# Cost-sharing reduction subsidies:
# Financial impact of the simplified methodology

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**The Patient Protection and Affordable Care Act (ACA) introduced two subsidies for low- and moderate-income individuals to help make health insurance more affordable. These include premium subsidies to lower the initial purchase price of a policy and cost-sharing reduction (CSR) subsidies to lower the cost sharing (e.g., deductibles, copays, etc.) absorbed by individuals at the time they receive care. CSR subsidies, however, are administered in a complicated manner. In many cases the federal government may not reimburse the full cost, leaving the remainder on the shoulders of health insurance companies.**

**This paper outlines the design of the CSR subsidies under the ACA and its implementing regulations. It then describes how, depending on the reimbursement methodology agreed upon between issuers and the federal government, the regulations as currently written[1] may under-compensate issuers of silver-level plans. Issuers should consider the scenarios described in this paper when choosing one of the CSR reimbursement methodologies allowed by the federal government.**

## HOW DO CSR SUBSIDIES WORK?

When issuers file their plan designs and premium rates for a given plan year, they are required to include a set of alternative plan designs similar to, but richer than, each standard silver plan. For example, as defined under the ACA, an issuer will on average pay about 70% of all allowed charges from providers for a standard silver plan, with the member paying the remaining 30% through various cost-sharing mechanisms such as deductibles, copays, etc. This is termed a 70% actuarial value (AV) plan. Of course, for any particular member in a year these percentages could vary greatly, but the 70% AV is expected to roughly hold as an average across a standard population.

For each 70% AV standard silver plan offered by an issuer through the individual market exchange, the issuer must also offer three variations, or alternative silver plans, with higher AVs than the standard silver plan to enrollees with specified income levels. A member with an income of 200% to 250% of the federal poverty level (FPL) signing up for a silver plan will actually receive a plan with a 73% AV. A member with an income of 150% to 200% of the FPL will receive a plan with an 87% AV. And a member with an income of 100% to 150% of the FPL will receive a plan with a 94% AV.

## HOW ARE CSR SUBSIDIES ACTUALLY ADMINISTERED?

When a member with an income below 250% of the FPL selects a silver plan and incurs claims, the issuer will pay those claims using the richer set of cost-sharing parameters associated with the higher AV, while the member will pay the lower cost sharing associated with that plan. Throughout the course of the plan year, the federal government regularly issues advance payments to health plans based on the expected values of these subsidies and the number of members enrolled in each of these plans. These advance payments are calculated using a very simple methodology that relies only on the AVs of the standard and alternative plans.

At the end of the plan year, a more sophisticated calculation is implemented in order to true up the amount actually owed to issuers for covering members in alternative silver plans. These true-up calculations can either result in a payment to or from the issuer depending on whether the advance payments were less than or greater than the value of the subsidy as calculated by the more sophisticated methodology. During the first three years of operation of the health insurance exchanges, issuers are allowed to select from two methodologies for the year-end true-up calculation.

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In one methodology, the issuer fully re-adjudicates claims for all members in alternative silver plans using the plan design provisions of the standard plan. This is referred to in the regulations as the "standard methodology" and could be thought of as the true and precise way to calculate the value of the subsidy. However, many issuers are finding it difficult to "rerun" their CSR claims under their claims-processing systems using the corresponding standard silver plan.[2] Anticipating this difficulty, the federal government created a simplified methodology that issuers can use instead during the first few years of the exchanges. This simplified methodology uses detailed claim data from the standard plan to condense its potentially complicated plan design down into a few summary parameters: effective deductible, effective coinsurance before deductible, effective coinsurance after deductible, and claim ceiling. Claims for members in alternative silver plans are then re-adjudicated under this simplified set of cost-sharing parameters to simulate the impact of being adjudicated under the true (and potentially more complicated) standard plan design. Issuers must decide whether they intend to use the standard or simplified methodology before the start of the plan year (although once the standard methodology is chosen, an issuer cannot switch to the simplified methodology in a later year).[3]

However, the simplified methodology as described above requires the issuer to cover at least 1,000 members for a full year in each standard silver plan under at least four specific scenarios[4]—both for individual and family coverage and with claims both above and below the effective deductible—to assure the summary parameters can be calculated in a meaningful way.

Because the above credibility thresholds will likely be difficult to meet for most issuers initially, HHS will require issuers to implement an even further simplified methodology for silver plans where the thresholds are not met. Under this approach, for each member in each silver plan variation, the standard member cost sharing is estimated as the minimum of:

- Total Allowed Charges for CSR Variation through Valuation Date x (1 - Standard Plan Actuarial Value)

- Standard Plan Out-of-Pocket Maximum (OOPM)

Considering the difficulty in achieving the required credibility thresholds of the simplified approach, it is reasonable to assume that many carriers will be required to use the further simplified approach if the standard methodology is not chosen. The following analysis focuses on the implications of this "alternate" simplified methodology for issuers unable to meet the credibility standard.

### SO WHAT'S THE PROBLEM?

First, consider how a 70% silver plan gets to be a 70% plan in the first place. Because of the skewed distribution of healthcare costs and the mandatory presence of an OOPM, a *70% plan is not achieved by having each member pay 30% of allowed charges as cost sharing*. Instead, it is usually the case that a small number of high-cost enrollees will pay only a small percentage of allowed costs (which is due to the presence of an OOPM), while the much larger number of enrollees with low or moderate costs will pay much more

| MEMBER | ALLOWED COSTS | COST SHARING UNDER 70% STANDARD PLAN | AS % OF ALLOWED | ACTUAL COST SHARING UNDER 87% CSR VARIANT | AS % OF ALLOWED |
|---|---|---|---|---|---|
| 1 | $200 | $200 | 100% | $200 | 100% |
| 2 | $150 | $150 | 100% | $150 | 100% |
| 3 | $6,900 | $3,380 | 49% | $1,250 | 18% |
| 4 | $21,000 | $3,500 | 17% | $1,250 | 6% |
| 5 | $1,300 | $1,300 | 100% | $660 | 51% |
| 6 | $25 | $25 | 100% | $25 | 100% |
| 7 | $125 | $125 | 100% | $125 | 100% |
| 8 | $150 | $150 | 100% | $150 | 100% |
| 9 | $100 | $100 | 100% | $100 | 100% |
| 10 | $50 | $50 | 100% | $50 | 100% |
| **TOTAL** | **$30,000** | **$8,980** | **29.93%** | **$3,960** | **13.20%** |

FIGURE 1: HYPOTHETICAL CONSTRUCTION OF A SILVER PLAN (STANDARD 70% PLAN AND 87% CSR VARIANT)

2    While the regulations are specific that an actuarial certification is required for issuers using the simplified methodology, it is less clear what methodologies and processes are required to comply with the standard methodology. Issuers may wish to explore whether a claims simulation model may satisfy the requirements for the standard methodology.

3    We note that, in spite of its name, the simplified methodology is actually somewhat complex to implement and requires a memorandum to be prepared by a member of the American Academy of Actuaries (AAA) describing how the calculations were performed.

4    The granularity of the credibility criteria expands to apply separately to eight subgroups for plans with non-integrated medical and Rx OOPMs.

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than 30% (for example, because of deductibles that require them to pay 100% of costs up to the deductible level). The table in Figure 1 shows 10 hypothetical members and how their cost sharing might look under a 70% standard silver plan and an 87% CSR silver plan. The cost-sharing column for the standard plan assumes a $2,500 deductible, $3,500 OOPM, and 20% member coinsurance. The cost-sharing column for the 87% variant assumes a $500 deductible, $1,250 OOPM, and 20% member coinsurance. Both of these designs satisfy the requirements of the U.S. Department of Health and Human Services (HHS) actuarial value calculator.

The illustration results in a CSR reimbursement to the health plan of $5,020 (i.e., $8,980 - $3,960) using the standard CSR methodology. The description of the simplified methodology for calculating CSR subsidies in the absence of fully credible data (as described above) would result in an unbiased estimate of the value of the CSR subsidy if the subsidy were not capped at the standard plan's OOPM. That is, the first of the two bullets of the calculation described above, taken by itself, would on average result in a fair estimate of the CSR subsidy, assuming the true actuarial values are close to the AVs produced by the AV calculator [in the example, it would be (1 - 70.51%) x $30,000 - $3,960 = $4,887 compared with an actual calculation of $5,020]. However, because the cap described in the second bullet will lower the subsidy calculated for some members and not change it for other members, the result is a downward-biased estimate. That is, on average, this calculation will result in too low of a subsidy, resulting in underpayment to health plans.

In this hypothetical example, the standard silver plan has an actuarial value (according to the HHS calculator) of 70.51%. The cap means member 4 (the only member for whom the standard plan OOPM kicks in) would be assigned an exactly accurate cost-sharing estimate of $3,500 (the OOPM), while the other nine members would be assigned cost sharing of 29.49% of allowed costs, even though all nine would have paid much more than that under the standard plan. The assumed cost sharing under the regulations for these 10 members adds up to $6,154, which is much lower than the $8,980 that would have actually been paid by members had they enrolled in the standard plan. This $6,154 can be computed by taking 29.49% of allowed costs for all members except member 4 (i.e., all members for whom the standard plan OOPM does not apply), and adding $3,500 for member 4:

$$[(1-70.51\%) \times (\$30,000-\$21,000)]+\$3,500=\$6,154$$

As such, using the alternative simplified methodology results in a CSR reimbursement to the health plan of only $2,194 (i.e., $6,154 - $3,960) compared with the standard CSR methodolody payment of $5,020. This underpayment is likely to vary from issuer to issuer, given the wide range over which members incur claims. For example, if most members incurred claims very close to the overall population average, we would observe little variation in the actual AV from one member to the next, and capping the subsidy calculation at the standard plan's OOPM would not have much impact on the resulting CSR calculation (there would likely still be a large underpayment in

this situation, though, not due to the cap). However, in practice, there are many members who will incur zero or a small amount of claims, and a small portion of the population that will incur a very large amount of claims. In light of this highly "skewed" distribution, capping subsidies at the standard plan's OOPM can have large impacts on the resulting subsidy estimate.

## IMPACT OF OUT-OF-NETWORK UTILIZATION

For plans offering out-of-network (OON) benefits, these impacts could be exacerbated because metrics applicable to in-network (IN) experience are applied to OON experience. The simplified methodology in the absence of full credibility assumes the following when estimating paid claims under the standard plan:

- The IN AV applies to OON charges
- The IN OOPM applies to OON charges

However, in general, the AV applicable to OON charges would be lower than the plan's IN AV because cost sharing is generally set higher on OON services to discourage OON utilization. The OOPM applicable to OON charges will often be higher than the IN OOPM for the same reason and also because the OOPM limitation created under the ACA does not apply to OON benefits. As a result, standard plan cost-sharing estimates for OON benefits will be biased downward, thus reducing the CSR subsidy payment to issuers.

We did not include this impact in our valuation because many plans operating under the ACA do not cover OON benefits, or when they do, the utilization of OON providers is very low. And these results would be highly dependent on OON utilization, OON charge levels compared to IN, and OON cost-sharing structure compared with IN.

## SIMULATION OF THE DEFICIENCY

To better understand the materiality of this issue, we simulated all the necessary claim metrics at the member level for a variety of plan designs (only modeling in-network benefits, as noted above). These include billed charges, allowed charges, federal transitional reinsurance recoveries, member cost sharing, CSR subsidies, resulting net paid claims, and premiums. We based our simulations on the claim probability distributions (CPDs) published as part of Milliman's Health Cost Guidelines™ (HCGs) and the induced utilization assumptions for alternative silver plans used by HHS when calibrating the risk-adjustment model. We constructed sample plan designs to meet the AV requirements for standard and alternative plan designs, as well as to comply with various plan design rules (e.g., OOPM requirements, absence of cost sharing for preventive care) implemented under the ACA. We simulated the key cash flows described above that an issuer would have expected when developing rates (assuming CSR subsidies were calculated by fully re-adjudicating claims) as well as those an issuer would actually experience in light of the simplified methodology. We then compared the resulting net cash flow to determine the issuer's pricing shortfall.

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Over a reasonable range of plan designs, and assuming a mix between standard and alternative silver plans typical of what we are observing on the exchanges,[5] we would expect the silver plans of many issuers to be underpriced by as much as 8% to 13% of premium. These results are highly sensitive to plan enrollment mix. For example, an issuer that enrolled members in standard plans only would never experience this issue. Because a greater volume of cost-sharing reductions is provided in an 87% or 94% variant compared with a 73% variant, the possibility of a shortfall is larger the more members are enrolled in these richer variants. In the alternate simplified methodology, cost-sharing structures with relatively higher deductibles or higher coinsurance rates generally result in greater underpricing due to the calculation of CSR subsidies. On the other hand, cost-sharing structures with relatively higher OOPMs generally result in less underpricing.

The results are also somewhat sensitive to morbidity and provider discount levels. This analysis assumes allowed charge levels similar to the costs underlying the AV calculator, but a particular silver plan could have costs that differ materially from those levels.

### WHAT STRATEGIES CAN ISSUERS USE TO MITIGATE THIS RISK?
The simplified methodology is only available for three plan years (2014, 2015, and 2016), at which point all issuers must transition to the standard methodology (i.e., re-adjudicating all claims). Issuers may elect to use the standard methodology sooner, however. Employing the standard methodology would avoid potential CSR underfunding entirely and would ensure that the CSR reimbursement exactly compensates issuers for the value of the CSR subsidy—even for plans not meeting the credibility standard. Modeling the impact of the formula in the simplified methodology can help issuers perform a more informed cost/benefit analysis when deciding whether to implement the standard methodology sooner than legally required. HHS has recently announced a deadline of December 15, 2014, to select a methodology for the 2015 benefit year. Issuers who used the standard methodology in 2014 must continue using the standard methodology, but issuers who used the simplified methodology for 2014 may switch to the standard methodology for 2015 if they notify HHS by that date.

If early implementation of the standard methodology is not feasible, issuers can consider adjusting 2016 pricing for the impact of any potentially uncompensated CSR subsidies. Obviously, it can be difficult to know how the regulatory landscape will change between when pricing decisions are made and when the final CSR settlement takes place. For example, plan year 2014 pricing decisions were made and finalized in the spring and summer of 2013, and the formula described in this paper[6] was not published until October 2013.

In modeling the impact of this policy, issuers should be careful to account for the impacts of the 3Rs (reinsurance, risk corridors, and risk adjustment) and medical loss ratio (MLR) rules.[7] Inadequate compensation for CSR subsidies may be partially offset by the risk corridor program—however due to ambiguities around the impact of sequestration, future regulatory guidance, and the evolving political landscape, it is not clear whether or to what extent payments will be made from the risk corridor program to issuers. If an issuer would have been in a position to issue MLR rebates, then inadequate compensation may not matter as much because some or all of the additional compensation could be owed as MLR rebates if it were received.

### LIMITATIONS
The analysis described above was based on a limited set of plan designs. To the extent that an issuer offers standard and alternative plan designs materially different from those included in this study, results will differ from those cited above.

We assumed a distribution of claims by member consistent with billed charge distributions observed in a large group population, along with a 50% average provider reimbursement rate (which approximates the data underlying the AV calculator). To the extent that actual allowed charge distributions in the post-ACA individual market differ from those assumed for this study, results will differ from those cited above.

We assumed all utilization is with in-network providers. To the extent that some utilization is out of network, the underpricing effects we observe may be exacerbated.

The results of this analysis only apply to issuers operating in the individual market in 2014 and later that have selected the simplified methodology for determining CSR subsidies and that do not have a sufficiently large population to be considered fully credible under the ACA regulations.

We assumed 2014 federal transitional reinsurance parameters. Results may change slightly in future years as the reinsurance parameters change.

We assumed all administrative expenses are fixed with respect to claims, and that the issuer prices to an 80% MLR. To the extent that some administrative expenses are variable, we might see larger impacts than those illustrated here.

We assumed no cost sharing was covered under an applicable state "wrap" plan.

We assumed a reasonable mix of members across the standard and alternative silver plan designs based on income distributions and available 2014 enrollment data. Results for an issuer will be highly dependent on this mix. For example, if an issuer only enrolled members in standard silver plans, this issue would not exist.

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5    We assumed that between 70% and 80% of silver plan enrollment would be in 87% or 94% alternate silver plans. In practice, some issuers will experience an enrollment mix outside this range.
6    *Federal Register*, vol. 78, no. 210 (October 30, 2013), pp. 65046–65105.
7    For more on the impact of the interaction among the 3Rs, see Petroske & Siegel, "When adverse selection isn't: Which members are likely to be profitable (or not) in markets regulated by the ACA," Milliman Insight,
     http://www.milliman.com/insight/2013/When-adverse-selection-isnt-Which-members-are-likely-to-be-profitable-or-not-in-markets-regulated-by-the-ACA/.

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The discussion in this paper represents our best interpretation of regulations issued to date by the Centers for Medicare and Medicaid Services (CMS). These regulations continue to evolve. As of this writing, we have not seen a detailed template for how issuers will report CSR reimbursement that is due to them under this alternate form of the simplified methodology, so we cannot rule out the possibility that the methodology will be implemented in a fashion different from the exact description provided in the regulations. Because of the variability of results from the simplified methodology (depending on plan designs and the actual cost distribution for an issuer's actual population), we strongly recommend modeling the impact for the particular plan designs in question.

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