MILLIMAN WHITE PAPER

Surplus for health insurers: How much is adequate?

Commissioned by the Blue Cross Blue Shield Association

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What should be the target surplus level for a health insurer and does the answer vary based on characteristics of the insurer?

The recent COVID-19 pandemic has affected the health and financial well-being of people across the world. These events are extremely rare. However, when they happen, they can cause significant strains on the economy and affect all industries. The healthcare sector is at the forefront of this pandemic and therefore faces an enormous challenge. All stakeholders including providers, employers, health insurers, and members feel the impact of events like COVID-19. Health insurers have an important role to provide economic protection for policyholders against future contingent events. The ability of a health insurer to provide protection is greatly dependent on having sufficient financial strength over an extended duration. The terms "risk-based capital (RBC) ratio" and “surplus” are often used when discussing financial strength of insurers.

What is surplus?

Surplus as shown in Figure 1 represents the difference between assets and liabilities for a health insurance company. It is a term that is applicable to both for-profit and not-for-profit insurance companies.

FIGURE 1: ASSETS, LIABILITIES, AND SURPLUS

The primary purpose of surplus is to ensure a health insurer remains solvent and has funds to meet policyholder obligations when certain contingent events occur. Health insurers face many different types of risks, most notably underwriting risk. This is the risk assumed when claims and expenses are greater than the projections made by the health insurer when developing premiums for its products. The health insurer’s surplus is available to fund the obligations to policyholders when such unforeseen circumstances happen.

Surplus vs. reserves

The terms "reserves" and "surplus" are sometimes used interchangeably; however, these two terms actually refer to different estimates. Reserves represent an estimate of amounts a health insurer will need in the future for an obligation that has already been incurred. Because they are designated to specific future expenses, reserves are actually liabilities. Health insurers hold different types of reserves for different purposes, but the most significant reserve is for incurred but not reported (IBNR) claims. An IBNR reserve represents a health insurer’s estimate of funds needed to pay claims that have already occurred but not been reported. Any additional assets beyond what is required to cover those liabilities represent the surplus.

RBC and its relation to surplus

Given the importance of surplus to meet a health insurer’s obligation to policyholders, the National Association of Insurance Commissioners (NAIC) developed the concept of an RBC ratio to measure the adequacy of surplus. The RBC ratio for health insurance companies is calculated by dividing the amount of surplus by a factor-based index called the authorized control level (ACL). The ACL is determined by an NAIC formula using information from an insurance company’s balance sheet and income statement.

The RBC ratio is primarily used by regulators to identify inadequately capitalized companies and provides legal authority for regulators to intervene if the RBC ratio falls below certain thresholds. An RBC ratio of 200% is defined under NAIC RBC rules as the “Company Action Level” (CAL RBC), which triggers required action by an insurer’s management and the regulator. Thus, an insurer needs to maintain a surplus well in excess of 200% of RBC to avoid regulatory intervention. A thorough discussion of RBC is outside the scope of this paper. Figure 2 outlines the four thresholds for surplus levels that

require regulatory response and intervention in states that adopt the NAIC model act.

FIGURE 2: REGULATORY ACTION LEVELS

Surplus	Regulatory Action Level
200% of ACL	Company Action Level (CAL)
150% of ACL	Regulatory Action Level (RAL)
100% of ACL	Authorized Control Level (ACL)
70% of ACL	Mandatory Control Level (MCL)

The four triggers identified are briefly described below:

- CAL: Health insurers must submit a corrective action plan to insurance commissioner.
- RAL: Health insurers must resubmit a corrective action plan and insurance commissioner issues an order on actions to be taken.
- ACL: Commissioner may take over day-to-day operations to protect policyholder interests.
- MCL: Commissioner is required to place company under regulatory control.

Using the RBC ratio to measure an insurer's financial strength has certain limitations, which insurers need to consider when determining target capital needs. RBC is a point-in-time estimate and is not forward-looking. RBC also does not measure the liquidity risk. As an example, a company may have a receivable that is recorded as an asset but the receivable is not expected to be paid for another six months. During the early years of the Patient Protection and Affordable Care Act (ACA), many startup insurers had large receivables for reinsurance and risk corridor payments that were recorded as assets on their balance sheets. Despite these assets, the companies did not have the funds to pay claims and conduct day-to-day operations. In this scenario, the company may look appropriately capitalized from a solvency perspective; however, it may not actually have enough cash to pay claims and conduct day-to-day operations.

Insurers must maintain surplus well above the regulatory minimums

While ACL RBC levels are statutory minimums at which regulatory intervention is triggered, these minimums should not be viewed as "adequate" or "appropriate" levels of surplus. Regulatory intervention due to low RBC ratios is itself an adverse event that an insurer needs to avoid to maintain ongoing viability. For this reason alone, a health insurer needs to maintain an RBC level high enough to mitigate the risk of triggering regulatory action, even in the event of unforeseen adverse events.

Although providing protection for policyholders is the primary purpose for maintaining surplus, there are other important uses of surplus. A health insurer may need surplus to fund new initiatives like:

- Developing new products
- Entering new markets
- Investing in new technology
- Care management
- Wellness Initiatives
- Compliance with new regulatory requirements

These investments will not be possible if the insurer's surplus is barely at the regulatory minimum levels.

What is an "appropriate" target surplus for a health insurer?

Target surplus represents the level of surplus that company management believes is appropriate given the risks the company has assumed, while balancing the interests of its investors, regulators, and rating agencies. There is no "correct answer" or "one size fits all" with regard to the appropriate target surplus level for a given company; several factors must be considered when determining the appropriate level of surplus through capital adequacy studies. Any reasonable capital adequacy assessment involves projecting surplus over a time horizon (typically five or more years) by running numerous simulations, as well as adjusting certain key variables that affect the company's net income.

There is no prescribed definition or methodology to determine target surplus. However, many insurers use stress tests and scenario testing that involve a combination of deterministic and stochastic tests. The target surplus is generally the level at which the probability of a company going insolvent over the selected time horizon is less than the threshold the company's management feels comfortable with.

Actual company surplus levels will fluctuate above and below the target surplus level, as healthcare claim costs and other expenses vary from the estimates used in pricing and budgeting. If surplus levels are above the target, a company may take a more aggressive pricing strategy, increase reimbursement to providers, pay dividends to shareholders, or implement some other strategy to lower company surplus to the target level. Conversely, if company surplus is below target, management may use a more conservative pricing approach, implement a program to reduce expenses, or introduce some other strategy to raise surplus levels to the targeted amount.

How do companies derive surplus and does it vary based on whether a company is for-profit or not-for-profit?

An important consideration for capital adequacy is whether the company has access to capital when needed. The premium an insurance company collects is intended to cover the expected claim costs, expenses, and profit. However, if adverse events happen, then an insurer may need to tap into the surplus to fund any shortfall.

Sources of capital for a health insurer vary depending on the type of insurer (e.g., for-profit vs. not-for-profit).

Publicly traded for-profit insurers have access to the capital markets if they need to access additional capital. Typically, a publicly traded health insurer has a market capitalization much greater than its statutory surplus. Not-for-profit insurers, on the other hand, do not usually have access to capital markets, and so surplus must be grown through normal business operations, often over extended periods of time. The surplus for most not-for-profit health insurers comes largely from accumulated underwriting and investment gains. This means that a reduction in surplus can only be replenished through future successful operations.

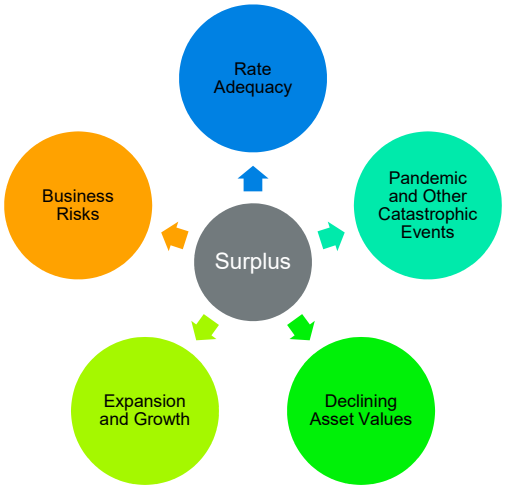
MLR provisions create a challenge for insurers to accumulate surplus

Under the minimum medical loss ratio (MLR) provisions of the ACA, an insurer's ability to grow surplus in any one year is significantly limited. Under current regulations, the sum of administrative expenses plus gains cannot exceed 15% of premium in commercial large group and Medicare Advantage markets, and 20% in small group and individual markets. There is no corresponding maximum on downside risk (i.e., an insurer's losses are not capped). Thus, if an insurer's surplus level is depleted due to adverse events, then it could take many years for the insurer to replenish its surplus.

What risks and contingencies are addressed by surplus?

The risks that health insurers face in the normal course of conducting business cannot always be reasonably anticipated in a timely fashion. Surplus is needed to address several major risks and contingencies faced by health insurers. Figure 3 illustrates some of these risks.

FIGURE 3: MAJOR RISKS AND CONTINGENCIES



Rate adequacy

A health insurer's premium rates are developed to cover anticipated claim costs, administrative expenses, and profits. If rates are insufficient to cover claim costs and expenses, surplus must be used to cover shortfalls. Typically, premium rates are developed on a prospective basis; therefore, many assumptions are made in order to estimate future premium levels. Some of these underlying assumptions include:

- Claim cost trends
- Benefit relativities
- Demographic distributions
- Geographic distributions
- Administrative expenses
- Commissions

If any of these assumptions are inaccurate, prospective rates will also be inaccurate.

Claim costs often comprise approximately 80% to 85% of premium rates; therefore, any adverse fluctuation in claim costs can result in inadequate rates. There is usually a high degree of uncertainty in determining future annual trends and this uncertainty increases with the introduction of new products or changes in the covered population. There is also a significant lag between when higher-than-expected trends occur and when they become known. This is due to the timing of claim reporting and other factors such as seasonal fluctuations that may mask the true underlying trend. Given the timing of when various regulatory rate filings for Medicare Advantage (MA) and ACA are due, health insurers have to develop and submit rates for the next calendar year in the first half of the preceding year. At this point, emerging experience may not be a good indicator of how the claims for rest of the year may develop. For

example, MA rates for CY 2021 are due on June 1, 2020. Even after an unexpected trend pattern is recognized, the management of a health insurer may be unable to correct premium rates immediately, as most health insurance policies contain 12-month rate guarantees and rate changes may only be allowed annually. Health insurers may also have difficulty getting these desired rate increases approved during regulatory rate reviews if regulators limit the magnitude of rate increases for policyholders due to local economy or other factors.

Pandemic and other catastrophic events

The 2020 COVID-19 pandemic provides an illustration of the unexpected outcomes that can occur from a severe, large-scale health event. Pandemic and other catastrophic events may result in much higher-than-anticipated claim costs, whether through actual healthcare utilization needs or through regulatory requirements such as waiving cost sharing or providing a premium holiday. Such events can also simultaneously put a strain on the economy, which can result in policyholders unable to meet premium obligations, moving to new market segments, or switching health insurers. All of those changes affect a health insurer's revenue, expected claim obligations, and cash flow patterns. These items can result in a cash shortfall for insurers that can affect their ability to pay claims to providers in a timely manner. The COVID-19 pandemic also creates many challenges for health insurer pricing for 2021, as there are many unknowns on pent-up demand due to deferred services, vaccine creation and effectiveness, accuracy of testing, the potential additional costs of treating the pandemic, and other considerations[1]. An appropriately capitalized health insurer should have the ability to withstand these risks, while avoiding the probability of becoming insolvent. The surplus should be sufficient for the insurer to remain viable throughout the event and in order to meet policyholder and provider contractual obligations.

Decline in balance sheet asset value

A company's balance sheet is a simple equation, expressed as either:

- Assets – Liabilities = Surplus
- Assets = Liabilities + Surplus

A health insurer's asset portfolio usually contains some mix of interest-bearing instruments and equities. The primary investment risk to the asset portfolio of a health insurer is a fluctuation in the market value of the assets. A related investment risk is reduced (or a lack of) investment earnings when interest rates decline.

As previously described, a health insurer contributes to surplus through underwriting gains and investment earnings. If asset values are declining in the financial marketplace, this usually signifies that investment earnings are declining, placing additional pressure on surplus.

Market expansion and growth

Market expansion and growth result in additional contingent liabilities. This further generates additional expenses to create and sustain the new business. To remain competitive in the market, a health insurer may need to significantly invest in new technology, cyber measures, and operational capabilities that are funded from surplus.

If premium levels needed to enter the market are not immediately adequate, which is often the case for insurers entering a new market, it can also create an additional need for surplus.

The significant expansion of the individual health insurance market during ACA and potential expansion of the Medicaid market during financial downturns are examples of market growth that may require sizable investments from health insurers.

Business risks

Other risks that require funding from surplus are the risks that a health insurer faces during the normal course of business. For example, a health insurer may see a sudden inability to cover overhead expenses due to a substantial loss in policyholders, resulting in lower revenue without a corresponding immediate decrease in expenses. Items such as legal concerns, regulatory issues, or reputational risks (e.g., a data breach) are all business risks faced by a health insurer.

Illustrative scenario for changes in RBC ratio over a three-year period

The risks that health insurers face from extreme events are not unprecedented. Two recent examples over the last decade illustrate this point:

- The costs associated with providing coverage to individuals who purchased insurance on the exchanges established by the ACA were considerably higher than most health insurers anticipated. Based on financial statements, health insurers lost billions of dollars in the ACA market from 2014 through 2016. Much of these losses were funded through the surplus of the insurers.

[1] https://us.milliman.com/en/insight/COVID19-Considerations-for-commercial-health-insurance-rates-in-2021-and-beyond

- The financial crisis of 2008 caused significant devaluation of the assets of health insurers; thereby causing significant reductions to surplus.

Figure 4 is a simplified illustrative example of how a health insurer's surplus can deteriorate quickly during an adverse event. . Assume that ABC Insurance Company (ABC) sells major medical business and its ACL is approximately 4.5% of claims for all years shown in the illustration. Further, the balance sheet and income statement item assumptions are as follows:

- Starting surplus equals $100 million
- Annual 5% revenue growth
- Claims increase by 15% in year 1, 10% in year 2, and 5% in year 3
- Administrative expenses increase by 3% each year
- There is a financial downturn in 2020 and ABC's assets, which are comprised of mostly equities, have a reduction in value of $20 million.

FIGURE 4: CHANGES IN SURPLUS

ABC Insurance Company				
	CY 2019	CY 2020	CY 2021	CY 2022
Starting Surplus	$100,000,000	$114,400,000	$84,632,000	$60,343,460
Revenue	$300,000,000	$315,000,000	$330,750,000	$347,287,500
Claims	$255,000,000	$293,250,000	$322,575,000	$338,703,750
Administrative Expenses	$30,600,000	$31,518,000	$32,463,540	$33,437,446
Contribution to Surplus	$14,400,000	($9,768,000)	($24,288,540)	($24,853,696)
Asset value change	$0	($20,000,000)	$0	$0
ACL	$11,475,000	$13,196,250	$14,515,875	$15,241,669
Ending Surplus	$114,400,000	$84,632,000	$60,343,460	$35,489,764
RBC Ratio	**997%**	**641%**	**416%**	**233%**

As shown in Figure 4, surplus for a health insurer can deteriorate quickly from unexpected claim spikes and many other risks that health insurers face in the normal course of business. The ability of a health insurer to remain solvent, provide the promised financial protection to policyholders, and pay providers is greatly dependent on having adequate surplus to address contingencies when they do occur.

Caveats and limitations

David Hayes, Rachel Killian, and Shyam Kolli are members of the American Academy of Actuaries and meet the qualification standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

The information in this white paper is intended to assist Blue Cross Blue Shield Association and its stakeholders with understanding the considerations in managing surplus. Regulatory requirements, along with the internal and external environments in which health insurers operate, are continually evolving. The optimal amount of capital required by a health insurance company varies by organization and other circumstances in the context of the regulatory environment.

This paper reflects our best understanding of the current regulations and requirements. To the extent that the rules and requirements change in the future, the considerations in this paper may no longer be valid. Additionally, this paper is only a brief summary and does not capture every item that a health insurer needs to consider when determining capital requirements. This paper may not be appropriate for other purposes, and our interpretations should not be relied on as legal interpretations. Please consult your legal counsel for legal interpretations.

The material in this report represents the opinion of the authors and is not representative of the views of Milliman. As such, Milliman is not advocating for, or endorsing, any specific views in this report related to determining capital requirements. Milliman does not endorse any product or organization.

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