ACA Implementation—Monitoring and Tracking

Health Insurer Responses to Medical Loss Ratio Regulation:

Increased Efficiency and Value to Consumers

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Lisa Clemans-Cope, Bowen Garrett, and Doug Wissoker

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URBAN INSTITUTE

With support from the Robert Wood Johnson Foundation (RWJF), the Urban Institute is undertaking a comprehensive monitoring and tracking project to examine the implementation and effects of the Patient Protection and Affordable Care Act of 2010 (ACA). The project began in May 2011 and will take place over several years. The Urban Institute will document changes to the implementation of national health reform to help states, researchers and policymakers learn from the process as it unfolds. Reports that have been prepared as part of this ongoing project can be found at **www.rwjf.org** and **www.healthpolicycenter.org**. The quantitative component of the project is producing analyses of the effects of the ACA on coverage, health expenditures, affordability, access and premiums in the states and nationally.

INTRODUCTION

A key goal of the Affordable Care Act (ACA) is to improve consumer protections for those buying health insurance in the individual and small employer group markets (US Department of Health and Human Services [HHS] 2015). As part of that effort, one provision requires that insurers spend at least a minimum percentage of premium revenues on health care and quality improvement expenses to increase the value of health insurance to consumers. The provision limits the remaining share of premium revenue that may be used to cover administrative costs (overhead) or counted as operating margin (profit). This paper uses recent data filed by insurers to examine insurers' responses to the new requirement and how it has affected consumers.

The medical loss ratio (MLR), which considers "loss" from an insurer's perspective, is the amount an insurer pays out for the covered health care expenses of its enrollees, expressed as a share of the premium revenue it collects from (or on behalf of) enrollees. All else equal, an insurer with a higher MLR provides higher value to consumers.

Beginning in 2011, the ACA required that insurers have an MLR of at least 80 percent in the individual and small group markets and 85 percent in the large group market. In 2010, many insurers in the individual and small group markets had MLRs of less than 80 percent, particularly among smaller insurers in the individual market (Clemans-Cope et al. 2013). When insurers fall short of the MLR standard, they are now required to issue premium rebates to consumers. Indeed, MLRs rose between 2010 and 2012—particularly in the individual market—after the MLR provision of the ACA took effect (Houchens 2013). Consumers received rebates totaling nearly $1.1 billion for insurance they had in 2011. Rebates fell to $504 million in 2012 as more insurers came in line with the MLR requirement. Taking together rebates and estimates of reduced premiums (relative to what premiums would have been without increases in MLRs), consumers received an estimated $3.9 billion in premium savings in 2012 (HHS 2013).

Although rising MLRs are a strong indicator that the policy has had its intended effect, *how* the health insurance industry responded to the provision and achieved the increase has varying implications for insurers and consumers. The increased average MLRs may have been achieved through a number of mechanisms, singly or in combination.

First, MLRs may have increased as a result of insurers reducing the growth in premiums or from higher growth in claims spending relative to trend. Increases in claims could occur in different ways: less aggressive utilization review, fewer claims denials, higher payments to providers, or increasing reserves counted as claims. Slower growth in premiums makes premiums more affordable for consumers, whereas higher growth in claims spending may benefit consumers today but could ultimately contribute to higher premium costs in the future.

Second, MLRs may have increased as a result of insurers reducing their administrative costs to become more efficient or by operating at lower margins. Increased efficiency through lower overhead rates enables lasting increases in value to consumers and provides more room for insurer margins within the constraints of the MLR regulation.

Reductions in excessive profits or margins also provide ongoing benefit to consumers. Reductions in margins below levels consistent with protecting solvency would not be sustainable, but they may occur on a temporary basis as part of the process whereby insurers with low MLRs adapt to the new regulatory environment.

Third, within a market segment, such as the individual market or the small employer group market, MLRs may have increased because of changes over time among insurers that stayed in the market or as a result of the effect of insurers entering and exiting the market. If insurers with MLRs below the overall market average disproportionately left the market, the overall MLR would rise. Even if the exit of certain insurers from the market would increase the efficiency of the industry as a whole and would create long-term value for consumers, it could be disruptive to the affected consumers in the short term if it requires them to find coverage through another company. Insurers that are already in the market and that need to increase their MLR could do so by changing or canceling some plans or products entirely, which can potentially reduce enrollment and adversely affect some consumers.

This paper uses recent data submitted by insurers about MLR and other financial measures to assess the relative importance of various potential contributors to the increase in MLR and to better understand the impact of the minimum MLR provision on consumers. Insurers began submitting standardized reporting of financial measures to the National Association of Insurance Commissioners (NAIC) in April 2011 on the basis of their 2010 claims experiences (the year before the MLR regulations took effect) and in the subsequent years. We use NAIC's Supplemental Health Care Exhibit (SHCE) data from 2010 to 2012 in our analysis.

We begin by reporting changes over time in MLR by health insurance market segment. Then we examine (a) the extent to which changes in claims expenses versus premiums underlie the shifts and (b) whether MLR shifts came more at the expense of administrative costs versus operating margins. We examine the role of the exit and entry of insurers in explaining the observed shifts in financial measures and enrollment patterns over the period. We report shifts in the *distribution* of MLR and administrative cost across insurers over time, which reveals substantial moderation of extreme cases following implementation of the minimum MLR provision. Finally, we focus on insurers in the individual market that are observed in all three years of data. For those insurers, we examine shifts in financial measures longitudinally and show that changes were concentrated among those insurers that had low MLRs in 2010, which suggests that the changes were a direct effect of the MLR rule.

PREVIOUS RESEARCH

Prior studies have examined the levels and overall trends in MLR measures, administrative costs, and operating margin using SCHE and similar data. An examination of the 2010 SCHE data found that in the year before the enforcement of the ACA's new federal standards, wide variation existed in MLRs across states, particularly in the individual market. Insurers with low MLRs dominated coverage in the individual market in more than one-third of states, and smaller insurers had lower medical loss ratios. The study also found that states that regulated loss ratios and premiums in 2010 generally had higher average medical loss ratios in both individual and small group markets (Clemans-Cope et al. 2013).

Using 2010–12 SCHE data, Karaca-Mandic and colleagues found that average administrative costs as a percentage of premiums declined steadily in the individual market (from 19 percent in 2010 to 14 percent in 2012), and those costs declined slightly in the small group market (from 13 percent in 2010 to 11 percent in 2012). Operating margins declined markedly in the individual market (from 6 percent in 2010 to 1 percent in 2012) but were stable in the small group market (at 5 to 6 percent) (Karaca-Mandic et al. 2013).

McCue and colleagues linked 2010 and 2011 SCHE data to data reflecting for-profit status and found that the largest changes occurred among for-profit insurers in the individual market. Median administrative cost (as a share of premiums) and operating margin of for-profit insurers fell by more than two percentage points each, while the median MLR fell by seven percentage points (McCue, Hall, and Liu 2013). The study also found that across all markets in the two years examined, nonprofit insurers reported lower operating margins and administrative costs and higher MLRs compared with for-profit insurers. A follow-up study demonstrated that those trends continued between 2011 and 2012, with variation across insurers related to quality-improvement expenses, which constitute less than 1 percent of premiums (McCue and Hall 2014).

A Milliman briefing paper combined the 2010 SHCE data with 2011 and 2012 MLR data submitted to the Centers

for Medicare and Medicaid Services (CMS) to evaluate changes in health insurers' financial measures, including MLR and profitability in the individual, small group, and large group markets (Houchens 2013). The paper found that the individual market saw a marked decrease in profitability, indicated by a decline in the share of insurers with operating margins ("underwriting gains") of more than 5 percent in 2011 and 2012. The paper attributes that decline to the minimum MLR requirements limiting exceptionally high margins but does not rule out the possibility that the comparison year (2010) was abnormal relative to other years before ACA enactment.

This paper expands on the existing research by focusing on (a) the mechanisms by which MLRs increased and (b) their implications for consumers. We examine the relative roles of changes in claims versus premiums and in administrative costs versus profits. We examine patterns of entry and exit by insurers to clarify their effect on changes in enrollment and MLRs. By examining the differential responses of insurers with MLRs above and below the minimum thresholds in 2010, we provide stronger evidence that the MLR rule was the cause of the increase in MLR, reduced administrative costs, and increased value to consumers.

DATA

As previously stated, we use data from three years (2010, 2011, and 2012) of SHCE files compiled by the National Association of Insurance Commissioners (NAIC) from data submitted by insurers (National Association of Insurance Commissioners [NAIC] 2011, 2012). We examine comprehensive health insurance (coverage that provides benefits for a comprehensive set of medical expenses, including doctor and hospital services and prescription drugs) offered in the individual and small group markets for each of the 50 states and the District of Columbia.[1] We use the SHCE data—not the MLR data collected by CMS for federal rebate purposes—because the CMS MLR data do not include 2010. Research comparing the two datasets finds that in 2011 and 2012, the datasets are comparable on key variables of interest but differed in the composition of insurers (Blewett et al. 2014). Whether and how the CMS MLR data from 2011 forward is comparable to the SHCE data since 2010 is an area for future research.

The SHCE data used in this study reflect only health insurance purchased from an insurance company (commonly referred to as "fully insured products"). Thus the small group data exclude small-employer products that are provided directly to employees through a third-party administrator (commonly referred to as "self-insured products"). For brevity, we refer to the fully insured small group market as the "small group market." Association business is included in the individual and small group market data. Policies that are not considered comprehensive health insurance (such as "mini-med" plans with limited benefit payments for specific services and overall annual limitations for covered benefits) are excluded from the analysis. In California, SHCE data cover only a fraction of insurers because health maintenance organizations (HMOs) are regulated separately from other insurers in the state and are not required to submit data to the NAIC (California Health Care Almanac 2011).[2]

DEFINITION OF KEY MEASURES

We examine the individual and small group markets separately, with the insurer as the primary unit of observation. For SHCE data and our analysis of it, an insurer refers to a set of plan offerings for each state and market.[3] We define parent companies for the analysis as groups of affiliated insurers with the same parent company in the same state. For example, UnitedHealth Group, in the small group market, is the parent company of an affiliated group of more than 100 insurers, including insurers within a single state and across multiple states. UnitedHealth Group would count as a distinct parent company in each of the states in which it operates within a market segment.

Enrollment is measured by member-years reported in the SCHE, an annual average measure of enrollment that is based on average monthly enrollment. Specifically, *member-years* refers to the average number of people with coverage through an insurer on a certain day of each month during the reporting year. We also examined covered lives—the number of enrollees (policyholders and dependents) with coverage through reporting insurers at the end of the reporting year—as a second measure of enrollment. Because the member-year measure is more reflective of average enrollment over the year, and because both measures demonstrated similar patterns of change over time, we report only member-years in the tables that follow.

We do, however, use covered lives to help identify insurers with unreliable data, as we discuss herein.

We examine four key financial measures for each insurer in each year. We first define a simple measure of MLR as medical claims incurred during the reporting year (including prescription drug claims net of pharmaceutical rebates) as a percentage of health premiums earned (equation 1).[4] This is a traditional pre-ACA measure of MLR.

Equation 1

$$MLR = \frac{medical\ claims}{health\ premiums}$$

The other three financial measures are closely related: the net MLR, the administrative cost ratio (ACR), and the operating margin sum to one. The *net MLR* (equation 2) has components similar to those in the federal MLR calculation used to determine federal MLR rebates to policyholders, plus an approximation of the federal MLR rebate paid to consumers. The net MLR computation includes additional categories of expenditures added to claims in the numerator and other categories of expenditures subtracted from premiums in the denominator, either of which would tend to increase net MLR relative to MLR, all else equal. We follow NAIC guidelines in computing the components of net medical claims and net adjusted premiums. The numerator of the net MLR is (a) net medical claims incurred during the reporting year, including expenses for reinsurance, MLR-related rebates and expected rebates, and other adjustments involved in computing net claims, as defined by NAIC, plus (b) expenses for improving health care quality incurred during the reporting year, plus (c) deductible fraud and abuse detection and recovery expenses. The denominator of the net MLR is net adjusted premiums, defined as premiums minus federal and state taxes and minus licensing and regulatory fees, plus other adjustments involved in computing net premiums, as defined by NAIC.

We examine both MLR measures to determine if changes in insurers' financial measures are observed only after accounting for the additional categories of expenditures in the numerator and denominator that are more consistent with the computation used for federal rebates. In addition, we examine both MLR and net MLR to determine whether insurers responded to the MLR regulation by setting high premium rates, with the expectation of paying rebates—that is, by collecting higher upfront premiums, as suggested in earlier literature (Harrington 2013). That insurer strategy if it were happening, could be detected in the MLR measure but not in the rebate-adjusted net MLR measure, transfers upfront costs and risk to the consumer, which undercuts the policy's goals of increasing value for consumers.

Equation 2

$$Net\ MLR = \frac{net\ medical\ claims\ including\ rebates + quality\ improvement + other}{net\ adjusted\ premiums}$$

The net MLR measure reported in this paper captures the main features of the calculation reported by insurers to CMS as a requirement under the ACA, but the measures are not the same (NAIC 2012b). The CMS measure has some additional technical adjustments and exceptions for very small insurers and adjustments for high-deductible plans, but it is otherwise similar to the net MLR measure we report here. Because the consumer does not perceive those technical adjustments in terms of a difference in value (as opposed to the rebate adjustment, which the consumer does perceive), those additional adjustments are not necessary for this analysis.[5]

Net MLRs reported in this paper are likely to be more than 80 percent after 2010 except when the computation for CMS was expected to include an adjustment, such as those for small insurers and high-deductible plans. For those insurers, the net MLRs reported in this paper may be less than 80 percent even after the MLR requirement took effect in 2011. Thus the average net MLRs reported in this document will be somewhat lower than those calculated when computing the federal rebate. Some insurers with a net MLR less than 80 percent in the data we report may not be bound by the minimum threshold or may owe a penalty in 2011 or 2012.

The third financial measure, the administrative cost ratio (ACR), is defined as administrative expenses and claims adjustment expenses (such as office and computer maintenance[6]) as a percentage of net adjusted premiums earned (equation 3). Administrative expenses include insurers' direct sales salaries and benefits, fees and commissions for agents and brokers, fraud prevention activities, and some additional types of spending. Thus the ACR measures the percentage of premiums devoted to insurers' administrative and enrollment expenses rather than to claims or insurers' operating margins.

Equation 3

$$ACR = \frac{administrative\ expenses + claims\ adjustment\ expenses}{net\ adjusted\ premiums}$$

And the fourth financial measure, the operating margin, for simplicity of comparisons to MLR and ACR is defined following recent literature (McCue, Hall, and Liu 2013) as 1 minus net MLR and ACR (equation 4).

Equation 4

$$operating\ margin = 1 - net\ MLR - ACR$$

This computation differs from a more traditional business definition of operating margin, in part because medical claims in the numerator of net MLR include several categories of claims reserves that could result in a somewhat higher MLR than by using a traditional business definition (Kirschoff 2014). Thus, the operating margin measure presented in this paper tends to be somewhat lower than a traditional measure of operating margin. Important to note is that negative operating margins may be sustained even over the long term because those losses do not take investment income into account, and the tax implications of negative operating margins can offset current or future tax liability as a result of positive profits from an insurer's other revenue sources (Hill 1979). Still, all else equal, a smaller or larger operating margin is associated with lower or higher profitability.

METHODS

To examine the overall trends in MLR and other financial measures, we report average MLR by market segment and year, weighted by member-years. We weight by member-years so that any changes observed will reflect the typical consumer's experience.

To examine patterns of insurer entry and exit and their effects on the financial measures, we group insurers together by the number of years (and which years) they are observed in the analytic sample. For example, an insurer that operated in 2010 and 2011 but did not operate in 2012 would appear in our sample for two years and be counted as exiting in 2012. Hence, we are able to analyze different groups of "continuing" insurers, "entering" insurers, and "exiting" insurers. We examine changes in the number of parent companies, insurers, and enrollment in each year, and we examine how MLR, net MLR, ACR, and operating margins changed over the period.

Although all insurers are required to file information with NAIC, if an insurer failed to report in a given year when it was operating, it would be grouped with insurers that exited. Thus, the entry and exit statistics we report will overestimate the number of true exits from the market to the extent that operating insurers do not report to NAIC in any of the years examined.[7] A merger between two insurers would also lead to overestimating the number of true exits, but that merger would not improperly affect enrollment trends as long as one of the insurers reported the combined enrollment after the merger. For both reasons, we interpret entry and exit figures reported herein as an upper bound, and we conduct sensitivity analyses, as subsequently described.

Analytic Sample

For a number of insurers and years, data elements do not allow computation of a valid MLR and other financial measures (for example, if premiums or claims are reported as zero). In other cases, reported data elements result in extreme or unreasonable values for financial measures, such as MLRs or net MLRs that are greater than 2 or are negative. Apparent data problems are much more frequent for smaller insurers than for larger insurers, but given higher variability of claims experience of small insurers, possibly some extreme cases are nonetheless valid. Because the financial measures we report are averages weighted by member-years, data issues among smaller insurers will have little effect on trends in the financial measures. Tabulations intended to measure entry and exit, however, are more strongly affected by how we handle data issues in our analyses. The approach we take is to make a set of data exclusions aimed at improving the comparability of the financial measures over time and then conduct sensitivity analyses to understand how alternative exclusion rules may affect the findings.

For our main analyses, we exclude cases that have invalid or extreme values for premiums, claims, MLR, net MLR, and ACR. We also exclude very small insurers. In addition, we exclude one large insurer with inconsistently reported data. For unknown reasons, some insurers that apparently continue to operate and report data in the CMS MLR data are absent from the SHCE data in certain years. Although an exhaustive comparison of insurers in the SHCE and CMS MLR data was beyond the scope of this study, we exclude one large parent company because of its inconsistent SHCE data. The excluded company was Health Care Service Corporation (HCSC), which operated insurers in four states (Illinois, Oklahoma, New Mexico, and Texas) in the individual and small group market. Although HCSC seems to exit the individual and small group markets during the study period according to the SHCE data, that company did not leave the market but continued to operate in those states through

2012, according to CMS and other data sources (CMS, 2011, 2012a; A.M. Best Company 2014).[8]

In the specified order (conditions are not mutually exclusive), we exclude insurers in a year that they have the following:

- Zero or negative premiums or net premiums (1,183 individual; 607 small group)
- Zero or negative claims or net claims (938 individual; 144 small group)
- Fewer than 25 member-years or covered lives in all three data years (1,429 individual; 234 small group)
- Extreme MLR or net MLR of 200 percent or higher (259 individual; 27 small group)
- Extreme ACR of 100 percent or more (52 individual; 18 small group)
- HCSC as parent company (8 individual; 8 small group)

The first two rules imply that no insurer in the analysis sample would have an MLR or net MLR of zero or less. The first three rules exclude a large number of insurers; those typically are very small insurers. We set the threshold level for an "extreme" ACR value at 100 percent, noting that typical values are about 15 percent. After exclusions, 3,066 insurer observations remain for the individual market and 2,571 for the small group market across the three years.

STUDY RESULTS

MLR Increases from 2010 to 2012

MLR increased from 2010 to 2012 in both the individual and small group markets following implementation of the MLR requirement (figure 1). In 2010, the mean MLR in the individual market was lower than in the small group market (76.6 versus 79.1 percent), but by 2012 the mean MLR was at or higher than 80 percent in both markets. Whereas the typical consumer's insurer in the small group market had MLRs near the 80 percent threshold in all years examined, consumers in the individual market experienced significant gains in value following implementation of the MLR rule in 2011. The MLR in the individual market started out substantially below 80 percent but rose 3.5 percentage points from 2010 to 2011 and another 1.6 percentage points from 2011 to 2012, ending at a higher MLR than the small group market.

Drivers of Increased MLR in the Individual Market—Substantial Growth in Claims Costs and Moderate Premium Growth

Mean health claims increased by 8.9 percent from 2010 to 2011 on a per-member per-year (PMPY) basis in the individual market, followed by a 5.1 percent increase from 2011 to 2012 (table 1). Those growth rates are approximately twice the rates of growth in national health spending per capita for 2011 and 2012 (3.2 and 3.4 percent, respectively) (Hartman et al. 2014). Premiums earned PMPY increased at a more moderate pace relative to claims (4.7 percent from 2010 to 2011 and 3.1 percent from 2011 to 2012), consistent with increasing MLRs.[9] Those findings suggest that to come into compliance with the MLR rules, insurers increased claims by substantially more than overall growth in health care costs, whereas premiums grew at a moderate pace over the period.

In contrast, PMPY claims in the small group market increased by a modest 2.2 percent from 2010 to 2011 and 3.4 percent from 2011 to 2012, in line with the historically low rates of growth in national health spending per capita in those years. Premiums earned also increased by modest amounts similar to claims, consistent with the relatively stable MLR levels in the small group market over that period.

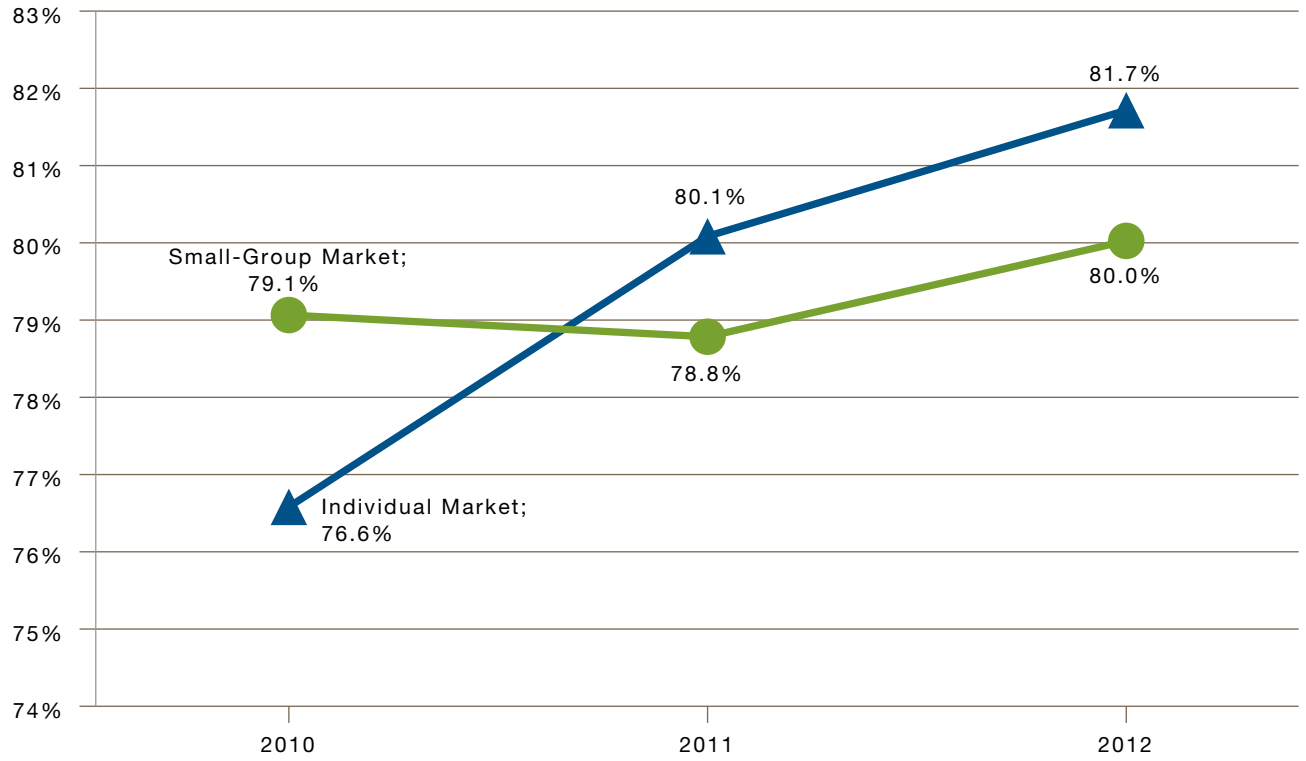
Premium PMPY and claims PMPY in the individual market were about two-thirds the levels observed in the small group market during the period, a likely result of more limited covered benefits in the individual market compared to the small group market (Houchens 2013), as well as coverage exclusions and denials in the individual market, which were common during the period (Pollitz 2009).

Changes in Insurers and Enrollment Between 2010 and 2012

Individual Market

In the individual market, data show a fairly stable number of enrollees from 2010 to 2012, with declines in the number of insurers and parent companies (table 2). The top panel of the table shows the total number of parent companies, insurers, and member-years in each year, and the remainder of the table shows the same information by subgroup of insurers on the basis of the years in which they appear in the data. The total number of insurers and parent companies stayed relatively consistent, and total enrollment increased between 2010 and 2011. All three decreased somewhat between 2011 and 2012. The increase in

Figure 1. Medical Loss Ratio (MLR) in 2010, 2011, and 2012 in the Individual and Small Group Markets



Source: Based on 2010–12 Supplemental Health Care Exhibit (SHCE) data by the National Association of Insurance Commissioners (NAIC).

Note: See text for a description of the sample and sample exclusions. MLR is computed as a mean for insurers by market segment and year, weighted by member-years. The sample size for individual insurers was 1,065 in 2010, 1085 in 2011, and 916 in 2012. The sample size for small group insurers was 917 in 2010, 862 in 2011, and 792 in 2012.

Table 1. Incurred Claims and Health Premiums Earned in the Individual and Small Group Markets

	Year			Percent Change (%)	
	2010	2011	2012	2010 to 2011	2011 to 2012
Individual Market					
Mean Incurred Claims, PMPY	$1,990	$2,168	$2,278	8.9%	5.1%
Mean Health Premiums Earned, PMPY	$2,552	$2,671	$2,753	4.7%	3.1%
Small Group Market					
Mean Incurred Claims, PMPY	$3,179	$3,249	$3,358	2.2%	3.4%
Mean Health Premiums Earned, PMPY	$3,998	$4,101	$4,191	2.6%	2.2%

Source: Based on 2010–12 Supplemental Health Care Exhibit (SHCE) data by the National Association of Insurance Commissioners (NAIC).

Notes: Mean medical claims incurred during the reporting year and mean health premiums earned, both computed on a per member per year (PMPY) basis. Measures are computed as a mean for insurers by market segment and year, weighted by member years. See text for a description of the data and sample exclusions. Notes: The sample size for individual insurers was 1065 in 2010, 1085 in 2011, and 916 in 2012, and for small group insurers was 917 in 2010, 862 in 2011, and 792 in 2012.

enrollment between 2010 and 2011 was driven by insurers who continued through all three years, with a net increase of more than 0.2 million enrollees. That increase more than offset the enrollment declines from insurers who dropped out after 2010.

The vast majority of enrollment in the individual market (95.8 percent of those insured in 2010) was in the parent companies and insurers that continued through all three years in the study, suggesting that the market was relatively stable during this period. Enrollment in those continuing insurers increased from about 8.8 million member-years in 2010 to 9.2 million in 2012.

The findings are consistent with household survey data from the Current Population Survey, which indicate that the number of people covered in the individual market did not change significantly during that period (DeNavas-Walt, Proctor and Smith 2012; DeNavas-Walt, Proctor and Smith 2013). We examine enrollment changes further in the sensitivity analyses.

Small Group Market

The largest amount of enrollment in the small group market (92.8 percent of those insured in 2010) was in parent companies and insurers that remained in the market through all three years in the study. Overall, the SHCE data suggest a decline in the number of insurers, parent companies, and member-years from 2010 to 2012 (table 2, right three columns in top panel). Overall, the number of member-years fell from about 17 million in 2010 to about 15.7 million in 2012. The decline between 2010 and 2011 was driven by enrollment declines from insurers who dropped out after 2010, although that decline was offset to a large extent by insurers who entered the market in 2011. The largest net enrollment decline happened between 2011 and 2012. That decline was driven by two groups of insurers: those who continued through all three years in the study and those who seem to drop out in 2012 after operating in both 2010 and 2011 (each accounting for a drop of about 0.4 million member-years).

Other data sources also suggest an overall decline in small group enrollment between 2010 and 2012. As measured by the Medical Expenditure Panel Survey Insurance Component (MEPS-IC) from Agency for Healthcare Research and Quality (AHRQ), the number of employees enrolled in health insurance offered by firms with 50 employees or fewer dropped by 6.6 percent between 2010 and 2011 and 1.9 percent between 2011 and 2012.[10] That decline continues a long-running trend of declining offers and take-up of employer-sponsored health insurance for small employers from 2000 to 2011 (Crimmel 2012).

Changes in Insurers' Financial Measures from 2010 to 2012

Individual Market

Table 3 reports mean financial measures for insurers in 2010, 2011, and 2012 overall and by the years insurers appear in the data. As presented in figure 1, mean MLR increased in the individual market from 76.6 percent in 2010 to 81.7 percent in 2012. The net MLR, which includes rebates and other adjustments, shows a pattern similar to the traditional MLR measure, but with higher values. The mean net MLR among insurers increased by 4.1 percentage points, from 79.6 percent to 83.7 percent between 2010 and 2011, and it gained another 1.2 percentage points between 2011 and 2012, rising to 84.9 percent. The consistency in the pattern of the two MLR measures suggests that insurers are not simply complying with the MLR rules by issuing rebates or making changes in the additional components included in the net measure, such as "quality improvement expenses," which would increase the net MLR but not affect the traditional MLR measure. In other words, MLR measures are changing because insurers are changing claims, premiums, or both.

The increase in the MLR measures over the period was associated with a decline in mean ACR and mean operating margins. The mean ACR decreased by 1.3 percentage points, from 19.9 percent to 18.6 percent, between 2010 and 2011, and it decreased another 1.0 percentage point between 2011 and 2012. The mean operating margin declined by 2.8 percentage points, from 0.5 percent to -2.4 percent, between 2010 and 2011, and it decreased slightly between 2011 and 2012 to -2.5 percent. Whether those negative operating margins would continue or be sustainable over time is a question we consider in the discussion herein.

In addition, the distribution of ACR and operating margins across insurers compressed significantly between 2010 and 2012, presumably toward an efficient level. In 2012, a 13.5 percentage point difference separated ACRs of the most profitable insurers and the least profitable insurers (measured at the 90th and 10th percentiles, respectively), which was smaller than the 19.6 percentage point difference observed in 2010 (not shown in table). Similarly, in 2012, a 16.8 percentage point difference separated the operating margin of the most profitable insurers and the least profitable insurers (again, 90th percentile and 10th percentiles, respectively), which was smaller than the 25.6 percentage point difference observed in 2010 (not shown in table).

Table 2. Parent Companies, Insurers, and Member-Years in the Individual and Small Group Markets

		Individual Market			Small Group Market		
		Year			Year		
Years Observed in Data		2010	2011	2012	2010	2011	2012
Total	Parent Companies	643	655	527	562	534	481
	Insurers	1,065	1,085	916	917	862	792
	Member-Years	9,234,966	9,602,319	9,270,082	16,969,862	16,483,219	15,726,997
2010, 2011, 2012	Parent Companies	456	439	424	419	434	436
	Insurers	754	754	754	704	704	704
	Member-Years	8,846,730	9,087,211	9,179,348	15,750,304	15,724,847	15,278,819
2010 and 2011	Parent Companies	73	76		67	68	
	Insurers	153	153		100	100	
	Member-Years	221,602	185,223		599,137	395,155	
2010 and 2012	Parent Companies	17		17	5		6
	Insurers	35		35	11		11
	Member-Years	53,470		25,120	3,689		2,425
2011 and 2012	Parent Companies		50	49		23	24
	Insurers		74	74		44	44
	Member-Years		34,957	49,066		354,566	367,505
2010 only	Parent Companies	97			71		
	Insurers	123			102		
	Member-Years	113,164			616,732		
2011 only	Parent Companies		90			9	
	Insurers		104			14	
	Member-Years		294,927			8,650	
2012 only	Parent Companies			37			15
	Insurers			53			33
	Member-Years			16,548			78,248

Source: Based on 2010–12 Supplemental Health Care Exhibit (SHCE) data by the National Association of Insurance Commissioners (NAIC).

Note: The total number of parent companies for the year does not equal the number of parent companies added from the subgroups because some parent companies may have multiple insurers spanning more than one subgroup. Member-years is the average number of people with coverage through an insurer on a certain day of each month during the reporting year. See text for a description of the data and sample exclusions.

Table 3. Medical Loss Ratio (MLR), Net MLR, Administrative Cost Ratio (ACR), and Operating Margin in the Individual and Small Group Markets

		Individual Market			Small Group Market		
		Year			Year		
Years Observed in Data		2010	2011	2012	2010	2011	2012
Total	Member-Years	9,234,966	9,602,319	9,270,082	16,969,862	16,483,219	15,726,997
	MLR	76.6%	80.1%	81.7%	79.1%	78.8%	80.0%
	Net MLR	79.6%	83.7%	84.9%	83.2%	83.4%	84.1%
	ACR	19.9%	18.6%	17.6%	13.6%	13.2%	12.7%
	Operating margin	0.5%	-2.4%	-2.5%	3.1%	3.3%	3.1%
2010, 2011, 2012	Member-Years	8,846,730	9,087,211	9,179,348	15,750,304	15,724,847	15,278,819
	MLR	76.8%	79.8%	81.6%	79.1%	78.6%	80.0%
	Net MLR	80.0%	83.8%	84.8%	83.3%	83.4%	84.1%
	ACR	19.7%	18.5%	17.6%	13.5%	13.2%	12.8%
	Operating margin	0.4%	-2.3%	-2.5%	3.2%	3.4%	3.2%
2010 and 2011	Member-Years	221,602	185,223		599,137	395,155	
	MLR	71.5%	86.3%		78.3%	79.5%	
	Net MLR	73.2%	83.2%		81.8%	83.0%	
	ACR	25.6%	20.8%		15.9%	15.5%	
	Operating margin	1.2%	-4.0%		2.3%	1.5%	
2010 and 2012	Member-Years	53,470		25,120	3,689		2,425
	MLR	74.1%		94.1%	64.3%		99.2%
	Net MLR	78.3%		93.9%	70.3%		101.7%
	ACR	16.6%		16.6%	14.5%		10.2%
	Operating margin	5.1%		-10.5%	15.3%		-11.9%
2011 and 2012	Member-Years		34,957	49,066		354,566	367,505
	MLR		90.2%	88.3%		84.3%	81.8%
	Net MLR		86.3%	83.8%		86.7%	85.5%
	ACR		25.6%	24.6%		9.6%	9.7%
	Operating margin		-11.9%	-8.5%		3.6%	4.8%
2010 only	Member-Years	113,164			616,732		
	MLR	72.0%			79.6%		
	Net MLR	65.9%			82.5%		
	ACR	26.8%			15.6%		
	Operating margin	7.3%			1.8%		
2011 only	Member-Years		294,927			8,650	
	MLR		83.0%			69.9%	
	Net MLR		81.7%			73.9%	
	ACR		20.5%			18.3%	
	Operating margin		-2.2%			7.7%	
2012 only	Member-Years			16,548			78,248
	MLR			87.5%			82.8%
	Net MLR			94.0%			90.2%
	ACR			16.6%			18.3%
	Operating margin			-10.6%			-8.5%

Source: Based on 2010–12 Supplemental Health Care Exhibit (SHCE) data by the National Association of Insurance Commissioners (NAIC).

Notes: MLR = Medical Loss Ratio, ACR = Administrative Cost Ratio. See text for a description of the data, sample exclusions, and definition of measures.

Those changes were largely driven by the insurers who remained in the individual market across all three years of the analysis because that is where the vast majority of enrollment was concentrated. However, other insurers also experienced changes in the measures examined over the period. For example, insurers exiting after 2010 had a mean MLR of 72.0 percent, which was substantially lower than the 76.8 percent mean MLR in 2010 for insurers that ultimately remained in the market through 2012. Those insurers exiting after 2010 also had a high mean ACR of 26.8 percent and a high operating margin of 7.3 percent, compared with a 2010 mean ACR of 19.7 percent and a mean operating margin of 0.4 percent for insurers remaining in the market through 2012. Insurers who had continued from 2010 but who exited after 2011 started in 2010 with lower mean MLRs and higher mean operating margins, than did insurers that remained in the market through 2012. But when they exited in 2011, those insurers had higher MLRs and much lower operating margins than did continuing insurers (-4.0 percent). Insurers entering (or reentering) the individual market in 2011 and 2012 had a mean MLR higher than did insurers operating in all three years, but their enrollment was too low to drive the overall rise in MLR during the period.

Small Group Market

The mean MLR and the mean net MLR for small group insurers overall were near or above 80 percent for many subgroups in all years in which they were observed. Still, we observe modest increases in mean MLR and net MLR between 2010 and 2012. The overall mean ACRs for small group insurers (13.6 percent in 2010, 13.2 percent in 2011, and 12.7 percent in 2012) were lower than were those for individual insurers in each respective year. Mean operating margins for small group insurers were similar in all three years (3.1 percent in 2010, 3.3 percent in 2011, and 3.1 percent in 2012) and were substantially higher than those in the individual market.

The modest trends in the financial measures in the small group market were almost entirely driven by the insurers who remained in the small group market across all three years of the analysis, because that is where the vast majority of enrollment was concentrated. The extent of entry and exit were somewhat limited, and the group of insurers that were present in 2010 and 2011 but absent from the data in 2012 were fairly similar to those in the far larger group of insurers present in all three years.

Shifts in the Distribution of MLR and ACR from 2010 to 2012

By examining the distribution of MLRs across insurers in the individual market (weighted by member-years), we find that MLRs did not increase across the board, but rather, the lower end of the MLR distribution was pulled higher over time, which was consistent with the intent of the MLR policy (figure 2). In 2010, 35.7 percent of member-years were covered by insurers with MLR at or above the 80 percent threshold. By 2011, 43.9 percent of member-years were covered by insurers with MLRs at or above 80 percent, and by 2012, 50.0 percent of member-years were insured at that level. Findings for net MLR are similar (not shown in figure). Accordingly, fewer consumers were enrolled in lower-valued products. Whereas 45.5 percent of member-years were insured by companies with MLRs below 75 percent in 2010, only 21.8 percent of member-years were covered by insurers with MLRs under 75 percent in 2012.

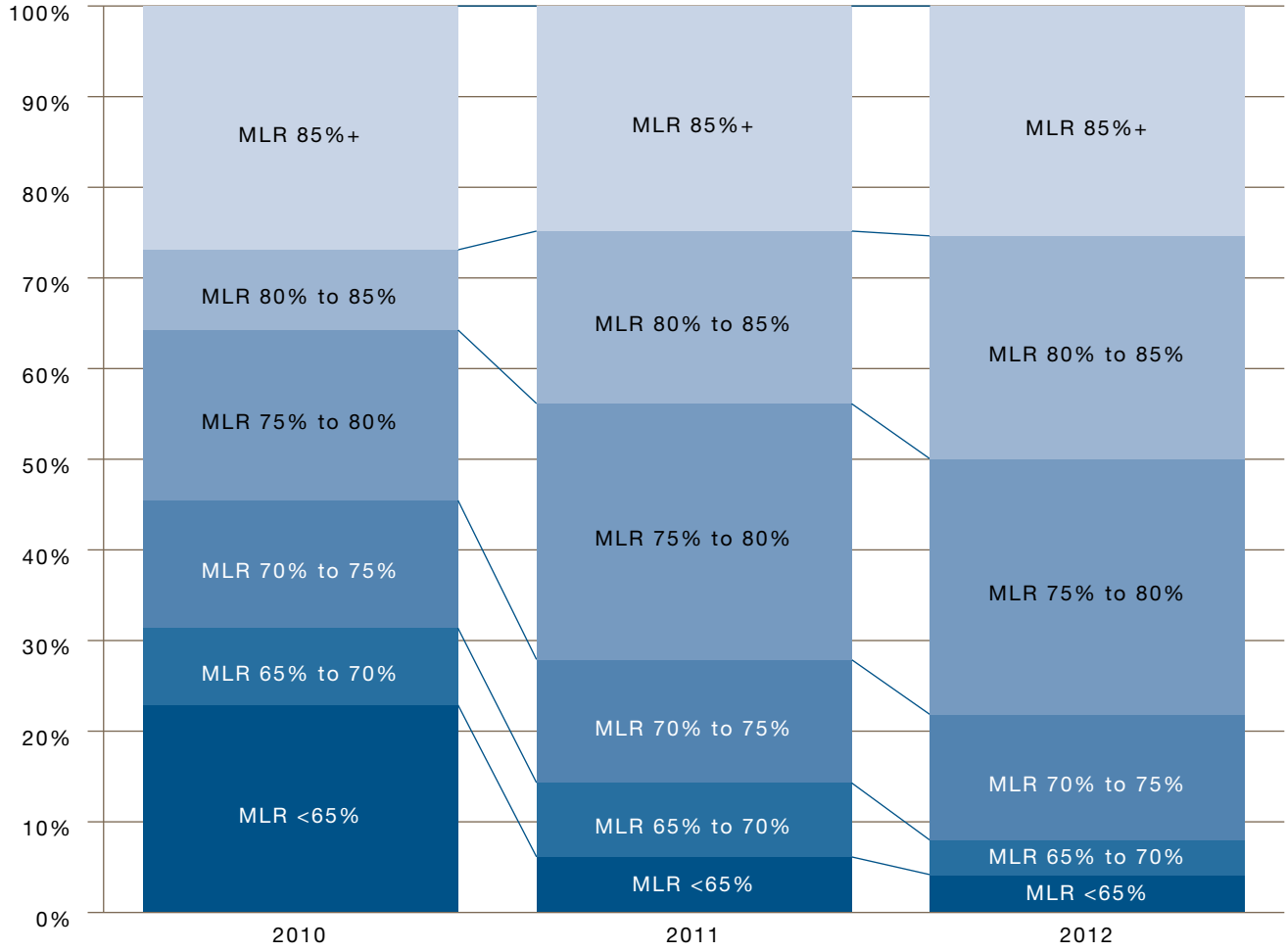
Figure 3 shows the distribution of ACRs across insurers (also weighted by member-years). Those data show that the MLR rule appears to have had a well-targeted effect that mainly influenced the behavior of insurers with high administrative costs relative to premiums. The high end of the ACR distribution in 2010 was reined in considerably by 2012. In 2010, nearly one-half (46.1 percent) of member-years were enrolled with insurers experiencing ACRs of 20 percent or more (and 21.8 percent were enrolled with insurers with ACRs of 25 percent or more). In 2012, only one-quarter (24.7 percent) of member-years were enrolled with insurers experiencing ACRs of 20 percent or more (and less than 10 percent were enrolled with insurers that had ACRs of 25 percent or more).

Those findings suggest that a subset of consumers benefited substantially from their insurers' reducing ACRs that were well above the market average. The share of member-years enrolled in plans with relatively low ACRs of 15 percent or less showed an increase from 30.0 percent in 2010 to 36.2 percent in 2012. In addition, the share of member-years enrolled in plans with very high operating margins—those at 10 percent or more—decreased from 16.8 percent in 2010 to 4.4 percent in 2012 (data not shown).[11]

How Did Insurers Achieve Increases in MLR in the Individual Market?

Shifts in the distribution of MLRs in the individual market, reported previously, suggest that low-MLR insurers were adjusting their operations to raise their MLR in response to the new regulation. We can see this more clearly by examining shifts in financial measures longitudinally for a fixed group of insurers. In table 4, we split into two groups the insurers that are in the individual market and that are observed in the data for all three years. That grouping is based on whether their 2010 level of net MLR was less than the 80 percent threshold required by the ACA beginning in 2011.

Figure 2. Distribution of MLR by Year in the Individual Market



Source: Based on 2010–12 SHCE data by NAIC.

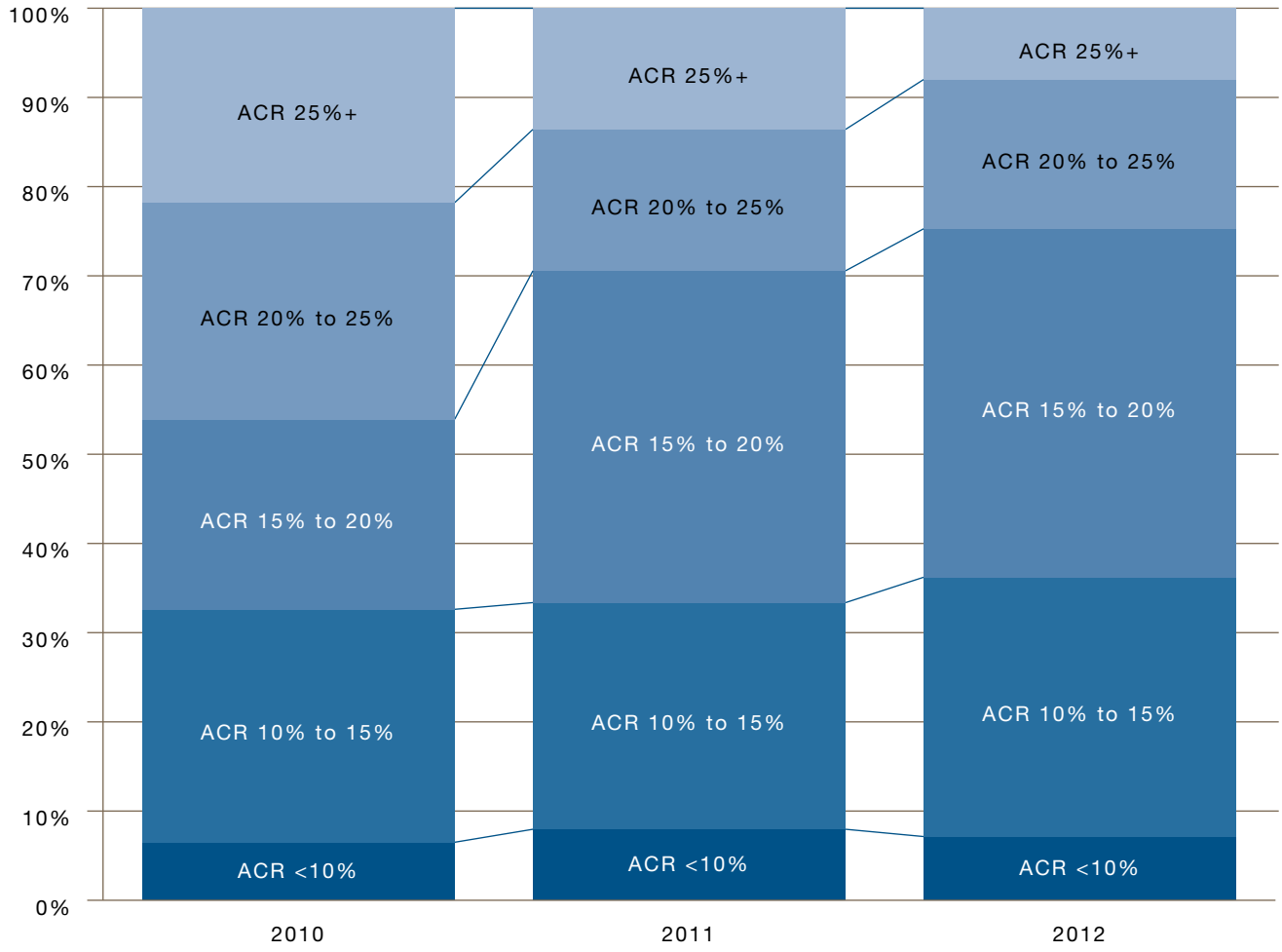
Note: See text for a description of the sample and sample exclusions. The MLR distribution is weighted by member-years.

If the MLR regulation is indeed the direct cause of the overall shifts in insurers' financial measures, we should see the changes concentrated among insurers starting out in 2010 with net MLR less than the 80 percent threshold. Insurers starting out with net MLR more than the 80 percent threshold serve as a useful comparison group: they are not compelled to change their operations according to the MLR regulation but are subject to shifts in market factors—such as health care cost inflation—common to all insurers in the individual market.

In 2010, 469 insurers started out with net MLRs of less than 80 percent ("low-MLR insurers"), and 285 insurers had a net MLR of 80 percent or more ("high-MLR insurers") (table 4). Low-MLR insurers had a higher ACR (23.1 percent versus 15.8 percent) and a higher operating margin (6.6 percent versus -6.7 percent) than did insurers in the high-MLR group in 2010. Low-MLR insurers also had somewhat lower premiums PMPY ($2,385 versus $2,697) and far lower claims PMPY than did high-MLR insurers ($1,588 versus $2,412) in 2010.

Insurers with low MLRs in 2010 experienced substantial changes in their financial measures by 2012, with much of the change occurring in 2011, when the minimum MLR requirement first took effect. The mean net MLR for low-MLR insurers increased by 10.9 percentage points, from 70.3 percent in 2010 to 81.2 percent in 2012. The MLR increased by a similar amount (10.2 percentage points). In contrast, the changes in MLR measures were relatively small for high-MLR insurers (a 1.7 and 1.0 percentage point reduction in net MLR and MLR, respectively). The relatively small declines in MLRs could reflect a small degree of reversion to the mean by insurers with unusually high

Figure 3. Distribution of Administrative Cost Ratio (ACR) by Year in the Individual Market



Source: Based on 2010–12 SHCE data by NAIC.

Note: See text for a description of the sample and sample exclusions. The ACR distribution is weighted by member-years.

MLRs in 2010.[12] If the overall shift in MLRs were the result of secular forces affecting the whole market, we would expect to see MLRs rising for both subgroups of insurers, contrary to our findings. Instead, our findings suggest that the reduction in MLRs was the direct result of the regulation.

Premiums PMPY increased 5.8 percent from 2010 to 2012 for insurers in the low-MLR group, which is less than the 11.2 percent increase in premiums PMPY for the high-MLR group. But more important, the MLR rule appears to have prompted significant increases in claims payouts among insurers with low-MLRs in 2010. Paid claims increased 22.0 percent for low-MLR insurers from 2010 to 2012, compared with a 9.5 percent increase for high-MLR insurers over the two-year period.

By reducing their ACR (administrative costs as a share of premiums), insurers can minimize the effect on their operating margins of increasing MLRs. From 2010 to 2012, low-MLR insurers reduced their mean ACR by 4.2 percentage points. ACRs for high-MLR insurers displayed very little change. Operating margins fell to near zero in 2012 for low-MLR insurers, from a high of 6.6 percent in 2010. Even with the reduction, operating margins in 2012 for low-MLR insurers were higher than those observed for high-MLR insurers, which were negative in each year of the data and stood at –5.1 percent in 2012. The need to make large adjustments does not appear to have deterred the low-MLR insurers from increasing their enrollment. Member-years increased by 4.8 percent for low-MLR insurers,

Table 4. Characteristics of Insurers in the Individual Market Who Remained the Data For All Three Years, By 2010 Net MLR Level Below Or Above 80 Percent

	Individual Market			Percent Change (%) or Percentage Point Change
	Year			
	2010	2011	2012	2010 to 2012
2010 Net MLR Level Below 80 Percent				
Insurers	469	469	469	–
Member-Years	4,661,355	4,746,290	4,883,084	4.8%
MLR	66.4%	74.6%	76.7%	10.2
Net MLR	70.3%	80.3%	81.2%	10.9
Incurred Claims, PMPY	$1,588	$1,831	$1,939	22.0%
Health Premiums Earned, PMPY	$2,385	$2,455	$2,522	5.8%
ACR	23.1%	20.3%	18.9%	-4.2
Operating margin	6.6%	-0.6%	-0.1%	-6.7
2010 Net MLR Level Equal to or Above 80 Percent				
Insurers	285	285	285	–
Member-Years	4,185,375	4,340,921	4,296,264	2.6%
MLR	88.3%	85.5%	87.3%	-1.0
Net MLR	90.7%	87.6%	89.0%	-1.7
Incurred Claims, PMPY	$2,412	$2,511	$2,641	9.5%
Health Premiums Earned, PMPY	$2,697	$2,908	$3,000	11.2%
ACR	15.8%	16.5%	16.1%	0.3
Operating margin	-6.6%	-4.1%	-5.1%	1.4

Source: Based on 2010–12 Supplemental Health Care Exhibit (SHCE) data by the National Association of Insurance Commissioners (NAIC).

Notes: MLR = Medical Loss Ratio, ACR = Administrative Cost Ratio, PMPY = Per member per year. See text for a description of the sample and sample exclusions and definition of measures.

compared with 2.6 percent for high-MLR insurers, from 2010 to 2012.

Even as mean MLRs among low-MLR insurers rose to a higher level, they had substantially lower levels of mean claims and premiums PMPY in 2012 compared to the high-MLR group. Echoing patterns in 2010, low-MLR insurers had lower premiums PMPY ($2,522 versus $3,000) and much lower claims PMPY than did high-MLR insurers ($1,939 versus $2,641) in 2012. Moreover, by 2012, the mean ACR was still higher and the operating margin was larger for the low-MLR group, suggesting that those insurers retained a different business structure and different product offerings from their high-MLR counterparts. Taken together, the findings suggest that throughout the study period, the low-MLR group likely specialized in low-benefit plans with a relatively high load compared with the high-MLR group.

LIMITATIONS AND SENSITIVITY ANALYSES

In this section, we describe several limitations of our analysis and the steps we took to address them. Measurement issues such as incorrect data submitted by insurers are difficult to assess. Data values for many insurers are clearly implausible. The exclusion criteria we apply seek to reduce, but cannot eliminate, the effects of measurement error or data quality issues on our findings. In this section, we discuss the sensitivity of our main findings to a range of alternative sample exclusion rules in response to specific concerns about the data or analysis.

As noted previously, inconsistent reporting and mergers would lead us to overstate the true extent of insurer entry and exit. Our exclusion rule, which drops very small insurers or those with no enrollment, reduces the amount of entry and exit in the data that are of little consequence. Conversely, dropping a case with extreme or invalid financial data in only one of the three years could artificially add to the entry and exit figures even as it helps produce more meaningful results for the financial measures.

As a first sensitivity analysis, we examine how the exclusion rules we applied in the main analyses affect trends in the number of insurers, parent companies, and enrollment relative to what we find in the NAIC before making any adjustments. We produced a version of the results shown in table 2 before excluding any insurers.[13] In that version, the numbers of insurers and parent companies are substantially higher because of the number of small insurers that were excluded. Enrollment levels are higher primarily as a result of the exemption of the parent company HCSC because of reporting inconsistencies (described earlier). Apart from the HCSC exemption, enrollment levels in the sample before exclusions are only slightly higher than in the main sample. In the individual market, the pattern of enrollment by member-years shows a decline overall (mostly because of the data anomaly with HCSC) but an increase among insurers present in all three years.

The main difference in the two versions is that the sample before exclusion has substantially more member-years with insurers entering the individual market in 2012 (about 220,000 versus 17,000). In the small group market, the sample before exclusions shows declines in member-years similar to those seen in the main findings, apart from the difference caused by data inconsistences related to HCSC. The main difference is that there are substantially fewer member-years with insurers that seem to be exiting the small group market in 2010 than in the data after making exclusions (about 221,000 versus 617,000).

As a second sensitivity analysis, we examine data quality issues in the financial measures. Those issues are more prevalent among very small insurers, which also generate a large amount of the apparent entry and exit. To examine whether the data errors of small insurers affect our main findings, we recomputed the measures shown in tables 2 and 3, further excluding insurers with fewer than 1,000 member-years from the analytic sample. Because insurers with fewer than 1,000 enrollees are exempt from the minimum MLR rule, that analysis also concentrates the sample on those insurers most affected by the rule. Excluding insurers with fewer than 1,000 member-years has very little effect on the trends in financial measures, which we would expect because our analyses are weighted by member-years. The number of insurers and parent companies are substantially lower, but the patterns for enrollment are very similar to those reported in table 2.

As a final sensitivity analysis, we exclude states with high degrees of enrollment variability, which could result from states changing the definition of the small group market or from inconsistent reporting (we apply those exclusions on top of the exclusions already made in the main analysis). States may have different definitions of the small group market in terms of the minimum or maximum number of employees separating the state's definition of individual, small group, and large group markets. Moreover, states may have changed those definitions during the analysis period (NAIC 2012b).[14] The implication is that some of the observed entry and exit within market segments could actually be movement from one segment to another. To identify and exclude state markets that may be more likely to have changing definitions of market segments or other data problems, we computed the coefficient of variation (CV) of member-years in the individual and small group markets by state over the three years. The CV is a measure of relative variability and is equal to standard deviation divided by the mean. Before computing the CVs, we again excluded HCSC.

In the individual market, the CV for member-years across the years was 20 percent or greater in four states: Delaware, New York, Ohio, and Rhode Island. Those states did not have correspondingly high CVs in the small group market. In fact, no state had a CV for member-years higher than 20 percent in the small group market (the highest CV was 15.4 percent for Arizona). Accordingly, we focus our analysis on trends in the individual market after excluding the four states with high CVs in that market.

The enrollment trends are similar to those we report in the third sensitivity analysis previously described, just at somewhat lower levels. The findings for MLR, net MLR, ACR, and operating margin are very similar to those we report in the main analyses overall and for insurers present in all three years' data. The main difference is that the insurers who seem to exit the individual market after operating in 2010 and 2011 account for only about 133,000 member-years in 2011, have net MLRs less than 80 percent (68.4 percent in 2010 and 79.0 percent in 2011), and have relatively high ACRs (31.1 percent in 2010 and 25.5 percent in 2011). Those insurers (144 total) that did actually exit the market—and did not just drop out of the sample as a result of data inconsistencies—may have decided that they could not operate profitably under the new requirements, given their high cost structure.

DISCUSSION AND CONCLUSION

One of the ACA's early market reforms, starting in 2011, was the MLR rule that required insurers to provide enrollees (as a group) with a certain minimum value in health spending in return for each dollar spent on premiums. The vast majority of states did not have MLR regulations in place for all plans in the individual and small group markets before the requirement in the ACA (America's Health Insurance Plans 2010).

Using data from 2010 to 2012, we examined whether regulation can constrain excessive health insurer profits through the MLR regulations while increasing value for consumers. Drawing on our analysis of the Supplemental Health Care Exhibit (SHCE) insurer data from 2010 to 2012, we conclude that the answer is yes. The ACA's minimum MLR rule had a direct effect on insurer behavior that increased value for consumers and increased efficiency in the individual and small group markets. MLRs increased substantially in the individual market overall, and those changes were concentrated among insurers with net MLRs of less than 80 percent in 2010 that raised their net MLR above the 80 percent minimum threshold by 2011 and 2012—after the rule took effect.

By increasing the amount of claims paid for health care, while holding premium growth in check, the MLR rule increased the value that many consumers received for their health insurance premium dollar. MLRs increased in the small group market from 2010 to 2012 but by more modest amounts because small group insurers were already closer to the ACA's targets or even exceeded them prior to the law's requirements.

In particular, insurers that were in the individual market and that had low MLRs in 2010 increased their MLRs from 2010 to 2012 because they increased their claims payments by substantially higher amounts than they increased premiums or the overall rate of health care cost growth—and by substantially higher amounts than insurers with high MLRs in 2010 increased claims. In addition, increases in premiums from 2010 to 2012 were much lower for low-MLR insurers compared with high-MLR insurers. Insurers may have increased claims by covering a wider range of benefits or by covering a greater share of the cost of the benefits. They also may have increased claims through less aggressive utilization review, fewer claims denials, higher payments to providers, or increased reserves counted as claims. Most of those actions benefit many consumers directly. To the extent that increased reserves boosts insurer solvency, consumers could benefit in the longer term from increased insurer and industry stability through higher reserves. Future research is needed to examine the way in which claims increased, but analysis options are limited because of the lack of data or weaknesses in available data.

In addition, the MLR rule created an incentive for insurers to reduce their administrative overhead costs as a share of premiums. We find that overall, individual market insurers reduced their administrative costs from 19.9 percent of premiums in 2010 to 17.6 percent of premiums in 2012. We find larger reductions in administrative cost ratios among insurers with low MLRs in 2010, which, as a group, also had higher-than-average ACRs in 2010. Reductions in ACRs represent increased efficiency in health insurance markets, which also provides long-term benefits to consumers.

Before implementation of the MLR requirement, some predicted substantial disruption among health insurers resulting from the inability of insurers to meet the requirement while remaining profitable. In 2011, one commentator predicted the following:

> *[T]he medical loss ratio will, ultimately, lead to the death of large parts of the private, for-profit health insurance industry. Why? Because there is absolutely no way for-profit health insurers are going to be able to learn how to get by and still make a profit while being forced to spend at least 80 percent of their receipts providing their customers with the coverage for which they paid. (Ungar 2011)*

In December 2011, Turner gave testimony that the ACA's MLR provision was leading to less competition and higher

prices for health insurance by forcing private insurers out of markets and by providing incentives to increase premiums among insurers that remain (Turner 2011). In 2013, Harrington warned of potential unintended consequences of the ACA's MLR provisions, including higher medical costs and higher premiums for some insurers, less consumer choice of plan design, and increased market concentration (Harrington 2013).

Our findings present evidence that this disruption did not occur. The evidence can be summarized in four points. First, the MLR changes appear to be driven largely by insurers who stayed in the market throughout the three-year period. Individual market insurers offering insurance in all of the three study years enrolled the bulk of member-years, accounting for most of the changes observed in the market. Those continuing insurers had generally higher mean MLRs to begin with and were then able to increase their mean net MLRs from 80.0 percent to 84.8 percent between 2010 and 2012, decrease mean ACRs, and operate with lower margins. Correspondingly, the effect of entering and exiting insurers did not drive the overall results in financial measures. Those insurers appear to have played a role, but their effect was limited because they constituted a small fraction of overall enrollment. To the extent that some insurers exited the individual market after 2010, they appear to be associated with lower value for consumers—many had relatively low mean MLRs, high mean ACRs, and high mean operating margins.

Second, although enrollment trends are difficult to discern because of inconsistent reporting in the SHCE data, we find no evidence suggesting a mass exit in terms of enrollment. After adjusting for the effect of one large insurer that continued to operate but does not appear in the 2012 data, we find no evidence of a net decline in enrollment in the individual market from 2010 to 2012, which is consistent with household survey data. Decreasing enrollment observed in the small group market may be inflated by data inconsistencies, but the decline is generally consistent with outside data showing a long-term downward trend in the offer rate of health insurance by small firms that started long before the ACA (Crimmel 2012).

Third, even with convergence in mean MLRs, consumers continued to experience a range of claims and premium levels in the individual market in 2012. Those findings are consistent with an individual market that continued to offer a variety of choices to consumers in terms of lean or more comprehensive benefits, while providing a fairly consistent level of benefits paid per premium dollar spent. This finding seems to contrast with the predictions of Harrington (2013) and others, who observed that lower-benefit plans or any plan with low expected claims will necessarily have higher overhead rates. They suggest that those insurers may exit the market, thus reducing consumer choice, because they may find that satisfying the MLR requirement is difficult or impossible, regardless of the credibility adjustments allowed under the federal MLR computation. Our findings suggest that lower-benefit plans were still available in 2012, along with any associated benefits from greater cost control or affordability of premiums.

Fourth, the changes we show for low-MLR insurers from 2010 to 2012 demonstrate that those insurers had the capacity to lower their administrative costs in response to the MLR regulation, to stay in the market, and to expand their enrollment. Our findings show that low-MLR insurers in 2010 did have lower claims costs and higher administrative cost ratios, but those insurers also had higher operating margins. This finding suggests that ACRs may have been high not by necessity but because the business model could support high administrative costs and high margins.

We do not know whether the negative operating margins observed among some insurers in 2012 will continue or be sustainable if they do continue. Negative operating margins can be sustained for many years because investment income can offset losses and because the tax implications of negative operating margins can offset current or future tax liability. Recent reports suggest that excessive reserves and the related investment income may be a concern that warrants further scrutiny among certain insurers.[15]

The findings presented here show that, consistent with incentives of the MLR rule, ACRs and operating margins declined—yet, counter to some predictions, that decline did not result in the mass exit of insurers because of poor financial performance. On the contrary, the performance of health insurers in the stock market suggests that operating margins were sufficient over the period. All of the so-called "Big Five" health insurers— UnitedHealth, Aetna, Cigna, Humana, and Anthem—have outperformed the overall stock market since 2010 (La Monica 2015). More broadly, our findings suggest that targeted regulation of an industry's profits (in this case, through the MLR rule) can benefit consumers without causing harmful market disruption.

Future research should focus on assessing the longer-term effect of the MLR requirement, particularly with regard to cost containment. The recent slowdown in the growth rate of private health insurance premiums across all markets has been attributed, in part, to the ACA's market reforms, including MLR requirements, despite the fact that the

slowdown was most pronounced in 2013, two years after the MLR requirement started (Hartman et al. 2014).[16]

New analysis of rate filings data from 2013 to 2014 suggests that the MLR requirement restrained premium increases to some extent for insurers in the individual and small group markets that had requested premium rate increases of greater than 10 percent (McCue and Hall 2015). Yet our research in the earlier period from 2011 to 2012 suggests that claims appear to have increased in response to the MLR rule. That finding casts doubt on the cost-containment aspect of the MLR rules, at least in the short term. In any case, cost containment is not the goal of the MLR rule but is the focus of other market reforms of the ACA, including increased competition in marketplaces. Ultimately, those issues must be addressed to determine whether or how much the MLR requirement has exerted downward pressure on premium growth in the individual and small group markets since the rule went into effect. Further study also is needed to examine whether the increases in claims costs were a short-term adjustment that will stabilize and whether operating margins will increase or prove sustainable at lower levels.

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ENDNOTES

1. In our analysis, we examine comprehensive health insurance offerings in health or life insurance lines of business, although comprehensive health insurance may be offered by insurers reporting different lines of business. Following previous research, we exclude property/casualty and fraternal lines of business from the analysis because they account for a very small share of reported experience in comprehensive health insurance (Abraham and Karaca-Mandic 2011; Karaca-Mandic et al. 2013).
2. In California, health insurers are regulated either by the California Department of Insurance (CDI) or the Department of Managed Health Care (DMHC). The former oversees most preferred provider organizations (PPOs) and traditional fee-for-service plans, whereas the latter regulates HMOs, which are not required to submit the SHCE data to the NAIC. Authors' calculations based on analyses of 2011 enrollment data show that data submitted by insurers regulated by the CDI—and therefore represented in the SHCE data presented in this document—covered 68.7 percent of the individual market and 72.4 percent of the group market (California HealthCare Foundation 2013).
3. In many states, comprehensive health insurance can be sold by insurers operating through different lines of business, including a small but significant share of comprehensive health insurance sold through life insurance lines of business. In this paper, insurers offering comprehensive health insurance in either the health or life lines of business are counted as distinct insurers.
4. The premiums used in this calculation include "earned" health premiums, or premiums for policyholders and dependents with coverage through the insurer during the reporting year, and exclude "unearned" premiums, that is, premiums for policyholders and dependents with coverage through the insurer outside the reporting year.
5. The data reported to CMS uses a different method to treat claims that have been incurred but not paid compared to the data reported to NAIC and used in this study. The calculation reported by insurers to CMS has a three-month run-out period for reporting claims from the prior year—claims incurred during the year will be reported if they were paid either during the current year or through March 31 of the following year. The SHCE data do not include a run-out period. In addition, the computation for CMS exempts the smallest insurers (those with fewer than 1,000 covered life-years) from the MLR requirement and adjusts the computation of the MLR for small insurers to compensate for annual fluctuations in their medical claims experienced as a result of their size. The regulations boost MLRs for those small insurers with between 1,000 and 75,000 covered life-years. That increase is the so-called "credibility" adjustment to MLR, which is multiplied by an additional adjustment for plans with higher deductibles to further increase net MLR used to calculate federal rebates (Centers for Medicare and Medicaid Services [CMS] 2012c). The computation for CMS also contains an adjustment for high-deductible plans because of their high administrative costs relative to claims. Finally, in 2011, seven states (Georgia, Iowa, Kentucky, Maine, Nevada, New Hampshire, and North Carolina) were granted temporary modification of the MLR requirement until 2014 that permitted lower MLRs in the individual market than the 80 percent MLR standard specified under the ACA (National Conference of State Legislatures 2012).
6. Claims adjustment expenses include expenses such as office and computer maintenance (US Government Accountability Office [GAO] 2014).
7. Future research merging the SHCE data with the CMS MLR data could improve estimates of entry and exit. Our overall conclusion, however, is that the role of entry and exit is minor, even if it is overestimated with these data.
8. Health Care Service Corporation was listed as "active" and "licensed" as of 2013 in those four states, according to the NAIC Consumer Information Source listed on the website https://eapps.naic.org/cis/financialReport.do?entityId=7624. In addition, the insurers in this parent company were listed in the CMS MLR public use file for 2012, further suggesting that those insurers did not exit the market in those states (http://www.cms.gov/CCIIO/Resources/Data-Resources/mlr.html).
9. Premiums reported in the SHCE data are notably lower than other benchmarks, at least for the small-group market where survey data are available. In 2011, for example, the Medical Expenditure Panel Survey Insurance Component (MEPS-IC) reported that the average total single premium per enrolled employee at private-sector establishments that have fewer than 50 employees and that offer health insurance was $5,258 (Agency for Healthcare Research and Quality 2011). One reason for the difference is that the SHCE data include only fully insured products, as noted previously, whereas the MEPS-IC survey data include self-insured small-employer plans.
10. Authors' calculations are based on the MEPS-IC data downloaded from the State Health Access Data Assistance Center (SHADAC). Enrollment figures in the MEPS-IC include only policyholders and, as noted previously, include self-insured small-employer plans. Thus, the MEPS-IC enrollment data are not directly comparable to the member-years enrollment data in the SHCE data. Nevertheless, the enrollment trends are generally consistent across the time period examined.
11. Although no set standard exists for how much of an operating margin would be considered excessive for health insurers, we use 10 percent as a reasonable benchmark; that figure is substantially higher—about three times higher—than figures in the health insurance industry overall in 2010. http://www.managedcaremag.com/archives/2013/8/excessive-profits-where.
12. The increase in MLR for small insurers may also reflect some degree of reversion to mean similar in magnitude to the decline in MLR for high-MLR insurers. However, the total increase for low-MLR insurers is much larger in magnitude than the decline for high-MLR insurers. The shift in the distribution of MLR shown in figure 2 strongly suggests that the shifts resulted from the MLR rule. If the changes were only due to reversion to mean, we should see similar distributions for each year in figure 2, contrary to our findings.
13. Results from the sensitivity analyses are available from the authors on request.
14. NAIC notes that the numerical thresholds defining the differences between those markets, as reported in the SHCE, may have changed for some states between 2011 and 2012, but the extent of those differences is not known (NAIC 2012b).
15. For example, Blue Shield of California lost its tax-exempt status in California in March 2015, a decision related in part to the $4.2 billion held in financial reserves, which was four times larger than the recommendation (Gold 2015).
16. The annual growth rate in aggregate private health insurance premiums slowed to 2.8 percent in 2013, compared to annual growth rates of 3.5 in 2010 and 4.3 in 2011 and 4.0 percent in 2012 (Hartman et al. 2014).

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