

Article Title: ARCHIVE | Criteria | Insurance | Health: Standard & Poor's Revises Its Health Capital Model As The Industry Comes To Grips With New Regulatory Standards Data: (EDITOR'S NOTE: —This article is no longer current. It has been superseded by an article titled "Analysis Of Insurer Capital Adequacy," which was published on April 22, 2009.) Standard & Poor's capital adequacy model plays a significant role in assessing the capital strength of managed care providers and health insurers. Although the managed care industry has not historically emphasized risk-based capital (RBC) analysis, recognizing its importance in evaluating the financial strength of managed care companies has been growing. This recognition is largely related to recent actions by insurance regulators and a number of HMO insolvencies, as well as the growing recognition of financial strength as an important ingredient of an HMO's ability to deliver its promises. The National Association of Insurance Commissioners (NAIC) recently introduced RBC reporting requirements for managed care health organizations such as HMOs. These reporting requirements were effective with year-end 1998 statutory financial statements that are filed with the insurance departments of most states. There were also a number of failures of HMOs in 1998, which left hospitals and doctors with significant amounts of unpaid bills. These insolvencies also resulted in health plan members having involuntary changes in health insurance coverage and providers of their medical care. The lack of guaranty funds for HMOs, such as those that exist for life insurance companies, compounded these issues. All this has raised public consciousness about capital adequacy issues, particularly among risk and benefit managers, regulators, providers, the media, and even members/policyholders of HMOs/health insurers. Standard & Poor's has long had a capital model for life and health insurers that incorporated charges for health insurance products. With the growth in market share of managed care products and providers, Standard and Poor's refined its model to better measure capital adequacy of HMOs and other health insurers. The most significant changes to the model involve applying lower factors to managed care products than to traditional health insurance coverage; the greater the degree of managed care, the lower the RBC requirement in the model. Lower factors are also applied to property and equipment used to deliver health care than for investment properties. Recent RBC Regulatory Issues Standard & Poor's expects most states to adopt the NAIC's RBC regulation into law in the near future. The law empowers the insurance commissioner to ask for certain remedial actions when a company's RBC ratio falls below predetermined levels. The type of remedial action depends on the RBC ratio. If the RBC ratio falls just below the radar screen, the regulator might ask for a plan of action to improve the RBC ratio. For companies with very low RBC ratios, the regulator would be authorized to place the company under regulatory control, even though the company may otherwise still be technically solvent. Although adoption of the law is up to each state, the NAIC determines the form of the statutory financial statement. Therefore, the regulator will be able to determine a company's RBC ratio from the statutory financial statements. Thus, even without passage, regulators will have a crucial piece of information that could provide an important early warning signal of financial problems at specific companies. Standard & Poor's expects regulators to begin using this information for this purpose. How Standard & Poor's Capital Adequacy Model Differs From the NAIC's RBC Standard & Poor's capital adequacy model is used in analyzing different degrees of financial strength, as well as in identifying companies whose capital strength is considered weak or marginal. In contrast, the NAIC's model is intended to be used solely as a solvency management tool. As a result of these differences, Standard & Poor's health capital adequacy model differs from the NAIC's RBC in a number of ways. A consequence is that no simple relationship between a company's Standard & Poor's capital adequacy ratio and the NAIC's RBC ratio exists. In general, though, the Standard & Poor's capital adequacy ratio will be lower than the NAIC RBC ratio. Some of the more significant differences are: The same risk factors that are used in Standard & Poor's analyses of managed care organizations, such as HMOs, will also be applied in the analyses of life insurance companies writing health insurance products. These factors will also be applied to any company that is effectively acting as a managed care health insurer, even if it is not legally organized as a managed care organization that falls under an insurance regulator's jurisdiction. The factors applied to medical and hospital insurance products in Standard & Poor's model are generally greater than those used in the NAIC's RBC calculation. In addition, the factors Standard & Poor's uses are applied to premiums or premium-equivalents, rather than to claims. In most cases, but not all, these factors are approximately 25% greater than what would be an equivalent factor used in the NAIC's RBC calculation. Analytical

judgment may be used in adjusting factors to appropriately reflect risk levels. Such adjustments may be deemed appropriate in certain situations, such as risks related to recent claims experience or to reserves that offer significant and unusual added protection against unfavorable claims experience. Standard & Poor's formula places asset risks in the numerator rather than in the denominator. There is no covariance adjustment, which is consistent with all other Standard & Poor's capital adequacy models. The Effect of RBC Analysis on Managed Care and the Health Insurance Industry Standard & Poor's believes RBC issues will materially affect the managed care industry. Many managed care organizations have Standard & Poor's capital adequacy ratios or RBC ratios that will fall below various thresholds, whether these be solvency-related or ratings-related. This is primarily a consequence of three issues: The existing capital requirements for managed care organizations and HMOs are often significantly below levels that would be indicated by RBC analysis for conservatively capitalized companies. Subsidiaries are often poorly capitalized compared with the group to which they are affiliated or to other units of the group. Parent companies have historically sought the greater financial flexibility that comes with holding capital at a parent rather than with a number of subsidiaries, each of which falls under the jurisdiction of a separate regulator. HMOs are usually required to have a separate legal entity in each state or jurisdiction in which they do business. Often, this is of even greater concern if the parent is a holding company that is itself not subject to insurance regulation. If the parent company is a publicly traded stock company, it may also be subject to stockholder pressures to reduce capital at subsidiaries to improve its return on equity. Not-for-profit HMOs are usually more restricted than other types of HMOs in their ability to upstream funds from controlled affiliates. Historically, this has often led to a reluctance to place capital in these units, even if they are strategically important, because it may not be easily accessible at some future date. As a consequence of the increased recognition of the importance of capital adequacy, managed care companies will seek to improve their capital positions in a number of ways. Specific changes that are expected include: For managed care organizations that are part of groups with good aggregate capital adequacy, capital will be shifted from better-capitalized parental or affiliate entities into the operating units where it is needed. Managed care organizations without the ability to access capital of affiliates are likely to seek affiliations with other organizations that can provide capital. This will only add to various other business and economic reasons that have been driving mergers and acquisitions in the managed care industry. Divestitures of particular units of groups increased in 1998 and 1999 and will become even more likely, because managed care organizations with units in markets deemed unprofitable will now have profit issues exacerbated by the need to put scarce capital resources into such units. Companies that are part of publicly traded for-profit organizations will also have to factor in the consequences of including RBC requirements in return-on-equity targets for underperforming units. Not-for-profit HMOs that need capital will be at a relative disadvantage in meeting capital needs compared with those companies that can raise capital through the capital markets. As a result, they will be more likely than others to seek mergers or affiliations, to seek changes in their organizational structure, or to divest unprofitable units. Increased use of reinsurance is expected if it can provide balance sheet strength when needed. Capital needs of weakly capitalized managed care providers will intensify, because these organizations are more likely to experience antiselection issues as their RBC ratios become part of buyer's decisions.

How Standard & Poor's Capital Adequacy Model Works The model produces a capital adequacy ratio, which compares adjusted capital and surplus minus realistic expectations of potential investment losses with a base surplus level appropriate to support liabilities at a secure rating level (i.e., 'BBB' range). The numerator of the ratio: Standard & Poor's begins by determining total adjusted capital (TAC), which is statutory capital and surplus increased by voluntary investment reserves. When applicable, the asset valuation reserve, which is one-half of the policyholder dividend liability, and other appropriate adjustments are included. The next step assesses risk charges against the insurer's assets, adjusted by multiplying by a portfolio size factor, and adjusting for any single issuer concentration risk (see table 1).

Table 1: Asset default/loss risk factors RATING/ NET FACTOR

RATING	NET FACTOR
EXEMPT A, AA, OR AAA	.0000/.0000
Bonds/Pref. Stock	.0042/.0083
BBB	.0326/.0652
BB	.0752/.1504
B	.1372/.2743
CCC	.2018/.4037
IN OR NEAR DEFAULT	.3000/.6000

COMMON STOCK:

RATING	NET FACTOR
NON-AFFILIATED	.15
AFFILIATED: PARENT- EXCLUDE;	
HMO/INSURANCE SUBSIDIARY -	
CONSOLIDATE;	
ALL OTHERS: 100% (ANALYST MAY ADJUST)	

INTEREST-RATE RISK CHARGE

ON MORTGAGE-BACKED SECURITIES AND CALLABLE CORPORATES: VARIES BASED ON SPECIFIC PORTFOLIO AND ECONOMIC CONDITIONS PROPERTY AND EQUIPMENT USED FOR THE DELIVERY OF HEALTHCARE: 0.10 CASH AND SHORT-TERM INVESTMENTS: 0.003 PREMIUM NOTES: 0.05; COLLATERAL LOANS: 0.05; WRITE-INS: 0.05; NET REINSURANCE RECOVERABLE: 0.005 (MIN. CHARGE 0); NON-CONTROLLED ASSETS: 0.01 OFF BALANCE SHEET ITEMS: CONTINGENT LIABILITIES .05; LONG-TERM LEASES (PRESENT VALUE AT 8% OF FUTURE PAYMENTS) .05 OTHER ASSETS SUCH AS INVESTMENT REAL ESTATE, MORTGAGES, ETC. SAME FACTORS AS IN THE LIFE INSURANCE CAPITAL MODEL SIZE FACTOR: MULTIPLY ASSET CHARGES BY ASSET SIZE FACTOR (MINIMUM ASSET SIZE FACTOR = 1): SIZE FACTOR=[(1ST \$100 MILLION INV. ASSETS X 2.5) + (NEXT \$100 MILLION X 1.5) + (OVER \$200 MILLION X 0.8)]/[TOTAL INVESTED ASSETS] SINGLE ISSUER CONCENTRATION: COMBINES ALL INVESTMENTS IN A SINGLE ISSUER. Percentage of total adjusted capital 15%-25% (inv. gr. bonds), 10-25% other assets 26%-50% 51%-75 76%-100 over 100 factor (max. total charge 1.0) 0.20 + applicable base factor for the asset 0.40 + base 0.60 + base 0.80 + base 1.00 The resulting asset charge is subtracted from TAC, forming the numerator of the capital adequacy ratio. The denominator of the ratio: The ratio's denominator is determined by applying risk factors to each type of liability. The factors in the Standard & Poor's model are described in table 2. Table 2: Health Insurance – Line of Business Risk Factors COMPREHENSIVE MEDICAL AND HOSPITAL OR MEDICAL ONLY FACTOR Traditional indemnity Earned premium first \$25 million 0.17 Earned premium over \$25 million 0.10 Contractual fees Earned premium first \$25 million 0.14 Earned premium over \$25 million 0.085 Bonus/withhold arrangements Earned premium first \$25 million 0.13 Earned premium over \$25 million 0.075 Capitation Earned premium first \$25 million 0.075 Earned premium over \$25 million 0.05 Noncontingent salaries Earned premium first \$25 million 0.055 Earned premium over \$25 million 0.036 Administrative-services only/ASC (Premium equivalents) first \$500 million 0.02 over \$500 million 0.0075 Stop loss Earned premium 0.33 Federal Employee Health Benefit Program Earned premium 0.04 Medicare supplement Earned premium first \$25 million 0.12 Earned premium over \$25 million 0.08 Dental (traditional indemnity) Earned premium first \$25 million 0.1 Earned premium over \$25 million 0.07 Hospital indemnity, AD&D;, and other limited benefits not anticipating rate increases Earned premium 0.08 Other limited benefits anticipating rate increases Earned premium 0.12 DISABILITY Individual noncancellable disability income Earned premium first \$50 million 0.35 Earned premium over \$50 million 0.15 Other individual disability or group disability Earned premium first \$50 million 0.25 Earned premium over \$50 million 0.15 Long-term care Earned premium first \$50 million 0.25 Earned premium over \$50 million 0.15 Exhibit 9 individual and group and credit claim reserves 0.05 [Note: base factors for all of the above are increased by 2.4% if rates are guaranteed for 15-36 months, and by 6.4% if rates are guaranteed over 36 months.] Factors applied to premiums or premium equivalents are tiered based on volume, reflecting lower charges for lesser degrees of pricing risk. In other words, the greater the degree of managed care, the lower the factor. For specialty managed care companies, such as dental insurers, the same principle is applied, although the starting point for the risk factor applied would be the factor used in a traditional insurance product. Thus, for dental insurance, 7% of the premium factor would be used for an indemnity dental insurance product, but lower factors would be used in capital analysis of dental products with managed care elements. The last ingredient in the denominator is a general business risk charge (see table 3), which is assessed against health premium revenue, excluding administrative services only (ASO) and administrative services contracts (ASC), regardless of whether these revenues are subject to state guaranty fund assessments. Table 3: Business Risk Factors U.S. health premiums 0.005 U.S. life and annuity premiums 0.020 In analyzing a group or a unit of a group, insurance companies and HMOs in the group are consolidated for the purposes of capital adequacy analysis by aggregating their assets and liabilities with those of the parent. The capital adequacy ratios of individual units may also be considered in arriving at financial strength ratings of those units. Standard & Poor's Capital Adequacy Ratio Adjusted Capital & Surplus - Asset Related Risk Charges

----- Charges for line of business risks The result is Standard & Poor's capital adequacy ratio. For 'BBB', minimally secure, the ratio must be at least 100%. In other words, a company must have total available capital (adjusted capital and surplus minus expected

potential investment losses) at least as great as the surplus required to support liabilities. To interpret this ratio, Standard & Poor's sets standards for relative capital strength based on the capital adequacy ratio. These standards are shown in table 4. Table 4 Capital adequacy ratio Below 100% 100%-124% 125%-149% 150%-174% 175% and above Assessment of capital adequacy Marginal Good Strong Very strong Extremely strong This ratio is only a starting point for judging capital adequacy. Qualitative and quantitative enhancements are applied as warranted to derive a more complete picture of an organization's capital position. The analyst plays a critical role in adjusting Standard & Poor's model to effectively assess any company's unique risks, while still maintaining comparability standards among companies. Although considerable attention is focused on RBC ratios, Standard & Poor's assessment of capital adequacy is only one of many factors used to arrive at a company's financial strength rating. Standard & Poor's rating process will continue to be predicated on the belief that the capital adequacy ratio is not a substitute for a broad-based analysis of a company's credit quality. Strengths or weaknesses in other key areas, such as management and corporate strategy, business profile, operating performance, liquidity, and financial flexibility, can more than offset relative strengths or weaknesses in capital adequacy.