July 31, 2012

Mr. Walter Smith, Esq.
The DC Appleseed Center for Law and Justice, Inc
1111 14th Street NW, Suite 510
Washington, DC 20005

RE: Group Hospitalization and Medical Services, Inc. ("GHMSI") Surplus

Dear Mr. Smith,

At your request, I am updating my letter of April 12, 2012 regarding the appropriateness of the surplus levels of GHMSI and a new independent review of GHMSI's surplus which is to be undertaken by Rector and Associates, Inc. ("Rector"). As part of this update, I have reviewed the various materials submitted by GHMSI on June 1, 2012 which included materials from Milliman and OPTUMInsight ("Optum").

It continues to be my conclusion first and foremost that Rector should develop its own surplus needs model, rather than relying on the Milliman or Optum models. Each of those models, in addition to other questionable assumptions and methodological issues, relies on the foundational assumption that an underwriting cycle exists (i.e., an alternating series of industry losses followed by industry gains, where losses are measured either by Net Income or Underwriting Gain/Loss). I will comment on this and other major concerns with their approaches in the remainder of this letter.

Underwriting Cycle
In a research article that I have authored and which has been submitted for publication in a national actuarial publication (pre-publication draft copy attached), I have examined the empirical data related to all mid-sized Blues affiliates (including GHMSI) and found no empirical evidence of an underwriting cycle over the last thirteen years (1999-2011)[1] for these plans. Not only has there been no underwriting cycle during this time, but there has not been a single year of aggregate industry losses among mid-sized Blues affiliates. Rather, there have been continuous aggregate gains in each and every year. Aggregate industry earnings vary from year to year, but the chance of there being *any* aggregate industry loss (which must occur periodically for a traditional underwriting cycle to exist), however small, is less than 0.1% when measured by Net Income and less than 2% when measured by Underwriting Gain/Loss.

My study did show year-to-year fluctuations in any given company's earnings around the company-specific mean which appear to be driven by company-specific factors. This company-specific variation for GHMSI confirms these general findings, as their Net Income has been at least 1.0% in every year and 2.9% on average from 1999 to 2011. Likewise, GHMSI has experienced underwriting profits in

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[1] The latest 13 years were used because in 1999 and prior 5-year histories, Total Adjusted Capital and authorized control level RBC do not exist. Also, for some companies, basic data (Net Income, Total Revenues, Net U/W Gain/Loss) from the 1999 5-year history do not match the 1999 data in the 2003 5-year history. So, the last data year used was 1999 to maintain data consistency.

twelve out of the last thirteen years, with only one loss year (2009) in which it experienced a miniscule underwriting loss, -0.04%. Its average annual underwriting gain was 1.7% from 1999 to 2011.

It should be noted that based on GHMSI's own Net Income experience, the chance of them having even a single year of Net Income as low as 0.5% of Total Revenue is only 2%. And there is only a 0.1% chance that they would ever have a loss of even negative 0.7%.

My findings strongly indicate that actuarial models seeking to establish appropriate target surplus levels for health insurers should not assume an underwriting cycle exists. Yet, the erroneous assumption of an underwriting cycle is a foundational assumption in both the Milliman and Optum models. Abandoning this assumption in line with both actual industry and GHMSI experience, all else equal, should allow companies like GHMSI to reduce their surplus without sacrificing sought-after high probabilities of maintaining surplus above threshold RBC ratios.

Net Income vs. Underwriting Gain

Both the Milliman and Optum models appear to focus on Underwriting Gain/Loss rather than Net Income. The ARM report of November 2, 2009 demonstrated mathematically, using Pearson correlation coefficients,[2] that underwriting profitability is not the best overall predictor of change in surplus for GHMSI and that adjusted net after-tax income is a much better predictor.[3]

Net Income is a better predictor of surplus needs more generally, as well—a point that is understood by actuaries at some other Blues affiliates. As an example, in a presentation made at the June 2012 Society of Actuaries meeting, Ed Cymerys, the chief actuary for Blue Shield of California, indicated that his company had consistently achieved an annual net income of between 2% and 7% in each year since 2000. He went on to explain an approach his company has adopted to limit the company's annual net income to 2% of revenue,[4] an income level at which his company's RBC ratio would be stable over time.

Revenue Growth

The assumption of future annual premium growth is a significant factor in the calculation of needed capital. Because premium growth increases ACL RBC, assuming a larger growth number has the actuarial effect of increasing surplus requirements at any confidence level.

Milliman assumed a growth range of 12-14% in its model and Rector subsequently increased the range to 10-16%, effectively increasing the required surplus. These growth assumptions should be set at more appropriate levels similar to the 2% compound growth rate in Total Revenues that GHMSI has experienced over the last four years (2007-2011).

There are several concerns with the levels of growth that either Milliman or Rector assumed:

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[2] Pearson's correlation coefficient is the best method of measuring the correlation between two sets of numbers (in this case adjusted net income vs. Changes in Surplus) because it takes into account covariance. Pearson's correlation coefficient gives information about the degree of correlation between sets of numbers as well as the direction of the correlation.

[3] See more detailed explanation on pages 9-11 of the ARM November 2, 2009 report.

[4] See Ed Cymerys' presentation from the June 2012 Society of Actuaries meeting: http://www.soa.org/Professional-Development/Event-Calendar/2012/Health-Meeting/Agenda-and-Presentations-Day-1.aspx

1) If GHMSI foresaw an underwriting loss period, it is questionable whether premiums would grow at all. Implementation of corrective rate action to address an underwriting loss tends to slow premium growth as policyholders seek other alternative coverages or carriers to offset the increases, and higher premiums discourage new sales.

2) Another reason high growth rates are inconsistent with an underwriting loss period is that newly written medical business tends to have the lowest loss ratios of all medical business. Thus, periods of time when the number of policyholders is increasing correlates much more closely with underwriting gains rather than losses.

3) The reasonableness of a high premium growth assumption is undermined by GHMSI's own testimony concerning the "unprecedented . . . movement towards high deductible health plans," and lower premiums.[5]

In summary, a more reasonable range of premium growth should be assumed in any modeling. A range of 0% - 6% is consistent with GHMSI's experience in the last 5 years.

Other Questionable Assumptions
The Milliman model, which all previous reviewers other than ARM relied upon, had other notable deficiencies. As identified by Rector, the deficiencies include:

1) How Catastrophic Events[6] are included;
2) Assuming that growth and development charges[7] occur in time periods when losses were occurring;
3) Whether reserve margins would be available for release[8] during times when losses were occurring; and
4) Assuming an apparent laissez-faire management approach during a loss period[9] rather than pro-active management to intervene early.

Each of these assumptions, and perhaps especially the assumption of laissez-faire management, should be modified or discarded in determining GHMSI's efficient level of surplus.

Appropriate Confidence Intervals
Each of the previous analyses of surplus needs, including Rector's, used point estimates to create a range. These point estimates were developed by applying different confidence intervals to the avoidance of 200% and 375% RBC levels. A more appropriate approach would be to recognize different upper and lower confidence boundaries for the 375% RBC target and the 200% RBC target, respectively.

Milliman proposed using a 98% confidence interval to estimate the lower boundary for the 200% RBC standard, while Rector used a 99% confidence interval for the lower boundary. Given that GHMSI

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[5] Sept. 10, 2009 Tr. at 244 (Testimony of Mr. Burrell).
[6] See page 6 of the Rector report.
[7] See page 7 of the Rector report.
[8] See page 7 of the Rector report.
[9] See page 7-8 of the Rector report.

endorsed the Milliman report, it seems appropriate to use the 98% confidence level relative to the 200% RBC standard.

For the 375% Blue Cross monitoring target, everyone agrees that a lower level of confidence should be used. Dipping below that level does not have an immediate impact on policyholders (after all, it is almost double the 200% standard which itself was set by the NAIC at a level designed to be conservative). While falling below 375% is not pleasant for management (as they will be subject to more intensive peer review by the Blue Cross Association), a confidence interval of 75% to 90% would be more than sufficient.

Also, both Milliman and Optum conclude that a range of surplus would achieve target certainty relative to the threshold RBC ratios. I understand their conclusion to be that every point in the range at least meets this target. If that is indeed the case, then the bottom of the acceptable range should be the target level to which GHMSI manages. GHMSI could then implement a program similar to Blue Shield of CA, running projections late in the year and reducing premiums in the final month(s) to keep surplus at the minimum feasible target. This would also appear to be consistent with the requirements of MIEAA.

In summary, a logical range of surplus would have as its minimum the greater of (a) a 75% probability that the RBC ratio would not dip below 375% or (b) a 98% probability that the RBC ratio would not dip below 200%, and as its maximum a 90% probability that the RBC ratio would not dip below 375%. Anything more would not seem appropriate under MIEAA.

Impact of ACA

Milliman and Optum propose that an increase in surplus is needed because of the Affordable Care Act ("ACA"). They speculate[10] that a variety of occurrences might create more uncertainty or might limit the amount of earnings that the company could retain in a good (i.e., low loss) year. But they ignore how the ACA could benefit GHMSI:

1) The changes that have already been implemented under ACA (elimination of annual limits, dependent eligibility, 1st dollar wellness benefits, medical loss ratios, etc.) have already been incorporated in market prices with no perceptible negative impacts on GHMSI.
2) Health Benefit Exchanges (HBEs) will advantage the carriers with the best physician and facility discounts. Due to its market share, GHMSI has physician and facility discounts that are second to none. All other things being equal, the company with the best discounts will get the most business from the HBEs because they will have the lowest rates.
3) As HBEs may disconnect insureds somewhat from agents and other intermediaries, price and all other things being reasonably equal, brand name will to a great extent drive consumer purchasing behavior. There is no other more trusted and well-recognized brand in the health insurance space than the Blues.
4) Because the ACA squeezes margins for all carriers, the tax advantage that GHMSI enjoys relative to for profit insurers gives it an even greater competitive advantage in pricing.
5) Even if GHMSI attracts more than its market share of impaired risks, it will likely not have more than its share of excess claims due to the ACA's risk mitigation programs which are to be implemented in 2014. While the details of these programs are not yet known, that is not

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[10] See for example page 5 of the Optum May 12, 2012 report in which they "speculate", "postulate", make "judgmental inputs", and term their work "directional" and "not precise".

sufficient reason to hold additional surplus; it is clear that the intent of these programs is to mitigate potential underwriting loss.

**Summary of Recommended Approach for Rector**

Rector's work in 2009 started with the Milliman model and then made adjustments. While this may have been an expedient approach, the method compromised the end result. For the new independent review, Rector should abandon the flawed Milliman and Optum models in favor of developing a new, independent model that, at a minimum, will:

1) Abandon the passé paradigm of a 3-4 year underwriting cycle.
2) Use as its foundation a forecast of net income, not the narrower measure of underwriting gain/loss.
3) Use assumptions about future revenue growth that are more consistent with GHMSI's recent experience.
4) Address other questionable Milliman assumptions, many of which Rector identified[11] in its previous report.
5) Use appropriate confidence levels to establish a minimum target surplus, and assume that GHMSI is capable of managing to that level.
6) Use a balanced approach to evaluating the impact of ACA and only make adjustments that reflect sound actuarial judgment, not directional speculation.

Finally, an essential criterion for an effective Rector model is that it be able to validate against GHMSI's actual experience over the last 15 years. As Rector noted in its earlier Report to DISB (p. 5), the Milliman model does not validate experience.

I am available to clarify or expound on any of the recommendations made herein. I am also available to make the recommended adjustments in order to produce an appropriate surplus range for GHMSI. To do this, I would need access to the same data that GHMSI has provided Milliman and Optum and I would sign an appropriate confidentiality agreement to facilitate that access.

Sincerely,
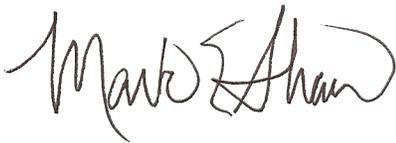
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[11] See pages 6-9 of Rector's report to DISB.