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Issue Brief

Insurers' Medical Loss Ratios and Quality Improvement Spending in 2011

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ABSTRACT: The Affordable Care Act's medical loss ratio (MLR) regulation requires insurers to spend 80 percent or 85 percent of premiums on medical claims and quality improvements. In 2011, insurers falling below this minimum paid more than $1 billion in rebates. This brief examines how insurers spend their premium dollars—particularly their investment in quality improvement activities—focusing on differences among insurers based on corporate traits. In the aggregate, insurers paid less than 1 percent of premiums on either MLR rebates or quality improvement activities in 2011, with amounts varying by insurer type. Publicly traded insurers had significantly lower MLRs in each market segment (individual, small group, and large group), and were more likely to owe a rebate in most segments compared with non–publicly traded insurers. The median quality improvement expenditure per member among nonprofit and provider-sponsored insurers was more than the median among for-profit and non-provider-sponsored insurers.

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OVERVIEW

The Patient Protection and Affordable Care Act requires health insurers generally to pay out at least 80 percent or 85 percent of premiums for medical claims and quality improvement expenses.[1] Insurers that pay out less than this minimum—known as a medical loss ratio, or MLR—must refund the difference to their policyholders. In 2012, 14 percent of all health insurers paid more than $1 billion in rebates to consumers, based on their 2011 MLRs.[2] In addition to refunding premium fees to consumers, the new MLR rule prompted insurers to reduce their administrative costs and profit margins by about $1 billion across all three market segments—large-group, small-group, and individual insurance—compared with 2010.[3]

The MLR rule also requires insurers to report their spending on four quality improvement activities, defined as activities that are likely to improve health outcomes, prevent hospital readmissions, improve patient safety and reduce

medical errors, and increase wellness and health promotion. They also must report the amount they spend on health information technology related to health improvement. These expenditure reports do not, however, measure actual quality of care or health outcomes.

This issue brief examines how MLRs, rebates, and quality improvement expenses differed by health insurers' corporate characteristics. We include all 947 insurers that were subject to the MLR regulation in 2011. These are the so-called credible insurers, meaning those with 1,000 or more members in a state's individual, small-group, or large-group market segment.[4] (See Data Collection and Methodology.)

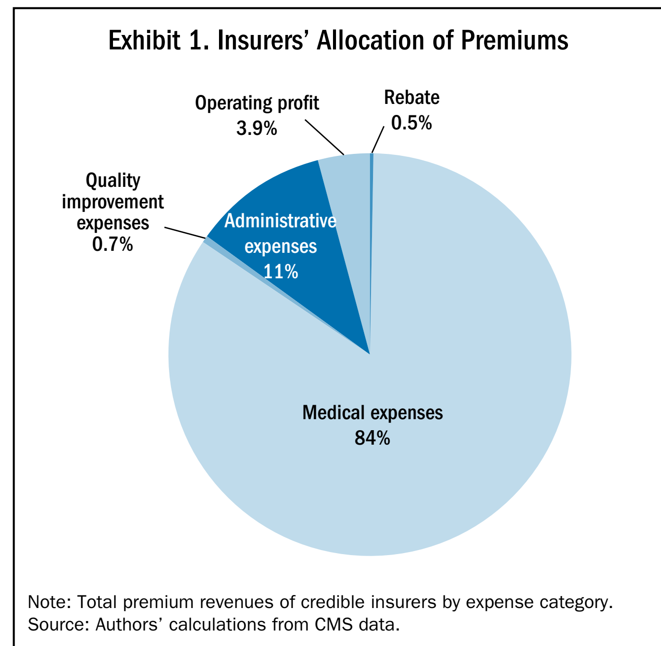
On average and at the median, insurers allocated less than 1 percent of premium dollars to activities designed to improve health outcomes, prevent hospital readmissions, improve patient safety, increase wellness, or enhance the use of health care data to improve quality.[5] Separately, insurers also report, on the medical loss ratio reporting forms, the size of incentives they pay to health care providers to reduce costs and promote quality improvement.[6] In 2011, this total amounted to an additional 0.35 percent of premium revenues. While these incentive programs are important and are expected to grow over time, our analysis focuses solely on direct quality improvement expenses reported by insurers in 2011, which are linked to identifiable quality improvement activities.

The amounts spent on quality improvement varied considerably by corporate traits.[7] The median nonprofit and provider-sponsored plans spent more on quality improvement than their counterparts—for-profit and non-provider-sponsored plans. Similarly, only a small percentage (less than 10 percent) of nonprofits and provider-sponsored insurers paid an MLR rebate, whereas more than 20 percent of for-profit and non-provider-sponsored insurers paid a rebate because they fell below the minimum MLRs.

MLR AND REBATE FINDINGS

Overall, credible health insurers devoted 84 percent of premium revenues to medical expenses, 11 percent to administrative overhead, 0.7 percent to quality improvement activities, and 0.5 percent to premium rebates.[8] Insurers retained the remaining 3.9 percent of premium revenues as operating surplus (i.e., pretax profits) (Exhibit 1).

Exhibit 1. Insurers' Allocation of Premiums



Note: Total premium revenues of credible insurers by expense category.
Source: Authors' calculations from CMS data.

Exhibit 2 presents the percent of insurers owing rebates, and Exhibit 3 provides more detail on the amount of rebates and the simple and adjusted MLRs, by individual, small-group, and large-group policies. The adjusted MLR number, which is the basis for calculating rebates owed, includes additional factors that reflect the insurer's size and whether it offers high-deductible plans.[9] Within the individual market, substantially more of the publicly traded insurers (48%) owed a rebate, compared with 28 percent of the non–publicly traded insurers (Exhibit 2). (It is important to note that nonpublic insurers include both nonprofits and private for-profits.) However on a per-member basis, the median publicly traded insurer that owed a rebate in the individual market owed a lower amount than the median non–publicly traded insurer that owed a rebate ($94 vs. $174) (Exhibit 3). Also, for all credible insurers, regardless of whether they owed a rebate, both the simple and adjusted median MLRs were significantly lower for the publicly traded insurers.

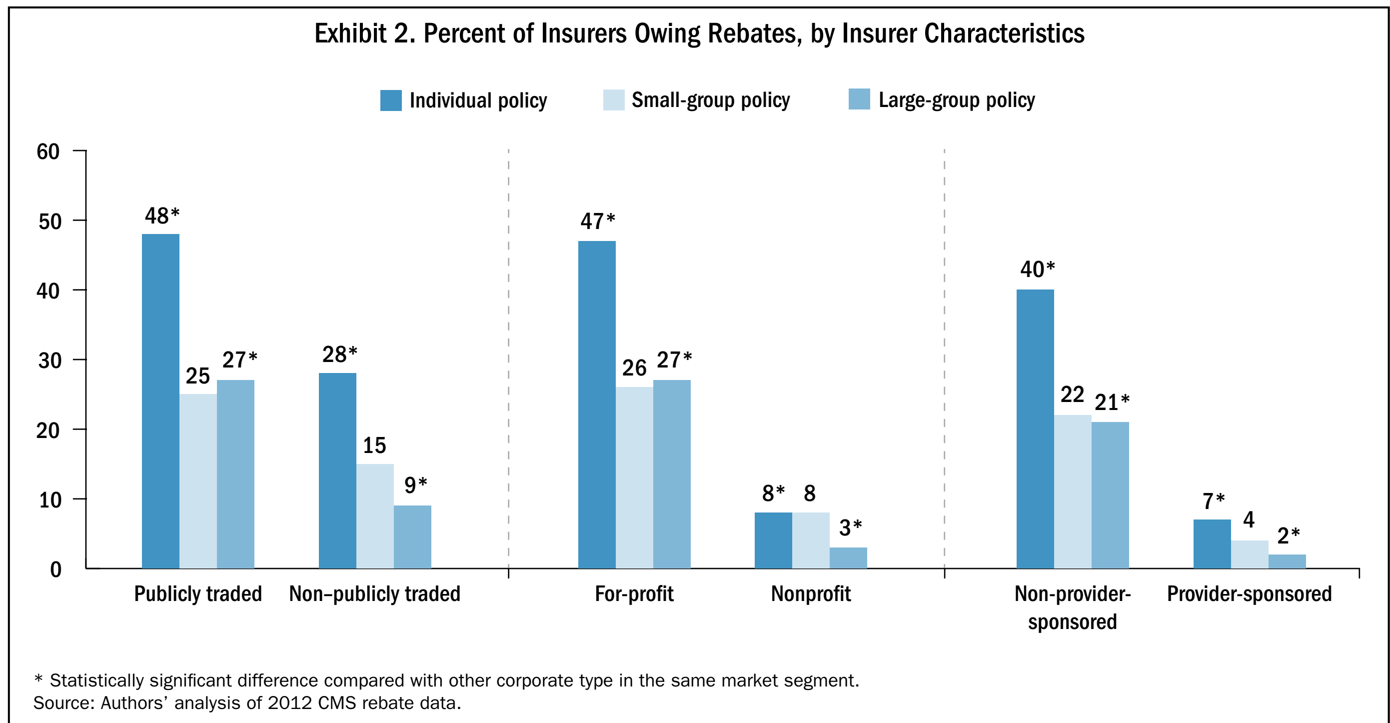


Exhibit 3. Rebate and Medical Loss Ratio Analysis by Insurer Traits

Individual Policy	**Median rebate per member (among insurers owing any rebate)**		**Median simple MLR (all credible insurers)**		**Median adjusted MLR (all credible insurers)**	
Publicly traded (n=260)	$94	*	75%	*	80%	*
Non–publicly traded (n=269)	$174		82%		86%	
For-profit (n=400)	$122	**	75%	*	80%	*
Nonprofit (n=129)	$34		90%		92%	
Non-provider-sponsored (n=488)	$123	ns	78%	*	82%	*
Provider-sponsored (n=41)	$23		94%		98%	
Small-Group Policy						
Publicly traded (n=268)	$111	ns	81%	*	83%	*
Non–publicly traded (n=291)	$119		84%		87%	
For-profit (n=370)	$119	ns	81%	*	83%	*
Nonprofit (n=189)	$88		86%		88%	
Non-provider-sponsored (n=481)	$117	ns	82%	*	84%	*
Provider-sponsored (n=78)	$72		88%		90%	
Large-Group Policy						
Publicly traded (n=300)	$90	ns	85%	*	88%	*
Non–publicly traded (n=281)	$144		90%		91%	
For-profit (n=368)	$99	ns	85%	*	88%	*
Nonprofit (n=213)	$91		90%		91%	
Non-provider-sponsored (n=492)	$99	ns	87%	*	89%	*
Provider-sponsored (n=89)	$176		91%		93%	

Notes: Simple MLR = medical claims and quality improvement expenses divided by premiums earned less taxes and regulatory fees. Adjusted MLR increases the simple medical loss ratio on a sliding scale for plans with smaller enrollment or high deductibles (see note 7).
** = significant at .05 level; * = significant at .01 level; ns = not statistically significant.
Source: Authors' calculations from CMS data.

Publicly traded insurers appear to aim their pricing closer to the minimum loss ratio than do other insurers, whose average MLRs are higher. This is evident in two ways. First, their adjusted MLR marketwide is virtually identical to the 80 percent limit (Exhibit 3). Second, there is a nearly equal split in the number of publicly traded insurers above and below the limit.

Only 8 percent of nonprofit insurers owed a rebate in the individual market compared with 47 percent of for-profit insurers (Exhibit 2). The median nonprofit insurer also paid significantly lower rebates per member ($34 vs. $122) than did the median for-profit carrier in the individual market (Exhibit 3). The median individual market MLRs (both simple and adjusted) were 12 to 15 percentage points higher among nonprofit insurers than among for-profit insurers.

Similar differences were seen between provider-sponsored and non-provider-sponsored insurers, but not all differences were statistically significant. However, the 16-percentage-point differences in both simple and adjusted median MLRs between provider-sponsored and non-provider-sponsored insurers did result in a statistically significant difference in the individual market (Exhibit 3).

Within the small- and large-group markets, corporate traits were associated with MLRs and rebates in ways similar to those seen in the individual market, but with a smaller magnitude of difference (Exhibit 2). Also, publicly traded, for-profit, and non-provider-sponsored plans in the group markets had lower median MLRs than their counterparts (Exhibit 3). Differences in the rebates paid per member were mostly in the same direction as those in the individual market, namely, lower rebates by publicly-traded insurers and higher rebates by for-profit insurers, but the rebate differences in the group market were not statistically significant.

QUALITY IMPROVEMENT FINDINGS

As noted previously, the federal MLR rule counts as medical expenses the amounts that insurers devote to quality improvement and related health information technology (HIT). Federal regulations and guidance specify a range of quality improvement activities that are likely to improve health outcomes, prevent hospital readmissions, improve patient safety and reduce medical errors, or increase wellness and health. By allowing insurers to count spending on these activities toward meeting the minimum MLR, the federal rule has generated a valuable new source of data about how insurers invest in quality improvement.

On average, credible insurers that reported any expenses related to quality improvement spent a total of $2.3 billion, or 0.74 percent of premium revenue. Separately, insurers also report (on the medical loss reporting forms) the size of incentives they pay health care providers to reduce costs and promote quality improvement. This total amounted to $1.1 billion in 2011, or an additional 0.35 percent of premium revenues. Our analysis focuses solely on the quality improvement expenses reported by insurers.

Credible insurers spent $29 per subscriber in 2011 on quality improvement activities, with substantial variations in spending. The median insurer incurred quality improvement expenses of $23 per member, while the top quartile of spenders incurred more than $40 in expenses per member. The bottom quartile reported spending less than $12 per member.

Out of the $2.3 billion spent on quality improvement in 2011, insurers reported that 17 percent was devoted to HIT expenses (Exhibit 4). Of the remainder, 51 percent of quality improvement expenses went to improving outcomes, 9 percent to hospital readmissions, 10 percent to patient safety, and 13 percent to wellness activities. However, a substantial number of insurers reported zero expenses in one or more of these areas. Because a good number of insurers report only total quality improvement expenses, rather than breakdowns by type of improvement, our further analyses will focus only on total quality improvement expenses, including HIT.

We examined whether health plans differ in the amount they spend on quality improvement activities based on their corporate characteristics. Rather than focus on overall spending per member, the analysis

Exhibit 4. 2011 Quality Improvement Expenses by Activities and Members

	Total (millions)	Per member	As percent of total quality expense
Premium	$305,466	$3,916.23	
Total quality improvement	$2,265	$29.04	100%
Health information technology	$381	$4.88	17%
Improve outcomes	$1,164	$14.92	51%
Hospital readmissions	$199	$2.55	9%
Patient safety	$229	$2.94	10%
Wellness	$292	$3.74	13%

Source: Authors' calculations from CMS data of all credible insurers reporting any quality improvement expenses.

calculated the median amount spent per member by different types of insurers. Although this approach disregards the fact that some insures are much larger than others (see methodology box on p.8), it is appropriate for studying institutional behavior, since it gives equal weight to each insurer. As shown in Exhibit 5, provider-sponsored insurers made the greatest investment in quality improvement, with a median of $37 per member spent on these activities in 2011. This is 63 percent more per member than the $23 per member spent by non-provider-sponsored insurers.

The differential in quality investment was even greater for nonprofit insurers. Their median expenditure per member on quality improvement was nearly twice the median among for-profit insurers. However, no significant difference was observed in median quality improvement expenses between insurers that were and were not publicly traded (Exhibit 5). One notable difference is that publicly traded insurers spent significantly higher amounts—50 percent more—than nonpublic insurers on the HIT component of quality improvement expenses (analysis not shown).

On average and at the median, insurers spent less than 1 percent of premium dollars in 2011 on activities that meet the federal definition for quality improvement. While some might attribute this level to a narrow definition of allowable quality-related activities, the federal rule appears to be fairly broad. Although it requires that activities "be grounded in evidence-based medicine, widely accepted best clinical practice, or criteria issued by recognized professional [or government] . . . organizations," the rule requires only that activities be "primarily designed" to produce good results and does not require insurers to show actual outcomes. Also, the rule provides a long list of activities relating to care management and quality reporting, and includes related health information technology expenses.

One potential explanation for insurers' level of investments in quality is the basic dynamic of

Exhibit 5. 2011 Median Quality Improvement Expenses per Member, by Corporate Traits

Publicly traded (n=456)	**Non–publicly traded** (n=399)	
$26.44	$22.49	
Nonprofit (n=211)	**For-profit** (n=644)	
$35.21	$19.11	*
Provider-sponsored (n=86)	**Non-provider-sponsored** (n=769)	
$36.82	$22.74	*

* = significant at the .01 level.
Source: Authors' calculations from CMS data of all credible insurers reporting any quality improvement expenses.

competitive insurance markets. Competing insurers can be expected to focus most on those attributes that the market rewards most strongly. Consumers certainly care about price and covered benefits. Surely, they also care about quality improvement, but if consumers are not presented with useful quality metrics, it is difficult for them to "vote with their feet" to reward insurers that invest more in quality improvement. Alternatively, quality improvement efforts by insurers that take the form of managed care controls might be viewed negatively by consumers as intruding on the doctor–patient relationship.

The difficulty of measuring, reporting, and evaluating quality in terms consumers can understand and use may explain why the level of investment differs by insurer type. In addition, the greater quality spending among provider-sponsored plans might be driven by the emerging payment systems launched by Medicare and commercial insurers that reward providers for meeting quality-of-care benchmarks.

CONCLUSION

On average and at the median, insurers spent less than 1 cent of each premium dollar in 2011 on MLR rebates. However, this small amount varied significantly among insurers, and the variation was associated with certain corporate characteristics. The MLRs of publicly traded insurers were closer than those of other insurers to the minimum regulated thresholds of 80 percent for the individual and small-group markets and 85 percent for the large-group market. Conversely, insurers operating as nonprofits or those affiliated with health care providers were significantly less likely than their corporate counterparts to owe a rebate, owing to their higher medical loss ratios.

Similar patterns can be seen for health insurers' spending on quality improvement. Overall, insurers spend little of their premium dollars on improving quality, but the investments they do make vary substantially by type of insurer. In 2011, the median spending per member that nonprofit insurers reported for various quality improvement activities was 84 percent more than the median reported by for-profits, and the median by provider-sponsored insurers was 63 percent more than by their nonprovider counterparts.

Because this is the first year that such data have been collected, we cannot be certain that they are entirely complete. Moreover, insurers may not have fully responded yet to the new MLR rule's focus on quality improvement expenses. Nevertheless, the overall level of spending on quality improvement suggests that current market forces do not strongly reward insurers' investments in this area. Therefore, more robust reporting of quality measures may be needed. The Affordable Care Act (section 2717) requires health insurers to report to HHS their benefit and provider reimbursement structures that improve quality in various ways.[10] To be most useful, HHS should synthesize and disseminate this information in a fashion that consumers find useful and relevant, in order to stimulate competitive pressures for health plans to improve quality of care.

Notes

1 For 2011, the Secretary of HHS approved applications by seven states to permit lower medical loss ratios, ranging from 65 percent to 75 percent, in the individual market to prevent market destabilization in those states. See M. A. Hall and M. J. McCue, *Estimating the Impact of the Medical Loss Ratio Rule: A State-by-State Analysis* (New York: The Commonwealth Fund, April 2012). The report of rebates paid take into account these and other permitted adjustments.

2 "Medical Loss Ratio List of Health Insurers Owing Rebates in 2012," http://cciio.cms.gov/resources/files/mlr-issuer-rebates-20120710.pdf; Centers for Medicare and Medicaid Services, "The 80/20 Rule: Providing Value and Rebates to Millions of Consumer," 2012, http://www.healthcare.gov/law/resources/reports/mlr-rebates06212012a.html; and Kaiser Family Foundation, *Insurer Rebates Under the Medical Loss Ratio: 2012 Estimates* (Washington, D.C.: Henry J. Kaiser Family Foundation, April 2012), http://www.kff.org/healthreform/upload/8305.pdf.

3 M. J. McCue and M. Hall, "Impact of Medical Loss Regulation on the Financial Performance of Health Plans," under review at *Health Affairs,* Dec. 2012; and M. J. McCue and M. Hall, *Insurers' Responses to Regulation of Medical Loss Ratios* (New York: The Commonwealth Fund, Dec. 2012).

4 "Credible" refers to the fact that insurers with fewer than 1,000 members in a market segment have less actuarial "credibility," meaning they face greater variability of medical utilization and costs. Therefore, these smallest insurers are presumed to meet the MLR rebate regulation.

5 Total expenditures on quality improvement by all 855 health plans as a share of total premium revenue is 0.74 percent. For total expenditures on quality improvement as a percent of total premiums for each health plan in the sample, the median value is 0.62 percent and mean value is 0.77 percent.

6 The reporting form defines "medical incentive pools and bonuses" as "Arrangements with providers and other risk sharing arrangements whereby the reporting entity agrees to either share savings or make incentive payments to providers to promote quality improvements." See http://www.naic.org/documents/index_health_reform_mlr_blanks_proposal.pdf.

7 Provider-sponsored refers to insurers owned, governed, or managed jointly with health care systems, community health centers, or physician groups.

8 The CMS rebate data available on August 5, 2012, did not explicitly report underwriting gain or loss. Therefore, we calculated operating margins for credible insurers based on reported data about premiums, medical claims, quality improvement expenses, and administrative expenses, but the calculation does not include any investment earnings. The total of 2,441 insurers include those that offered some combination of multiple policies. For example, there were 590 insurers that offered health insurance in all three markets segments.

9 Because carriers with small numbers of enrollees might experience year-to-year volatility in their medical loss ratios because of a few large claims, insurers with fewer than 75,000 members are allowed to decrease their target MLRs on a sliding scale ranging from 8.3 percentage points for 1,000 members to no adjustment for 75,000 or more members. These smaller insurers that also offer a high-deductible plan (greater than $2,500) receive an additional adjustment depending on the deductible size, since high-deductible plans are considered more volatile. For example, having a $10,000 deductible will reduce the target MLR for a 1,000-member carrier by 14.4 percentage points rather than just 8.3 points.

10 E. Hoo, D. Lansky, J. Roski et al., *Health Plan Quality Improvement Strategy Reporting Under the Affordable Care Act: Implementation Considerations* (New York: The Commonwealth Fund, April 2012).

Data Collection and Methodology

Data for this study come from the medical loss ratio (MLR) rebate forms that insurers filed with the Centers for Medicare and Medicaid Services for 2011.[a] Insurers report separately in each state in which they have enrollment, for a total of 2,441 state insurers that offered comprehensive health insurance. However, insurers with enrollment of less than 1,000 have less actuarial "credibility," meaning that they face greater variability of medical utilization and costs; therefore, under federal regulations these smaller insurers are presumed to meet the MLR rebate regulation, and we exclude them from our analysis. There were a total of 947 insurers with 1,000 or more members per state in at least one market segment (individual, small group or large group). Of these, 855 reported quality improvement data. Because the excluded plans are small, they represent only 1 percent of the membership of all reporting insurers for 2011.

Using NAIC data and the AIS Directory of Health Plans, we categorized each insurer according to three corporate traits, noting that an insurer might well have more than one of these traits. Insurers were categorized by the status of their parent company rather than the status of each subsidiary. The median test was used to test differences in median rebate per member as well as medical loss ratio across plans with and without each of these corporate traits. Some results were sensitive to whether quality improvement expenses were measured as averages versus based on the median among each insurer's per-member spending. For instance, for-profit insurers in aggregate reported more spending per member than did nonprofits. That measure, however, weights each insurer's spending according to its size, whereas analysis of median expenditures gives equal weight to each insurer's quality expense per member.

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[a] Centers for Medicare and Medicaid Services, Center for Consumer Information and Insurance Oversight, Submissions of 2011 Medical Loss Ratio Annual Reporting Data (as of August 5, 2012), http://cciio.cms.gov/resources/data/mlr.html. We accessed data from August 5, 2012, filings. We recognized that there may be future updates to the 2011 data; however, since all health insurers were required to file by June 1, 2012, and all rebates were required to be paid by August 1, 2012, we expect further updates will be minimal.

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