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**“Financial and management practice in a voluntary
medical insurance company in the developed world”**

**Roger Bowie
Gayle Adams**

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1 Context

Background

This paper has been commissioned by Alexander Preker, Chief Economist, Health, Nutrition and Population (HNP) to provide background material for the Voluntary Health Financing Strand of the World Bank Sustainable Health Financing Program. The purpose of the paper is to help answer the question “Can the essential elements of a voluntary health financing scheme be created in a middle income country?” by addressing: “What constitutes financial and management practice in a voluntary medical insurance company in the developed world”.

The paper provides a summative evaluation of the financial and management practice of voluntary health insurance in UK, Australia, New Zealand, and Ireland from the practitioner’s view point. From a statistical perspective, we concentrate on Australia, as one of the few environments where there is a wealth of publicly available information. To a lesser extent, reference is made to Israel and South Africa where differences in these systems offer additional insight. Generally, unless otherwise stated, we have assumed that institutional capacity is for the most part, generic across variations of the Voluntary Health Financing theme. The paper examines health financing schemes where there is some form of universal public health entitlement. For this reason we have not included the USA.

Structure of the paper

Section 1 places the discussion in the context of there being much to learn from the history of voluntary schemes.

Section 2 defines the various roles that voluntary health insurance can have in a health system, particularly when it exists in a role of secondary funder to a mandated national or government system. The descriptor “gap insurance” is used to generalise the features and characteristics of voluntary health financing which then provides a context in which to consider financial and management capacity.

Section 3 examines the evident management capacity including pricing, products and major processes required for a successful operation.

Section 4 examines the financial capacity required in health insurance and comments on the drivers, special considerations and implications of financial and accounting items. It briefly touches on solvency management and the role of financial regulation.

Section 5 offers some insights on what constitutes a virtuous cycle of activity to ensure the sustainability of a voluntary health insurer.

Section 6 summarizes the key characteristics found in Voluntary Health Financing in the developed world. It also raises questions and issues for further study in determining to

what extent can lessons learned be translated and/or resolved in setting up regulatory and institutional frameworks in a developing country.

Attachment 1 provides a list of key financial ratios for each insurer in Australia together with brief analyses to illustrate how ratios and performance can vary within a country.

Basis of the paper

Much of the type of information examined in this paper relies on specific knowledge of commercially sensitive information of individual insurers that is not appropriate to publish without consent. The paper is of a general nature and requires problematic comparisons across countries and between insurers in very different environments. We believe that it is valid to provide general information that can be supported without specific reference to confidential information. Because of this we have restricted ourselves to general comments and only quoted publicly available information. Australia has often been used as a case study as the Australian regulator publishes good quality comprehensive data on all Australian health insurers.

The paper draws on confidential input from several major insurers in various countries, research and other publicly available information and our industry experience and general knowledge. The authors have practical experience in the health sector in New Zealand, USA and Australia. Between them they have held roles as Chief Executive and Chief Actuary of a major health insurer with a hospital network, President of the International Federation of Health Plans, Health Practice Leader of a major Australian consultancy and reinsurer, and executive membership of an industry association. They have also been involved in population public health funding in Australia and New Zealand and development of provider reimbursement schedules.

The paper is general in nature and so should not be used for detailed decision making without additional targeted specific research and analysis.

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2 Introduction to Voluntary Health Financing

2.1 Historical context

Once upon a time there were no state funded health systems to the extent we have seen dominate the political and social horizons in developed countries over the past 60 or so years.

While state intervention in the provision of healthcare (and other welfare or redistributive services) is not entirely new¹, the world has not seen the prevalence and dominance of state funding that arose in the latter part of the 19th Century, culminating in the welfare state concepts of post World War II.

Prior to then, the most common form of collective protection against unexpected illness came from communal groupings of people, based on geography, work or some other common interest. Early organizational forms of protection against illness or injury arose from the growth of Guilds; then Friendly Societies, which flourished in the United Kingdom in the 19th Century such that by century's end, more than half the labour force was enrolled in a Friendly Society².

Similar trends in Europe gave rise to a political response which also endeavoured to adopt principles of universality. The notions of social security which were first mooted on a national basis by Bismarck in Germany and the Liberal Government in New Zealand in the last decades of the 19th century, evolved into national social insurance schemes, which covered pensions, protection against injury, welfare for widows, orphans and some unemployed, and access to healthcare services.

The key difference which emerged in the middle of the twentieth century largely separated the English speaking world (with the notable exception of the USA) from the European world (with the exceptions of Spain, Portugal and Scandinavia). Healthcare in the English speaking world became funded from general taxation, differentiating health from the other redistributive activities which continued to rely mainly on the employer/employee relationship as the source of funding. European welfare state systems, in contrast, almost exclusively relied on employer/employee contributory funding schemes, supplemented where necessary from general or local taxation. Both systems were based on the principle of universal access, regardless of ability to pay. The European social insurance environment also relied heavily on the principle of "solidarity", a notion which derived from the communal self help spirit of the early guilds.

¹ Evidence appears from Egypt in the second millennium BC, of publicly funded health care with healers paid by the community.

² 5.5 million out of a work force of 10 million. Another estimate puts it at 6.86 million out of 7.

For the purposes of this paper, we focus mainly on the English speaking world, i.e. United Kingdom, Ireland, Australia and New Zealand [We also touch on South Africa and Israel, as more modern examples of how voluntary financing works].

As state funding for social purposes emerged, the voluntary movement was still regarded as both valued and legitimate. Beveridge, upon whose 1942 report the United Kingdom's NHS system was based, advocated a combination of state social insurance assisted by voluntary self help – drawing on the legacy of Friendly Societies and their explicit role, during the years between the two World Wars, of administering the National Insurance Scheme.³

The political outcome of this particular initiative, influenced no doubt by both the impact of World War II and what was happening in New Zealand, was in fiscal terms a pay-as-you-go scheme, administered and provided by the state, with its appealing emphasis on universality as well as efficiency and therefore higher perceived value for money. This effectively put paid to the partnership between Friendly Societies and Government and initiated a steep decline in their fortunes.

The post World War II move away from voluntary welfare schemes to more universal, publicly funded and administered schemes reflected the global shift away from unbridled capitalism, a compromise in the centre between market orientation and socialism. A new, pragmatic idealism emerged, but nonetheless an idealism which either ignored, or focused on the weaknesses of, the voluntary movement. There had to be a better way, in the form of the welfare state and the “cradle to grave” benevolence and wisdom of government.

The weaknesses of the voluntary movement were characterized typically, and not without some justification, as high administration costs, weak governance, lack of and lack of access to capital, inability to predict risk and the consequent failures which left people stranded. The “self selection” nature of the movement also attracted criticism by virtue of its lack of universality. A less well understood, but essential feature for discussion today, was the essentially passive nature of the funding, acting simply as a conduit from a pooled risk between patient and provider, a process which did little to understand let alone contain costs. When the funds did try to contain costs, for example by employing doctors, they incurred the wrath of the medical profession.

The above scenarios typified the pre and post World War II situation in the United Kingdom and New Zealand. Ireland took a slightly different approach by setting up a Government owned voluntary scheme (the VHI) in 1957, to provide insurance for those citizens who wanted it and were prepared to pay. VHI held a monopoly over “private” insurance until 1994.

³ More precisely, a selected segment of “approved Friendly Societies”

One exception to this trend away from voluntarism to socialized medicine was found in Australia, which held on to its essential base of healthcare funding from voluntary sources (with the exception of the State of Queensland) until 1975. The first version of the State funded insurance scheme, Medicare, was then introduced, but with a more explicit role for the voluntary funds than was allowed for in the United Kingdom or New Zealand.⁴ As a consequence of this later introduction of universal access for healthcare, Australia's health system has always comprised a unique public/private "partnership", with both funding sectors highly regulated, but with arguably the most balanced outcome of the inevitable conflict between the objectives of a universal access system (equity, efficiency) and individual freedom of choice.

More recent examples of State intervention to improve overall access have been seen in Israel and South Africa. In Israel, the imminent collapse of the major sickness fund created the crisis which gave impetus to regulatory reform which resulted in a form of "managed competition"⁵. Four licensed funds compete for enrollees on the basis of quality (for the compulsory, state funded scheme) and complementary schemes which the funds are allowed to market on a relatively unregulated basis (provided benefits are truly complementary to the state scheme). In South Africa, decades of apartheid had resulted in some 80% of funding going to 20% of the population, an iniquitous as well as inequitable situation which has led to a long process of attempting to introduce a social insurance system.

Which brings us to the point of the fairy tale opening of this section; the allegorical nature of many old stories handed down over the ages indicate humankind's propensity to forget, to discard old ideas for something fashionable or new, only to return to the old idea when the promise of the new proves less than satisfactory or is exhausted and in need of rejuvenation. An observation which is not meant to foreshadow an attack on Government funded schemes, but to raise the prospect of voluntary health insurance playing a greater role in developing countries, just as it did in the developed world in the 19th and early 20th centuries.

The essential premise is that developing countries lack the capacity to provide sufficient funding from taxation, in any form, and, as a consequence, 80% of funding is out-of-pocket expenditure, with no capacity for individuals to pool their risk. So why not look at private insurance as a vehicle to fill the gap, at least for the period of time it will take to establish the institutional capacity to provide a mandatory funding stream?

⁴ Medicare was introduced in 1975, substantially revised in 1976, and then again in 1984, largely reverting to the original model. This reflected changes in government, and the essential "left of centre", "right of centre" debate between universal access and more individual responsibility which is still alive today.

⁵ "Managed Competition" describes a situation where the market is constrained by regulation or rules, either enforced by governments, or, in the case of the USA, by employers wanting to provide choice and contain costs at the same time

In preparing the ground for this debate, we now move on from the historical context, to the primary focus of this paper, which is to understand the role of and institutional capacity of voluntary health insurance today, and what we can learn from this in supporting the development of private insurance mechanisms in the developing world.

2.2 Role of Voluntary Health Financing Today

2.2.1 Is it truly voluntary?

Voluntary Health Financing in today's world plays a varying role dependent on the particular historical and political context of the host country. The term "voluntary" can also have varying degrees of authenticity dependent on the regulatory environment and the existence of incentives.

For example voluntary in the United Kingdom and New Zealand contexts, where there exists minimal regulation, comes closest to meaning what it says - an expression of the willingness of the individual to pay extra for healthcare cover which they are already entitled to receive by way of the national health system. One effectively pays twice, in the form firstly of income tax which contributes to the annually allocated healthcare budget from government funds, secondly by paying for private health insurance from after tax income. The purity of definition in this context can be compromised, according to whether an individual's employer is prepared to pay for or subsidize the cost of private insurance, even if this is tax neutral to the individual.

In Australia and Ireland, by contrast, the level of incentives created by regulation reduces the level of double payment. This makes the choice of having health insurance an economically influenced decision, as opposed to purely voluntary on the basis of personal preference and perception of risk, although these decision factors are undoubtedly still a key part of the mix for individuals in these countries.

2.2.2 Definitions and terms

Broadly speaking, the role of voluntary health financing can be characterized in five ways, duplicate, supplementary, co-pay, complementary or substitutional⁶:

1. A duplicate role pertains when it is not possible to combine a voluntary funding entitlement with other funding entitlements (particularly mandated public entitlements), at the point of use. This is typically the case with Voluntary Health Insurance in the UK, Ireland, Australia and New Zealand

⁶ We thank Mark Bassett, iFHP Health Insurance Fellow to the World Bank for his assistance in these definitions

2. A supplementary role pertains when it **is** possible to combine funding entitlements at point of use, without constraint, and for defined benefits in kind. In the Netherlands, for example, it is possible to use supplementary cover to add to the mandated cover to allow for the costs associated with choice (e.g. timing, location, medical device etc.)
3. A complementary role pertains when it is possible to combine entitlements but in a restricted manner e.g. for some treatments in the Netherlands, the amount of additional funding one can apply is constrained. A slight variation on this theme is found in Israel, where complementary cover can only be cover for services which are not covered by the mandatory insurance fund.
4. A co-pay role exists where entitlements under one insurance can be used to pay for co-payments under another, typically mandated insurance. This is typical in France, for access to primary care, and also appears in New Zealand with pharmaceutical co-pays.
5. A substitutional role for voluntary insurance exists if the law allows a consumer to exit from a mandated scheme and subscribe to a private or voluntary scheme. This system exists in Germany (voluntary) and the Netherlands (obligatory over a certain income level)

With the exception of substitutional, the above examples characterise the role voluntary health financing can play, in an environment where the predominant funder is a mandated government fund.

This paper focuses mainly on the duplicate systems found in the developed countries of the Commonwealth, although there are some examples of co-pay to be found, particularly in New Zealand and Australia. The issues faced by voluntary health funding organisations, from an institutional capacity perspective, are, however, broadly similar.

As such we are talking about “gap” insurance – insurance which covers the “gap” in financial and/or entitlement terms, between what a government funded system purports or promises to deliver, and what individuals either have to pay for themselves or perceive they will not be sufficiently covered for. Coverage in this context also means the ability to choose the time, the facility and the doctor. A third driver is one of perceived quality, although in the absence of good outcome information, quality differentials between public and private insurance systems is largely limited to experiential quality and speed of access.

“Gap insurance” is therefore a term we can use to encompass all manifestations of voluntary health financing outlined above, excluding substitutive.

There are two other salient features worth describing now:

- Gap insurance is like the pre HMO indemnity insurance in the USA, in that benefits and entitlements are clearly defined and identifiable, unlike publicly funded systems (and indeed HMOs) where coverage is more loosely defined as “medically necessary”
- Short term contracts (usually annually) are the norm where premium rates can and do change frequently, often annually. Some countries have legislatively imposed guaranteed renewability, however in practice most countries do not impose new terms and conditions once a contract is established.

2.2.3 What defines the Gap?

There are four factors which define what aspects of healthcare are typically financed via gap insurance. These are:

1. Government legislation along with the scope of state funded coverage
2. Public/private sector interface for the provision of healthcare to gap insurance members
3. Private sector capacity
4. Consumer demand

Government legislation and regulation

The primary factor which determines the role of gap insurance is the role of government in legislating restrictions to and/or the scope of coverage, closely allied with the defined role of the state funded system, and the level of funding applied.

For example, in Ireland, United Kingdom and Australia, the state system fully funds, or universally funds to a certain level, access to primary care physicians. Coverage for primary care is either forbidden by law (Australia), or not considered an insurable risk by the gap insurers themselves. In New Zealand, by contrast, state funding for primary care has always been targeted, initially as a contribution to the costs of a General Practitioner visit, and latterly on economic grounds⁷. Gap insurers in New Zealand have the choice of including coverage for primary care, although not all choose to do so.

In the broader context of defining primary care as all care which is given in an out-patient setting, gap insurance has responded where it can, for example in Australia gap insurers provide cover for “ancillary” services such as dental, optical, physiotherapy, chiropractic and other allied health professional services⁸.

⁷ The current health policy in New Zealand is to progressively move to a universally funded primary care system. It is unclear whether this will end up a contributory funding stream, or a fully funded one

⁸ Conversely, in Australia there is current health policy debate about opening up primary care to private insurance. In Ireland primary care coverage is slowly gaining ground.

In Australia there is yet another dimension to the term “gap”, in that coverage is defined by law to extend only to the gap between what the government funded system is prepared or able to pay (75% of schedule), and the government schedule of fees, which has led to a further gap as doctors elect to charge more than the government schedule⁹.

Related to the above is the more subtle influence on gap coverage induced by rationing. Although government funded systems are seldom explicit in terms of what is covered, reduced or capped funding, leading to waiting lists for certain procedures, sends a message to consumers that they should use their private insurance (if they have it) to avoid the queue, or that others should take out insurance to avoid the risks of waiting. One can argue that the role of voluntary health financing in this context is to soak up excess demand and free up capacity in public systems for those who do not have insurance or perceive they cannot afford it.

Public/private sector interface

Another factor which determines the role of gap insurance is whether or not payment by an insurer is permitted in a public hospital or provider setting. This can be directly related to whether or not coverage is determined by legislation or by consumer demand/insurer choice. In Ireland, United Kingdom and Australia, gap insurers cover chronic secondary care treatment as well as elective surgical treatment, and payment for services in a public setting is permitted, if not encouraged. In New Zealand, while there is some competitive element between insurers with respect to chronic care coverage (i.e. some insurers offer it for competitive reasons, to enrich the offering), in practice there is very little because the vast majority of in-patient care takes place in a public setting, and private patients are rarely treated in a public hospital (a political as opposed to a legal restriction).

Private sector capacity and consumer demand

This leads to the third and fourth factors, private sector capacity and consumer demand. If there are restrictions in law, policy or capacity from accessing treatments in a public setting, gap insurance coverage is effectively determined by private sector capacity. As private sector capacity increases, through competition and/or rationing or lack of investment in the public sector, insurers are almost obliged to offer cover due to consumer perception that what is done in a private setting should be covered. Consumer demand plays an even more active role in determining coverage for lifestyle and preventive treatments, as well as new technologies which remain unproven by randomized trial. The impact of such demand on efficiency is discussed further below.

⁹ Recent legislation has allowed insurers to contract directly with hospitals and clinicians to cover this gap, provided it is fully covered, and contractually so.

2.2.4 Gap Insurance: The Value Proposition

The role of private healthcare financing and its strengths and weaknesses is broadly and frequently debated. For completeness, we outline the negative aspects as well, but the fact that gap insurance has survived with and without regulatory support and/or constraint would indicate a value proposition. We find there are six major components to the value which voluntary healthcare financing through gap insurance brings to the countries and communities which concurrently support a government funded system.

1. More money:

Voluntary healthcare financing comprises between 15 and 30% of total healthcare spending in most developed countries. The contribution directly attributable to health insurance (i.e. claims paid) is generally between 5 and 10% of total funding, but these figures mask both the impact of the pooling effect on out of pocket expenditure (much of which is directly related to part payment of insured events) as well as the impact on the overall spend for specific areas covered by insurers. For example, in New Zealand the overall contribution of private health insurance is measured in one study at 6.3% of total funding, but 10.8% of surgical and medical funding, and, in another study, 56% of adult cancer-related treatments¹⁰ Putting the difficulties of precise measurement of the contribution to one side, it is evident that pooling out of pocket expenditure into some form of insurance has efficiency benefits for the contributors, if not for the system as a whole.

2. Choice:

Government funded systems view risk from a population perspective, and individual wants and needs are subjugated to the needs of the population as a whole. Gap insurance allows individuals the choice of viewing their own risk more discreetly, as well as the other elements of choice (referred to previously), i.e. timeliness of access, choice of facility and/or doctor and experiential quality.

3. Productivity:

Getting access to treatment faster has a direct impact on individuals' and employers' economic as well as the individual's physical well being. A study by Southern Cross Healthcare in New Zealand revealed that people who had taken time off work due to illness had taken, on average, 16 days off if they had insurance, and 36 days if they had no insurance¹¹.

¹⁰ New Zealand Ministry of Health, 2000: Health Expenditure Trends 1980-99 Appendix 5A

¹¹ New Zealand Institute of Economic Research Report to the Health Funds Association of NZ, Dec 2001

4. Freeing up capacity:

Gap insurance facilitating access to private facilities frees up capacity in public systems to prioritize the type and extent of services provided as well as access for the uninsured.¹²

5. Innovation:

Gap insurers have to innovate to survive in both regulation free and regulation heavy environments. Innovations in health plan structures have led to the introduction of new technologies as well as wellness programmes which encourage prevention, in spite of the challenges in defining a return on investment discussed below.

6. Maintaining a professional workforce:

The existence of gap insurance provides medical professionals with an additional source of income, and arguably subsidizes the government funded system, although this is an argument which can quickly become circular¹³. Certainly the availability of privately funded work in smaller urban and rural centres is a factor in retaining professionals in the public system.

7. Consumer Satisfaction

In spite of the many challenges faced by gap insurers, challenges which are outlined below, consumer satisfaction with the concept and generic performance of health insurance is high. The perception of greater control or at least a greater role in the process if not the outcome of a personal confrontation with illness and disease, is seen as a major advantage by those purchasing insurance.

2.2.5 Gap Insurance: The Issues

1. Systemic Issues

The first issue is a systemic one and relates to the lack of clear definition between public and private systems and what each one covers in the eyes of the consumer. The lack of explicit definition of coverage which typifies government funded, universal coverage systems in turn leads to a very complex response from the gap insurers, as they struggle to avoid the subtle shifting of risk and responsibility from one pool to the other.

¹²The Australian Health Insurance Association makes these arguments in its June 2003 Submission to Senate Select Committee on Medicare

¹³ Paula Gonzalez' paper, entitled "Should Physicians' Dual Practice be Limited? An Incentive Approach" presented to the 2003 IHEA Conference offers some further insight into a complex area

From a consumer point of view the difference between the two systems is on the one hand quite clear; with gap insurance one receives a comprehensive policy document outlining in great detail one's entitlements, whereas a public system claims to be able to provide almost everything to everybody. The term "medically necessary" emerged in the USA as indemnity insurers transformed into Health Maintenance Organisations (HMOs), as the new, consumer friendly qualifier to universal coverage¹⁴. Public systems tend to shy away from even this degree of specificity, because of the problems defining and defending "medically unnecessary".

On the other hand, gap insurer policy documents frequently become so complex they defy easy interpretation, a fact which has not gone unnoticed by consumer protection agencies in both the United Kingdom and New Zealand in recent years¹⁵.

Further, the lack of clarity with regard to the government funding entitlement leads to the phenomena, not of the non-insured as we see clearly in the United States market, but of the under-insured in the sense that consumers are never really sure of their rights to access, and how long it will take, until they are already afflicted and cannot buy private cover (by virtue of their pre-existing condition not being accepted). This is particularly so in the case of elective as opposed to acute conditions.

From an epidemiological point of view, the fragmenting of health risk amongst competing insurers also means that data about health status is also fragmented, leading to key decisions about future health risk being made from incomplete data sets.

In today's environment, there is no technical barrier to overcoming this weakness, through the ability to standardise and share an electronic health record. However, political, ideological and/or financial constraints act as a barrier to sharing of both data and experience between public and private systems.

2. Consumer Induced Demand

Returning to the question of consumer-induced demand mentioned briefly above, gap insurers are often criticized for including coverage for healthcare which is entirely predictable and frequent, which defies the basic rule of insurance.

Gap insurers frequently include benefits which will be fully utilized, in order to maintain competitiveness and respond to members demands. This criticism often comes from economists on the basis of efficiency, but ignores the demand induced by free care at the point of service which typifies government funded systems.

¹⁴George C. Halvorson & George J. Isham, M.D. "Epidemic of Care" Chapter 9

¹⁵ Impending regulation in the UK focuses partly on reducing asymmetry of information between insurer and consumer

The difficulty in resolving this argument resides in the lack of ability for gap insurers to determine the return on investment in wellness, preventive or lifestyle coverage in terms any other than customer service and retention. This of course returns us to the issue of fragmented systems and fragmented information. Gap insurers only insure for part of the body for part of the time; unlike government funded systems (or HMOs in the US context) which insure for all of the body for most of the time. Deciding return on investment in wellness and prevention is theoretically a much more readily calculable equation in a single funder environment.

Adverse selection is also an endemic phenomenon, as it is in all forms of insurance. Briefly, adverse selection can occur when one party to an insurance contract has more knowledge about the likelihood of future risk than the other party. Examples include the taking out of insurance with prior knowledge of a health condition not being declared; or moving from a higher priced, comprehensive or fully reimbursing policy to a high deductible, lower priced policy because of a healthy lifestyle. The gap insurer's reaction to what is often rational behaviour on the part of the consumer (acting in one's personal interests without regard to the interests of the pool) is to impose waiting periods (sometimes regulated) before claims can be made and/or carefully case manage early claims. The sanction of refusing cover after having accepted the contract is often compromised by consumer protection legislation; however, in the vast majority of instances consumers tend to be honest. The greater likelihood of adverse selection in a community rated versus a risk rated pricing environment is discussed below in section 3.2.

3. Administration Costs:

The cost of administering gap insurance schemes varies between 8-19% of premium income. Government funded systems boast a much lower level of spend but enjoy both economies of scale and scope, and do not have to incur marketing and claims adjudication costs. The debate about administration costs can only be objectively had in the contexts of like for like comparisons as well as evidence which compares efficiency and quality from a total supply chain perspective.

4. Governance:

Because of their predominant heritage as not-for-profit organizations, "owned" by the members whom they serve¹⁶, boards of gap insurers have tended to be conservative, risk averse and not as commercial as shareholder owned for profit entities. In many ways this is an understandable risk aversion, in that in the absence of a shareholder base to call on, working and investment capital can only come from reserves. However it has also led to a culture of benevolence and passivity in the face of a rapidly changing healthcare environment over the past ten years; and an implicit

¹⁶ For most not-for-profit organizations, ownership by the members is a very restricted form, and almost never beneficial ownership. Boards of Directors or Trustees in actual fact wield considerable power in the absence of true "shareholder" rights of accountability.

conflict of interest between service to members and acting more aggressively to contain rising healthcare costs.

5. Affordability

Purchasers of health insurance are more likely to come from a high income group or be part of an employer subsidized or facilitated scheme. They are also more likely to be older. Younger people generally feel they do not carry enough personal risk to justify allocating scarce discretionary income. Rising premiums associated with age generally impact older people on fixed incomes. The removal of a subsidy can also severely impact affordability, as witnessed recently in the United Kingdom, when a tax incentive for the over 65 year olds was withdrawn.

2.2.6 Gap Insurance: The Achilles Heel

Gap Insurers have managed all of the issues above to varying degrees, and have survived, with or without regulation. The one area where gap insurers have failed, however, is that they have not (yet) succeeded in moving away from passive funding to active purchasing of healthcare, a transition which also challenged the traditional not-for-profit funds in the USA.

Gap insurers have traditionally used many tools to contain costs and manage risks, and these are discussed further below, but they have been essentially passive in nature. Plan and benefit design, fee schedules, and ownership of clinical facilities have all worked to a certain extent, but gap insurers have essentially been acting as agent for their members in facilitating access to and payment for healthcare.

Providers of healthcare have always jealously and zealously defended their rights as principal in the relationship with their patients. Efforts to intervene more directly in determining choice on behalf of members have led to a backlash from both consumers and providers.

Fee for service payment mechanisms still prevail over fixed price contracting. Providers are well equipped to deal with any initiative by gap insurers, having learned the tricks of trade from monopsonistic purchasing by government agencies and readily adopting the rhetoric of their United States colleagues in denouncing managed care¹⁷.

The criticism which can be applied to government funding systems of not managing their supply chains can just as readily be applied to gap insurers. This is a key issue which must be addressed in promoting voluntary health financing in developing countries.

¹⁷ The Australian Medical Association has led the charge in resisting active purchasing by Australian Health Funds with rhetoric such as “damaged care” and “managed scare”.

3 Voluntary Health Financing – Institutional Capacity from a Management Perspective

In this section we describe voluntary health financing from a functional and process perspective, concentrating on those areas which have specific applications to health insurance as opposed to generic competencies in areas such as marketing, planning, human resource management, and finance and administration. In section 4 we describe the financial, technical and balance sheet aspects, and in section 5 we propose a framework which synthesizes current practice into a generic cycle of activity.

3.1 Product

Products generally fit into two broad categories, dependent on whether primary care cover is included or not.

The most common products offer coverage for hospital inpatient and surgical procedures. Surgery is most often described as elective rather than acute, although these definitions are misleading and often blurred. Medical type benefits (for chronic diseases or non-invasive treatments) are covered dependent on country.

As discussed above, in 2.2., private sector capacity is one driver for defining the boundary between acute and elective; from the consumer perspective, however, many procedures are considered both urgent and necessary as opposed to a population based view which tends to distinguish between life threatening and non-life threatening as a basis for definition.

Comprehensive products contain cover for surgery as well as primary care (or ancillary care as is defined by legislation in Australia).

Products focused on wellness and occupational safety are emerging in New Zealand, Australia, the United Kingdom and Ireland, but these products are limited both by the ROI issue described previously, and, in Australia's case, by their exclusion from eligibility for risk equalization.

In Ireland primary care products are only just emerging. In South Africa medical savings plans have been in place for a number of years and there is evidence of good cost containment arising from well designed products, particularly in containing rising costs of pharmaceutical utilisation.

Within product design all the known instruments for containing risk are to be found : exclusions, waiting periods, co-payments (typically in percentage terms) front- end deductibles or excesses, annual maximums, single procedure maximums, grants – all exist, sometimes as options within the same policy, making products complex and difficult to compare. In Ireland the risk management tools in product design are limited to exclusions and excesses.

3.2 Pricing

Pricing practices in the four countries principally under study vary quite starkly based on the presence or absence of regulation.

In Ireland and Australia, community rating has always been in place through regulation. Community rating systems attempt to spread risk and create equity by mandating a single price regardless of age, sex, epidemiology or tenure. Competition on this basis of very little underwriting has still resulted in unequal risk exposure between funds, therefore both countries have risk equalization regimes, post enrolment, to “reinsure” funds against competitive disadvantage because of the subtle selection techniques of others (the system has been designed but not yet implemented in Ireland).

In New Zealand and the United Kingdom, with minimal regulation, the funds have been free to price as they see fit, which has inevitably led to age related premiums as the primary risk management tool. BUPA in the U.K. has priced on the basis of single year age bands for over ten years; in contrast, Southern Cross, in New Zealand, has only just moved to this system after battling for years with three broad age bands (three “communities” of risk) against the competition’s position of mainly five year bands. The underlying theme which emerges is: absent regulation and/or the capacity and capability to manage risk through control over supply, voluntary health financing will gravitate to risk rating ante rather than post enrolment.

Another form of pricing evident in non-regulated environments is the practice of experience rating, usually for large and discrete groups, typically a large corporate. This practice, more common in general insurance markets, has the advantage of maintaining a predictable margin for part of the overall book of insured, and the disadvantage of ring-fencing that segment from the rest and losing the potential cross subsidy. Gap insurers have learned that margins should be set sufficiently high, to counteract a negative response from the client when claims experience declines and premiums go up. The weakness of experience rating in a corporate environment is that the corporate generally remains a passive risk manager, not able to influence the incidence of claims, and therefore reluctant to take full responsibility for a claims blow-out. Gap insurers are responding to both the demand for experience rating and the lack of risk management, by supporting the client with risk assessment and lifestyle/wellness programmes

In the United Kingdom, BUPA have recently introduced personal underwriting, i.e. a degree of customization for the individual which allows for greater premium and cover trade-offs than traditional excess or deductible options in that existing conditions may be accepted as part of the trade-off.

In Australia, recent legislation has modified the pure community rating concept to one of “lifetime community rating”, whereby consumers are deemed to buy insurance at age thirty, and are subject to a yearly based surcharge of 2% per annum over base (30 years) price dependent on the age they join.

The relationship between regulation and pricing is an interesting one in the context of tomorrow’s design for developing countries. The advantage of pricing regulation (as per Australia’s current regime) is deemed to come from the recognition and reality that the private sector partner can play a demonstrably greater social role. Higher risks can be safely and equitably delegated to the voluntary finance sector and private delivery sector as opposed to being deemed to be the exclusive or default preserve of government systems. The disadvantage of community rating in a competitive market environment (i.e. where the insurers have to compete for membership) is that consumers can play “hit and run”, the ultimate in moral hazard induced behaviour. That is to say an individual can take out insurance in the knowledge that treatment is highly likely or imminent, wait out the waiting periods (often legislated for maximums), obtain treatment, and cancel the policy. The threat of such behaviour is only partially mitigated under Australia’s new system.

The transition from community rating to risk rating creates huge issues particularly for funds with a predominance of more elderly customers who have retained their policies over many years and resent the sudden loss of intergenerational transfer benefits. Southern Cross felt that the advantages of single year age bands outweighed the short, sharp pain of transition.

3.3 Major processes

3.3.1 Distribution

Insurers use a variety of distribution channels: direct sales forces are used more predominantly than third party agents or brokers, due to the large commissions traditionally earned by brokers, including renewal commissions. The low margins typically found in the voluntary health insurance segment means that an in-house sales force produces a lower cost of sale and retention than a brokerage channel, although the latter may be more productive in terms of new sales.

Most insurers sell both directly to individual consumers (and families) as well as via corporate customers, as agents. Generally the principal relationship remains between insurer and individual, unless the employer chooses to directly subsidise. Unlike in the United States, employers in the environment under study do not gain tax advantage from paying for health insurance; most corporate sales are therefore facilitative in the form of payroll deductions for premium payment and the ability to provide access to a more balanced pool of risk (younger as well as older employees, and families).

Increasingly, insurers are turning to telesales and the internet as a way to complement their direct activity at lower overall cost, in spite of misgivings about customers' willingness to divulge personal health details through these media.

3.3.2 Claims processing

Claims processing is a key process as insurers generally face a high volume of low value claims along with a low volume of high cost, complex claims. Adjudication processes, unless automated, can be both paper and labour intensive.

Insurers are increasingly moving away from the traditional method of requiring the member to pay first for treatment, and then submit a claim, although this is still the predominant process in New Zealand.

Direct payment to hospitals and surgeons on behalf of members is most common in all environments, particularly if a pre-approval process establishes cost estimates in advance. The lower volume, albeit higher value of such transactions, means that direct payment can be more easily managed even if processes are manual; it also relieves the member from having to outlay large amounts in advance of being reimbursed.

The high volume, lower value claims present a different challenge, as exemplified in Australia and New Zealand. In Australia the tendency for insurers to establish retail outlets for sales and claims submission has led to an industry solution which automates claims payments at point of service. In New Zealand, the only environment with a high level of primary care cover, coupled with a non-retail environment, the volume of low value claims presents a real challenge. Automation of these processes is perfectly feasible from a technical point of view; however resistance by providers to a contracting or fixed fee paradigm has led to caution; the fear being that ease of claiming at point of service would induce provider driven inflation and consumer cost unconsciousness, more than offsetting the transaction cost savings.

As contracting with providers in both primary and secondary care takes hold, then claims processes covering receipt, adjudication, exception reporting/handling and payment can be fully automated; a trend which will improve efficiency, customer service and provider satisfaction with the insurer.

In spite of processing challenges, insurers generally promise fast payment of claims, particularly when paying directly to members post event. In such circumstances 90% of claims are paid in the 2-3 week range.

3.3.3 Billing

Billing processes can also be quite complex given the prevalence of corporate payroll systems acting as process engines for premium collection. Having a third party administer the frequent changes which occur as individuals change cover, add or subtract a family member, or leave employment creates complexities which do not exist in a direct to the consumer relationship. While automation takes care of much of the complexity, there is still effectively an “outsourced” relationship to be managed.

3.3.4 Risk Management

In this context we examine the risks unique to health insurance in a gap environment. We make an assumption, supported by evidence of sound commercial practice, improved governance and existing regulation, that generic business risk is being appropriately managed. Financial risk is discussed in more detail in Section 4

Gap insurers are particularly vulnerable to inflationary pressure. Claims escalation is often in excess of 10% per annum (typically 5-8%), comprising a composite of real cost increases, CPI, the impact of new technologies and utilization. The latter component is a particular challenge because the drivers are many and varied:

- Government induced, when government funded systems ration access to certain procedures, or delays the introduction of new technology, and volume demand rises in the private and voluntary sectors¹⁸.
- New technology, particularly if there is real “consumer” appeal, e.g. brachytherapy for treatment of prostate cancer.
- Insurer induced demand, e.g. gym memberships or other wellness related initiatives
- Provider induced demand, even in the circumstances where insurers manage to negotiate price reductions and providers respond by doing more.
- Consumer induced demand, in response to a premium increase, or in pursuit of a new technology.
- Moral hazard of a more generic type as individuals treat their insurance policy as an entitlement.

¹⁸ In 1997 the Industry Commission in Australia identified cost shifting from the public to the private sector as the most significant cause of claims escalation in Australia despite the impact of aging on the compulsory community rating premium structure and other factors

Risk Management Tools:

Insurers use a variety of risk management tools, some of which have already been described:

- **Plan or Product Design:** the combination of defined benefits, exclusions, waiting periods, co-payments, annual limits, excesses or deductibles. An emerging trend is to link the level of reimbursement to an explicit list of providers.
- **Price:** by age, sex, health status, and lifestyle. Most insurers in unregulated environments have only gone as far as age banding. Pricing for health status, history, or lifestyle is not yet widespread.¹⁹ Conversely, pricing in regulated environments restrict the insurer's ability to "select" based on price.
- **Underwriting:** Like pricing, this is often regulated, but in an unregulated environment insurers are free to exclude coverage, or price it at a higher rate which can effectively make it unaffordable to the individual. This freedom is often constrained by umbrella regulation covering human and/or consumer rights. Competitive pressure often leads to a relaxation of rules in favour of market share.
- In a regulated environment, insurers are obliged to accept cover and/or limit exclusion or waiting periods. Of emerging interest is the extent to which genetic testing can be used in underwriting. Although there is already a degree of genetic based underwriting (family history, existing conditions), insurers at this point are either voluntarily or collectively abstaining from requesting testing or access to tests.
- **Technology assessment:** Gap insurers tend to rely on external resource to evaluate the effectiveness of care provided or requested, although increasingly they have to invest in such processes as an in-house capability. At the crudest level, plan design is the first line of defence in deciding what to cover, and adjudication the second in terms of "refereeing" between insurer and provider as to the nature, extent and complexity of the claim. Risk management by removing coverage for certain techniques because of technological and/or skills obsolescence on the part of the provider is a legitimate but controversial aspect – likely to upset both provider and consumer.
- **Schedule of Fees:** Insurers either publish a schedule of fee maximums against which they will reimburse, or resort to a less formal "usual and customary charges" regime. In Australia the government publishes a fee schedule and a commitment to reimburse 75%; insurers are allowed to insure the gap between the two. Only recently have insurers been able to lift their coverage to meet the gap between the government schedule and what private providers actually charge.

¹⁹ BUPA in the UK do so for the personal market. Southern Cross in New Zealand have just announced a move in this direction

- Insurers also typically rely on government researched and published drug formularies to limit exposure to pharmaceutical inflation.
- Collective action and lobbying: Industry associations in both regulated and unregulated environments, notably Australia and New Zealand, play a big role in projecting the role of voluntary health financing in a positive light, and influencing regulators to ensure that regulation is effective and for the purpose intended.

3.3.5 Provider Relations

This is a singularly challenging area for voluntary health financing in that, unlike public, mandatory systems the principal relationship in a private healthcare transaction has been between provider and consumer i.e. doctor and patient.

This has led to the plethora of essentially passive risk management and cost containment measures described in previous sections, and has also driven gap insurers down a transaction based processing route, as opposed to a purchasing and quality control route which would normally accrue to a principal.

From a consumer perspective the insurer is there to pay claims and facilitate their freedom to choose.

From a provider's perspective, the motivation to enter private practice has been for economic reasons as well as independence. In a private setting providers have generally been able to set their own prices notwithstanding a competitive environment. The tendency for private practitioners to operate independently (of their colleagues) along with the advantages gained from information asymmetry has meant that practitioner fees in the private sector have been higher (than in public) and cost- plus in their construction. To a certain extent one can argue that costs in the private sector are more transparent and real, dependent on the quality of the costing systems in the public sector; on the other hand the fragmented nature of the private market results in diseconomies of scale and scope (independent solo practitioners versus multi-disciplinary group practice).

The secondary motivation is no less important in our context in that there is generally disenchantment with the stringent rules and management overheads of working in a public system, or, in other words, operating in a funding constrained managed care environment. The freedom to act in a private sector is both appealing and a privilege to be protected. Hence the great difficulty private insurers face in attempting to shift from agent to principal and move from passive funding to active purchasing. The practitioners see the change coming and resistance can be fierce.

Notwithstanding the difficulties, insurers have moved steadily forward in recent years. In Australia legislation has allowed insurers to contract with providers to bridge the gap between market pricing and the government fee schedule. Providers have reluctantly acquiesced to establishing fixed fees per procedure as the benefit clearly lies with the consumer or patient, who otherwise would have to pay the difference out of pocket. The insurer has to pay more; but provides a better service as a result. In New Zealand Southern Cross has rewarded providers who agree to price on a product basis (i.e. relatively fixed pricing, with clear rules for price variability) by paying directly, and electronically, and allowing the introduction of new technology. BUPA in the United Kingdom uses a mixture of fixed price contracting (mainly with hospitals) and incentives to practitioners who comply with their schedule of usual and customary fees. In Ireland, because of the monopoly enjoyed by the VHI until recently, the purchasing power has been greater and virtually all private hospitals and practitioners negotiate contracts with the two insurers now operating.

While there has indeed been progress in transforming from passive to active, the value from purchasing can only be realized in terms of predictability – of the immediate costs to be faced by individuals and /or the insurer, and of future costs, albeit to a lesser extent. Insurers have yet to demonstrate value from purchasing in terms of cost containment or quality improvement. The latter benefit is particularly significant if one accepts the maxim that quality can cost less if one factors in the savings from not having to fix things when they go wrong.

A key factor in overcoming the challenges in this area, which gap insurers almost universally recognise, is the ability of the insurer to create a partnership/win-win relationship with providers, particularly clinicians, whereby clinicians are not compromised in their ability to select the most appropriate treatment, and insurers support that process with streamlined, non-bureaucratic processes and timely, non-judgmental feedback. The transition from passive funding to more active involvement in outcomes is a long process of educating clinicians as to the value an insurer can add to the pursuit of better quality in healthcare, without the threat of loss of their clinical independence.

3.3.6 Customer Service/ Fulfilment

Customer service and fulfilment functions are mainly performed through modern call centres as insurers respond to a myriad of requests from customers and providers. Buying or making changes to a policy, enquiring about different policies, seeking prior approval for surgery, querying a claim reimbursement and asking for advice, are typical circumstances which call centre agents respond to.

The latter issue is becoming more important as consumers struggle with the complexity of their policy, their illness and the information given by the doctor or obtained over the internet. Gap insurers increasingly play an advocacy role, often through dedicated help lines staffed by qualified nurses, a role which at times leads to further tension with providers who see advocacy and advice as a core function and competency.

3.3.7 Information and Technology.

Information technology plays a critical role in underpinning all the services and processes which make up a health insurance offering. Call centres, customer relationship management, claims processing, billing and risk management all rely on integrated systems providing accurate and timely information.

Because of the passive nature of their role, gap insurers have traditionally concentrated their information technology systems on in house transaction processing. Even today, only a minor percentage of claims transactions are fully automated through EDI. The data requirements for such processes are limited to verifying what was done to whom, verifying eligibility, and matching the costs to the entitlement. As a consequence, data sets concerning health status and quality of healthcare provided do not exist or exist only in limited form. Data marts, or warehouses, focus on price and price comparisons more so than qualitative measures such as length of hospital stay or theatre readmissions.

Collecting data for quality measurement is a big hurdle for insurers as the lead time for collecting sufficient data is long and the costs hard to justify. Providers are reluctant to share data for fear of nurturing a managed care response. Nonetheless, some funds have been building up more qualitative datasets over the past few years.

Investments in technology have focused more on improving the efficiency and accuracy of billing and claims processing, specifically in the latter case through automated adjudication. Both BUPA and PPP in the United Kingdom have started to outsource some of their processing to bureaus in India in order to reduce cost.

3.3.8 Process Management and Quality Assurance

The picture which emerges is that voluntary health insurance has developed to the extent that market and regulatory environments, product features, risk management tools along with rising consumer interest and involvement, have combined to create considerable complexity of process. The management of process change and quality of execution and performance now requires considerable management attention and overhead. At a minimum, organisations use internal audit or project related approaches to process review (for example, at the time of introducing a new IT system). At a more systematic level, organisations such as BUPA in Ireland have developed comprehensive service and process specifications which permeate and drive day to day activities. Change management becomes much easier under such a system.

3.3.9 Governance and Organisation

Gap insurers have focused on governance capacity and capability in recent years as regulation, or the threat of regulation, increase, and as the response required to market or political change becomes more complex. One example is the recent introduction of new solvency standards in Australia, discussed further in the following section.

Governance mechanisms embrace all functions and processes which one would find in a listed organisation, i.e. Boards of independent directors, regular Board meetings, committees for audit, investment, remuneration, actuarial involvement in pricing, reserving and product design, and medical involvement in reviewing new medical technologies.

Organizational structures have focused on traditional functions such as sales, marketing, operations (claims and payments) and customer service. Evolution in organizational structures is now taking place to respond to:

- Increasing consumer demand for information and advice
- The skill sets required for purchasing and contracting
- More knowledge based risk management (actuarial and epidemiological skills)
- Process management and quality assurance

4 Institutional Capacity from a Technical, Financial and Balance Sheet Perspective

4.1 Overview of Major Components (technical account)

4.1.1 Major accounting items

The following table shows at a high level the major components that we consider are specific to a health insurance organisation. We have not included more generic items such as tax, sale and purchase of subsidiaries, shareholder equity and other accounting items.

These items and typical variations and concerns are explained in the remainder of the section. For illustrative purposes we have included figures from the Australian industry in Appendix C. This contains a summary of the underwriting accounts and other key statistics for all Australian health insurers to help illustrate the variation that can be seen even in a relatively homogeneous industry.

The following table shows the major accounting items of an insurer's balance sheet and revenue & expenditure account. These items are discussed in detail in the order presented in the table. Australian industry average figures have been supplied in the table to show orders of magnitude although these can naturally change substantially between countries and individual organisations. Appendix C contains a summary of financial ratios for each health insurer in Australia to help show the variation that can be seen even within one country.

Voluntary Health Financing

Major health insurance accounting items

Australian industry year ending June 2002 (public funds)

	\$000's	As a % of premium
Income & expenditure		
Premium income (less State Government levies)	6,691,758	100%
Incurred claims	6,027,966	90%
Management expenses	766,747	11%
Underwriting result	(102,955)	-2%
Investment income	49,907	1%
Other expenses	1,114	0%
Profit before tax & extraordinary items	(54,162)	-1%
Tax & extraordinary items	(25,826)	0%
Profit	(79,988)	-1%
Assets		
Investment assets & cash	3,185,853	48%
Outstanding premium (net of doubtful debts)	59,737	1%
Other	611,503	9%
Total assets	3,857,092	58%
Liabilities		
Outstanding claims (including IBNR)	740,925	11%
Unearned premium & unexpired risks	858,662	13%
Other	322,780	5%
Total liabilities	1,922,366	29%

4.1.2 Revenue items

4.1.2.1 Premium income

The largest revenue item for a health insurer is premium income. Basic drivers of premium income are number of insured lives, bad debts and average premium per member. The growth drivers are generally membership growth, premium increases and membership mix.

Membership growth

Membership growth can be achieved by marketing and distribution activities (new product, new geographical and/or industry target etc.), acquiring other insurers and regulatory or Government health policy changes. For example New Zealand, Australia and the United Kingdom have all seen acquisition activities over the past five years²⁰.

Common marketing and distribution initiatives include introducing new distribution channels, changing commission levels or sales remuneration, introducing new products, special promotions, brand or product advertising through the mass media or sponsorships and direct sales. Indirect initiatives are also common such as concentrating on customer service such as claims turn around times to help get a competitive advantage. Price cutting is not common and by its nature needs to be very short term.

In Australia the recent change in legislation allowing and encouraging consumers to buy health insurance at the old community rate for a period of time before the new lifetime community rating system was introduced, contributed to an increase in population coverage of hospital cover from 30% in December 1998 to 46% in September 2000.

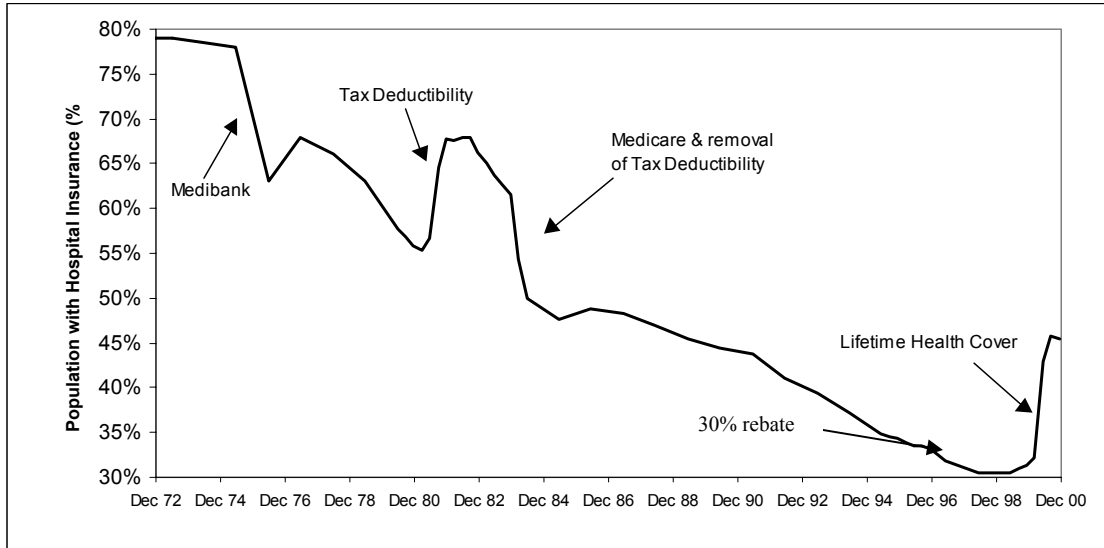
Government policy in respect of tax incentives and public health funding and provision policy can have dramatic impacts of the overall size of the market and therefore on premium income.

The following graph shows population penetration in Australia over 30 years. It marks times where significant changes to Government policy led to changes in market size. Over the thirty year period premium rates and claims increased in real terms which help to explain the general decline.

Health Insurance Penetration: 1972 to 2000²¹

²⁰ More specifically, BUPA International, outside of the UK

²¹ Andrew Gale and Gayle Adams, *Insuring Kiwi's and Aussies*, Institute of Actuaries of Australia, 2001



Notes:

1. Medibank & Medicare are national health schemes
2. Penetration has since steadily dropped from a high of 46% in 2000 to 44% as at March 2003

Premium increases

With the exception of the recent Australian experience, revenue growth comes mainly from premium increases, which have been as high as 27% in one case in recent years. Premium increases are mainly driven by claims escalation, and/or the need to maintain solvency ratios. Results of consumer responses to premium increases include increases in cancellation rates and downgrading of cover, both of which reduce revenue. Most insurers can correlate membership cancellations to levels of premium increase.

Membership mix

Membership mix can change as policyholders move from one class of product to another, such as the recent trend in New Zealand away from comprehensive policies to less expensive hospital only cover. Policyholders can also elect larger excesses or deductibles in exchange for a lower premium. Offsetting this trend, in unregulated pricing environments average premiums per member have increased due to the increase in average age.

The level of bad debts is a function of the economic climate, termination rates, culture, mix of business (for example employer or individual) and internal management practices. The level of bad debts tends to be low because of the insurers ability to terminate cover.

4.1.2.2 *Investment income*

Investment income as percentage of premium income was between -1% and 6% of premium in the countries under consideration. (Organisations with very low returns had high equity positions.) The level of income is a function of the amount of technical and other reserves, short term interest rates, an insurer's investment policy, and, for groups (for example multi-line insurers), the investment income allocation policy to the technical account.

Investment income is significant relative to the typically low level of profits of an insurer, although not as significant as for some classes of general insurance business which have larger technical reserves and therefore investment assets. Notwithstanding the relatively low level of importance, income from reserves does enable insurers to operate with higher loss ratios and is usually taken directly into account in determining the level of premium rates required.

Larger organisations are more likely to invest in equities and engage in merger and acquisition activity, although their freedom to act may be curtailed by regulation (either of investment options, as in South Africa, or the implications of solvency requirements, as in Australia) or the "trustee" nature of their articles of constitution. As discussed below, the overall investment trend is conservative. Sometimes it is relevant to consider acquisition activity as an investment although it is generally not classed as such.

In comparing accounts between organisations it is important to understand the differences in reserve levels and, where an insurer is part of an overall group, the policy of allocation of assets to the health insurance unit. A stand alone mutual with large free reserves will naturally have higher reported investment income and apparent solvency compared to a business unit of a conglomerate that keeps the minimum level of capital in the business unit.

4.1.2.3 *Risk equalisation receipts*

Risk equalisation receipts can be significant for some organisations. For example in Australia those organisations with a high proportion of over 65 year olds will receive significant payments. Risk equalisation is described in more detail in "claims" in the expenditure section.

4.1.2.4 *Other Sources*

Some insurers have been able to successfully derive income from selling services and/or data to third parties.

4.1.3 Expenditure items

The largest expense item is usually claims paid with operational and management expenses being much smaller.

4.1.3.1 Claims

The level of claims are determined by a wide variety of factors including the type and mix of product cover, demographic profile of insured lives, source of business, claims escalation, provider relationships, private sector capacity and capability, underwriting and claims management practices.

The impact of these factors on claims can change significantly and unpredictably over time making budgeting and financial control difficult. Unanticipated changes in the mix of business will also cause financial difficulties.

Claims escalation

Claims escalation is one of the most volatile and significant drivers. It can vary from negative to 20% or more for individual product types and it can be difficult to isolate the cause. Claims escalation is also notoriously difficult to predict. It is nearly always higher than the local CPI and often higher than the health component of the CPI.

Both utilisation and unit costs can increase rapidly. Specific causes identified to us include prostheses costs & utilisation, specialists' fees, hospital charges and exchange rates. These factors were not universally important across all countries. Claims escalation drivers are discussed in section 3.3.4.

Aging and an increasing duration of a portfolio also cause increases in claim costs although these impacts are not always considered a component of claims escalation. These factors are discussed below.

Claims spirals

“Claim” or “vicious”²² spirals are an unfortunate feature of health insurance which creates inbuilt instability. The spiral occurs as claims inflation leads to premium increases that are higher than general inflation. This leads to policy holders leaving the market. These policy holders tend to be lower risk than average reflecting rational consumer behaviour. This leads in itself to further increases in claims costs for remaining policy holders leading again to further withdrawal of lower risk members from the market. Repeating “spirals” are also referred to as a “death spiral”.

²² Industry Commission (1997), Private Health Insurance, Report No. 57

This phenomena creates a challenge as the health insurance industry matures. Insurers need to find innovative ways to increase the policy holder value proposition to maintain population penetration at viable levels. The spiral can occur at both industry and organisational level. It is a larger challenge for more established insurers or those insurers not growing as fast as the industry as they will be further ahead in the spiral.

The phenomenon does require management but is often over emphasised in importance. There is some indication that increasing claims and premiums due to the spiral effects are quite slow at the industry level, even for relatively large shifts in the penetration rate. The immediate issue for an individual insurer is to ensure that one's actions do not create one's own personal fast death spiral. Addressing the non spiral related aspects of claims escalation will have more impact on membership levels.

Business mix

Business mix is important to the level of claims with age, gender and geographic location all being important claim drivers. Geographic location mix is a driver of claims, especially the rural urban mix, mostly because of the differences in access to private facilities between locations as well as differences in cultural attitudes. An Australian insurer has recently been put into administration after experiencing solvency and other difficulties caused partly by rapid growth in major cities when its premium rates were based on rural claims experience.

Product design

Product design impacts both claims escalation and the level of claims. Members selecting products with higher levels of cover tend to be worse risks than those selecting lower priced products reflecting a degree of self selection that underwriting and other risk control mechanisms do not fully remove. This is not a concern if anti selection disincentives are built into the premiums and the premiums remain affordable. Care does need to be taken when setting premium rates for new products.

Benefit limits can reduce the dollar impact of unit price escalation. The impact of the benefit limit is determined by the relationship of the benefit limit to the average claims size. Benefit limits have the most impact when they are close to or less than the average amount claimed.

Employer subsidised business tends to have lower relative claims than non-subsidised or individual business, due to the reduction in employee anti-selection.

Growth versus Tenure

During periods of rapid growth average claims per member can be misleadingly low as benefit design and underwriting can cause claims to be lower in the first few policy years. This impact is more obvious when the relatively higher impact of IBNR (incurred but not yet reported) is not taken into account. The average claim per member will increase rapidly once the portfolio matures.

Experiencing low claims due to rapid growth can allow an insurer to undercut the more established insurers and still make profits depending on their acquisition expenses. This has serious implications for the stability of the industry as the ability of the established insurers to refresh their risk pools and therefore maintain a sustainable portfolio is reduced. For this reason, being a long term player in health insurance doesn't automatically mean a clean bill of health. The tenure impact is made worse in community rating environments as the new insurer will also have a much younger age profile further decreasing relative claims costs.

The rapidly growing insurer needs to be prepared for the consequences of an inevitable slowing of growth. Rapid growth needs to be balanced by a careful trade off between market share and pricing for an unsustainably low short term claims experience.

A rapid increase in claims costs per member can also be a warning sign as there is a lag between when a trend begins and when the insurer can increase premium rates.

Claims and risk equalisation transfer payments

Claims and risk equalisation schemes are compulsory risk sharing schemes where insurers share specific claims or risk according to some pre determined basis. They are usually aimed at standardising the effect of differences in insurers' risk profiles (equalisation) or providing some form of protection to individual insurers against high claims (reinsurance).

Compulsory equalisation schemes are usually necessary when there are restrictions on the freedom to set premiums according to risk. In the absence of an equalisation scheme, these restrictions would give rise to inequities between funds and could cause viability problems for insurers. For example if funds are required to charge the same premium regardless of age, then without an equalisation scheme those funds with a high proportion of older members will have relatively high premiums and will have difficulties attracting or retaining members. A compulsory equalization scheme may be considered where it would prove difficult for smaller insurers to seek external reinsurance cover on acceptable terms.

In the countries under consideration the risk profile equalisation aspect is more significant than the reinsurance aspect. This relationship can be expected to vary in different environments and between scheme designs depending on the claim size drivers, sources of claim volatility and scheme rules.

Insurers in countries that have compulsory risk equalisation schemes will generally need to make or receive periodic payments from the scheme. Transfer payments between funds can be significant, especially when compared to the average profit. Budgeting and therefore financial control can be difficult when the transfer payment can only be determined with accuracy in arrears. In Australia transfer payments can be +/- 30% of premium for smaller insurers.

The impact that an equalisation scheme will have on a particular insurer will vary according to the design of the scheme and its risk profile. Some designs mean that transfer payments can only be determined after the expense is incurred or revenue earned. Financial management is easier where transfer payments can be estimated in advance with a reasonable degree of accuracy. The basis for determining transfer payments is generally dependent in some way on the experience during the period under consideration, so can not be fully predicted in advance.

The actual transfer amounts are generally either based on (i) sharing the claims of higher cost members or member segments or (ii) fixed amounts per member that varies according to the risk characteristics of members – for example age and gender.

By their nature equalisation schemes can only make imperfect broad brush adjustments and will invariably result in some member segments being more attractive than others. Thus the existence of the equalisation scheme will distort incentives for insurers. For example, schemes that are based on actual claims can reduce incentives for insurers to manage claims. In Australia, where insurers only retain a fraction of in-hospital claims for the over 65s, there can be a large disincentive to invest in innovative alternative treatment programs for this group.

The design of the scheme can also result in incentives for insurers to improve their competitive position by increasing their proportion of attractive member segments who fall outside of the equalisation scheme, for example young members in community rated environments.

4.1.3.2 Management expenses

Expense ratios, such as expense per member and expenses as a proportion of premium ratios, vary significantly between countries and organisational structures. For example, Australian industry average expense to premium ratio is 12% and varies between 8% and 19%

Somewhat counter intuitively there also do not appear to be large economies of scale, between large and small organisations, except for start-ups, where expenses will be initially high. Research conducted by the Industry Commission in Australia in 1996 showed that there were surprisingly few economies of scale beyond a very low level of members. This can be attributed firstly to smaller organisations constraining their spending to fit with industry norms and secondly to the fact that large organisations are investing heavily in new technology and capabilities (see organisational evolution comments in section 3.3.9)

The largest expenditure is generally salaries. IT, marketing/distribution and occupancy costs are often the next most significant.

The high expenditure on salaries reflects the labour intensive membership and claims processing associated with a health insurance product. High staffing levels also cause rent to generally be a significant expense. Processing intensity is changing in the UK and Australia where claims payments can be automated and arrangements with providers sometimes allow for point of service payments or bulk billing. These changes are often accompanied by an increase in IT expenditure.

Distribution methods can have a large impact on expenses. Broker distributed business can attract significant commissions with the rate varying significantly even within countries. Commission rates can vary from a few percent of premium for large employer groups to more than 100% initial commissions for individual business, although this is an extreme case. Conversely some organisations have a captive market. These are often owned by an employer for the purposes of providing insurance to their employees only. These organisations generally have much lower expense ratios than other organisations.

IT is a very significant expense. Administration systems are often complex reflecting the complexity of most health insurance products. Many payment, claims processing and provider contracting initiatives also require heavy investment in IT.

4.1.4 Assets

A large proportion of an insurer's assets are investment assets reflecting the need to hold suitable assets to cover technical reserves and a prudential solvency buffer. The term of assets tends to be short albeit often longer than liabilities.

The following table shows the breakdown of assets for the Australian Industry.

Breakdown of the Australian Industry Assets June 2002 (Public funds) ²³

Investment assets	57%
Cash	25%
Other	9%
Property, plant & equipment	7%
Provision for contribution in arrears	2%
Total	100%

²³ Private Health Insurance Administration Council, PHIAC A & B Reports and Annual Reports, 2000-2001

88% of these assets were classed as “current” reflecting the trend towards assets with short terms. Investment assets and cash are equal to 48% of premium. This makes investments a significant part of an insurers’ operation and indicates that extreme care is required in managing these assets. This ratio will vary between countries and insurers however it is always likely to be significant in financially sound insurers. Because of this, insurers who wish to depart from investing in purely short term capital guaranteed government or bank instruments need to invest in specialist investment expertise.

4.1.4.1 Investment assets

Investment assets are generally short term, high quality and liquid.

The following table shows the distribution of investment assets across sectors for the Australian industry at 30 June 2002.

Australian Asset sector allocations June 2002 (public funds)²⁵		
Asset sector	% of total investment assets	
	Including cash**	Excluding cash**
Short term fixed interest (cash, term deposits, bills)*	52%	32%
Government Stocks *	19%	28%
Shares	18%	25%
Debentures *	1%	2%
Property	0%	0%
Other	9%	14%
Total	100%	100%

*Bills and term deposits are short term fixed interest assets. When health insurers invest in these instruments they usually choose issuers who have very high security such as banks. Debentures are longer term fixed interest assets, usually with regular coupon payments and a final repayment of capital. They are often issued by companies who need capital. The security of a debenture is dependant on the issuing organisation and so these can sometimes be risky. Longer term fixed interest instruments that are issued by a domestic government are classed as government stock.

** Showing assets with and without cash on hand illustrates the potential for cash reported outside investment assets to be higher than required.

The table shows that on average the industry has conservative, short term, low risk investment portfolios.

4.1.4.2 Investment policy

There are three factors which determine investment policy:

- Regulation (Australia and South Africa)
- The nature of the organisation – mutuals tend to be more conservative as they do not have a shareholder base to call upon
- The short tail nature of claims

The size of health insurer's technical liabilities has a large influence on the size of investment assets. These liabilities are generally very short term. The average term of claim liabilities are typically only one to four months. The unearned premium provision is also by its nature short term. The provision can vary from one to six months of premium depending on the proportion of the insurers business that is monthly direct debit. The short term nature of these liabilities, together with market structures being dominated by mutuals, leads to insurers often having investment policies that are conservative, short term, low risk and very liquid. Investment portfolios typically have a high weighting in cash and high quality fixed interest instruments. The average term of assets is often longer term than the liabilities. This is demonstrated by Australia where the current investment assets as a proportion of all investment assets are 87%. Beyond these broad principles insurers do not usually practice highly sophisticated portfolio matching or immunisation as the solvency buffer and the broad investment principles mentioned above provide adequate protection.

Some health insurers invest in equities however equity exposure is usually subject to conservative risk controls such as limits on total exposures to a small proportion of total assets. While most insurers have conservative exposures some insurers have suffered losses from more aggressive policies. In 2001, one large Australian insurer had 50% of its investment assets in equities. After subsequent poor returns the insurer now has no exposure to equities.

4.1.4.3 Other assets

Significant exceptions to the above generalisations include –

1. Investments in institutions such as hospitals and nursing homes (these are often run at an arms length basis)
2. Ownership of the insurers head office or branch premises

3. Ownership of dental, optical or pharmaceutical outlets
4. For larger organisations, investment in subsidiaries such as life insurance, savings or international operations.

Many insurers own their own premises especially their head office building. Australian solvency standards and good diversification practice limits the amount that smaller funds should invest in their own premises

Insurers also may own hospitals, dental, optical and pharmaceutical facilities. The driver for these initiatives is often cost containment and is appropriate as long as the investments are structured so that they can not significantly weaken the financial position of the insurer.

Depending on the circumstances these types of investments can be appropriate and have proved successful. On the other hand problems can arise if they comprise a significant proportion of the organisations investment portfolio. Liquidity, marketability and correlation can cause problems when these assets make up a significant proportion of an insurer's assets, especially if the insurer has a declining membership base. The dangers are allowed for in the Australian regulatory regime where the value of a specific asset that can be counted for solvency of capital adequacy investment is restricted to a low percentage of total assets and investments in related entities are subject to special treatment.

Overdue premiums held as an asset in the accounts are usually small. The asset held will generally be much lower than actual overdue premiums reflecting that a late premium is often a sign that a policy has lapsed. The reduction is usually based on historic experience.

Most business is billed in advance and so premiums paid in arrears are usually small. Some group business is paid in arrears in response to market demand. However it is preferable that insurers charge an up front interim premium with a final wash up payment at the end of the term to reduce default risk.

It can be a warning a sign if either the above two items are significant. In the case of overdue premiums it can be a sign of poor credit control or an attempt to artificially overstate the financial strength of the balance sheet. In the case of having significant business billed in arrears it may indicate that the insurer is overly exposed to default risk.

Loans in any significant quality are not generally an appropriate asset for health insurers.

4.1.5 Liabilities

The significant liabilities that are special to health insurance are the outstanding claims, unearned premium and unexpired risk provisions. Liabilities related to capital raising and employee benefits can also be significant depending on the country and organisation.

Liabilities not related to employee benefits or capital raising tends to be very short term. In Australia 99% of liabilities have a term less than one year. The associated ratio of current assets to total assets is 83%.

4.1.5.1 Outstanding claims

The provision for outstanding claims consists of an estimate of the amounts that will eventually be paid for claims that have already been incurred at the balance date but not yet paid. The two main components are claims that have been incurred but not yet reported (IBNR) and claims that have been reported but not yet paid (RBNP). Future claim payments in relation to claims open but not yet finalised are generally very small. In several countries an allowance is also made for the claims administration expenses that will be incurred to pay the claims and sometimes organisations include a prudential margin (either implicit or explicit) above expected costs to increase the probability that the provision will be enough to meet the liabilities.

In Australia, New Zealand and UK the outstanding claims provisions as a percent of premiums is less than 25% and sometimes as low as 6% (the Australian average is 11% reflecting a relatively high level of automation and electronic payments). This is an indication that the average liability term is less than a few months. Prudential margins on this provision generally vary between 0% and 20% depending on how accurately outstanding claims can be predicted and individual organisation's policy.

The level of outstanding claims is impacted by several factors including product mix, claims turn around time (target and actual), average tenure of policies, level of prudential margin and claims administration expense allowance, degree of claims payment automation, bulk billing and other payment arrangements with providers.

Where claims are manually submitted (i.e. after payment by the insured to the provider) small claims typically are reported to the insurer later than large claims because of the smaller financial significance to the member. This means that the IBNR related to comprehensive products has a longer term than hospital or secondary care products when claims are submitted manually. Comprehensive products also generally have a higher IBNR because of the additional benefit coverage. Organisations that have a high proportion of providers under contracting arrangements or on-line or point of service payment facilities will have relatively lower outstanding claims provisions.

The insurers of the countries under consideration had target claims turnaround time ranging from several days to three weeks. Claim backlogs can blow out due to a range of issues including systems changeovers, unexpected high absenteeism and management changes. This can cause actual outstanding claims to significantly increase and can be a significant concern both from the impact on being able to detect trends and from the customer service perspective.

It is important that organisations have a way of reliably estimating “claims on desks” to ensure that technical reserves can be determined appropriately and claims trends can be properly interpreted. This also ensures premium rate increases can be implemented in a timely fashion to protect the organisations financial position. It is preferable for organisations to keep backlogs at a stable level so that claim trends can be detected more quickly.

There is also a recognised tendency for organisations in financial difficulties to take a more optimistic view towards the expected cost of claims and appropriate prudential margins. A reducing trend in an insurer’s outstanding claims ratio over time can be therefore be a concern if it can not otherwise be explained. Auditors, Audit Committees and actuaries involved with determining balance sheet strength and in particular outstanding claims provisions all need to take special care around the veracity of the data and information that they are supplied with to help protect against unintentional overstatement of an insurer’s financial strength.

4.1.5.2 Unearned premium

Unearned premium is the amount of premium received that relates to future time periods. It is sometimes called “prepaid premium” or “premium in advance”. The size of unearned premium as a percent of premium is mostly dictated by billing frequency with organisations that have a higher proportion of business paid monthly having the lowest ratios. For many years the trend has been towards monthly premium paid by direct debit and this has led to a decrease in the significance of the unearned premium provisions in some countries. Unearned premium reserves in the UK and Ireland are 40-55% of premium contrasting with the 6% to 15% typically seen in Australia and New Zealand.

4.1.5.3 Unexpired risk

In some countries an unexpired risk provision is held when it is expected that current premiums will not be enough to cover expected expenses and claims related to contracts already entered into. The provision is the expected shortfall between the expected costs of future claims and the unearned premium reserve.

An unexpired risk provision may be required by accounting or actuarial professional standards or insurance or solvency legislation. Unexpired risk may be allowed for directly in the balance sheet or taken account of in the calculation of an insurer's minimum solvency requirement.

The existence of an unexpired risk provision is a sign that at least some of the premium rates are inadequate. This is a rare item to see in an insurer's balance sheet. It may simply be an indication of a short term problem or a minor problem with old contracts but it can have more sinister implications. Where it does exist an insurer may already have addressed the issue by the time the accounts are published. However care should be taken by actuaries, auditors and Audit Committees to ensure that such a provision is required and is adequate. They should ensure that the organisation has adequate plans in place to rectify the situation if necessary and that the plans will be implemented within a time frame that is suitable for maintaining the financial strength of the organisation.

4.1.6 Capital

Insurers need much more free capital in excess of liabilities than many non risk based organisations. They need capital to absorb unexpected losses due to many factors including –

- Undetected deteriorating claim trends
- Unintentional under reserving for technical reserves
- Under pricing including under-estimating the claims trend
- Poor or negative investment returns including capital gains losses on shares or long term fixed interest stock.
- Unexpected need for cash flow
- Meet new regulatory solvency standards
- Other shocks such as changes in government policy that change profitability before the insurer can adjust rates or take other action to address the implications of the change. For example in Australia or New Zealand the change in level or availability of the government subsidy on pharmaceuticals can immediately have a significant impact on claims costs and there is substantial lead time in changing rates.

Insurers may require capital for reasons that are common to many types of organisations including investments in IT, developing new products, acquisitions of companies or to provide liquidity.

Appropriate capital levels depend on a range of issues including ability to raise capital, the degree of risk in business plans, inherent risk of the product and market, size of the insurer, degree of sovereign risk, attitude to risk of failure of management and Board. Some of these are discussed further in the section on solvency.

Shareholder companies have the normal range of options and issues in attracting additional capital while mutual organisations are much more restricted. Access to capital is a common driver behind demutualization.

Obtaining capital to strengthen a weak financial position

Mutual insurers need to build their capital from premium rates being set higher than claims and expenses less interest.

If a mutual's financial position becomes weak it may have few options to recover to a stronger position and will be extremely vulnerable to failure if there is not a strong regulator or a Board that takes early action.

In this case the option may be to arrange reinsurance to reduce the amount of free capital required to operate safely. However in some countries reinsurance may not be available, or may even be prohibited by regulation, which is the currently case in Australia.

Often a mutual insurer's only recourse, when solvency has dropped below critical levels and suitable reinsurance cannot be obtained is to arrange for another insurer to take them over or to cease writing business. Historically this has been done both before and after insurers actually become insolvent. The use of subordinated debt is occasionally used to strengthen the balance sheet however accounting standards limit the extent that this is done.

As insurers do not plan to have critically low solvency there is generally not enough time for a mutual to demutualise. Even if there is it is debatable whether investors would be interested in an organisation that had unintentionally become in need of capital. Likewise it will be difficult for an insurer in financial difficulties to obtain a loan. Reinsurers may also be wary of entering into an arrangement with an organisation in these circumstances.

Raising capital for other reasons

An insurer has more options if it wishes to increase capital for acquisition purposes, to cover an illiquid portfolio, to respond to profitable rapid growth or to make a special investment.

An insurer wishing to raise capital for these reasons will have more chance of attracting a loan, attracting additional shareholder investment or being able to demutualise to solve capital needs.

In many cases it may be appropriate to deal with capital issues by obtaining appropriate reinsurance cover. Quota share is a common type of reinsurance treaty used by insurers to address capital issues. Under a quota share arrangement a reinsurer takes a set proportion of premium in return for a fixed proportion of all claims. Issues regarding choice of reinsurance structure to address capital needs are quite different from considerations regarding generic stabilisation of claims experience.

4.2 Governance and regulation

4.2.1 Solvency

Health insurers require a buffer to ensure that they have an appropriate likelihood of remaining solvent in the short term like all risk based businesses.

Definitions

An insurer is insolvent when its assets are less than its liabilities. An insurer is known as *technically* insolvent when it fails to meet regulatory solvency requirements, whether or not its assets are greater than liabilities. Insurers in countries with minimum solvency level regulations must hold additional capital to ensure they do not breach solvency standards.

An insurer's solvency level is a reference to how much its assets exceed minimum requirements. A high level of solvency means that an insurer has surplus assets and usually means that it has a high chance of surviving in the short term. An insurer with low solvency will be much more at risk of insolvency (technical or actual) caused by unanticipated adverse events.

Measures and appropriate levels

There are many ways in which solvency and solvency measures can be defined. Methods are usually some form of the amount by which assets exceeds either liabilities or minimum level prescribed by legislation. This amount is then often expressed as a ratio of premiums or as the equivalent number of premium months. An alternate approach is to express total assets as a multiple of the minimum solvency requirement^{24, 25}. The Australian regulator publishes these ratios for all insurers.

A pragmatic definition of solvency level is net tangible assets to premium. Refinements include reducing the value of fixed assets, property and items such as unpaid premium to reflect that in a wind up situation these items can often only be realised at substantially below the asset value recorded in the accounts.

²⁴ In Australia the minimum solvency requirement is defined as the sum of an insurer's liabilities plus additional solvency margin required.

²⁵ This ratio does not appear to have widespread industry support.

Appropriate solvency levels should be chosen in regard to the risk associated with its assets, liabilities and general business. In particular the following should be considered -

- Management and Board's view of an acceptable risk of insolvency – the cost of capital required to guarantee solvency is generally prohibitively high.
- Appropriateness of the asset portfolio – for example an investment portfolio heavily vested in equities or long term fixed interest securities should have substantially higher solvency levels than a small organisation
- Volatility and predictability of claims
- Future capital needs
- Risk inherent in business plans

In Australia there is a wide variation of solvency levels with solvency multiples for public funds as calculated by the regulator ranging from 1.2 to 2.5 in 2002 with a median of 1.7 This excludes two funds under regulatory action and one small fund with a particularly high multiple. It is interesting to note that the two funds now under regulatory action reported industry average solvency positions in 2001.

4.2.2 Regulation

South Africa, Australia, and Ireland all have a highly regulated environment with New Zealand and the UK enjoying a comparatively unregulated environment.

Insurers in all countries are subject to normal company and consumer legislation as well as relevant general insurance accounting and actuarial standards. Although Australia is the only country where the use of actuaries is mandatory there has been a trend towards their routine use for pricing, reserving, budgeting and product design and it is becoming increasingly common for larger insurers to employ actuaries in house.

Countries that have significant restrictions on the full risk rating of premiums have a compulsory risk equalisation scheme.

UK

The UK has no specific regulations regarding price, product or minimum provider or facility reimbursement levels and has a fair degree of freedom in product design, underwriting and risk selection. Some prudential matters are subject to regulation regarding financial soundness and suitability of directors. A general insurance industry body (GISC) addresses some health insurance issues and is responsible for self regulation of the industry including codes of practice.

In response to EEC requirements in 2005 many of the self regulatory aspects of GISC will come under the purview of the Financial Services Authority (FSA), the body that regulates the arrangement and administration of insurers and how insurance is sold. This is expected to increase health insurers' ability to demonstrate appropriate risk management controls and compliance with legislation. The full implications of the move to FSA are being understood as the new rules that will take effect from 2005 are developed. The change is in response to EEC requirements.

New Zealand

Like the UK, New Zealand has no specific health insurance legislation.

The Human Rights Act is becoming more significant with implications on premium rates, premium rate structures, underwriting, exclusions and benefit design. Under the Human Rights Act it is necessary for the insurer to justify on actuarial data or other reasonable grounds where ever it has different terms and conditions for particular contributors or groups of contributors.

There are currently no specific solvency standards other than the current requirement to hold a small amount of \$500,000 in trust for the event of failure. The Government has signalled that it would like to impose a requirement for insurers to obtain a rating as a method of helping to strengthen the industry. There is some debate as whether obtaining a rating will have the desired effect on strengthening industry because of the limitations of ratings.

The industry has an industry body (HFANZ) of which all health insurers are member. The HFANZ has a sales code of conduct regarding reasonable sales practices and ethics and pricing guidelines that members are required to comply with.

Australia

In Australia premium rate structures, premium increases, product design and facility reimbursement are all subject to strict regulation. The types of product that can be offered are restricted as minimum benefit types and benefit levels are defined. Particular product types and rating structures are prohibited for example it is not currently possible to give discounts for a healthy lifestyle or not smoking. Underwriting is prohibited, including the application of premium loadings and exclusions, and maximum waiting periods are dictated for most significant benefits.

The rating structure is defined as age at entry and family status. Premiums can not vary by current age, health status, gender or geographical location within a state. Premium rate increases can only occur once a year and must be approved by the Minister.

The financial stability of the industry is regulated with insurers being required to supply substantial data to the regulator and to meet minimum solvency and capital adequacy standards. These standards are described in more detail in Appendix B. The regulator publishes much information providing substantial publicly available good quality information regarding individual insurers and the industry which helps to strengthen the industry. It is worthy of note that for the first time insurers will be required to appoint an actuary from 2004.

Ireland

Like Australia Ireland has mandated benefits and waiting periods, prohibited underwriting and minimum solvency levels (20% of premium). Solvency standards are the same as for the EEC. If the largest insurer was privatised it is thought likely that premium rates will also come under some of regulation.

South Africa

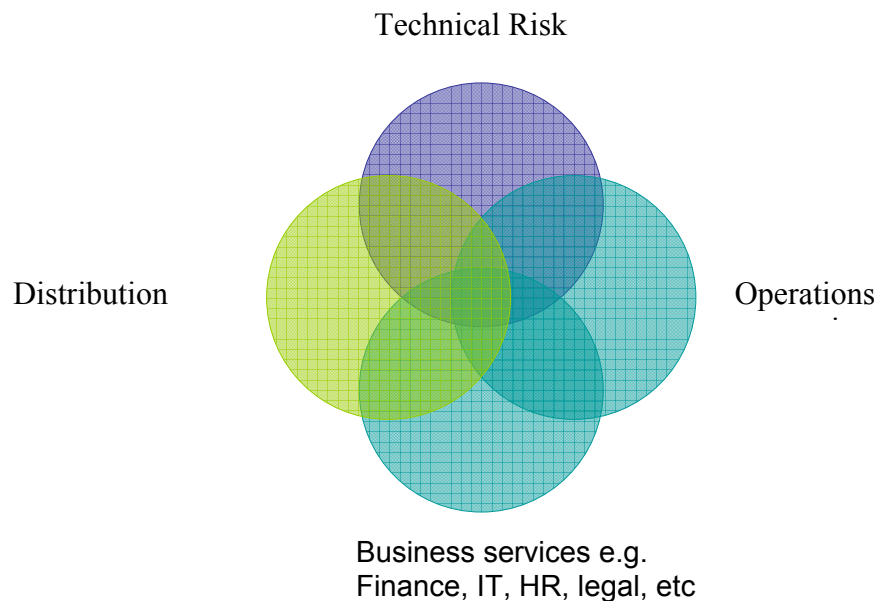
South Africa is subject to similar categories of restrictions as Australia and Ireland with requirements for community rating, minimum benefit coverage, open enrolment and a minimum 25% of premium solvency level.

5 Getting it Right

Much of this paper concentrates on high level or long term considerations. However the “day to day” operations set up for a health insurer are possibly more important to its success in the short to medium term.

This section sets out specialist aspects of a health insurers operations and environment that we consider can be best practice.

The key functional areas of a health insurer can be described as claims processing and operations, risk, distribution and business services. These functional areas each need to be fully supported and aligned to ensure that the key business processes described in section 3.3 can be successfully managed and optimised. These processes either run through or require support from most of these functional areas.



Operations, distribution and business services are fairly self explanatory.

Technical risk requires special mention because of its special importance in an insurance organisation. Its importance stems not just from a product and pricing perspective but also because technical risk skills and products are required throughout the organisation for budgeting, solvency management, provider relations, marketing and distribution etc. Technical risk includes pricing, underwriting, provider contracting, risk selection and technical product design.

To be successful an insurer needs to be able to design viable and popular products, price and budget accurately, forecast future experience and understand the implications of past experience. Often the skills required to do this, if present at all, are spread across several

divisions and can be isolated. An insurer can increase its chance of success by establishing an integrated technical control cycle.

Financial Management & Technical Control Cycle (Technical Control Cycle)

The Technical Control Cycle describes an orderly and regular process of analysing and understanding the organisation’s experience and incorporating it into the organisations management and planning. The Technical Control Cycle links management reports, business plans, products, prices, budgeting and other processes reliant on the technical experience.

The diagram below illustrates how different aspects of an organisation’s functions feed into each other. Having an established and orderly process to address these in an integrated fashion allows an organisation to respond in the quickest and most effective manner possible to changes in the environment which impact its performance. Increasing the visibility of the technical control cycle also reduces the risk of silos developing and helps ensure that functional areas retain focus, perspective and understanding of the insurer's core business and processes.



Other management processes

Other important management processes that a best practice organisation is likely to have in order to systematically manage risk, include -

1. **Internal governance** including delegated authorities, detailed sign off and exceptions processes for pricing, changes to business rules and procedures and products. The governance framework would also include detailed manuals and change processes (including testing and contingency plans) for pricing, products, business rules and computer changes.

Board Audit committees may also consider requiring actuarial or independent sign off on changes to premiums and products and on financial projections and financial condition assessments to ensure appropriate skill levels and the integrity of the information with which they are supplied.

2. **Investment policy**, liquidity & monitoring that is linked to liabilities, solvency position, future plans and the organisation's level of risk aversion.
3. Explicit **capital adequacy objectives** reflecting the organisation's business plans and inherent risk of variation in financial forecasts.
4. Management of **legal & sovereign risk** including anticipating regulatory that may have a direct or indirect impact on the organisation
5. Management of **public relations and member expectations**
6. Management of **information and technology risk**
7. An **integrated routine general risk management process** including identification of factors that cause significant damage to the organisation and development of contingency and risk management plans. This process would have active Board involvement and would tie together the management and governance of the organisation's risks from all sources.

Industry factors

A best practice industry environment might have the following to assist promote a positive and healthy competitive environment:

- A sensitive and pro active regulator including the provision of detailed industry data and solvency and other standards
- An active and intelligent industry body – for lobbying and educating the public & government. It could also provide leadership to the industry and facilitate development of solutions to common industry problems. It can help develop standards such as sales practices that protect the whole industry, increase market size and reduce the need for intrusive government regulation.

- Specific professional standards for actuaries and accountants (especially in countries where there is little depth of expertise. Standards would include auditing, solvency management, liability estimation and pricing).

6 What can we learn?

6.1 The state of Voluntary Health Financing today

From the above discussion we can summarise the state of voluntary health financing as follows:

- Voluntary Health Financing has evolved differently according to local political and legislative environments. Gap insurance has high loss ratios, high inflation, low automation, a predominantly transaction processing business model, and a product focus predominantly on secondary care.
- Successful VHF organisations are characterised by: effective product development and distribution; robust risk management processes; prompt payment of claims; cost control; active purchasing or commissioning; supported by good information and communications technology along with continuous process improvement and quality assurance.
- VHF in a mandated public system environment tends to attract corporate and high income individual support as these segments have sufficient economic freedom to assess their personal risk and act on it.
- VHF has largely maintained a not-for-profit organizational form, which reflects more, today, in terms of limitations in capital raising capacity, than any tendency to be less than commercial in governance and management terms.
- VHF has been extremely innovative in maintaining a value proposition in the face of:
 - Negative criticism from supporters of a mandated public system
 - Either frequent but piecemeal regulation or policy makers grouping health insurers with general insurers without sufficient recognition of the differences.
 - A passive approach to risk management
- VHF has been unsuccessful in organizing healthcare delivery chains to respond to high inflation, new technologies and evidential quality, although there are encouraging signs of progress in this regard.
- Insurers in the VHF sector need to invest concurrently in robust control cycles, supply chain management, information systems, data marts, underwriting and actuarial skills. The alternative appears to be frequent regulation in order to maintain sustainability.

- Australia provides an interesting example of a regulated partnership between public and private sectors. South Africa presents a more current experience in transforming a predominantly private to a mixed system.
- A regulator can play a constructive role in the health of the industry, however the tradeoffs between stability and security from a consumer perspective; and low margins and disincentives to innovate, must be carefully considered.

6.2 Can the essential elements of a Voluntary Health Financing scheme be created in a middle income country?

In order to answer this question the following issues must be looked at, and in the context of the Bank's further work on this subject

6.2.1 Target Environment

What are the objectives for a voluntary financing scheme in the context of the target environment? Specifically, will it play a primary role or secondary (gap) role to a mandated scheme?

What are the pre-existing political, social, economic and infrastructural conditions which will shape the nature and extent of any insurance scheme?

Does the target environment have a functioning public health system?

What epidemiological factors determine health priorities?

Each environment will have its own set of specific features which will shape the design of any health insurance scheme. Tailoring a scheme to the particular environment will be critical to its success, along with the nature and extent of regulation.

6.2.2 Regulation/ Reinsurance

Regulation is advisable if the chosen market wishes to foster a sustainable voluntary insurance sector and/or attract inward investment..

Reinsurance can take many forms, including risk equalisation and technical assistance, as well as traditional functions such as protection for catastrophic events or stop-loss arrangements.

Regulatory and reinsurance rules must have built in flexibility to reflect and respond to both the maturity of the system and its institutions as well as the risks of disincentives and aberrant behaviour.

6.2.3 Organisational Capacity

A blueprint for organisational capacity and capability can be drawn up, emphasising the recruitment of skills which ensure a control cycle can be implemented and sustained.

Given the historical vulnerability to high inflation and passive funding, emphasis should also be placed on institutional capacity amongst providers, to ensure that insurers wishing to actively purchase or commission on behalf of their members have willing and capable partners with whom to engage.

A Australian Capital Adequacy and Solvency standards

Australia has a relatively complex conceptual solvency and capital adequacy regime. Australian standards require that an organisation examine its financial soundness from both a going concern and a wind up basis in contrast with most countries that have either no special requirements or reserve requirements stated as a simple percent of premium.

Solvency standards require that an insurer demonstrates that it has enough capital to meet its obligations in a wind up situation. Capital adequacy standards require that an insurer has enough capital to achieve the organisation's business plans, absorb short term adverse experience and to continue to remain solvent in a reputable and credible manner. While the concept is relatively complex the actual calculations are straightforward. The risks that are specifically addressed by the standards are -

1. Liability risk
 - Reserve adequacy risk
 - New business risk
 - Pricing risk
 - Catastrophe / reinsurance risk
2. Asset risk
 - Asset / liability mismatching risk
 - Valuation risk
 - Credit risk
 - Asset concentration risk
 - Off balance sheet risk
3. Administration/management/business risk
 - Growth risk
 - Administration risk
 - Business plan & implementation

Insurers are also required to demonstrate that they have appropriate risk management controls in place for the major organisational risks including insurance, business and legal risks.

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C Statistics and financial information for Australian health insurers

The tables in this section show various key statistics and ratios for Australian health insurers that are open to the public for the year ending 2003 together with the premium rate increases in 2003. The tables have been provided to show the values that key ratios can take. Unless otherwise defined the ratios are the accounting item expressed as a percentage of premium net of Government levies. It should be noted that what can be considered a reasonable range for these ratios will vary by country.

The tables demonstrate that interpretation of statistics even within a country can be difficult without substantial background about individual insurers as is similar for most industries.

Size

There is substantial variation in the size and market share of Australian insurers. 75% of health insurers have less than 3% market share with smallest insurer having 2,966 insured lives compared with largest insurer's 2.6 million insured lives.

Financial performance

The industry achieved an average profit of 4% of premium with a 98% underwriting ratio. The Australian industry has historically had low profitability. While the industry can be difficult this might also reflect the concentration of not for profit insurers. This concentration means that on average the industry is not under pressure to make commercial returns on capital and may lead to over supply caused by lack of some of the commercial pressures that would normally lead to exits.

An insurer's profit is most impacted by its loss ratio (claims to revenue ratio). This could be expected as

- Claims account for a high proportion of premium income
- Investment policies are usually conservative
- Competitive pressures limit expense growth.

Management expenses do vary between companies. While size and economies of scale do contribute to some extent to this variation however the relationship is not as strong as might be expected given the large variation in insurers' size.

Investment income is generally low, without extreme variations, reflecting the current low interest rate environment and insurers' generally conservative short term investment policies. The insurer that made the largest loss of 1% of premium had 72% of their assets in equities. This was an unusually high concentration for the industry and the insurer has subsequently converted its equities to fixed interest assets.

Rate increases

50% of rate increases in 2003 were between 3 and 10%. Three insurers had rate increases of more than 30% over 2002 and 2003, two of which are now under regulatory action with solvency below statutory minimums. A high rate increase is generally followed by a poorer than average financial result the following financial year and is not closely related to the prior year financial results.

This demonstrates that insurers were generally able to predict to a certain extent their future financial performance, at least by six months, and were aware in advance of problems. The high rate increases of the two insurers that are now under regulatory action shows that this awareness is not always enough to prevent later failure.

Solvency

Most insurers have solvency well in excess of the required statutory minimum. There is a tendency for larger insurers to have slightly lower excess solvency assets, possibly reflecting that smaller insurers are more subject to statistical variation in claims experience and the need for a minimum fixed dollar amount of free capital.

Solvency levels are influenced more by variations in loss ratios than investment income and expenses.

Two insurers that are currently under regulatory action and that have solvency levels below the statutory minimum had industry average excess solvency levels in 2001.

Assets

Investment assets and cash made up 82% of insurers' assets reflecting the need for insurers to hold technical reserves and have a minimum level of free capital. Property, plant and equipment on average are relatively small at a combined 7% of premium.

Australian health insurers generally have short term low risk liquid investments. This is illustrated by 75% of insurers having less than 15% in shares and 0% in property. Larger insurers are more likely to invest in assets that are not directly matched to their liabilities such as longer term bonds, debentures and equity. This possibly reflects greater economies of scale allowing greater specialisation and diversification of management interest.

Liabilities

Technical liabilities accounted for a median of 21% of premium with 50% of insurers having technical liabilities within 17% and 26% of premium. These relatively low levels reflects that a high proportion of Australian insureds pay monthly and that insurers' have a reasonable level of automation in claim payments or provider reimbursement arrangements.

Liabilities are very short term with 99% of liabilities being classed as "current" compared with only 88% of assets. This relatively small mis match is generally reasonable when insurers have low risk investments and excess solvency reserves.