BEFORE THE INSURANCE DEPARTMENT OF THE
COMMONWEALTH OF PENNSYLVANIA

In Re:	:	Pursuant to the Health Plan Corporations
	:	Act, Act of November 15, 1972, P.L. 1063,
Applications of Capital BlueCross,	:	No. 271, as amended, 40 Pa. C.S.A. §§6101
Highmark Inc., Hospital Service Association	:	*et seq.*, 6301 *et seq.*
of Northeastern Pennsylvania d/b/a Blue	:	
Cross of Northeastern Pennsylvania and	:	
Independence Blue Cross for Approval of	:	
Reserves and Surplus	:	
	:	Misc. Docket No. MS05-02-006
	:	

DETERMINATION

AND NOW, on this 9th day of February, 2005, pursuant to the Health Plan Corporations Act, and after consideration of the documents, studies and public comments received, M. Diane Koken, Insurance Commissioner of the Commonwealth of Pennsylvania, hereby makes the following Determination concerning the applications of Capital BlueCross ("CBC"), Highmark Inc. ("Highmark"), Hospital Service Association of Northeastern Pennsylvania d/b/a Blue Cross of Northeastern Pennsylvania ("NEPA") and Independence Blue Cross ("IBC") (collectively the "Blue Plans") for approval of their reserves and surplus:

FINDINGS OF FACT

A. Identity of Applicants

1. The Blue Plans are, at the parent level, not-for-profit corporations engaged in the business of maintaining and operating non-profit hospital plans and professional health services plans. 40 Pa. C.S.A. §§6101-6127, 6301-6335. In 1938, these types of legal entities were established as "charitable and benevolent institutions" exempt from taxation by the Commonwealth and its political subdivisions, 40 Pa. C.S. §6103(b), §6307(b), and are commonly recognized as "insurers of last resort."

2. The four Pennsylvania Blue Plans differ dramatically in terms of size and level of diversification.

3. CBC is a Pennsylvania domiciled non-profit hospital plan incorporated in 1938 and headquartered in Harrisburg, Pennsylvania, with five wholly owned for-profit insurance subsidiaries: Capital Advantage Insurance Company (CAIC), Keystone Health Plan Central, Avalon Health, Ltd., Capital Administrative Services, Inc., and Consolidated Benefits, Inc. CBC Application Materials at CBC 00107.

4. CBC is an independent licensee of the Blue Cross Blue Shield Association and operates under the Blue Cross service mark to offer hospital care coverage in central Pennsylvania and the Lehigh Valley. In addition, it offers physician services under the Blue Cross (not Blue Shield) service mark, through CAIC.

5. CBC and its subsidiaries claim they have nearly 1,000,000 members in the central portion of the state.[1] Pennsylvania direct written health premiums in 2003 totaled $1,762,752,061. This is one of several possible measures of CBC's business risk. This amount does not include amounts collected solely for administrative services provided.

6. Highmark is a Pennsylvania domiciled non-profit health plan corporation, and was created by the consolidation of Medical Service Association of Pennsylvania, Inc. and Veritus, Inc. in 1996 and is headquartered in Pittsburgh, Pennsylvania. The predecessor companies were created in the 1930's.

7. Highmark operates under all sections of the Health Plan Corporations Act, encompassing both hospital plans and professional health service plans.

8. Highmark operates Highmark Blue Cross Blue Shield and Highmark Blue Shield, and has a number of wholly owned or controlled insurance subsidiaries, including: Keystone Health Plan West, Inc. ("KHPW"); HealthGuard of Lancaster, Inc. ("HealthGuard"); United Concordia Companies, Inc.; HVHC Inc. (and its subsidiaries Davis Vision, Inc. and Davis Vision of Michigan, Inc.); Highmark Life & Casualty Group, Inc.; Alliance Ventures, Inc.; HCI Inc.; Industrial Medical Consultants, Inc.; Highmark Casualty Ins. Co.; Highmark Life Ins. Co.; Highmark Life Ins. Co. of New York; Highmark West Virginia Inc., d/b/a Mountain State Blue Cross Blue Shield, Inc.

9. Highmark has a number of partially owned or controlled subsidiaries, including: Gateway Health Plan, LP; Inter-County Health Plan, Inc.; Inter-County Hospitalization Plan, Inc.; and Medmark Inc. Highmark Financial Statement as of March 31, 2004, at Schedule Y; Financial Statement as of June 30, 2004, at Schedule BA, Notes to Financial Statements; Highmark Application Materials at 00401-00405.

10. KHPW and HealthGuard provide managed care health insurance coverage; the remaining subsidiaries provide other insurance coverages and serve as investment vehicles for Highmark. Highmark Application at 00620-21.

[1] *See, e.g.*, https://www.capbluecross.com/Press+Room/.

11. Highmark is an independent licensee of the Blue Cross Blue Shield Association and operates under the Blue Cross or Blue Shield service marks to offer hospital care coverage and professional health services throughout western and central Pennsylvania. In addition, Highmark partners with NEPA and IBC to offer professional health services in their service areas in northeastern and southeastern Pennsylvania.

12. Highmark and its subsidiaries claim to have 3,800,000 members in the western and central regions of the state.[2] Pennsylvania direct written health premiums in 2003 totaled $6,605,972,813. Direct written premiums for all business in 2003 totaled $7,718,743,276. This is one of several possible measures of Highmark's business risk. These figures do not include amounts collected solely for administrative services it provides.

13. IBC is a Pennsylvania domiciled non-profit hospital plan corporation incorporated in 1938 and headquartered in Philadelphia, Pennsylvania.

14. IBC has a number of wholly and partially owned or controlled insurance subsidiaries, including: Keystone Health Plan East, Inc.; QCC Insurance Company; AmeriHealth HMO, Inc.; Inter-County Hospitalization Plan, Inc.; Inter-County Health Plan, Inc.; Vista Health Plan, Inc.; AmeriHealth Casualty Ins. Co.; AmeriHealth Ins. Co. of NJ; Healthcare Delaware, Inc.; Independence Insurance, Inc.; La Cruz Azul de Puerto Rico. Financial Statement as of June 30, 2004, Schedule Y; Financial Statement as of December 31, 2003, Notes.

15. IBC is an independent licensee of the Blue Cross Blue Shield Association and operates under the Blue Cross service mark to offer hospital care coverage in the 5-county southeastern region of Pennsylvania. In addition, it partners with Highmark Blue Shield to provide professional health services coverage.

16. IBC and its subsidiaries claim to have 3,500,000 members nationwide, and principally operate in the southeastern region of the state.[3] Pennsylvania direct written health premiums in 2003 totaled $7,119,546,589. The direct written premiums for all business totaled $7,972,861,893. This is one of several possible measures of IBC's business risk. These amounts do not include amounts collected solely for administrative services provided.

17. NEPA is a Pennsylvania domiciled non-profit hospital plan corporation incorporated in 1938 and headquartered in Wilkes-Barre, Pennsylvania.

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[2] *See, e.g.*, https://www.highmark.com/hmk2/about/newsroom/pr020105.shtml. *See also* https://www.highmark.com/hmk2/about/newsroom/pr012605.shtml.

[3] *See, e.g.*, http://www.ibx.com/news_events/press_releases/2005/2005_01_31.html.

18. NEPA owns HMO of Northeastern Pennsylvania, Inc., d/b/a First Priority Health. First Priority Health is a non-profit stock corporation licensed by the Commonwealth to operate a health maintenance organization since October 31, 1986. NEPA also owns First Priority Life Insurance Company, Inc., a domestic stock life insurance company organized pursuant to the laws of the Commonwealth. Other wholly or partially owned subsidiaries in the NEPA holding company system include Universal Managed Care, Inc., Erin Group Administrators, Inc., and Eastern Physicians Group, PC. 2003 Annual Report at 6.

19. NEPA is an independent licensee of the Blue Cross Blue Shield Association and operates under the Blue Cross service mark to offer hospital care coverage in a 13-county region of northeastern Pennsylvania. In addition, it partners with Highmark Blue Shield to provide professional health services coverage.

20. NEPA and its subsidiaries claim to have 600,000 members, principally in the northeastern region of the state.[4] Pennsylvania direct written health premiums in 2003 totaled $597,691,466. This is one of several possible measures of NEPA's business risk. It does not include amounts collected solely for administrative services provided.

21. Highmark, CBC, IBC and NEPA are members of the national Blue Cross Blue Shield Association ("BCBSA"). The BCBSA establishes the territories in which its members may operate and standards for financial solvency and strength of its members.

B. Background

22. The Department held a public informational hearing on September 4, 2002 to gather information about the reserve and surplus[5] levels of the Pennsylvania Blue Plans, to hear from interested parties, and to facilitate deliberation of this issue. Information received at the hearing is available on the Department's website, www.insurance.state.pa.us.

23. Following that informational hearing, the Department issued additional data calls.

24. As a result of analyzing information received at and after that hearing, the Department concluded that the Blue Plans collectively held substantial reserve and surplus amounts, and that there was likely a level at which accumulating additional surplus by the Plans would be inefficient.

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[4] *See, e.g.,* http://www.bcnepa.com/news_releases/cardio_risk.htm.

[5] A discussion of the distinction between "reserves" and "surplus" is in section A.1. below. Throughout this report, "reserves" means monies set aside to pay for incurred but unpaid claims; "surplus" means the capital that remains after all liabilities have been deducted from a company's assets.

25. Pursuant to its express authority under the Health Plan Corporations Act ("HPCA")[6], on January 5, 2004, the Department advised the Blue Plans of its intention to initiate an application process for approval of their reserves and surplus.

26. In addition to allowing for the application itself, the statute permits the Department to seek additional materials to assist it in its analysis of the efficient reserve and surplus levels of the Plans. 40 Pa. C.S.A. §§6102(e); 6124(a),(b); 6329(a), (b).

27. A notice advising the public of this Application Process, and inviting public comment thereon, was issued in the January 17, 2004 Pennsylvania Bulletin. 34 Pa. B. 458.

28. On April 15, 2004, the Blue Plans each submitted their respective applications.

29. On August 6, 2004, the Department issued a second Notice, Notice 2004-07, at 34 Pa.B. 4340, advising the public of the availability of the applications and additional documentation for public comment. These materials are available electronically on the Department's website, www.insurance.state.pa.us, as well as in hard copy in its public room in Harrisburg, and in its regional offices in Philadelphia and Pittsburgh.[7]

30. A thirty-day public comment period ran from August 16, 2004 through September 14, 2004, and was extended to September 24, 2004 in response to numerous requests by legislators, various consumer advocates and other interested persons.

31. The Department received 329 public comments, all of which were also provided to the four Blue Plans. A list of the comments received is available on the Department's website.

32. The majority of the public comments opposed the current surplus levels, claimed them to be excessive, and questioned the uses of surplus by the Blue Plans. These comments advocated a variety of uses for surplus.

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[6] 40 Pa. C.S.A. §§6101-6127, 6301-6335.

[7] The public availability of the applications was delayed due to litigation commenced in the Commonwealth Court by CBC and NEPA challenging the subject application process on various grounds. Highmark also filed a separate action. The matters are captioned, Highmark Inc. v. Pennsylvania Insurance Department and M. Diane Koken, Commissioner, Cmwlth. Ct. Docket No. 47 MD 2004; Capital BlueCross, et al. v. M. Diane Koken, Commissioner, and Pennsylvania Insurance Department, Cmwlth. Ct. Docket No. 172 MD 2004. CBC and NEPA sought injunctive relief, claiming that their applications and related materials were proprietary and confidential. The Department contested these actions. The Court denied CBC's and NEPA's attempts to secure a preliminary injunction and further ruled that the materials submitted by the Blue Plans, with the exception of certain proprietary materials, should be made available for public comment. All of the legal actions remain pending at the time of this Determination.

33. Four comments suggested that the surplus levels should be maintained to allow the Blue Plans to remain solvent through the vicissitudes of the health care market.[8]

34. Approximately 20% of the commenters, including legislators and trade groups, called for reduced premium rates, generally taking issue with increasing health care costs.[9]

35. In addition to public comments seeking reduced premium rates or other rate relief, commenters, including legislators, industry members, and other advocates, suggested that the Blue Plans were not fulfilling their charitable and benevolent responsibilities, and that the surplus should be used for those purposes, including providing more benefits to the uninsured, particularly through adultBasic.[10]

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[8] *See, e.g.,* September 1, 2004 Comment from Carol Jenkins; August 27, 2004 Comment from Thom Pesta; September 3, 2004 Comment from Jim Benna; August 11, 2004 Comment from James A. Murnock.

[9] *See, e.g.,* June 17, 2004 Comment from Mike Bendick; August 27, 2004 Comment from Becky Burdick; August 31, 2004 Comment from Pamela C. Kamody; August 31, 2004 Comment from Rita Berardino; September 1, 2004 Comment from John M. Gregorowicz; September 1, 2004 Comment from Diane D. McDowell; September 3, 2004 Comment from John & Norene Nelson; September 8, 2004 Comment from Donald W. LaVan, M.D; and September 9, 2004 Comment from Thelma Reese. Legislators and other public figures seeking rate relief include: September 9, 2004 Comment from Rep. Tony DeLuca; September 8, 2004 Comment from Rep. Phyllis Mundy; September 14, 2004 Comment from Rep. Thomas Tigue; Undated Comments from the City of Philadelphia and its Mayor's Office of Consumer Affairs; September 24, 2004 Comment from the Association of Pennsylvania State College and University Faculties; and September 8, 2004 Comment from the Pennsylvania AFL-CIO. *See also, e.g.*, comments concerning rebates – August 19, 2004 Comment from Susette Higdon, August 23, 2004 Comment from Sally/John DiRico, August 28, 2004 Comment from Dorothy Renziehausen, November 15, 2004 Comment from William A. Levinson; concerning rate freezes, September 7, 2004 Comment from Andrew T. Panian.

[10] Numerous legislators, industry members, and other advocates suggest surplus monies should be used to further a charitable mission. *See, e.g.,* September 24, 2004 Comment from Sen. Richard Kasunic; Undated Comments from the City of Philadelphia and its Mayor's Office of Consumer Affairs; September 24, 2004 Comment from Community Legal Services, the Pennsylvania Health Law Project, Philadelphia Citizens for Children & Youth, Action Alliance of Senior Citizens of Greater Philadelphia, Consumer Health Coalition, and the Philadelphia Unemployment Project; September 24, 2004 Comment from Insurance Federation of Pennsylvania; March 22, 2004 & September 22, 2004 Comments from Geisinger Health Plan; September 10, 2004 Comment from Hospital and Healthsystem Association of Pennsylvania; and September 24, 2004 Comment from HealthAmerica. *See also*, August 25, 2004 Comment from Dale Mertz; and September 24, 2004 Comment from Kaye L. Weiss.

36. Fifty commenters questioned administrative and capital expenditures by the Blue Plans, including executive salaries and perks, event sponsorships, "magnificent" headquarters buildings, investments in start-ups, and advertising.[11]

37. Five comments suggested that the Blue Plans should not be permitted to remain tax exempt; rather, they should function in law as they appear to function in fact – as for-profit entities.[12]

38. Certain technical comments were also submitted addressing some of the specific accounting issues presented in the Blue Plans' Applications.[13]

39. The Blue Plans were permitted an opportunity to respond to the public comments.

40. CBC, Highmark and IBC submitted supplemental responses on or before October 8, 2004.

41. On October 21, 2004, the Department submitted additional questions to the Blue Plans, many of which were the result of questions or assertions raised in the public comments.

42. The Blue Plans responded to those additional questions in early November, 2004. All non-confidential, non-proprietary information in the responses was made available to the public through the Department's website, public room and regional offices.

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[11] *See, e.g.*, concerning the Blue Plans advertising – June 22, 2004 Comment from William A. Levinson, June 22, 2004 Comment from Leo Davis, June 23, 2004 Comment from Gregory A. Gower, June 24, 2004 Comment from Annette Palutis, September 16, 2004 Comment from Lucinda Wiebe; concerning impressive headquarters' buildings – September 7, 2004 Comment from George Dudash; concerning event sponsorships – August 31, 2004 Comment from Rita Berardino, September 11, 2004 Comment from James A. Kelly, Jr., August 24, 2004 Comment from Bob Valeriano; concerning executive salaries – January 22, 2004 Comment from Richard P. Haaz, August 28, 2004 Comment from Loretta E. Stona, August 31, 2004 Comment from George Rosenberg; and concerning risky investments – August 11, 2004 Comment from Jim Eisenhower, August 26, 2004 Comment from Rita C. Donnelly.

[12] *See, e.g.,* August 27, 2004 Comment from Jeff Susa, September 1, 2004 Comment from John M. Gregorowicz, September 2, 2004 Comment from John L. Drederice, September 7, 2004 Comment from Andrew T. Panian.

[13] *See, e.g.,* September 24, 2004 Comment from the Pennsylvania Medical Society; Report from Larry Kirsch, IMR Health Economics, LLC attached to September 24, 2004 Comment of Community Legal Services, et al.

C. **Department Procedures**

43. As part of its analysis of the Blue Plans' applications, the Department reviewed and considered all public comments and the Blue Plans' responses to the comments.

44. In reviewing and considering the Blue Plans' applications, the Department undertook an extensive actuarial, accounting and legal analysis to determine an appropriate surplus range for each Plan.

45. The Department considered the Blue Plans' status as non-profit corporations, including the inability of such Plans to access capital through the issuance of equity securities and their insulation from market forces, and their status as the "insurer of last resort."

46. The Department further considered the benefits derived by the Blue Plans from the statutory exemption from taxation by the state and its political subdivisions. 40 Pa. C.S.A. §§6103(b), 6307(b).

47. The Department also analyzed proposed alternative means of measuring surplus as suggested by the Blue Plans.

48. As part of its analysis, the Department considered the best means of measuring surplus, as well as the corporate structure of each Blue Plan.

49. The Department considered the Blue Plans' short-term and long-term solvency requirements in the face of the respective economies, competition, and Pennsylvania legal requirements.

50. The Department's technical and regulatory expertise is uniquely suited to perform analyses that require the interplay of actuarial, accounting and legal considerations.

DISCUSSION

The reserve and surplus levels of the four Pennsylvania Blue Plans have been the subject of much public debate over the years. This debate has occurred in the context of the larger public debate over the availability and affordability of health care generally – a debate seen on both the national stage and in every corner of the Commonwealth.[14] The focus of this analysis is on the financial solvency and strength of the Blue Plans, a matter within the Department's

[14] The Department recognizes that the healthcare affordability debate raises many other issues that are beyond the scope of this Determination, including availability of healthcare for the uninsured, tort reform, healthcare provider reimbursement levels, increased utilization of technology, patient safety, and so forth.

discretion pursuant to the Health Plan Corporations Act ("HPCA"), 40 Pa. C.S.A. §§6101-6127, 6301-6335. In enacting the HPCA, the General Assembly recognized that the Department is uniquely qualified to assess the reserve and surplus levels of the Blue Plans in Pennsylvania, a qualification upheld by our courts. The Department undertook the application process pursuant to the HPCA to address this issue of concern to many citizens of the Commonwealth.

As the Department analyzed the appropriate operating ranges for surplus among the various Blue Plans, the Department reviewed all information presented in the Blue Plans' submissions and the public comments. As discussed in this Determination, the maintenance of appropriate levels of surplus is important for many reasons. Some are specific to each Blue Plan, but the most important reason is applicable to all, and that is to remain adequately solvent. Protection of these companies' financial health is paramount for the millions of citizens in the Commonwealth who receive health insurance and other services from the Blue Plans.[15] On the other hand, as Health Plan Corporations, these are unique entities subject to special laws and regulations, and analyzing whether the surplus levels are becoming inefficient is also the responsibility of the Department. As noted above, many of the public comments focused on the Blue Plans' charitable obligations. This Determination analyzes the adequacy and efficiency of the surplus levels of each of the Blue Plans. However, the Department's review of the Blue Plans' applications and the public comments also led to a recognition that the Blue Plans' charitable or community activities should be better defined, and this is addressed in a separate Agreement on Community Health Reinvestment dated February 2, 2005.[16]

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[15] Business generated by the not-for-profit entities within the Blue Plans and health maintenance organizations within the Blue Plans have no guaranty fund protection against insolvency.

[16] The Agreement on Community Health Reinvestment is posted on the Department's website, www.insurance.state.pa.us.

A. Relevant Insurance Concepts

1. Reserves and Surplus

As a preliminary matter, it is important to clarify the terms "reserves" and "surplus."[17] Reserves and surplus are collectively the sums of money held by an insurance company for such purposes as paying claims, covering unexpected losses, and financing new initiatives. "Reserves," specifically loss reserves, also referred to as "claims unpaid," represent a Plan's best estimate of the funds it needs to pay for claims that have been incurred but not yet paid: they are liabilities. "Surplus," however, represents what a Plan has in capital after all liabilities have been deducted from assets. Like all licensed insurance entities in the Commonwealth, the Blue Plans are required to file annual financial statements with the Department. *See* 40 Pa. C.S.A. §§6125(a), 6331(a). Those financial statements include statements of reserve and surplus levels.

2. Sources of Risk

Necessary to any analysis of what constitutes efficient surplus levels is a recognition of the purposes for which, in fact, surplus might be used. At its most basic level, surplus represents a backstop of capital to ensure that unforeseen contingencies do not render a Blue Plan unable to meet its obligations to its policyholders. Surplus also funds the growth needs of Blue Plans. The level of risk to which an insurer is subject significantly impacts what level of capitalization is appropriate. As discussed further herein, this is recognized by the National Association of Insurance Commissioners ("NAIC") RBC formulas.[18] To analyze the uses for surplus, one must

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[17] Historically, the term "reserves" (in applicable statutes and in accounting practices) included what is referred to as "surplus." In this Determination, they will have distinctly different meanings, thereby meriting this discussion.

[18] The RBC formulas developed by the NAIC were adopted into Pennsylvania law in 1997 (for life RBC and for property and casualty RBC) and in 2000 (for Health RBC). 40 P.S. §§221.4-A, 221.5-A; 40 P.S. §221.4-B. Hereinafter, RBC as applied to health organizations, shall be referred to as "Health RBC."

first review the risks faced by a health plan corporation.

There are many sources of risk to which the Blue Plans are subject. The RBC formulas identifies credit, investment, underwriting, and other operating risks faced by insurers. But beyond these risks, all of which are identifiable on a company's balance sheet, there are additional risk factors. These may vary by company and can substantially affect the operating risks of an insurer. These include, *inter alia*: liquidity; leverage; diversification; market structure; degree and quality of reinsurance; degree and quality of risk management facilities; health care inflationary pressures; utilization; general economic conditions; litigation; government programs; legislative and regulatory mandates; catastrophe risk; and reputational risk. Health insurers are particularly vulnerable to many of these risks due to the nature of the health care marketplace.

Health care regulation and the inflation of health care costs are two of the most obvious risks for health insurers. There are frequently new requirements arising on either the state or federal level that necessitate the development of new products, the change of procedures, or the enhancement of technologies. For example, on the state level, this was seen when managed care plans were required by law to implement complaint and grievance procedures,[19] and when insurers have been required to adjust coverages to meet new statutory mandates, such as those for diabetic supplies[20] and maternity hospital stays.[21] On a federal level, an unforeseen change in operational requirements occurred with legislation for medical savings accounts a few years ago; more recently, there has been legislation to permit health savings accounts. In addition to new insurance products and processes, there are medical advances and changes in the

[19]Act 68 of 1998, 40 P.S. §§ 991.2101-991.2193.

[20] Act 98 of 1998, 40 P.S. § 764e.

[21] Act 85 of 1996, 40 P.S. §§1581-1584.

marketplace that increase the costs of coverage. The increasing number of bariatric surgeries is but one current example of such a medical advance[22]; the large number of expensive pharmaceuticals available and advertised directly to the public is another.

Several risk elements merit further discussion. First, the Blue Plans each identify a variety of additional catastrophic sources of risk to their operations. For example, Highmark identifies terrorism, class action law suits and public health outbreaks. Highmark 00014, 00017. CBC identifies "... epidemics ..., Aids ..., and other catastrophes such as terrorist attacks." CBC 00039. NEPA states that:

> BCNEPA is particularly susceptible to the economic impact of an epidemic or catastrophe .... [and] is subject to the risk of adverse investment market fluctuations. For example, volatility in the financial markets was evident in the aftermath of the September 11, 2001 terrorist attacks, whereby investment carrying values were greatly impacted.

BCNEPA 00010. Clearly such risks are real. Nevertheless their low probability of occurrence or unforeseeable or catastrophic nature recommend that they are most efficiently prepared for through a combination of government, industry-wide, societal and individual company specific initiatives. The reality is, no individual insurer can or should be permitted to collect or accumulate enough premiums to cover any and all catastrophic events no matter how remote or unforeseeable.

Second, underwriting risk is universally identified by the Plans as an especially problematic and significant operational risk. It is difficult to manage and diversify this type of risk. This risk is the most significant operational risk facing these Plans. *See, e.g.*, Highmark, October 8, 2004 Letter at Milliman Report page 5 (first listed "major risk" category is "rating adequacy and fluctuation"); CBC October 8, 2004 Letter at Sherlock Report page 2 ("[CBC]'

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[22] *See, e.g.*, "Blues Plans Try New Approaches to Reducing Obesity-Related Illnesses at http://www.aishealth.com/Bnow/120104c.html.

profits are limited by its competitive environment ... [t]he level of profits earned by [CBC] is determined by its ability to effectively manage its costs and appropriately price its services. For instance, excessive premium rates will attract additional competition and excessively low rates will harm earnings").

So concerned are the Blue Plans with underwriting risk that several of them suggest measures of surplus to explicitly measure the Plans' ability to sustain negative underwriting returns. For example, Highmark's consulting actuary, Milliman USA, suggests measuring surplus by days of claim and expense payments in reserve. In fact, Milliman suggests, after certain "Monte Carlo" simulations, that:

> ... Highmark's surplus should be sufficient to withstand cumulative operating losses over a multi-year period of the magnitude of 14-19% of annual claims and expenses for the enterprise.

Highmark 00670. The Department recognizes and agrees with the Blue Plans that underwriting risk is a significant operational risk. However, simply measuring underwriting risk by measuring underwriting leverage to surplus via a measure of claim and expense payments in reserve, as suggested by Milliman, is not an appropriate tool to compare the various Blue Plans. Such a tool ignores the dramatic differences in underwriting volatility associated with size and diversity among these entities.

Another risk the Blue Plans claim is the absence of access to capital markets through the issuance of equity securities. For example, CBC notes in its application that:

> Unlike for-profit commercial insurers, which have ready access to lower cost capital through the sale of equity securities, CBC must look solely to its surplus in order to fund the growth and development of new infrastructure ... or rely on high cost debt.

CBC 00039. Similarly, Highmark noted that "[u]nlike many of the health insurance companies with which it must compete for business in Pennsylvania and nationally, Highmark does not have access to capital from public stock offerings." Highmark 00620. *See also* NEPA 00014

("BCNEPA does not have at its discretion the capital flexibility possessed by for-profit companies, whereby capital can be raised through company stock offerings").

Applied to the Blue Plans, such statements are potentially inaccurate. First, such statements seem to imply that owner equity is a "cheaper" or even "no cost" source of funding. In fact, just the opposite is often the case. Since equity-supplied funding is not contractually guaranteed a specific return, a higher return than interest yields is demanded over time to compensate for additional risk.[23] Further, often overlooked in this discussion are the operational advantages engendered by a not-for-profit structure. The Blue Plans are in fact not subject to the operational constraints to which publicly traded for-profit corporations are subject. The Plans do not have to earn a market-determined rate of return on owner-supplied equity.[24]

The fact that the Blue Plans are not subject to all of the efficiency constraints imposed by competitive capital markets is critical to the need of the Department to set standards for efficient surplus levels. One can reasonably argue that each additional dollar of available surplus reduces a Plan's probability of ruin[25] and increases the likelihood that the Plan will be able to meet its

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[23] *See, e.g.*, Zvi Bodie, Alex Kane, & Alan J. Marcus, "Investments", Irwin McGraw-Hill, 4th ed., 1999 (entire text, but especially Part 3: "Equilibrium in Capital Markets").

[24] *See, e.g.*, September 24, 2004 Comment of Insurance Federation of Pennsylvania, at 1-2 ("The threshold question is whether the Blues plans [or any insurer] can have 'excess surplus,' with the Blues plans suggesting they cannot. That may be true with for-profit insurers in a competitive market, where the demands of shareholders, investors and competition are the best regulators and distributors of excess surplus. It is not true, however, with the Blues – each of which is a non-profit corporation, albeit with varying degrees of for-profit subsidiaries, and each of which faces limited competition from other insurers and limited [and controlled] competition from one another that has enabled the Blues to enjoy dominant market shares in their regions.")

[25] "Probability of ruin" is a term used to express the likelihood that an insurance company will become insolvent.

obligations. This is essentially a central argument posited by each Blue Plan as to why none of their surplus is "excess."[26]

While this argument is correct on a certain level, it fails to provide any guidance for determining an outcome based on recognized principles of economic efficiency. That is, the argument fails to acknowledge the diminishing nature of the marginal reduction in probability of ruin or default from successive dollars of surplus. It also fails to balance this marginal reduction in risk against the benefits of using these same surplus funds in an alternative fashion. Clearly, the Blue Plans are not subject to all of the capital market efficiency constraints that promote the efficient allocation and use of capital by publicly traded firms.

Finally, the Department recognizes that much of this risk can be managed and reduced through diversification, pooling, reinsurance, and other techniques. Indeed, the surplus of the various Blue Plans is in significant measure invested in relatively low risk, high quality government and corporate fixed income instruments. In addition, these investments are generally held for long periods, with an investment horizon sufficient to mitigate the risk of short term interest rate fluctuations. Nevertheless, the nature of insurance – a risk-spreading mechanism – means that, regardless of risk management efforts, each of the Blue Plans is subject to a variety of sources of risk.

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[26] *See* Highmark 00012 ("Highmark must operate within a surplus range that assures the company will have a high probability of viable operations on an ongoing basis"). *See also* CBC 00038 ("reserves and surplus are the sole source of satisfying member and provider claims; they serve as the ultimate 'backstop' to protect against unforeseen contingencies"); IBC 00004 (regarding using RBC as a measure for a maximum level of surplus, "[IBC] cannot be comfortable that such a maximum level would allow us to give our customers and members the financial security they expect"); BCNEPA 00019 (business plan includes goals of "[a]dequate surplus to serve the long-term needs of BCNEPA, its policyholders, subscribers, customers and communities," "[l]inkage of surplus to increasing risks," and "[f]lexibity to address the evolving and ever-changing dynamics of the health insurance industry").

3. The Rate Process and Surplus Considerations

A third concept that is essential to understand in the context of the Department's surplus analysis – and one that figured prominently in the public comments – is that of how rates are regulated and how they might be impacted by a surplus analysis. There is a misperception that the Department pre-approves each and every rate that any Blue Plan (or any other insurer) charges for any of its products. In fact, the Department has the authority to review some premium rates prior to use, while others are only subject to enforcement initiatives if they are later determined to be unlawful. The Blue Plans are subject to rate regulation for some, but not all, of their rate filings. Rates for individual accident and health products are subject to filing with the Department prior to implementation to assure that the rates are satisfactorily supported and comply with all applicable laws, regulations and statements of policy. 40 P.S. §3803(c). Similarly, certain rates for group products offered by entities within the Blue Plans that are hospital plan corporations, professional health service plan corporations, as well as group filings by HMOs, are subject to filing with the Department prior to use, in order to assure that the rates are not excessive, inadequate, or unfairly discriminatory. 40 P.S. §3803(e). All other rates in use, including group rates offered by commercial entities, are only subject to Department review after they are already in use to ascertain whether they are unfairly discriminatory in a way that would constitute an unfair insurance practice. *See* 40 P.S. §1171.5(a)(7).

When the Department does review rate filings, there are principally two components of a rate filing that are analyzed. The first component is the "pure premium." This is the actuarially developed projection of the cost of paying for claims, adjusted for future inflation and statistical irregularities. The second component is the addition of other "loads." Loads typically include

amounts to cover taxes, administrative expenses,[27] agent commissions, and other contingency loads, such as profit. The contingency loads are at the heart of many of the comments received. Contingency loads are there in the event actual losses exceed the actuaries' projected cost of paying for claims. Profit loads are designed to provide returns to investors in for-profit companies for assuming risk.[28]

In the public comments the Department received, many commenters discussed rates in the context of suggesting rate relief in the form of rebates or premium reductions. These comments are based on the assumption that customers' premium payments have necessarily contributed to the surplus levels of their respective Blue Plans. This may be, in part, a correct assumption; surplus is, in essence, profits derived from either underwriting profit, or from investment gains.[29] However, attempting to target accumulated surplus to one group of ratepayers over another is an inherently problematic and potentially inequitable notion. In fact, a rate rollback, or a rate freeze, could prove detrimental to the marketplace.

First, current non-Blue Plans consumers might leave their current insurer to go to a temporarily less expensive Blue Plan. The effect could very well be to drive other insurers out of the market. In time, this would leave consumers with no competitive alternatives to the Blue

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[27] There were many public comments that questioned why the Department does not dictate or bar specific administrative expenditures incurred by the Blue Plans, particularly in the context of rate approvals. The administrative expense factors for those products that are filed before the Department for rate approval are presented on an enterprise-wide, allocated basis.

[28] Not-for-profit entities use a risk and contingency factor, but not a profit load, though that factor may result in increased surplus levels. Some of the Blue Plans have for-profit subsidiaries which do include profit loads in their rates. Those profits do accrue for the benefit of the parent companies.

[29] Note that insurers such as the Blue Plans have limitations on where they can invest money in the market, since they have a responsibility to ensure sufficient funds are available to pay all incurred claims. *See* 40 Pa. C.S.A. §§6123, 6330 (Blue Plans required to follow rules for life insurers) and 40 P.S. §504.2 (life insurance company investment rules); *see also* Annual Statements at Summary Investment Schedule and at Schedule D, Part 1.

Plans. Second, a rate rollback would benefit only the current targeted subscribers, and then only on a short-term basis. Those consumers who paid premiums to a Blue Plan for years, or only recently ceased paying premiums, would receive no commensurate benefit from a rollback. Even more fundamentally, it would be impossible to allocate surplus dollars to particular rate payers in any fair way – as it is impossible to tell whose premium dollars, or even which product's premium dollars, actually constitute the surplus dollars in the company's collective surplus account.

However, there is a correlation between rates and surplus that suggests it is appropriate in some circumstances to provide recompense to subscribers through the rate process. Particularly, where a Blue Plan has sufficient surplus, forward-looking rate relief would assure that additional surplus is not cumulatively derived from premium income. Thus, for example, it would be appropriate to charge rates that do not include a risk and contingency factor when a Plan has a sufficient level of surplus.

4. Uses for Surplus

The surplus generated by the Blue Plans, whether from underwriting profit or investment gains, exists for many purposes. Clearly the most important purpose for surplus funds, particularly in light of policyholders' need for health care, is to reduce policyholder risk by reducing to an economically efficient level the probability that claims contracted to be paid are not paid. Risk Based Capital, discussed below, is one tool that can be used for analyzing the Blue Plans' ability to meet this purpose.

The Department is well aware of the intense regulatory environment in which health entities operate, and of the corresponding requirement for surplus monies to fund, for example, product initiatives, wellness initiatives, mandated benefits, and technological advances – whether mandated by law or required for efficient business operations. However, surplus is not

necessarily diminished by such ventures. In fact, improving technology or other operational efficiencies or investing in another company via acquisition is simply an alternative way to invest surplus. Such an investment often is a vehicle for diversification. Diversification can, in fact, reduce risk and ultimately augment surplus.

The Department does not discount the regulatory environment in which the Blue Plans operate or the many purposes for which surplus may be held. However, identifying the uses for surplus is only part of the analysis. More important is determining which uses are most efficient. Most for-profit firms are constrained in this regard by the efficiency of the capital markets vis-à-vis owner-supplied funds. As noted previously, the Blue Plans are immune to this constraint. The Department must take this into account when determining what are efficient operating ranges.

5. Appropriate Use of Risk Based Capital (RBC) as a Tool

There is a substantial statutory and regulatory framework in place to monitor the essential solvency of these Plans. This includes the Health RBC Act, 40 P.S. §§221.1-B-221.15-B, which became effective for use with the annual statements filed in early 2001. The Health RBC Act uses risk-based capital ("RBC") as a tool to monitor an insurer's financial solvency. This is currently the best tool available to regulators to quantify the financial strength of an insurer.[30]

RBC is a valuable tool developed by the NAIC to measure the risks faced by insurers and to identify a level of surplus necessary to minimize the threat of insolvency resulting from the

[30] The Department is not alone in using RBC to measure financial strength. For example, within the last several weeks, the National Securities Clearing Corporation has proposed to use RBC to evaluate the market strength of insurers. National Underwriter, January 24, 2005. *See also* June 7, 2002 letter from Steven D. Putziger, Executive Director, Brand Protection & Financial Services, Blue Cross Blue Shield Association, to Stephen J. Johnson, Deputy Insurance Commissioner, at p. 2 (Exhibit to Response to Question 43 in Capital BlueCross's Comments at the Department's September 4, 2002 Public Informational Hearing (hereafter "Putziger Letter") (BCBSA use of RBC to measure financial strength of member companies).

measured level of risk.[31] RBC requirements were developed to assist regulators in identifying insurers in a deteriorating or weak capital position and to authorize regulatory action based solely on RBC results to avoid or minimize the impact of insolvencies. Effective solvency regulation requires the use of RBC as a fluid measure of capital requirements that takes into account the differences in risks facing different insurers at different periods in time. Though RBC is one of a number of tools used to monitor an insurer's financial solvency, it is arguably the most universally understood and recognized tool existing to evaluate when an insurer is weakly capitalized. RBC is a formulaic approach to the calculation of minimum capital requirements that reflects risks associated with the business operations of each insurer.

The RBC formula compares an insurer's total adjusted capital to its authorized control level ("ACL") RBC. ACL RBC is defined as "the amount of a health organization's authorized control level RBC calculated under the RBC formula in accordance with the RBC instructions." 40 P.S. §221.1-B. ACL RBC is further defined as a mandatory trigger point for regulatory intervention by the Department. 40 P.S. §221.1-B. Because RBC is a tool that the Department works with regularly in the context of financial solvency concerns, the Department is uniquely qualified to adapt the tool to use it as a measure of financial strength as well.

It is important to note that an RBC ratio of 200% is not a minimum "acceptable" ratio; it is merely a regulatory bright line indicator that an insurer may be weakly capitalized. That is, a 200% RBC level triggers required action by the company and the Department due to a concern over solvency. *See* 40 P.S. §§221.1-B (definition of "Company action level RBC"), 221.5-B (Company action level event). Since 200% RBC is recognized as a "danger" level, a healthy

[31] The RBC formulas include factors to measure credit, investment, underwriting, and other operating risks faced by insurers. For health insurers, those risks include: Asset Risk, Affiliates; Asset Risk, Other; Underwriting Risk; Credit Risk; and Business Risk.

company necessarily would normally maintain an RBC level above 200%. As the NAIC Research Quarterly for Winter 2002 states:

> Most companies fall into the "no action" level [above 200%]. This level does not necessarily mean the insurer is in strong financial condition. It simply means the insurer has not triggered one of the regulatory intervention levels. *An insurer can be in weak financial condition and still pass the RBC test.*

Necessarily, then, the Department must take such a minimum acceptable surplus level into account when reviewing appropriate surplus operating ranges for the Blue Plans. The fact that 200% RBC is a discernible trigger for regulatory action does not mean that it would be appropriate to assume that it is also a clear demarcation of insufficiency or excessiveness. Were it so, the addition of one cent would make a company have excessive surplus, while the subtraction of one cent would render them troubled. On the other hand, neither does it mean that there are not levels at which accumulating additional surplus would become inefficient or excessive. Stated differently, the question is: at what point is the statistical likelihood of insolvency so remote that a surplus level at or above that point would be considered inefficient?

The Blue Plans have each argued in their application submissions that RBC is not an appropriate tool to use when determining an appropriate surplus operating range for each individual plan. For example, NEPA states that it

> ... strongly believes that the risk based capital ("RBC") methodology in its statutorily prescribed current form does not appropriately serve the purpose of identifying a level of surplus that is adequate to protect the viability of NEPA, ... The current RBC methodology identifies the minimum acceptable surplus levels to operate an insurance company, and does not aid in determining an appropriate level of surplus for a well-managed going concern or the level of surplus necessary to allow, for example, business growth or diversification, service enhancements or catastrophe management. Moreover, RBC establishes a regulatory minimum level of capital based upon quantifiably measurable risk and does not set a standard for a specific, targeted surplus level. Indeed, the RBC formula does not consider many of an insurer's unique facts and circumstances nor does the formula take into account an insurer's future needs and business decisions.

NEPA 00008. *See also, e.g.,* CBC 00040-00044; Highmark 00011, 00013; IBC 00004-00005.

In spite of the protestations of the Blue Plans, however, it is with good reason that the Department uses RBC as a foundational concept in this analysis of efficient surplus operating ranges. It is extremely convenient to couch these discussions in terms that are commonly understood by the parties. Authorized control level RBC and the ratio of actual surplus to this formula amount are such convenient terms. This should not be construed to imply that the Department has relied exclusively on the RBC formulas or RBC-specific information to distinguish among companies or to derive appropriate operating ranges. But the RBC concept establishes a healthy and commonly accepted reference point in language, terms and technique commonly understood by regulators and insurers alike. To deny RBC its place as a cornerstone and foundation to any analysis regarding efficient surplus operating ranges would be imprudent.

Further, while the Blue Plans oppose the concept of using RBC for anything other than a minimum solvency standard, it should be noted that the national Blue Cross Blue Shield Association ("BCBSA") itself uses RBC for purposes to measure both solvency and financial strength. BCBSA maintains a licensure minimum of 200% RBC, the same as the statutory "danger" level, and an early warning level of 375% RBC. At its upper category of 800% RBC, the BCBSA makes the "presumption ... that the Plan is sufficiently strong to meet its obligation to its insureds well into the future."[32] If the national organization of which the Blue Plans are members uses RBC as a measure of "financial strength," those same Blue Plans should not be heard to argue that the Department may not do the same.

Finally, it must be recognized that RBC is not used by the Department in isolation or as an absolute criterion for an efficient operating range. The RBC ratios set by statute establish

[32] *See* Putziger Letter at 2. The Department finds the Putziger letter, which was submitted to the Department prior to the initiation of the Application Process, more persuasive than the later statement filed by CBC, where BCBSA construes NAIC materials to argue that "it is inappropriate to utilize [RBC] as a barometer of financial strength." CBC 00052.

minimums, below which an operating range should not likely drift. At the same time, however, while not perfect, RBC is the most efficient measuring tool available to evaluate and express surplus adequacy or excess. In fact, the NAIC continues to refine and enhance the RBC tool and to develop new tools based on the experience of the states and the industry. For this reason, each Blue Plan, factoring in all considerations of the possible efficient use of surplus, will have its own level above which further accumulation of surplus would be inefficient and above which the divestiture of excess surplus would be appropriate, and those levels may be expressed using an RBC ratio.

B. Introduction to Analytical Framework

The Department has completed its review of the materials submitted by the Blue Plans in support of their applications for approval of their reserve and surplus levels. In particular, the Department reviewed the Blue Plans' independent actuarial reports supporting the various Plans' reported reserve levels, and has also thoroughly reviewed the Plan submissions regarding an appropriate operating range for surplus as measured by the RBC formula. After consideration of these submissions and additional public comment, the Department has identified a surplus operating range for each of these Plans.

Before deciding appropriate surplus levels, it was first necessary to determine whether all balance sheet items were reported correctly and uniformly. Failure to address such differences in reporting among otherwise similar entities could lead to inequities with regard to appropriate surplus operating ranges. The Department took a variety of measures to assure accurate and uniform reporting, including, review of claim expense reserves, review of reinsurance arrangements, and consolidation of Plan results across corporate entities. Review of reserves and reinsurance was done to assure accurate balance sheet reporting and straightforward accounting

operations. Consolidated analysis was necessary to assure that accurate measures of corporate risk elements leveraging surplus are related to available surplus for the entire entity.

In addition to assuring the uniform reporting of balance sheet items, it was necessary to address the differences among the Plans. The Blue Plans criticized the use of RBC for this very reason. For example, NEPA stated that

> ... the RBC formula does not consider many of an insurer's unique facts and circumstances nor does the formula take into account an insurer's future needs and business decisions.

BCNEPA 00008. IBC noted:

> The formula has not been designed to differentiate among adequately capitalized companies. Therefore, it would be entirely inappropriate to use this formula to rate or rank adequately capitalized companies.

IBC 00004. The Department agrees that RBC may not adequately account for all differences among the Plans. Yet the Department considers RBC as a critical component of its analysis, and expresses its conclusions regarding operating ranges in terms and values understood by all, such as total adjusted capital and authorized control level RBC. Therefore, the Department has considered operational, structural and other differences among the Plans in determining an efficient operating range for policyholder supplied surplus.

It is in specific recognition of the dynamic environment within which the Blue Plans function that the Department chose an efficient operating range for individual plan surplus levels. The Department has identified a unique sufficient operating range of surplus for each Plan that takes into account the probabilistic lessons from the past and provides some cushion for future contingencies. These ranges were selected after consideration of the risk profile of each Plan. These ranges were also selected to comport with our mission to protect consumers from the risks of nonpayment of healthcare claims that result from financial difficulty. We utilize RBC to express these ranges. RBC, as discussed above, is an appropriate tool for expressing operating

ranges because RBC reviews past experience to gauge in a probabilistic sense the range of possible outcomes that may impact an insurer. RBC then identifies a minimum acceptable probability of ruin threshold that all companies are required to meet.[33]

1. Proper Corporate Unit to Review for Capital Adequacy Determination

One of the public commenters notes that "an extremely important threshold issue" is the reporting level at which capital adequacy is reviewed. That commenter goes on to state that:

> ...the appropriate basis for this inquiry is the range of surplus needed by the applicants on a consolidated basis, i.e., the parent companies together with their insurance subsidiaries and affiliates. Since each of the Plans operates within a holding company structure and has a substantial and growing stake in subsidiaries and affiliates – for profit and not for profit – ...A financial analysis from the perspective of the Consolidated Company is the only way for the Department and the public to develop a comprehensive and accurate picture of the financial strength of the applicants.

September 24, 2004 Comment of Community Legal Services, et al., at page 2 of attached report from Larry Kirsch, IMR Health Economics, LLC [hereafter "Kirsch Report"]. The Department agrees with this comment and had, in fact, independently reached the same conclusion.

Each of Pennsylvania's Blue Plans operates under a holding company structure, doing business through one or more affiliates. The Blue Plans face and manage risk through holding company systems of increasing complexity. A company that has no subsidiaries or affiliates runs the risk that its ordinary business growth might not continue at a regular pace, thus creating a greater risk of instability for the company. However, companies that have subsidiaries and affiliates protect themselves by having more than one entity generating business growth at a time. The result of this diversification is that there is less risk that the parent and all of its

[33] To illustrate, consider an analogy from the physical world of a river and a dam or dike. Before designing a dam or dike, engineers will examine historical water levels, rainfall patterns, known changes in landscape and hydrology, and other factors. They will then design the dam or dike to assure that it will withstand the rigors of future storms with some reasonably rigorous level of confidence. In the same way, RBC captures past experience and other factors, allowing an actuarial gauge of the "rigors" of future events for an insurer.

subsidiaries and affiliates will have irregular business growth at the same time. Thus, a diversified company is using that diversification to manage its risk. Because each of the Blue Plans has used diversification to manage its risk, it is therefore prudent to analyze risk in recognition of that diversification.

An appropriate means of performing that analysis is to consolidate balance sheets and financial information. A consolidated analysis is necessary in order to relate all of the risk elements for the corporate entity to its actual surplus. No individual company balance sheet shows all assets, all liabilities and all surplus for the combined corporate entity. The parent balance sheet does show the combined surplus, however, it does not show the combined assets and combined liabilities whose risk actually leverages this surplus. This is because the company specific balance sheet is only intended to show the operations of the individual company, not the entire corporate entity.

By reviewing risk and surplus on a consolidated basis, the Department can get an accurate portrait of the corporate entities' operating characteristics for comparison purposes. The Department consolidated each Plan's financials sufficiently to allow this analysis. The Department considered this analysis among other factors in selecting an operating range for each Plan's surplus.

2. Consolidation and RBC

As discussed above, the RBC formula for health organizations ("Health RBC formula") provides a well recognized and understood tool for evaluating the capitalization of an insurer. When the Health RBC formula is applied to a parent Blue Plan, the analysis centers on the parent company's balance sheet, but also evaluates the risk factors of its affiliates. The affiliates' risk factors are included in the parent's calculation as components of Asset Risk – Affiliates with RBC (H0), Asset Risk – Other (H1), and Credit Risk (H3). See NAIC 2004 Health RBC

Overview and Instructions. The Department utilized the Health RBC formula as one means to examine the capitalization requirements of Blue Plans on a consolidated basis.

In order to further examine the impact of a Blue Plan's size, level of diversification and corporate structure on its capitalization requirements, the Department also applied the RBC formulas as if the four Blue Plans had filed consolidated balance sheets ("consolidated risk factor analysis").[34] To this end, the Department treated each individual Blue Plan and its insurance company subsidiaries and affiliates, listed on Schedule Y of the Annual Statement, as one corporation. Using the total adjusted capital values reported in each Blue Plan's 2003 Annual Statement, the Department then derived a consolidated risk factor ratio for each Blue Plan.

First, the Department divided each Blue Plan and its affiliates by type of entity (property and casualty, life, and health). For each Blue Plan and its health affiliates, the Department calculated the various RBC values by sub-category. In performing this calculation, the Department treated the affiliates as part of one corporation, rather than as separate entities producing only asset and credit risk. The Department summed the sub-category values within each entity and then across all entities. The Department then applied the Health RBC formula utilizing these values. To the extent that a Blue Plan had non-health insurance affiliates, the Department then applied the relevant formula for that subsidiary – either the property and casualty formula or the life formula. The Department used the health, property and casualty, or life formula, depending on the nature of the subsidiary, to preserve the integrity of the three distinct RBC formulas. Finally, the Department combined the results of the different formulas

[34] The primary difference between the Department's consolidated risk factor analysis and the RBC methodology is that the covariance adjustment is applied at the consolidated holding company level in the Department's analysis but at the individual subsidiary level in the RBC methodology. Arithmetically, it is an issue of whether numbers are summed before or after the square root has been taken. Conceptually, both methods should produce the same result. The fact that the results may differ based on the level and type of diversification at the subsidiary and holding company levels illustrates why the Department employs both methods.

and divided them into the Blue Plans' total adjusted capital values to produce a "consolidated risk factor ratio" for each Blue Plan.

3. Additional Alternative Models

The Blue Plans and the commenters who provided economic analysis variously suggest either simply that RBC is an inappropriate model to use or that an alternative model of their own making should be developed and used for the purpose of deriving an operating range for individual Blue Plan surplus. For example, CBC posits that RBC is a static model and argues that a dynamic model would be more appropriate. Highmark criticizes RBC and suggests simulating historical underwriting cycles in order to estimate a surplus level sufficient to weather adverse underwriting results for some period of time. At least one commenter suggested an alternative model based on a less volatile underwriting cycle.[35] It is instructive to recognize that a 'model' is an abstraction of reality. All models represent a simplification. Consequently, any model, whether dynamic or static, involves judgments, whether explicit or implicit.

Nevertheless, the Department undertook to test the alternative measures of surplus adequacy proposed by the Blue Plans and developed its own actuarial analysis of the Blue Plans' relative underwriting risk and underwriting risk leverage. The Department utilized the actuarial notions of the total variance of the sum of a sample, the coefficient of variation, index values and leverage to surplus to compare the underwriting risk differences among the Plans.

C. Applying the Framework

While we cannot precisely measure risk, RBC ratios, surplus and appropriate operating ranges for each given moment, due to both the dynamic nature of business and the limitations of these actuarial and accounting tools, we can develop bounds for these values. This is why the Department is setting forth a "sufficient" operating range for each Blue Plan. Rather than

[35] *See* Kirsch Report at 12.

determining exactly how much risk each individual Plan has assumed, the Order below classifies the Blue Plans with regard to various measures of risk by distinguishing relative risk. The Department used three mechanisms for evaluating the relative risks of the four Blue Plans: (1) RBC; (2) consolidated risk factor analysis; and (3) actuarial analysis of the Blue Plans' relative underwriting risk. These three mechanisms enabled the Department to determine appropriate surplus operating ranges for each Blue Plan.

The first mechanism is the RBC approach developed by the NAIC, discussed above, and adopted by Pennsylvania for use by health insurers in 2001. Using this methodology demonstrates that the smaller Blue Plans, CBC and NEPA, have higher RBC ratios, which typically indicate less risk, even though the smaller Blue Plans' size and comparatively limited diversification might suggest otherwise. Nevertheless, the RBC methodology is helpful as one measure of risk.

The second mechanism, the consolidated risk factor approach, is discussed at Section B.2. above. It applies the Health RBC formula as if the Blue Plans had filed consolidated financial statements. Essentially, this methodology aggregates all risk and all diversification at the holding company level. As noted in footnote 34 above, theoretically, the two methodologies should produce the same result. The fact that they do not in all cases demonstrates the value in looking at risk both ways. Using the consolidated risk factor approach in analyzing the Blue Plans demonstrated that the smaller plans may be exposed to more risk than reflected by the RBC model.

Table 1 – Consolidated Risk Factor Ratios

Corporate Entity	Consolidated Risk Factor Ratio
Highmark	687
IBC	397
CBC	767
NEPA	867

While the Department will not set forth in this document the Blue Plans' actual 2003 Health RBC levels,[36] for comparison purposes, the Department's comparison of the RBC and the consolidated risk factor ratios illustrated that the smaller, less diversified Blue Plans had notably lower consolidated risk factor ratios than Health RBC ratios. The larger Blue Plans showed significantly less variation.

Finally, the Department undertook to test the alternative measures of surplus adequacy proposed by the Blue Plans and developed its own actuarial analysis of the Blue Plans' relative underwriting risk. It should be noted that several simple measures of leverage[37] are employed commonly throughout the insurance industry as convenient measures of risk. Two of the more common are the surplus to premium ratio and the surplus to reserve ratio. The former is a measure of underwriting risk. It is essentially the measure advocated by Highmark and its consulting actuaries Milliman, as well as others, as an alternative to RBC. However, as illustrated below, this measure suggested by the Blue Plans themselves does not adequately account for the differences among the four Blue Plans.

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[36] Actual RBC levels are confidential pursuant to 40 P.S. §221.1-B.

[37] Leverage in the insurance context means how much risk, as measured in dollars by an accounting value, is supported by each dollar of surplus. The greater the leverage, or risk per dollar of surplus, the greater the risk of a failure to perform, all other things being equal.

A simple example, dividing surplus by direct written premiums, illustrates the flaws in the Blue Plans' underwriting exposure analysis. Table 2 presents these values by corporate entity.

Table 2 - Underwriting Exposure

Corporate Entity	Direct Written Premium	Total Adjusted Surplus	Surplus to Premium Ratio
Highmark	$7,718,743,276	$2,194,249,672	28%
IBC	$7,972,861,893	$840,916,664	11%
CBC	$1,762,752,061	$515,476,773	29%
NEPA	$597,691,466	$404,694,781	68%

This table demonstrates that:

- IBC has leveraged its surplus the most by this measure.
- The smallest plan, NEPA, is the least leveraged at 68% of a year in reserve as compared to the other plans. This appears counter-intuitive since NEPA is the smallest and is arguably subject to the greatest underwriting risk among the Pennsylvania Plans.

This latter point suggests that the underwriting exposure measure proposed by Milliman does not adequately address differences among the Plans, especially with regard to size and diversification. In fact, it ignores dramatic differences in potential underwriting results due to size.

As discussed, in order to conduct its own actuarial analysis of the relative underwriting risk assumed by the Blue Plans, the Department consolidated the financial statements of the Blue Plans and their affiliates. The Department then used the formulas for both the mean and the variance of the sum of a random sample. The Department also used the coefficient of variation to evaluate the magnitude of dispersion of a random variable by comparing actual dispersion to the expected value. This was accomplished by taking the ratio of the standard deviation to the

expected value. The standard deviation is the square root of the variance. This statistic has many uses.[38] The Department used the coefficient of variation statistic to compare the underwriting risk assumed by each of the Blue Plans.

The Department measured the underwriting risk differences among the Plans, using the actuarial notions of the total variance of the sum of a sample, the coefficient of variation, index values and leverage to surplus. First, the coefficient of variation is a statistic. It is defined as the ratio of the standard deviation to the expected value. This statistic is a measure of variation around the expected or average value. As such, it is a measure of risk. We have a measure of the expected value of the underwriting results: the sum of the premium dollars collected. Using certain actuarial assumptions, the Department then calculated for each Blue Plan the unique multiple of the common standard deviation that its unique underwriting risk profile generates. The resulting coefficients of variation were indexed. (For convenience and clarity of presentation, NEPA, as the smallest plan but with the largest coefficient of variation, served as the base value for the indexing process.) The indexed values are: Highmark – 28%; IBC – 27%; CBC – 58%, and NEPA – 100%.

These indexed values allow the Blue Plans to be ranked according to their relative underwriting risk. This analysis examined the potential variability in underwriting results in relation to premiums collected. The results of the Department's underwriting risk analysis coincide with the results of the Department's consolidated risk factor analysis. Highmark and IBC have almost identical indexed values which are significantly lower than those of the smaller Blue Plans, CBC and NEPA. Because of their large premium volume, Highmark and IBC operate with less exposure to underwriting volatility (relative to collected premiums) than either

[38] For example, the coefficient of variation might be used to measure one's own risk in stock returns.

CBC or NEPA. In other words, the larger more diversified Blue Plans are comparatively less exposed to variations in underwriting results than the smaller Plans.

The Department next considered the potential impact of surplus on underwriting volatility. This was accomplished by taking the ratio of underwriting risk, shown above, to underwriting exposure shown earlier. Again, these values can be presented as an index with NEPA as a base value. The results show coefficients of variation using an underwriting risk leverage analysis of: Highmark – 66%; IBC – 176%; CBC – 135%; and NEPA – 100%. The results of this underwriting risk leverage analysis demonstrate that Highmark, because of its large premium volume and surplus, operates with substantially less exposure to underwriting risk leverage than the other three Plans. IBC and CBC are the most leveraged by this measure.

Considering the results of the RBC analysis, consolidated risk factor analysis, and actuarial analysis of underwriting risk and the underwriting risk leverage indicates the following:

- Because of its premium volume and surplus level, Highmark operates with less exposure to underwriting volatility than the smaller Blue Plans, CBC and NEPA, and any underwriting volatility that Highmark experiences poses less risk to its surplus than any of the other Blue Plans.

- In view of size and level of diversification, Highmark and IBC are comparable. The difference in their surplus levels, and resulting exposure to underwriting risk leverage, must be accommodated in establishing an appropriate surplus operating range.

- Due to their smaller premium volumes, CBC and NEPA are more exposed to underwriting volatility than either Highmark or IBC, and, due to their surplus levels, are more exposed to underwriting risk leverage than is Highmark.

- In view of their size and level of diversification, CBC and NEPA are comparable. They are exposed to similar levels of underwriting volatility and underwriting risk leverage. Their differences from the larger Plans must be accommodated in establishing a different appropriate surplus operating range.

These conclusions were considered by the Department in establishing appropriate surplus operating ranges for the Blue Plans.

D. Efficient, Sufficient and Inefficient Surplus Levels

The foregoing discussion demonstrates that many variables must be considered in determining an efficient surplus level for a Blue Plan. An economically efficient level of surplus is the level at which a Blue Plan does not face solvency issues from routine fluctuations in factors such as underwriting results and returns on its investments. For Blue Plans, there is a continuum of efficient levels of surplus ranging from the lowest point to the highest, over which further accumulation of surplus would potentially become inefficient and inconsistent with the Blue Plans' status as statutory non-profit charitable and benevolent institutions.

As discussed in Sections A.5. and B.2., above, the Department is using Health RBC ratios – a well established and understood means of expressing financial solvency and strength – and consolidated risk factor ratios to express the sufficient surplus operating range for each Blue Plan. The Department used both methodologies because they present different perspectives on the risks associated with the Blue Plans based on their different corporate structures. If the two ratios differ, the Department is using the lower of the two, that is, the more conservative estimate of the Blue Plan's financial strength. This is appropriate: by using the more conservative expression of risk measurement, the Department is guarding against the potential of accounting or infrastructure changes triggering a determination of inefficient surplus. Stated differently, the Department is using the approach that will best protect the interest of consumers who depend on the Blue Plans for payment of their health care claims.

1. Efficient and Sufficient Surplus Levels

The optimally efficient level of surplus for each Blue Plan necessarily varies among the Plans and the unique circumstances they may face at any given point in time. For purposes of this analysis, the Department does not believe that identifying specific points for an efficiency

floor is necessary or helpful.[39] Rather, this analysis focuses on what are the appropriate upper bounds of efficiency.

In the upper end of each Blue Plans' range of efficient surplus levels, there is a surplus operating range where a Blue Plan maintains a sufficient level of surplus, such that the Department believes the Plan has sufficient surplus and should not seek to include risk and contingency factors in its filed premium rates. As explained above, one component of rates may be a "load" for risk and contingency. *See* footnote 28, above. But since the purpose of such loads is to assure that surplus levels are not drained below a safe operating level by a greater than expected incidence and severity of claims, if surplus is sufficient, such that any reasonably probable "drain" will not reduce surplus below a safe operating level, then there is arguably no purpose for accumulating additional surplus directly from ratepayers. For the Blue Plans, functioning largely outside of the market constraints of for-profit business enterprises, this limitation on further surplus development where the surplus level is already sufficient is a reasonable means to help to keep Pennsylvania healthcare premiums more affordable. On the other hand, when a Blue Plan's surplus level is below its sufficient surplus operating range, but

[39] In light of the many public comments on this issue, the Department does note that any assertion that a lower bound to the operating range should be below Company Action Level RBC, or 200%, as maintained by some commenters, is questionable. The Department believes that operation at or near this level may indicate the existence of significant solvency concerns. On the other hand, the BCBSA has identified 375% of ACL RBC as an "Early Warning Level," where it "intensifies its financial monitoring [because the Plan is] judged to have a heightened risk of falling below the licensure minimum capital requirement in the foreseeable future." Further, BCBSA believes that companies whose RBC ratios fall below 375% are less capable of providing the level of products and services that the marketplace associates with the Blue brands. *See* Putziger Letter. Whether 375% is an appropriate floor for an efficiency analysis is also subject to debate, and would necessarily require an analysis of a particular Blue Plan's situation as it approaches or drops below that level.

remains efficient, it may properly apply a risk and contingency factor to its filed premium rates in order to increase its surplus to provide an even more robust level of protection for its policyholders and to fund future growth needs.

Approximately 50% of all insurers (life, health, and property and casualty) operate at RBC ratios below 600%. Essentially, an RBC ratio of 600% represents the median surplus operating ratio for all insurers, which are predominantly for-profit entities. A sufficient surplus operating range for the Blue Plans must take into account the limitations and advantages of their non-profit status, as well as each Plan's unique circumstances that may impact its surplus requirements, including size and diversification. Of the four Pennsylvania Blue Plans, Highmark and IBC are the largest and most diversified. As a result of their size and corporate structure, Highmark and IBC have greater opportunities to access capital than the other Blue Plans.

For Highmark and IBC, the Department finds that a sufficient surplus operating range, as measured by Health RBC ratios and consolidated risk factor ratios, is 550% to 750%. This range recognizes these Blue Plans' size and level of diversification, but allows fluctuation to 750%, considering the inability of non-profit corporations to access capital markets through the sale of equity securities. Choice of this range also accommodates the differences in underwriting risk leverage between Highmark and IBC. IBC's Health RBC and consolidated risk factor ratios are lower than Highmark's.[40]

For CBC and NEPA, the Department finds that a sufficient surplus operating range, as measured by the Health RBC ratios and consolidated risk factor ratios, is 750% to 950%. A higher level of capitalization is recognized as sufficient for CBC and NEPA, because

[40] This should not be construed as implying that IBC is somehow in a less advantageous position than Highmark from a surplus efficiency standpoint. In its application, IBC invited the Department to assure its members that it is in an appropriately secure financial position. IBC 00010. In fact, this would appear to be the case.

comparatively, they lack the size and diversification to compensate for their more limited access to capital.

2. Inefficient Surplus Levels

When a Blue Plan is above its sufficient surplus operating range, and thus outside the continuum of efficient levels of surplus, it has accumulated surplus at an economically inefficient level that is likely inconsistent with the Blue Plans' status as statutory non-profit, charitable and benevolent institutions. When the Blue Plan's Health RBC ratio and consolidated risk factor ratio both exceed the sufficient range established above, the Blue Plan will be presumed to be maintaining an economically inefficient level of surplus. In such instances, the Department will require the Blue Plan to justify its surplus level, or if its surplus level is excessive, provide a plan to the Department illustrating how it will reduce its surplus level back to within its sufficient surplus operating range over a reasonable period of time.

E. Conclusion

An appropriate sufficient operating range for the Blue Plans, as measured in terms of the Health RBC formula or the Department's consolidated risk factor analysis, is 750-950% for CBC and NEPA, and 550-750% for IBC and Highmark. The difference between the ranges is due to considerations of size and level of diversification, as well as distinctions in underwriting risk volatility and underwriting risk leverage. Surplus amounts exceeding the sufficient operating range will be presumed to be inefficient. Based on 2003 year-end financial reports, the Department finds that Highmark, CBC and NEPA operated within their sufficient surplus operating ranges during calendar year 2003. The Department further finds that during calendar year 2003, IBC operated within an efficient operating range.

Those Plans in the sufficient surplus operating range have no need for a risk and contingency factor to be applied to their filed rates. If any Plan accumulates surplus such that

its Health RBC ratio and consolidated risk factor ratio rise above its sufficient operating range, it will be presumed to have an inefficient surplus level. In addition to having no need for a risk and contingency factor on filed rates, a Plan having a presumptively inefficient surplus level will need to justify its surplus level or file a plan with the Commissioner explaining how it will adjust its surplus below the applicable upper bound in a reasonable timeframe. Such a plan must be filed with the Department not later than ninety days after the Department determines that the Plan's Health RBC ratio and consolidated risk factor ratio exceed the established sufficient ranges.

Accordingly, the following Order is hereby entered.

BEFORE THE INSURANCE DEPARTMENT OF THE
COMMONWEALTH OF PENNSYLVANIA

In Re:	:	Pursuant to the Health Plan Corporations Act, Act of November 15, 1972, P.L. 1063, No. 271, as amended, 40 Pa. C.S.A. §§6101 *et seq.*, 6301 *et seq.*
Applications of Capital BlueCross, Highmark Inc., Hospital Service Association of Northeastern Pennsylvania d/b/a Blue Cross of Northeastern Pennsylvania and Independence Blue Cross for Approval of Reserves and Surplus	:	Misc. Docket No. MS05-02-006

ORDER

Upon consideration of the foregoing Determination, the Insurance Commissioner of the Commonwealth of Pennsylvania ("Commissioner") hereby makes the following Order:

1. An appropriate sufficient operating surplus range for the Pennsylvania Blue Plans,[1] as measured by the lower of Health RBC ratios or consolidated risk factor ratios is: for Highmark and IBC, 550-750%, and for CBC and NEPA, 750-950%.

2. Operating at levels above the upper levels of the respective sufficient operating surplus ranges, as set forth in paragraph 1 above, will be presumed to be inefficient.

3. For calendar year 2003, Highmark, CBC and NEPA operated within their sufficient surplus operating ranges. IBC's surplus level was efficient.

WHEREFORE, the applications of the Blue Plans for approval of their reserves and surplus are hereby denied in part and approved in part, subject to this Order and the following conditions:

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[1] The Pennsylvania Blue Plans are Capital BlueCross ("CBC"), Highmark, Inc., d/b/a Highmark Blue Cross and d/b/a Highmark Blue Cross Blue Shield and d/b/a Highmark Blue Shield ("Highmark"), Hospital Service Association of Northeastern Pennsylvania d/b/a Blue Cross of Northeastern Pennsylvania ("NEPA") and Independence Blue Cross (IBC") (collectively the "Blue Plans").

a. The Department will determine whether a Blue Plan is operating within the sufficient operating range on an annual basis (based on the Blue Plans' Health RBC ratios, as reported annually pursuant to 40 P.S. §221.2-B, and where necessary, a consolidated risk factor analysis). No Pennsylvania Blue Plan shall include a risk and contingency factor in its filed premium rates unless and until the lower of its Health RBC ratio or consolidated risk factor ratio for the preceding calendar year is below the lower bound of its sufficient operating surplus range.

b. If a Blue Plan's Health RBC ratio and consolidated risk factor ratio exceed the upper bound of its sufficient operating range (as determined annually by the Blue Plan's RBC Report filed pursuant to 40 P.S. §221.2-B, or as calculated by the Department), that Blue Plan must, within ninety (90) days, file a report with the Commissioner justifying its current surplus level or file a plan with the Commissioner explaining how the Blue Plan will divest itself of surplus in a manner that benefits its policyholders, such that its surplus level will result in its Health RBC ratio or consolidated risk factor ratio dropping back into the sufficient operating surplus range, with such divestiture to occur in a manner and within a period of time deemed reasonable by the Commissioner.

c. Each Blue Plan shall make available to the Department such information as may be required to allow the Department to verify compliance with this Determination. Any such information that is proprietary or confidential shall be clearly marked prior to submission to the Department, and shall be accorded confidential treatment and not disclosed by the Department to the public except by agreement with the Blue Plan or pursuant to Court Order. Upon receipt of any request from a third party for that designated information, the Department will notify the Blue Plan of the request to allow the Blue Plan to intervene or otherwise seek additional protections from having to disclose such information. The Department may, but does not have to, assist the Blue Plan with any efforts to maintain the confidentiality of the information in any Court proceeding.

d. When evaluating any written report concerning inefficient surplus levels or a plan for the divestiture of excessive surplus under subparagraph b. above, the Department may retain attorneys, appraisers, independent actuaries, independent certified public accountants or other professionals and examiners, the cost of which shall be borne by the Blue Plan subject to review.

This Order is effective immediately.

M. DIANE KOKEN
Insurance Commissioner
Commonwealth of Pennsylvania