SOCIETY OF ACTUARIES

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Chairperson's Corner

By J. Patrick Kinney

Welcome to the 73rd issue of *Health Watch*, this time with an editorial focus on the implications of U.S. health care reform. In this month's Chairperson's Corner, I will talk about some of the accomplishments of the Health Section Council (HSC) over the past year. And I encourage any members attending the Society of Actuaries (SOA) Annual Meeting in San Diego to come to the Health Section breakfast on Tuesday morning, where you will have an opportunity to ask questions and interact with section leaders and fellow section members.

Health Section Leads in Member Retention—Again!

A good measure of the Health Section's success in satisfying our members' need for education and professional connection is the percentage of section members who renew their membership each year. I am happy to report that the SOA section renewal statistics for 2013 showed the Health Section leading all 19 SOA sections in this statistic. For the second year in a row, in fact! At 92 percent of members renewing, we exceeded the total SOA section renewal percentage of 85 percent. But wait, there's more! We are the only section in the past five years to achieve 90 percent or greater member retention—and we have done it every year! We have also been growing in total membership, with new members more than offsetting the attrition rate. Thank you to all members of the section for supporting our activities with your dues, your volunteerism, and your continued interest in the Health Section.

The only disappointment in the membership stats is that we have fallen to second place—behind the Financial Reporting Section—in total membership as of August 2013. We need 60 more members to catch back up! You know the benefits of section membership, so encourage your colleagues and students to join the Health Section. Don't make me drop my Financial Reporting membership next year out of a heightened sense of contrived competition!

Health Meeting

As you know, the largest continuing education event for the Section is the SOA Health Meeting, held in June of each year. This year's Health Meeting was held in Baltimore, Maryland. (I didn't get to Fort McHenry or Camden Yards this time, but I did pay my respects to E.A. Poe.) The section council, SOA staff and numerous volunteer session coordinators and speakers worked together to provide an outstanding opportunity for professional education and networking. Major thanks go to our meeting chair Karl Volkmar and vice-chair Valerie Nelson. We came very close to record attendance, and 98 percent of survey respondents rated the meeting as Good to Excellent (with Very Good receiving an outright majority). Over the next few months, the section council and SOA staff will be reviewing the detailed responses on the 98 meeting sessions, in preparation for next year's Health Meeting in San Francisco.

Continuing Education

One of our primary functions is to provide continuing education to section members, other actuaries, and interested parties. In this we have done even more than usual during the past year. Our annual report to the SOA Board at their October meeting includes the following accomplishments:

- The Section provided 85 percent of the content at the SOA Heath Meeting.
- We are sponsoring 15 sessions at the October Annual Meeting (that's all the time the SOA can give us).
- We sponsored eight webinars and produced several podcasts for health actuaries on the go.
- We ran Boot Camps each November on rotating topics important to Health actuarial practice.
- Med School for Actuaries remains a popular seminar offered several times per year.

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To join the section, SOA members and non-members can locate a membership form on the Health Section Web page at http://www.soa.org/health/

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- Our new Provider Payment Reform Seminar was very highly rated by attendees.
- We launched members-only online access to *Health Affairs*.
- We also opened a LinkedIn subgroup for Health Section members to engage in ongoing discussion.

Add to that the outstanding *Health Watch* issues of the past year and our monthly Health E-News blast email, and I think you will agree that the Health Section continues to provide significant value for your membership dues.

Section Council

We all owe particular thanks to the members of the section council, who contributed so much of their time and effort over the past year to achieve the strong results outlined above. I have enjoyed working with all of them, and I personally have learned so much through having the opportunity to lead the section over the past year. In addition to me, council members whose terms expire this fall include Karl Volkmar, Dewayne Ullsperger, and Tom Handley. Please join me in thanking each of these leaders for their work with the Health Section.

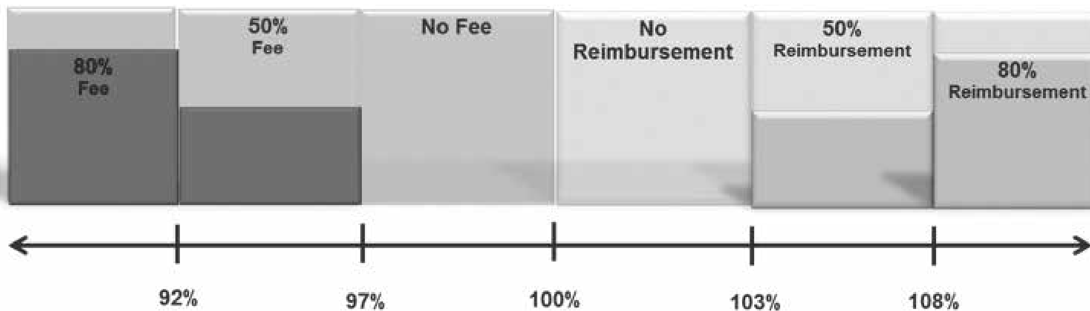
Continuing on the council next year will be Donna Kalin, who steps into the chair position after the Annual Meeting, Andie Christopherson (vice-chair), Valerie Nelson (2014 Health Meeting chair), Greger Vigen, Nancy Hubler, Kara Clark, Olga Jacobs, and Eric Goetsch. Thanks to each of you for your continuing involvement with the Health Section.

Section Elections

Each year the Health Section membership has the opportunity to elect new volunteer leaders as members of the section council. As I write this, the section elections are about to begin. By the time you are reading this in *Health Watch*, we will know who is joining the Health Section Council for the next three years. I am sure those elected will be eager to work alongside Donna, Andie and the other returning HSC members in continuing our tradition of providing strong and substantive professional development for Health actuaries.

As always, if you have ideas for our future success, along with energy and commitment to carry us forward, consider how you might be able to contribute as a volunteer. For more information, please contact Donna Kalin or any member of the Health Section Council. Remember, as I have said often over the last few years, we are the oldest and the best of the 19 SOA sections—and together we will keep it that way! ■

Figure 1: Gain and Loss Sharing under ACA Risk Corridors



On the face of things, the risk corridor program appears rather straightforward (and may appear less complicated than its "three R" brothers—risk adjustment and transitional reinsurance). However, there are some interesting aspects of the formula itself, and there are also some interesting consequences that result from the rule's language. Our goal is to dispel some common misconceptions, demonstrate some of the less obvious aspects of the risk corridor program, and help you navigate through these next three years.

Why Do We Have Risk Corridors?

By now, you have hopefully completed your 2014 product pricing. Unless you have a vintage DeLorean (with time machine capability), you were likely intimidated by the amount of uncertainty in your pricing assumptions. How many employers will send their employees to the individual market? What percentage of the current uninsured will purchase coverage? How healthy will these individuals be? For those newly covered, how much will pent-up demand affect their utilization? How will my competitors price their products? Will the transitional reinsurance be fully funded?

The list of concerns goes on and on (and could be the subject of its own article). Regardless, it is clear that, despite our best efforts and actuarial principles, there are some significant factors about the future insurance market that we cannot know.

The goal of the risk corridor program is to protect health insurance issuers against this pricing uncertainty of their plans, temporarily dampening gains and losses in a risk-sharing arrangement between issuers and the federal government. Since the protection is only available for QHPs, it also provides a strong incentive for issuers to participate in the health insurance exchanges set up by the ACA. Lastly, it provides an incentive for issuers to manage their administrative costs optimally.

The program compares "allowable costs" against a "target amount." Allowable costs are essentially claim costs plus various adjustments, including adjustments for the other two Rs and quality and health information technology costs. The target amount is essentially premium less allowable administrative (non-claim) costs, where the administrative costs include a certain allowance for profit. If the ratio of these amounts is greater than one, then the premium was less than what was required, and if the ratio is less than one, then the premium was more than what was required. Based upon this ratio, plans share with HHS in the fashion shown in Figure 1 above.

The chart in Figure 1 illustrates the basic concept, although we will walk through some case studies later in the article. If a plan's ratio is within three percentage points of 100 percent, the plan keeps all gains (or losses) for itself. For the next five percentage points, gains (or losses) are shared 50/50 between the plan and the government. Beyond that (either below 92 percent or above 108 percent), the plan keeps 20 percent of gains (or losses), ceding the remaining 80 percent to the government.

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Given the uncertainties in pricing, and the need to both maintain market share and receive approval by state divisions of insurance, there is pressure to keep premiums lower.

However, as we'll see, the "gain" and "loss" percentages shared here are not really what health insurance issuers are used to when they see those words. The formula is complex, and it is important to work through examples to understand it fully. For instance, having a risk corridor ratio of 100 percent does not mean that an issuer broke even—in fact, the issuer could have either gained or lost money, depending on its specific situation.

One consequence of the chart is obvious—the risk corridor program appears to be symmetric, with some plans paying into the program and some plans receiving funds from the program. But is it really? In the final rule HHS states that "[the Congressional Budget Office] did not separately estimate the program costs of risk corridors, but assumed aggregate collections from some issuers would offset payments made to other issuers."[2] However, if all of the plans in a market (or even just the most popular ones) end up pricing their products too low and so suffer losses, the government will end up needing to fund this program, and the required funds could be substantial.

Given the uncertainties in pricing, and the need to both maintain market share and receive approval by state divisions of insurance, there is pressure to keep premiums lower. Because state divisions of insurance are typically more likely to question high prices than low prices, the possibly of an asymmetric risk corridor program outcome seems likely. For this provision to be symmetric, the losses would have to exactly balance the gains, which would be more a coincidence than a certainty. HHS did acknowledge this on page 15473 of the Federal Register (released on March 11), noting that the program is not statutorily required to be budget neutral, and that payments will be made regardless of the balance between receipts and payments.[3]

How Do the Risk Corridors Work?

The ultimate goal of the risk corridor program is to dampen the impact to issuers from having premiums that end up being too high or too low; however, the formula contains a cap on administrative expenses as well as a floor on profit, which combine to produce interesting results. Here are the official steps involved in a risk corridor calculation:

- Claim costs = Incurred claims + IBNR + payments/receipts from risk adjustment and transitional reinsurance.
- Allowable costs = Claim costs + quality expenses + health care information technology (consistent with the medical loss ratio (MLR) definition).
- Profits = (Premium – allowable costs – non-claim costs), floored at 3 percent of after-tax premium.
- Administrative costs = Non-claim costs – taxes/fees.
- Allowable administrative costs = Taxes/fees + (administrative costs + profit, capped at 20 percent of after-tax premium).
- Target amount = Premium charged – allowable administrative costs.
- Risk corridor ratio = Allowable costs / target amount.

Note that the formula does not compare pricing assumptions with actual experience. All of the values used in the risk corridor calculation are actual experienced values; the formula uses premiums actually charged, and claim and administrative costs actually experienced. It is also important to note that the parameters are set up so as to be aligned with the federal MLR calculation as much as possible. (The risk corridor calculation happens after reinsurance and risk adjustment, but prior to the minimum MLR provision calculations, because any risk corridor payment or receipt is an input to the MLR calculation.) Issuers must submit risk corridor data and calculations by July 31 of the year following the benefit year. The calculations can essentially be done at the issuer level (although there are some subtleties), in order to be consistent with the ACA's single risk pool requirement.

The March 11 publication in the Federal Register[4] walks through a rudimentary calculation example, which is quite helpful (even though the parameters used in the published example are not particularly realistic). Consider instead this baseline scenario: An issuer has $350 per member per month (PMPM) in allowable costs (including health care quality and health information technology expenses). In addition, the issuer has $85 PMPM in non-claim costs

(other than profit margin), $25 of which are taxes and fees. Let us assume that the issuer has priced its product accurately, including a 5 percent profit margin (as a percentage of total premium, not after-tax premium), and has set its premiums at $458 PMPM on average. After-tax premiums are therefore $433 PMPM, with profits at $23 PMPM and allowable administrative costs at $108 PMPM (neither factor is subject to the cap/floor here). Therefore, the target amount (premiums less allowable administrative costs) is $350 PMPM, which is compared with the allowable costs (also $350 PMPM). The risk corridor ratio is 100 percent (and no payments are made or received), since actual results came out consistent with pricing assumptions. In this baseline scenario, the issuer's priced-for profit margin of 5 percent was actually achieved, and remains at 5 percent after risk corridors.

Because the goal of the program is to cushion against pricing uncertainties, let us modify our example to see what happens when our issuer prices its product 10 percent higher than what would have been ideal (above and beyond the priced-for profit margin), and when our issuer prices its product 10 percent lower than what would have been ideal. Does the risk corridor "protect" against these scenarios?

Just to be clear, given all the "profits" floating around: The line labeled "Priced Profit Margin" in Figure 2 is the profit the issuer intended to make. The "Profits" line is the profit amount used in the risk corridor formula after applying the floor. Finally, the last two lines show the approximate profit margins the issuer experiences as a percentage of total premium before and after the impact of the risk corridor program.

In both scenarios shown in Figure 2, the transfer payment between the plan and HHS mitigates the impact of the deviation from pricing assumptions to some degree, but far from completely. In the overpricing scenario, the allowable administrative costs are capped at 20 percent of after-tax premiums, plus taxes and fees. If this cap were not present, then the issuer would be permitted to deduct its entire allowable administrative costs (including the large profit), and there would be no risk corridor payment made.

Figure 2: Risk Corridor Calculation under Mispricing Scenario

	Baseline	10% High	10% Low
Premium Charged	$458	$504	$412
Allowable Costs	$350	$350	$350
Non-claim Costs (other than Priced Profit Margin)	$85	$85	$85
Taxes/Fees	$25	$25	$25
Priced Profit Margin	5%	5%	5%
After-Tax Premium Earned	$433	$479	$387
Profits (in risk corridor formula)	$23	$69	$12*
Allowable Admin Costs	$108	$121*	$97
Target Amount	$350	$383	$315
Risk Corridor Ratio	100.0%	91.4%	110.9%
Risk Corridor Receipt (Payment)	$0.00	$(11.42)	$15.30
Profit Margin Before Risk Corridors	5.0%	13.6%	-5.6%
Profit Margin After Risk Corridors	5.0%	11.4%	-1.8%

*Asterisks denote values impacted by cap/floor. Note: Dollar values are rounded PMPM values. Taxes/fees assumed to be flat amount, and not indexed to premium. Profit margins are percentages of premium charged.

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Figure 3: Risk Corridor Calculation under High/Low Admin Cost Scenario

	Baseline	High Admin	Low Admin
Premium Charged	$458	$526	$421
Allowable Costs	$350	$350	$350
Non-claim Costs (other than Priced Profit Margin)	$85	$150	$50
Taxes/Fees	$25	$25	$25
Priced Profit Margin	5%	5%	5%
After-Tax Premium Earned	$433	$501	$396
Profits (in risk corridor formula)	$23	$26	$21
Allowable Admin Costs	$108	$125*	$71
Target Amount	$350	$401	$350
Risk Corridor Ratio	100.0%	87.3%	100.0%
Risk Corridor Receipt (Payment)	$0.00	$(25.20)	$0.00
Profit Margin Before Risk Corridors	5.0%	5.0%	5.0%
Profit Margin After Risk Corridors	5.0%	0.2%	5.0%

*Asterisks denote values impacted by cap/floor. Note: Dollar values are rounded PMPM values. Taxes/fees assumed to be flat amount, and not indexed to premium. Profit margins are percentages of premium charged.

"…the program is also designed to strongly reward administrative efficiency".

Similarly, in the underpricing scenario, if the profits were not floored (at 3 percent of after-tax premiums), then there would be no risk corridor payment received. This explains why the cap and floor are needed—without them, the program doesn't make sense (assuming that it is to be based on actual expenses rather than pricing assumptions).

Next, let us examine the impact of an issuer that has higher (or lower) administrative costs than our hypothetical issuer. These are non-claim costs other than health care quality and health information technology (which are both considered allowable costs). The table in Figure 3 compares our baseline scenario with two issuers, each of which has accurately priced its product, but the first has higher administrative costs, and the second has lower administrative costs.

If the issuer manages to keep its administrative costs low (as in the third column in Figure 3), the issuer does not have to share any of these efficiencies with the government. However, if the issuer has high administrative costs (as in the second column in Figure 3), its allowable administrative costs are capped at 20 percent of after-tax premium earned, plus taxes and fees, and it is required to make a significant risk corridor transfer (approximately 5 percent of premium charged, which in this case is their entire profit margin). Thus, the program is also designed to strongly reward administrative efficiency.

Finally, consider the impact of pricing a plan with a high profit margin as compared to pricing a plan with a low profit margin, assuming accurate pricing elsewhere. The table in Figure 4 on page 9 illustrates this scenario.

The issuer that prices in a large profit margin (as in the second column in Figure 4) ends up hitting the cap on administrative costs, and has to pay back a portion to HHS (in this example, approximately 0.6 percent of premium). On the other hand, the issuer in the third column includes no profit margin (you can see that the premium charged is equal to the allowable costs and the non-claims costs). Despite this, the risk corridor formula builds in a 3 percent profit margin (as percentage of after-tax premium, not total premium) in order to calculate the risk corridor ratio, and the issuer receives a small payment from HHS (although not the entire 3 percent).

Note that if a plan has low enough administrative costs, the issuer can price in a larger profit margin without hitting the 20 percent cap.

What Are Some Key Considerations Related to This Provision?

The final regulations aligned the risk corridor provision with the minimum MLR requirement, such that allowable taxes, fees and quality expenses in the MLR formula are also allowable in the risk corridor calculation. Issuers have been dealing with the MLR formula for a while now, and have found that it is critical to appropriately categorize items that qualify as health quality improvement expenses—items that lead to measurable improve-

ments in patient outcomes or patient safety, prevent readmissions, promote wellness or enhance health information technology. It is also important that issuers are appropriately allocating administrative expenses between their individual, small group and large group business (along with their self-funded and other non-commercial lines of business). Remember that only individual and small group QHPs receive protection from the temporary risk corridor program.

Because risk adjustment payments and transitional reinsurance compensation will feed into the risk corridor calculation, and the risk corridor calculation will adjust the final MLR calculation, it is not a simple exercise to project (and correct for) potential MLR rebate payments in advance. Some plans have taken measures—such as premium holidays or the waiving of cost sharing—in order to avoid the administrative effort (and potential negative publicity) of making MLR refund payments. Beginning in 2014, it will be more difficult to manage MLR liabilities in this fashion, because it will be possible that a plan is sitting at a comfortable MLR, only to have a large risk adjustment receipt or risk corridor correction push them below the minimum MLR requirement.

Issuers may be able to readily model their own risk score, but will find it difficult to model the overall market risk score (which is just as important in the risk adjustment calculation), and the risk adjustment transfer payment feeds into the risk corridor calculation, which populates the MLR formula. This is another place in which the risk corridor mechanism ends up being non-symmetric—after a certain point, an issuer must start disbursing gains to policyholders through MLR rebates. In other words, the issuer's potential gains are capped, but the downside risk is not (merely dampened), and for very profitable issuers, the risk corridor may essentially have the effect of allocating some gains to the federal government that instead would have been paid to policyholders as rebates. Issuers should already be modeling potential risk adjustment, reinsurance and risk corridor scenarios and how they feed into their MLR, and should be setting up a real-time process to monitor how these provisions are impacting their bottom line.

Figure 4: Risk Corridor Calculation Under High/Low Priced Profit Scenario

	Baseline	High Profit	Low Profit
Premium Charged	$458	$483	$435
Allowable Costs	$350	$350	$350
Non-claim Costs (other than Priced Profit Margin)	$85	$85	$85
Taxes/Fees	$25	$25	$25
Priced Profit Margin	5%	10%	0%
After-Tax Premium Earned	$433	$458	$410
Profits (in risk corridor formula)	$23	$48	$12*
Allowable Admin Costs	$108	$117*	$97
Target Amount	$350	$367	$338
Risk Corridor Ratio	100.0%	95.5%	103.6%
Risk Corridor Receipt (Payment)	$0.00	$(2.83)	$1.08
Profit Margin Before Risk Corridors	5.0%	10.0%	0.0%
Profit Margin After Risk Corridors	5.0%	9.4%	0.2%

*Asterisks denote values impacted by cap/floor. Note: Dollar values are rounded PMPM values. Taxes/fees assumed to be flat amount, and not indexed to premium. Profit margins are percentages of premium charged.

HHS has clarified that it is conscious of the risk corridor program's non-symmetric nature, and states in the March 1 regulations[5] that funds will be paid out regardless of the balance between payments and receipts. Some issuers are still worried that if the formula requires a large amount of funding from the government, there may be political pressure to reduce payments to issuers. It does not appear that most issuers are pricing differently as a result of these fears (based upon what has been released publicly so far).

Because of the risk-sharing nature of the program, it could provide an incentive for an issuer to price its plans competitively (with reasonable but aggressive assumptions), and if its price ends up being too low to cover costs, it will share that burden with HHS, while at the same time gaining market share. State divisions of insurance have historically had a focus upon plans with rates that they perceive to be too high; going forward, it will also be important for state divisions of insurance to increase efforts to review rates for being potentially insufficient. To the

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extent that issuers are underpricing in a competitive market, this could also lead to significant rate increases in 2017 when the risk corridor program ends.

It is also important to remember that the risk corridor only applies to QHPs both on and off the exchange. For plans sold on the exchange, this should not be a concern, as QHP certification will happen at that point. However, as mentioned previously, the recent HHS proposed rule suggests that products sold only off exchange will not be eligible for QHP certification (or risk corridor protection).

The ACA presents an exciting, yet uncertain, reality for issuers, who are accustomed to pricing products using an ample amount of relevant, quality data. Ultimately, the risk corridor program is designed as a "bridge over troubled waters" to help protect against this uncertainty. If all goes well, by the time the risk corridor program sunsets in 2017, issuers will finally have the ability to price ACA plans with ACA data.

END NOTES

[1] U.S. Department of Health and Human Services (June 19, 2013). Patient Protection and Affordable Care Act; Program Integrity: Exchange, SHOP, Premium Stabilization Programs, and Market Standards (Proposed Rule). Federal Register, Vol. 78, No. 118, 45 CFR Parts 144, 147, 153, 155, and 156, p. 37044.
[2] U.S. Department of Health and Human Services (March 11, 2013). Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment Parameters for 2014 (Final Rule). Federal Register, Vol. 78, No. 47, 45 CFR Parts 153, 155, 156, 157 and 158, p. 15516. Retrieved July 12, 2013, from *http://www.gpo.gov/fdsys/pkg/FR-2013-03-11/pdf/2013-04902.pdf.*
[3] Ibid, p. 15473.
[4] Ibid, p. 15472.
[5] Ibid, p. 15473.