Health care products from overseas and their applicability to India

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ABSTRACT
The purpose of this paper is to look at the possibilities for expanding the penetration of health insurance in India, by considering the most common products that are available in some overseas markets and their applicability to the Indian market.

KEYWORDS
Health care; health insurance; private medical insurance; cash plans; critical illness; long term care; medical savings accounts

1 Introduction

1.1 There has been much commentary regarding the lack of new entrants into the health insurance market in India and the challenges faced by overseas health insurance companies looking to enter the market, be it due to a lack of credible data on which to price products or the amount of capital required to enter the market.

1.2 The purpose of this paper is to take a look at the possibilities for expanding the health insurance market in India, by considering some of the common products that are available overseas and their potential applicability to the Indian market.

1.3 In the first section we summarise the status of healthcare provision and health insurance provision in India. We then consider cash plans, stand-alone critical illness and long term care products and their applicability to the Indian market. Whilst cash plans are already available in the Indian market, they are very limited in nature compared to those offered overseas and hence we have included them in this paper. Since private medical insurance is already available in India in the form of Mediclaim, we have not covered this product or income protection, which is a subject worthy of another paper! We have also included a chapter on medical savings accounts since these have been introduced in a number of countries to provide for medical expenses with some success.

Written for and presented at 8th GCA, Mumbai 10-11 March, 2006

2 Healthcare provision and health insurance provision in India

Introduction

2.1 The healthcare market in India is highly fragmented, with little regulation and there are no government standards to dictate the quality of care received by patients. Private healthcare providers play a large role in the delivery of medical services and the quality of services is very variable, ranging from world class medical facilities to untrained roadside physicians.

2.2 It is difficult to find accurate details of the proportion of the population covered by some kind of health insurance arrangement in India. Taking into account those in the government run health schemes, insurance offered by non-government organisations ("NGO's") and other community based health insurance programmes, employer based schemes and voluntary health insurance schemes, it is estimated that somewhere between 10% and 15% of the total population may have some kind of health insurance coverage. This is incredibly low in a country where there is no state sponsored national healthcare coverage and shows the vast opportunity for health insurance in India.

2.3 There are currently no stand-alone health insurance companies operating in the Indian market. Health insurance products are currently delivered by non-life insurance companies and to a lesser extent by life insurance companies through riders on life insurance products. Offering products that meet the healthcare needs of the Indian consumer with affordable premiums are the challenges that the health insurer must tackle.

Population statistics

2.4 Population indicators, such as birth and death rates, and the expectation of life at birth have improved markedly in the last 50 years in India, although the infant mortality rate and maternal mortality rate still remain high in comparison to many countries. The average infant mortality rate in India in 2001 was 66 infant deaths per 1,000 live births, which compares to a rate of around 4.5 infant deaths per 1,000 live births in a number of European countries.

The disease burden

2.5 Figures from the World Health Organisation ("WHO"), show that whilst India has only 2% of the world land area and 16% of the world's population, it suffers from 21% of the global disease burden.

2.6 The Report of the National Commission on Macroeconomics and Health ("NCMH"), 2005 reports a grim picture for disease prevalence in 2015, with the incidence of cardiovascular diseases more than doubling from 2000 levels (to 64 cases per million of population), HIV infection almost quadrupling (from 5.1 cases per million in 2004 to 19 cases per million in 2015) and diabetes increasing from 31 cases per million in 2005 to 46 cases per million in 2015. Government projections also show that India will not be able to achieve the Millennium Development Goals ("MDG") for reducing infant, child and maternal mortality rates. The NCMH report also suggests it would be more effective to spend funds on preventative health measures to reduce the disease burden, such as encouraging healthy lifestyles, quitting smoking and so on.

Health expenditure

2.7 Public health in India is the responsibility of individual state governments rather than the central government. In the past, central government spending on public health has accounted for approximately 15% of the total spend, with individual states contributing the remaining 85%.

2.8 The budgetary allocation for health in individual states declined from 7% to 5.5% of state budgets between 1990 and 1999, resulting in negligence of the public health sector. As a result the central government launched a new national health policy in 2002 to increase the central government's contribution to healthcare, with the aim of improving the health services in the country with a special focus on the under-served and under-privileged segments of the population.

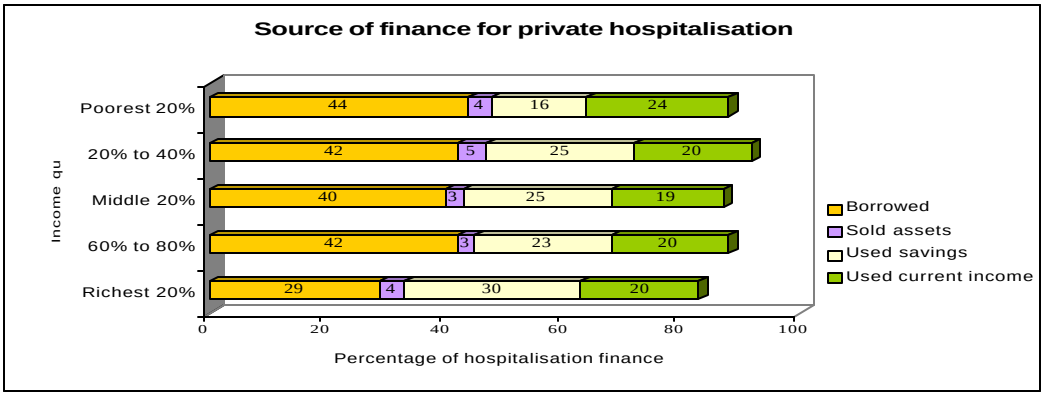
2.9 Although in absolute terms, total government spending on public health has increased substantially over the years, it has not been able to keep pace with requirements. Most resources are used to maintain the existing infrastructure and to pay for overhead costs. According to government estimates, almost 50% of the total planned outlay is spent in meeting the states' recurring liabilities and maintenance costs.

Public versus private spending on health care

2.10 The WHO estimates that India spent 6.1% of GDP on health in 2002, of which 21.3% was public (government) expenditure, and 78.7% private expenditure.

2.11 The poorer segments of the population have less access to, and less ability to pay for, public and private sector curative services than the wealthier sections of the population. Out-of-pocket expenses incurred on health care facilities for the lowest paid 20% of the population is about a fifth of that spent by the highest earning 20% of the population. Given that the earning differential between top and bottom quintiles is greater than five times, this implies that the poorer population spends a larger portion of earnings on healthcare.

2.12 The following graph shows the mechanisms by which different income groups meet the out-of-pocket expenses for hospitalisation. Hospitalisation for a major illness is a cause of indebtedness across all income groups.



Source: NSAER 2000, NSSO 1995-96

2.13 The following excerpts from the policy document of the "National Rural Health Mission" launched by the central government in 2002 reveals the realities about the state of hospitalisation financing in India:

- Curative services funded by the government favour the non-poor: for every Rs1 spent on the poorest 20% of the population, Rs3 is spent on the richest 20% of the population

- Only 10% of Indians have some form of health insurance and even that is mostly inadequate
- Hospitalised Indians spend an average of 58% of their total annual expenditure on healthcare
- Over 25% of hospitalised Indians fall below the poverty line due to hospital expenses.

2.14 These stark facts demonstrate the clear need for health insurance. The NCMH 2005 Report suggests the introduction of a Social Health Insurance Corporation and that "a careful blending of social health insurance, community-based health insurance and limited and well regulated private health insurance is recommended as a way forward". It is not clear why there should be 'limited' private health insurance!

Medical infrastructure

The public heath service – 3 tier system

2.15 The public health service in India is a three-tiered system primarily sponsored by the state governments and comprising of a network of primary health centres, district hospitals, medical colleges, and super specialty hospitals.

- The primary health care infrastructure provides the first level of contact between the population and health care providers, including primary health care physicians. Health and family welfare programmes are implemented through these centres.
- The secondary health care infrastructure comprises routine surgeries, medium investigations, ambulance facilities and hospitalisation. It provides diagnostic services, consumables and drugs and provides care for high-risk cases and emergency services.
- The tertiary health care infrastructure comprises large super speciality hospitals with a large number of highly skilled and qualified doctors conducting complicated surgery, intensive and acute care, and top end diagnostics.

2.16 Primary health care in the rural areas provides integrated preventive, curative and rehabilitative services to the population close to their home. The majority of the health care needs of the population are taken care of by trained health personnel at these health care facilities. The delivery of primary health care occurs through an infrastructure of sub centres, primary health centres and community health centres.

2.17 Although there are more than sufficient primary health care doctors currently employed in public service, 10% of primary health centres are without doctors due to doctors not wanting to accept rural postings where they are most needed. There are also shortfalls in the required number of surgeons, gynaecologists, physicians, and paediatricians in community health centres of 56%, 56%, 59% and 67% respectively. The NCMH 2005 Report also confirms that there is a specialisation mismatch with a shortage of super specialists like biostatisticians and epidemiologists and many other specialist personnel being used inefficiently since they are working as generalists.

2.18 About 30% of the total population of India lives in the urban areas, where greater access to health care facilities is available. However, the public urban health services are not well organised and unlike the rural health services, there is no definite structure for primary, secondary and tertiary care services, resulting in some centres being over-utilised and a lack of available facilities in some area's.

Private medical facilities

2.19 The private sector mainly comprises "for-profit", "fee-for-service" practitioners, remains virtually unregulated and offers a widely varying quality of care, with the services ranging from world-class institutions with highly regarded medical practitioners to back-street outfits, manned by unqualified and untrained practitioners. It is estimated that there are 1.3 million health enterprises employing 2.2 million people in the private sector, with over one third of these having no registration of any kind.

2.20 There is no government licensing of institutions across the private sector and due to the lack of regulation, it appears that most of the private sector is dominated by profit motives, often resulting in over-medication, inappropriate use of technology and the overcharging of patients. There is also no uniformity of fees charged and no national quality rating of medical facilities. Recently, the government has taken initiatives to introduce a rating system to assess the quality of hospitals and bring in uniformity in charging structures. The emergence of private medical insurance, third party payer systems, and quality assurance companies has also led to more demand for conformity in charging structures adopted by various private players.

Social health insurance schemes

2.21 A number of schemes have been established in the last 60 years aimed at providing cash and medical benefits to a number of different groups of workers in India. The schemes are summarised in the table below and cover approximately 4% of the population.

Social health insurance schemes in India

Scheme	Who covered	Beneficiaries	Description of cover	How financed
Employees State Insurance Scheme ("ESIS")	Employed workers from industrial sectors	30.4 million[1]	Sickness, maternity, disability and death benefits. Health care provided through network of ESIS facilities (dispensaries, clinics, hospitals and so on). Cover can be extended into retirement.	Contribution of: 1.75% employee 4.75% employer (employees <R50 per day exempt) Government subsidy of 1/8th medical benefit expenditure up to Rs750 per capita + 100% of expenditure above Rs750 per capita
Central Government Health Scheme	Central government employees, retired employees and their families	4 million	Comprehensive medical care using government facilities and extending to use of private facilities	Monthly subs: From Rs15 per month for salaries/pension up to Rs3000 per month, to Rs150 per month for salaries/pension up to Rs15,000 per month Government subsidy of Rs5,000 million in FY2003/04
Railways	Employe	7.3	Comprehensive	Government subsidy of

Health Scheme ("RHS")	es of Indian railways	million[2] (FY2003/ 04)	medical care in RHS facilities and sanitation in railways colonies	Rs6,607 million in FY2003/04 Individual contributions ??
Total beneficiaries		41.7m 4% of population		

Source: Central Bureau of Health Intelligence, Government of India, Ministry of Health and Family Welfare, Government of India Notes:
1. Figure taken from Table no 13.03 of Health Statistics 2004, Central Bureau of Health Intelligence website. IRDA report 2003-04 reports a figure of 0.34m.
2. Figure taken from Table no 13.07 of Health Statistics 2004, Central Bureau of Health Intelligence website. IRDA report 2003-04 reports a figure of 1.2m beneficiaries.

2.22 Apart from the schemes listed above, the government has launched various health insurance products to cater for the under privileged sections of the population. These various health care plans have been offered through the four subsidiary companies of General Insurance Corporation, including the Universal Health Scheme which was launched for groups below the poverty line in FY2003/04. According to the IRDA 2003-04 annual report, 1.3million people were covered by the scheme in FY2003-04.

2.23 The take up of the Universal Health Scheme has been disappointing, with only Rs20m of the Rs100m budget allocated by the Government having been utilised by October 2005. The reasons cited for the failure of the scheme include the fact that the scheme was only aimed at those below the poverty line who are already high risk and hence there was no true risk pooling, and there was no mechanism for implementing the scheme on a wide scale.

Health insurance legislation

2.24 The current regulations only allow life insurance companies to sell health insurance as a rider cover on a life insurance product, rather than as a stand-alone product. However, recently some of the private life insurers, whilst being careful to meet this requirement, have started marketing health insurance products, with the life insurance cover appearing to be marketed as a secondary benefit. The IRDA Act 1999 attempts to control the extent of rider covers offered on base life insurance products by specifying that the premium for a health insurance rider can only be up to 100% of the premium for the base life insurance product.

2.25 Non-life insurance companies can sell stand-alone health insurance products and indeed many of both the public and private sector players do so. The premiums that may be charged for health insurance products are not tariffed and hence non-life insurance companies have some freedom over their pricing health insurance products. The key issue on the non-life side appears to be that health is a very small secondary market, compared to the larger markets of motor, fire and house insurance, and hence does not get as much development attention as it would were health insurance the primary product being sold by those companies.

2.26 The entry requirements and eligibility criteria for a stand-alone health insurance company are currently the same as for a life insurance company. However since the liberalisation of the market in late 1999, not a single stand-alone health insurance company has entered the Indian market. The most common reasons cited for this lack of specialist health insurers is the prohibitively high minimum capital requirement of Rs1 billion and the

lack of coherent centralised health records, on which the pricing of health insurance products could be based.

2.27 The IRDA is currently considering the recommendations of the Narasimhan Committee, which recommended lowering the capital requirement for stand-alone health insurance companies, amongst other things and it is expected that the capital requirements for health insurance companies will be relaxed soon

2.28 Health insurance premiums up to Rs10,000 are exempt from income tax under section 80D of the Income Tax Act of 1961.

Industry statistics

2.29 During FY2004/05, new business health insurance premiums collected by life insurance companies represented only 0.5% of total new business premiums collected. The new business health insurance premiums collected by non-life insurance companies grew by 27.9% in FY2004/05, compared to 18.1% the previous year. The new business premium income for health insurance business collected by private sector non-life insurers grew by 114%, while the health new business premium income collected by the four public sector companies grew by 17.8%.

2.30 Information related to claims is not yet publicly available for FY2004/05. However claims ratios across the non-life insurance industry for individual and group health business are currently around 90% and 120% respectively and expense ratios are understood to be between 20-30%, showing that the premiums currently charged are insufficient. Over time this should lead to a broad increase in premiums across lines of business where the claims ratios are currently unfavourable.

Products

Offered by life insurance companies

2.31 Two of the private life insurance companies have recently marketed products as stand-alone health insurance products, although it should be noted that the products offer a low level of life insurance cover to meet the requirements of the current regulations. The products offer combinations of private medical, critical illness, personal accident and life cover, with benefits in the event of hospitalisation (daily allowance), surgery, critical illness, accidental injury and death.

2.32 Most of the other life insurers offer health insurance in the form of critical illness riders, with between four and 29 diseases covered. One private insurer has a hospital assistance rider that provides additional benefits on the diagnosis of an illness and subsequent hospitalisation and another has a hospital cash rider which offers fixed cash benefits during hospitalisation periods.

Offered by non-life public sector companies

The non-life health insurance sector is dominated by the four public sector general insurance companies. Private medical insurance is the most widely sold health related product in India. The product is sold by all the public non-life insurance companies and provides cashless hospitalisation for the treatment of any illness or disease or accidental injury suffered during the policy period. In addition, some pre- and post- hospitalisation expenses are also usually covered.

2.33 A further three company specific products are offered by these public sector players, the first two are similar to the private medical insurance policies outlined above, with the third being a critical illness product.

Offered by non-life private sector companies

2.34 There are five private non-life insurance companies which sell stand alone health insurance products. The majority of the products offered by these companies are private medical insurance plans, providing cashless hospitalisation cover, as well as some pre- and post- hospitalisation medical expenses. There are also a small number of cash plans available which provide for a fixed daily amount of cash for each day spent in hospital.

3 Cash Plans

Product description

3.1 Cash plans are a defined-benefit defined-premium product, offering a range of fixed cash payouts to the policyholder (and their dependents if covered) in the event of certain healthcare related events.

3.2 Insurers usually offer up to five benefit packages for the policyholder to choose from, with the premiums increasing as the benefits offered in the package increase. For some of the covers included in the package, the benefit is a reimbursement of health care expenditure up to a specified amount. For other types of cover, the plan may provide a fixed sum of money that bears no relation to the medical costs actually incurred.

3.3 The primary difference between a cash plan and a private medical insurance plan is the limiting of benefits under the cash plan to specified fixed relatively low amounts, rather than acting as a reimbursement policy to match medical expenses, which is the way private medical insurance tends to operate. This results in the average premium for cash plans being much lower than that of a private medical insurance policy and the average claim under the cash plan also being significantly lower.

3.4 Premiums are usually payable monthly. Premiums do not necessarily increase with age - a feature which is sometimes incorporated to encourage persistency/long term loyalty to the plan. Policies are for no fixed term but renewed automatically each month unless the policyholder cancels or the premium is not paid and the policy lapses.

3.5 A brief description of the types of cover that may be included in a cash plan policy, and details of common exclusions, are given below.

- Optical – reimbursement for the cost of eye sight tests and prescription spectacles or contact lenses, up to an amount specified in the policy. Common exclusions include repairs to frames and non-prescription items.
- Dental – reimbursement for payments made to dentist and for the cost of dental treatment and dental check-ups. Common exclusions include dental trauma (dental treatment as a result of an accident) and cosmetic treatment such as teeth whitening. Dental trauma may be covered, however, as an additional benefit under the plan.
- Consultation of medical specialist – reimbursement of consultation fees paid as a result of seeing a medical specialist or surgeon and when referred to the specialist by a general practitioner, up to an amount specified in the policy. Common exclusions include consultations relating to cosmetic surgery and sterilisation.
- Physiotherapy – reimbursement of treatment costs up to an amount specified in the policy.
- In-patient – payment of a fixed daily allowance defined in the policy for each day admitted to hospital up to a maximum number of days in a year. Common exclusions include maternity related admissions for the first 'n' number of nights.
- Maternity – payment of a fixed amount per child as defined in the policy.
- Recuperation – payment of a fixed amount as defined in the policy following discharge from a relatively long stay (14 nights) in hospital.

3.6 Additional features, such as health screening and personal accident cover may be provided in the more expensive packages which are not provided to those opting for a lower level package. These additional benefits are often designed to assist in keeping the cost of claims down. For example, by providing health screening, the policyholder will become aware of any health issues earlier than might otherwise have been the case which should assist in containing healthcare costs.

3.7 In addition, some plans are designed such that for the cheaper benefit packages, the policy only reimburses a limited percentage e.g. 50% or 75% of the costs actually incurred (up to a fixed monetary amount), whereas for the most expensive package of benefits, 100% of costs may be reimbursed (up to a fixed higher monetary amount). Allowing exactly for the costs incurred is against the principles of a cash plan, since the intention of the plan is to provide limited fixed benefits, rather than a match of the actual costs incurred.

3.8 Some insurance providers also offer features such as a 24 hour confidential counselling helpline and concessionary deals on health and fitness club membership fees. These features are designed to encourage policyholders to maintain a healthy lifestyle, which should lead to lower claims costs for health care expenditure. Some providers also provide cover whilst policyholders are travelling outside their country either on business or pleasure and claims can be submitted for costs incurred overseas.

Product pricing and profitability

Controlling claims costs

3.9 The providers of cash plans control claims costs, anti-selection and the risk of moral hazard through a number of features described below.

- A maximum monetary sum is defined that can be claimed for each type of cover included in the plan. This controls overall claims costs and allows likely average claims costs to be estimated.
- Waiting periods or qualifying periods are often defined at the start of a plan, when claims may not be made. The waiting period may vary according to cover type (e.g. a longer waiting period of 10 months may be imposed on the maternity benefit) and according to the package selected (e.g. a waiting period of 6 months might be imposed on those selecting a more expensive package and a waiting period of only 3 months might be imposed on those choosing the cheaper package). This helps to prevent anti-selection and should assist in controlling claims costs in the first year of the policy.

3.10 There will usually be an exclusion clause that may exclude claims arising as a result of pre-existing conditions (except dental and optical cover), claims arising from war, civil disturbance and so on and claims arising as a result of any criminal proceedings brought against the policyholder. In addition, charges made by doctors and hospitals for filling in claim forms are usually also excluded. The insurer may also specify groups of the population who are not eligible for cover e.g. professional sportspeople.

Determinants of profitability

3.11 Cash plans are profitable when sufficient design and control is in place to be sure that benefits are payable only on "insurable" events and where the cash benefits are in line with what services actually cost. It is worth noting that charging a higher premium does not necessarily imply greater profitability, since high premiums sometimes mean that the policy is only considered valuable or affordable to those that expect to claim more than they spend in premium.

3.12 Provided the product design is sound, claim sizes tend to be relatively stable and hence fairly predictable. Having sufficient volumes of business in force will provide the insurer with greater data on which the pricing can be based which will assist in ensuring that the product is priced 'correctly'.

3.13 In terms of lapse experience, maintaining policies on the books for long periods may or may not improve profitability, depending on the policyholder behaviour in the market in question and the techniques used to control anti-selection at the outset of the policy.

- Policyholder loyalty and maintaining policies on the books for a sufficiently long period of time may result in higher profitability, since prospective policyholders may take out plans when they expect to incur health care expenditure and claims may peak towards the end of the first year of cover. If a policyholder can be encouraged to maintain their policy for a longer period, this selective effect will wear off and average annual claims costs are likely reduce as the term of the policy increases.
- Maintaining policies on the books for a long period of time may in fact result in lower profitability. Given the techniques that may be used to prevent anti-selection, such as imposing waiting periods and underwriting, and a general lack of benefit understanding, it may be the case that cash plans are exceptionally profitable for the first few years, with experience deteriorating rapidly thereafter – especially for individual plans where healthy individuals have been sold a plan that they later feel they don't need. Healthy individual's lapse their policies, and unhealthy individuals stay, contributing to a worsening of portfolio experience.

Pricing of cash plans

3.14 There are usually four aspects to pricing cash plans:

- Strategic pricing, which relates to the insurance provider's overall financial plan, profitability targets and business objectives, allowing the insurer to set goals with regards to the average premium it expects to charge and the position of the product in the market relative to competitors, sales channels and other products offered by the insurer.
- Differential pricing, which relates to adjusting the central premium rate for particular subsets of the portfolio of policyholders.
- Practical issues, which relates to constraints that may exist in the market e.g. acceptable premium levels compared to competitors and the type of premium structure that is acceptable in the market.
- Reactive pricing – adjusting premiums/benefits as experience emerges.

3.15 In strategic pricing, the company takes account of its own financial plans and the desired level of profitability it requires from this book of business. In particular the company must be able to forecast well the price elasticity of demand in order to assess the optimum price it can charge to maximise both the profit per policy and the volume of business written.

3.16 Before pricing commences, the company must decide on the package of benefits it will offer within its cash plan and the various levels of package it will offer. This will depend on the usual marketing objectives of making the product attractive, offering competitive packages of covers compared to competitors and also offering an overall product which fit with the brand image of the company. The company must also consider the extent to which it wants to include features which will minimise anti-selective behaviour (as outlined in section 4.8 above) and also the extent to which it wants the product to complement/integrate with other healthcare schemes (e.g. government/public sector care that may be available).

3.17 In designing the product, the company will want to ensure that there is an alignment of incentives for the policyholder (who in the event of an illness will want to get well quickly and may also intend to utilise the policy to the maximum extent possible), the insurer (who will want claims costs to be controlled and profitability to be maintained) and the healthcare provider (who would hopefully have the policyholders health as their primary concern but may have a profit motive as their primary concern).

3.18 Once the benefit design is derived the insurer must set the 'central price', the premium to be charged for the average customer for each benefit package. This comprises the pure risk cost, to meet the cost of the benefits provided, and other loadings. The other loadings would be for items such as expenses, return on capital, a loading to protect against adverse variations in experience and other items such as tax.

3.19 Differential pricing involves segmenting the central price according to certain risk factors that will materially impact the nature and size of the claims occurring. An obvious risk factor is age, as the greater the age of a policyholder, the greater one can expect the cost of their health care claims to be. Other risk factors that may impact the nature and size of the claims incurred are listed below:

- Location of policyholder
- Duration in force (as discussed the claims experience may be heavier or lighter in earliest years of policy due to selection effect in the market in question)
- Gender
- Marital status
- Occupation
- Socio-economic group
- Smoker status
- Height/weight factors and other health factors such as family medical history

3.20 Many cash plans are priced on a much simpler basis than the list above would suggest. The insurer may use one or two socially acceptable risk factors to adjust the central price for each benefit package, such as age at entry or smoking status, but generally no further factors would be used to differentiate pricing, although the risk characteristics listed may be used during the underwriting process to determine whether the risk will be accepted or declined. Essentially the insurer accepts cross-subsidies between heterogeneous groups of policyholders. The insurer will monitor experience according to various risk factors to check whether the underlying assumption regarding the 'average' policyholder holds and also whether the loading for variability in experience is sufficient.

3.21 The ultimate charging structure must be easy to understand and readily marketable. The premiums derived will be sense checked against competitors rates, although care will be taken since a product may offer different benefits and levels of benefit compared to their competitors.

Reviewing cash plan premium rates

3.22 Given the opportunity for selection, it is essential for insurers to monitor claims experience and adjust premium rates frequently. The primary factor the insurer will consider is whether the average claim amount is as expected for each benefit type within each benefit package, and whether the frequency of claims is as expected. An analysis of both claim frequency and claim amount will be carried out and the results compared to the assumptions made when the product was last priced.

3.23 In addition, the insurer will want to assess whether the assumptions made during the grouping of policyholders to determine a simple pricing structure are still appropriate.

3.24 Some cash plans offer policyholders fixed premium rates that do not increase due to age, provided the policy does not lapse, but that may increase due to the inflation of medical costs and an assessment of medical cost inflation would be needed.

3.25 Other factors that the company will take into account when re-pricing will be:

- Business volumes – if these are lower than expected, then the overall book is likely to be less profitable than expected due to a lower contribution than expected to fixed overheads and the reasons for poor sales volumes would be analysed (e.g. premiums too high, ineffective sales force/distribution channels, undercutting by competitors and so on). If, however, business volumes are higher than expected, this may equally be a cause for concern since it may indicate that premium rates have been set 'too cheaply'.
- The premiums being charged by competitors and the competitiveness of the insurers own product.
- Any changes in benefit design e.g. if one benefit has significantly variable claims experience or higher than expected average claims, the insurer may consider lowering the maximum benefits available rather than changing the premium level, or imposing other exclusions on the policy.
- The insurer will also assess any advances in medical technology that may affect either claims cost or claims frequency and any changes to Government/State health care facilities and how these integrate with the cash plan.

Experience in the UK

3.26 In 2000, there were 3.1 million contributors to cash plans in the UK, made up of 2.4m individual contributors and 0.7m company paid contributors, providing cover to 7m people in the UK, which is around 11.6% of the UK population.

3.27 Cash plan premiums amounted to £339m in 2000, with individual policyholders paying premiums of £245m (an average premium of £102) and company paid schemes paying premiums of £94m (an average premium of £134). The claims paid out amounted to £251m in 2000, £177m of this to individual policyholders (giving an average benefit of £73) and £74m to individuals in company paid schemed (giving an average benefit of £105).

3.28 Hence the cost of claims in 2000 was 74% of the premiums charged, with the remaining 26% being available to meet other items, such as expenses, return on capital and so on. It is interesting to note that both the average premium and average claims of employer paid schemes exceeds those of individual schemes.

3.29 Generally speaking, the frequency of claims under cash plans has been higher than the frequency of claims experienced under private medical insurance policies but more predictable. Claims are smaller on average due to the capped maximum benefits that are paid under each of the benefit headings included in the plan. Claims peak between the 7th and 13th month after taking out the policy, with claims after this settling at a relatively low level. There is evidence to suggest that there are a small number of policyholders who claim large sums regularly, however most don't and there is also some evidence to suggest that some policyholders don't claim at all even when they are entitled to. This seems to be for three reasons:

- Policyholders forget they have cover
- Inertia - policyholders cannot be bothered to go through the claims process for a small claim.
- There may be some policyholders who do not understand that they are entitled to claim and may think that the scheme is more like a medical savings account – so they don't claim for small items because they are 'saving' for a larger claim in the future. This is a misunderstanding on the part of the policyholder as to how their cash plan actually works.
- In the UK, the market is dominated by one provider, who in 2001 had an approximate 40% share of the market, followed by a number of other providers who have between

10% and 4% of the market each. In total, there were 37 schemes offered in the UK market in 2001.

3.30 In the UK, the key differences between cash plans and private medical insurance policies are as follows:

- The primary difference is the limiting of benefits under the cash plan to specified fixed relatively low amounts, rather than acting as a reimbursement policy to match medical expenses. This results in the average premium for cash plans being of the order of £100 per annum, whereas the average premium per annum of a private medical insurance policy is £600 per annum. The average claim under a cash plan scheme is around £80, whereas the average claim under a private medical insurance scheme is £1200.
- Private medical insurance schemes in the UK tend to be primarily group schemes offered by employers to their employees, sold through the broker market, whereas cash plans tend to be bought by individuals directly from insurers, with little business placed through the broker market.

3.31 In terms of the types of claims experienced, the table below shows the breakdown of the value of benefits paid out in 2001 between various benefit types.

3.32

Cash plan value of benefits paid in 2001 as a percentage of total	
	Value of benefits paid (%)
Hospital inpatient	27.5%
Optical benefits	25.0%
Dental benefits	21.5%
Physiotherapy	9.5%
Others	16.5%
Total	100.0%

Source: 7 million people can't be wrong, can they? 2002 IOA Healthcare Conference

Applicability to India

3.33 There are already very limited cash plans available in the Indian market that provide a fixed amount of benefit for each day spent in hospital, or for major surgeries. These plans generally do not provide cover for a wide range of health expenses and offer a single benefit only.

3.34 Given the statistics which indicate 25% of Indian's fall below the poverty line due to hospitalisation benefits, any product which is designed to meet a variety of health related expenses for a fixed low premium is likely to be attractive to the population, especially if the benefits can be structured in such a way that financial hardship is avoided.

3.35 Cash plans are generally more affordable than private medical insurance policies, which may make them more attractive and more affordable for a broader segment of the population. The experience in the UK suggests that the average premium for a cash plan is $1/6^{th}$ that of the premium for a private medical insurance product, and hence this product could be an attractive low cost solution for providing heath care cover to the millions of Indian's who currently have no health insurance cover at all.

3.36 Cash plans can be designed to reimburse the policyholder for health related expenses, or can be designed to provide a fixed cash benefit when a specific event occurs e.g. on the birth of a child. It is likely that the former will be more desirable in India since the benefit more closely matches the expense-outgo of the policyholder. It is also possibly less likely to

lead to moral hazard, since few would choose to undergo treatment they didn't need and the benefit could be designed to match expense-outgo (or limited to a percentage of the expense-outgo to keep premiums lower). However, in order to encourage patients not to over-claim and to encourage medical providers not to overcharge, it is more likely that cash plans offering fixed benefits at levels below the expected cost of treatment would be more effective in India.

3.37 Due to the multitude of healthcare facilities available of differing standards, and the ease with which bogus medical receipts can be obtained, it is likely to be difficult to remove moral hazard altogether. Steps to control this could include tie-ups with reputed medical institutions and monitoring systems to check on claims submitted, although the benefits of this would have to outweigh the costs to be worthwhile since streamlined claims procedures are essential to maintain the profitability of cash plans.

3.38 Consideration needs to be given to the range of benefits that would be attractive, which will vary depending on the socio-economic groups targeted and the location of those groups (i.e. whether rural, urban etc). Many of the additional 'extra' benefits that would be found on cash plans in, say, the UK or the US, such as concessionary deals on health clubs, may well be attractive in the metro's in India to certain socio-economic groups and age groups, but they are unlikely to be attractive to other groups in the population and finding 'hooks' that would appeal to the target group are likely to be important. Health screening may be attractive across all groups, as might benefits such as ante- and post- natal care, given the relatively high levels of infant and maternal mortality in the country. The provision of free health advice from qualified and trusted doctors in rural areas may also be attractive as an add-on service.

3.39 Cash plans could fill a valuable gap in the benefits currently provided by private medical plans in the Indian market. Common complaints regarding the private medical cover currently available often revolves around the need to be hospitalised overnight before some investigations will be paid for by the private medical plan. Cash plans designed specifically to meet out-patient care and common investigations, as well as offering a range of other benefits may be very attractive in this market.

Issues in pricing and possible solutions

Issues

3.40 The key issues likely to be faced by an insurer offering this product in India include:

- Determining the distribution of likely claims costs. There is no regulation regarding the prices charged for any health care service or procedure. Hence a well reputed institution may charge Rs25,000 for a routine surgery, whilst a back-street surgeon may charge Rs4,000 for the same procedure carried out in unhygienic conditions, with a higher risk of subsequent complications and hence claims.
- Determining the expected claim frequency. This will be different to any other country due to a number of factors e.g. the likelihood of falling sick will be different, the propensity to claim will be different and so on.
- Determining the price elasticity of demand and hence the volumes of business that are likely to be written for a given premium.
- Moral hazard and cost efficient claims procedures. It is possible to secure a receipt for almost any good or service in India without that good or service having been rendered. One of the most important aspects in launching such a product in India would be to determine ways to check the authenticity of medical receipts whilst still maintaining a low cost efficient claims process.

Possible solutions

3.41 The Government has proposed regulating the charges for certain routine procedures. If this were to come about then this would make assessing the likely claims cost for some procedures more certain.

3.42 To reduce the possibility of moral hazard, insurers could offer the product in partnership with reputed medical institutions where the costs of procedures are known. If such partnerships could be achieved, the health provider may be willing to share their treatment database showing the charges for each admission and the procedures and services provided from which a claims cost distribution model could be derived. Some medical institutions may have such data split according to whether the patient was insured or uninsured, which may provide insight for the insurer as to whether being insured has an impact on the treatment received and likely claim size.

3.43 Insurers could impose wider exclusion clauses in an attempt to manage the likely claims costs. However there is currently much pressure from the regulator and other quarters in India for insurers to offer cover for pre-existing conditions. If this were to be imposed on cash plans, it is highly unlikely that any insurer would be willing to offer the product (unless at such high premiums as to render the product worthless) due to the extremely high possibility for anti-selective behaviour at outset.

3.44 To determine likely volumes, the insurer could look at the volumes achieved already in the health insurance market by both the public and private sector players, to determine the kind of volumes that might be achievable, although the extent to which this will be useful may be limited unless premium levels (and perceived benefits) are similar and the sales channels which would be used to sell the business are comparable.

3.45 To ensure that claims procedures are as efficient as possible, maximum use of technology must be made, from automating the claims process for, say, small claims through to automated claims decision letters and automatic payments either through electronic payment or by cheque.

3.46 Third party administrators ("TPAs") are used in India to manage health insurance claims for insurance companies. This approach is also common in South Africa and Australia, though it is not a model used in Europe, where insurers may hold a view that the profitability of the health insurer will be determined by the strength of its claims management skill and this is often developed in-house resulting in strong claims management teams with an 'in-house' philosophy on claims management. Having said this, some UK insurers are starting to outsource their claims management for certain lines of business, such as income protection and critical illness, realizing that a specialist skill set is required that they may not possess or they have a shortage of skilled claims assessors. Outsourcing the function that is likely to determine the company's profitability may therefore not be a universally popular proposition and consideration could be given to allow an insurer not to use TPA's to manage their claims, if this would reduce claims costs.

Conclusion

3.47 Cash plans could be an attractive, relatively cheap product that could be designed to meet the specific needs of particular subsets of the Indian population. Due to the highly diversified nature of the total population it is unlikely that the traditional design, where the same suite of benefits are used as the basis for each benefit package and only the specified limits for each cover varies from package to package, would be suitable. It may be more

appropriate to develop menus of benefits targeted at particular socio-economic groups or in particular locations rather than use a 'one size fits all' approach.

3.48 To reduce to an adequate level the risk of moral hazard, a cash plan that partially meets health care related expenses may be more desirable (and easier/cheaper to price) than one which attempts to refund 100% of the health expense outgo. For example, if one of the benefits offered was a cash allowance for each day in hospital, this allowance may be set so that it covers the cost of basic care in a reasonably good hospital, rather than the cost of a private room with all the trimmings in a first class hospital, which may help in keeping the cost of claims down.

4 Critical illness

A brief history

4.1 The first critical illness insurance ("CII") product was launched in August 1983 in South Africa. The product was developed by a cardiac surgeon and it covered four conditions, heart attack, cancer, stroke and coronary artery surgery. The CII product has evolved manifold since its launch and now covers many more medical conditions or events.

Product description

4.2 A CII policy is designed to cover an individual for life or for a set period of time against a number of serious illnesses, diseases, medical conditions and events. It pays out a lump sum or an income on the diagnosis of one of the illnesses or events specified in the policy details. Diagnosis alone of one of the specified illnesses or events is sufficient to trigger payment. There is no requirement for loss of earnings or even for special medical treatment. CII cover can either be provided as a standalone policy or as a rider on a life policy (potentially as an acceleration of the death benefit).

4.3 Policyholders opt to take CII cover for a variety of reasons including:

- to buy special equipment to help during the period of illness
- to pay off loans or a mortgage
- to adapt a car to make it easier to drive in the event of disability needs
- to hire domestic assistance
- to take care of the family's future

4.4 Illnesses covered under a CII policy/rider vary by country and insurance company. In the UK, the Association of British Insurers ("ABI") has standard definitions for core and additional conditions. The following table lists the core and additional conditions:

Core conditions	Cancer, Coronary Artery Bypass, Heart Attack, Major Organ Transplant, Kidney Failure, Multiple Sclerosis, Stroke
Additional conditions	Aorta Graft Surgery, Benign Brain Tumour, Blindness, Coma, Deafness, Heart Valve Replacement, Loss of Limb, Loss of Speech, Motor Neurone Disease, Paralysis/Paraplegia, Parkinson's Disease, Terminal Illness, Third Degree Burns

It is important to note that these definitions are currently under review.

4.5 CII can be written on a guaranteed or reviewable premium basis. Under reviewable rate CII plans, insurers may revise their premium rates based on their past experience and expectation of future developments.

Product pricing and profitability

Pricing considerations

4.6 Critical illness incidence rates typically exhibit the following characteristics:

- Low incidence rate at younger ages, increasing rapidly at older ages.
- Male incidence rates are typically higher than female incidence rates (but not as pronounced a differential as for life insurance)

- Difference in incidence rates by smoker status is more pronounced in the attained age group of 60 years to 75 years.
- Lapse rates are usually lower at higher durations and higher attained ages.

4.7 Hence the premium rates will be determined by:

- Age of policyholder
- Sex of policyholder
- Smoker status
- Personal and family medical history
- Occupation
- The range of diseases covered by the policy
- Premium rate guarantee or degree of reviewability
- Stand alone or accelerated coverage.

4.8 Reviewable CII plans have led to more realistic pricing by insurers as premium rates can be increased if the experience is worse than expected. However, such plans suffer from the following:

- For several reasons including pressure from the marketing department and regulatory filing of revised premium rates, premium rates may not be changed as frequently as the insurer may like. There will also be a loss of policyholder confidence if rate revisions are more frequent or larger than expected.
- It is expected that there will be significant time lags between the analysis of credible experience and implementation of premium rate change. During this period, the insurer is likely to suffer losses.
- There will be poor publicity if competitors do not effect rate changes around the same time, which may affect the frequency at which rate changes are implemented.

4.9 In countries where data on critical illness is not available, insurers usually extend other countries experience to suit local conditions. This should be carefully done since the incidence of major critical illnesses and economic conditions are likely to be very different from country to country.

4.10 The methodology adopted for pricing CII plans is usually very similar to that used for pricing life insurance, where the claim incidence or probability of a claim occurring is determined, and this is the primary input into the profit test, along with assumptions for other items such as lapses, expenses, commission, reserving and solvency etc. Differences in the illnesses/events covered may lead to a different assessment of claim incidence (and claim size) and hence premiums may differ when compared to those offered by competitors.

Controlling claim costs

4.11 Insurers may offer CII cover only for the major four or five illnesses and offer cover for other illnesses as optional riders. The major illnesses typically cover 75% to 80% of the claims and more data is usually available for them. This will assist in more accurate pricing of the 'base' plans.

4.12 Some experts suggest that moving to a graded benefits structure based on attained age will help reduce claim costs for insurers and eventually lead to lower premium rates for policyholders. This approach is also consistent with the reduced financial obligations of policyholders at older ages and is a common feature in US products. It may also result in reducing the lapse supported nature of these products. An example of a graded benefits

structure might be for the pay 100% of claims between attained age 20 years and 65 years, pay 75% of claims between attained age 66 years and 75 years and pay 60% of claims from attained age 76 years onwards.

4.13 Insurers may also consider offering surrender values to policyholders, who have not claimed, beyond a certain attained age, for example 65 years, to control the huge claim costs experienced in the much older ages. This is also expected to increase policy termination rates in the older ages leading to lower ultimate claims.

4.14 Insurers can consider introducing waiting periods or qualifying periods at the start of a plan, when claims may not be made. The waiting period may vary according to the types of illnesses covered and the level of cover. This helps to prevent anti-selection and should assist in controlling claims costs in the first year of the policy.

Experience in the UK

4.15 CII plans were introduced in the UK in 1986 and have been a very successful protection product. Market reports indicate that until recently sales of the product have increased year on year. Approximately 12 million adults and children are now covered by CII plans with aggregate sum assured of more than £450 billion. It is estimated that insurers have paid over £1.6 billion in critical illness claims since the start of 2000.

4.16 When CII was introduced, there were lots of differences between the products offered by various insurers. In 1992 standard definitions for six illnesses were introduced leading to greater consumer and adviser confidence in the market.

4.17 In 1998 the Office of Fair Trading published a report on health insurance and one of its conclusions was that there were too many different definitions between companies and this was causing consumer and adviser confusion. In 1999 the ABI published the "Statement of Best Practice for Critical Illness Cover". The Statement includes a common format for how insurers should present CII in product literature and model definitions for the illnesses most commonly covered. These are set at an "appropriate minimum standard" so that insurers have to use that definition, or may modify the definition in prescribed ways to offer at least the same cover. The Statement allows for a full review every three years ensuring that it remains up to date, for example, with legislative and market changes and advances in medical science.

4.18 Industry studies indicate that claims experience for CII overall has been broadly in line with expectations, based on population studies adjusted to reflect the expected difference in experience for insured lives. More recently, there have been concerns about potential and unpredictable increases in future claims due to advancing medical science, especially more screening to diagnose cancer earlier and better diagnostic techniques. There is also concern about increased legal challenges as consumers become more aware of their rights. This has caused significant changes in the CII market with insurers responding by:

- Increasing the premiums for new guaranteed premium CII policies.
- Pulling out of the guaranteed premium market and offering reviewable rate contracts.
- Removing conditions where treatments have become more routine and less invasive, for example, angioplasty.

4.19 As a result, CII products are now becoming potentially less affordable and offering less cover and choice to policyholders. Industry data indicates that while premiums for reviewable

rate products have remained fairly constant between 2002 and 2004, guaranteed rate premiums have risen by about 60%. Market analysts also feel that while prices in the CII market are starting to level off, concerns remain about the future of the product. Having said that, the industry is working together to try to address some of these issues.

Applicability to India

4.20 In India most insurers sell CII cover as a rider attached to a base insurance policy. A few insurers have launched standalone health insurance products covering critical illnesses.

4.21 With over 25% of the population below the poverty line, an affordable CII cover is likely to be attractive provided it is customised to the Indian conditions. Also, there is absolutely no monetary support from the government for critical illness treatment costs. Hence, opting for a CII cover may be the only viable solution to provide for such costs.

Issues and possible solutions

Issues

4.22 Insurers will have to design a product which caters to the major critical illnesses in India. Lack of credible data will lead insurers to include significant margins when extending other countries' experience data. This may make CII cover prohibitively expensive for a large segment of the Indian population.

4.23 Insurers will also have to decide on the following:

- What pricing assumptions are reasonable? These are likely to be different from the assumptions for typical life insurance policies.
- How to reserve for these plans? Lack of experience will lead to issues whilst setting valuation assumptions for this portfolio. This will make the critical illness portfolio more capital intensive for insurers.
- What level of cover should be offered?

4.24 Marketing of CII plans is very crucial because of the complexity of definitions of medical conditions. There is a significant mis-selling potential as the definitions may be too technical for policyholders to understand. This may result in bad publicity and in extreme circumstances legal proceedings against insurers.

4.25 The take up rate of CII riders is lower than 5% in India, which compares poorly to an attachment ratio of around 40% witnessed in some Asian countries. There are a number of plausible reasons which may contribute to this low attachment ratio:

- The underwriting requirement for CII riders is usually more stringent than for life insurance policies. This may discourage policyholders from opting for a CII rider.
- The complexity of medical conditions covered and the benefits structure may lead to problems with agents understanding the product.

Possible solutions

4.26 Insurers may consider adopting standard industry-wide definitions of various medical conditions. These definitions should be non-technical and water-tight. This will help in reducing mis-selling claims and make it easier for policyholders to understand which conditions are covered. It is important that medical and legal input is sought when setting these definitions.

4.27 Insurers may consider introducing reviewable rate CII products to tackle the issue of lack of data. However, the effectiveness of reviewable rate contracts should be considered as

mentioned in section 4.8. A drawback here is that the regulator may restrict insurers from offering reviewable rate contracts.

4.28 Insurers also have the option to offer CII plans with guaranteed rates for 20 years and then move to reviewable rates. This will provide insurers time to analyse the experience of their critical illness portfolio. However, reinsurers may not be in favour of long term guarantees (they usually prefer 5 year rate guarantees) and may not offer reinsurance for the product.

4.29 Insurers may consider introducing CII products with reviewable definitions for various medical conditions. However, this may lead to bad publicity and lower new business sales if definitions are revised frequently to benefit the insurers only. This may also not be allowed by the regulators.

4.30 Insurers may adopt stricter underwriting controls to reduce early incidence, eliminate high risk individuals and detect genetic predisposition to disease. However, stricter underwriting is likely to increase the insurer's expenses and may also reduce new business sales.

4.31 Additionally, insurers may also consider the following:

- Offer CII cover with a tiered benefit structure as mentioned in section 4.12.
- Offer surrender benefits to claims-free policyholders beyond a certain attained age
- Introduce waiting periods

Conclusion

4.32 Critical illness cover could be an attractive product if customised to meet the needs of the Indian population. If the risks associated with the product can be minimised then a relatively cheap product may be viable and it will appeal to a large segment of the population.

4.33 Lack of data will be one of the major issues in introducing standalone CII products in India. Insurers will have to work around this problem by extending experience data from other countries. Caution will have to be exercised because of the differences in economic conditions and the incidence of major illnesses may differ from country to country.

5 Long term care

Product description

5.1 Long term care products are designed to meet the cost of long term care for the policyholder either in their own home or in a residential/nursing home. Both lump sum/single premium and regular premium options are available. Long term care may be bought particularly by those who are concerned that assets meant for transfer to heirs would be utilised on long term health care costs if sufficient insurance is not put in place.

5.2 'Long term care' refers to care that is needed for the foreseeable future as a result of potentially permanent conditions, e.g. as a result of old age, dementia (including Alzheimer's disease) or following a stroke for example. Long term care policies are not designed to meet the cost of care during a specific illness (or the period of convalescence after such an illness) if the policyholder is expected to regain their health following such an illness.

5.3 The benefits of a long term care policy may include some or all of the following:

- The cost of a professional caregiver who attends the policyholder in their own home.
- The cost of ancillary help, such as employing someone to carry out domestic duties, which the policyholder can no longer carry out.
- The cost of respite care. For example, the long term caregiver may be the spouse of the policyholder. The policy may pay for the cost of the stay of the policyholder in a professionally run nursing home, to give the spouse a break from caring.
- The cost of fitting medical aids and gadgets to allow the policyholder to remain at home rather than moving into a nursing home e.g. grab bars to assist mobility in the home, specially adapted toilet and shower facilities and so on.
- Indexation (to ensure that the benefits are protected against the effects of inflation), which will increase both the premium each year and the benefits that will be provided under the policy in the event of a claim.

5.4 Usually long term care products are designed to fit in with any Government/State provided care, which helps to control the size of the premium.

5.5 Claims are usually assessed by taking into account the extent to which the policyholder can carry out a number of 'Activities of Daily Living' ("ADLs"), such as the ability to feed oneself, bathe, dress and walk and so on or a significant cognitive impairment (such as Alzheimer's Disease). This assessment assists the insurance company in determining the type of care that is required. The number and type of ADLs against which a policyholder is assessed will vary from product to product.

5.6 There are 3 types of long term care products:

- Immediate needs
- Pre-funded
- Equity release

5.7 An immediate needs product is a single premium impaired life annuity plan, where in return for a single premium, the insurance company provides a regular income, taking into account the poor health state of the annuitant (and therefore offering a higher regular income than under a standard annuity product). The annuity income would be used to pay for some/all of the cost of care for as long as necessary i.e. until the policyholder dies.

5.8 There are two types of pre-funded long term health care products.

- Under the traditional pre-funded plan, the policyholder pays either a regular premium or a single premium for a particular level of care. The product allows the policyholder to choose the type of care they would wish to receive (e.g. initially care at home followed by care in a residential home) and the premium would be set taking into account the health status of the policyholder.
- Under the second option, a single premium investment bond is taken out and the income from the bond is used to pay the regular premium of a long term health care product. If long term care is never needed, then the value of the bond is returned to the policyholder's estate and his/her heirs will benefit from this. This combination option allows the policyholders' dual needs, of long term care cover and providing for heir's in the event of their death, to be met.

Under pre-funded long term care products, the benefits become payable as soon as the policyholder is unable to perform a specified number of ADL's. The insurer may impose a waiting period, of say 3 months, before the benefits start being paid by the insurance company.

5.9 Equity release plans enable the policyholder to release some of the equity tied up in the capital value of their home to pay the premiums on a long term care policy. This may be a useful option for someone with significant equity tied up in their main home but with a low level of income. Equity release plans have suffered from poor press in the past due to the potential for misunderstanding/mis-selling, with policyholder's failing to understand that they are essentially selling part of their home. Issues may particularly arise on the death of the policyholder if there is a surviving spouse still living in the property. Further details can be found in the Equity Release Report 2005, written by the Equity Release Working Party of the Institute and Faculty of Actuaries.

5.10 It is worth noting that the sales of long term care products in many countries, including many European countries, South Africa and the US, have been disappointingly low, especially in the pre-funded market. There are many suggestions as to why this might be, including:

- poor product design, since insurers fail to take into account the circumstances of potential policyholders, such as marital status, when designing long term care products;
- expensive/high premiums for an event that is a long way off for many consumers;
- denial of the general public that they will ever become incapacitated in old age and hence they have no need for such cover; and
- poor savings culture (sales of long term care products tend to be marginally higher where the savings culture is stronger)
- belief that the State will provide the care when/if they need it.

Product pricing and profitability

5.11 We consider below the issues relating to product pricing and profitability for impaired life annuities and pre-funded long term health care plans.

Impaired life annuities

5.12 The two most important assumptions are the expected rate of annuitant mortality and the interest rates/yields available at which the single premium can be invested to meet the required annuity outgo.

5.13 Impaired life annuity pricing requires an assessment of the deterioration of life experience of the impaired life annuitants compared to the 'normal' annuitants. This will allow the insurer to calculate the expected duration in force for which the annuity is expected to be

paid, which in turn will allow the insurer to invest the single premium in an asset of appropriate duration (which in turn will provide the investment return assumption which should be assumed during the pricing of the product). Note that an insurer may try to enhance the returns of the invested single premium by not maintaining a matched position, but this is not discussed further here.

5.14 Annuity business has the potential to result in large losses if the above factors are not adequately analysed. So for example, an overzealous assumption about the rate at which impaired lives may die, e.g. due to not taking into account the impact of medical advances, may result in a disproportionate loss of profitability for the company. As a result only a limited number of insurance companies tend to operate in the impaired life annuity market. Due to their specialisation, these insurers have a reasonable amount of credible data on which they can base their pricing models.

Pre-funded long term health care plans

5.15 There is significant difficulty for any insurer in pricing long term health care plans:

- The volumes of business sold to date are very small and hence there is a lack of credible evidence on which the pricing can be based.
- The type of care that may be required can vary very widely in cost, making it difficult to accurately model the claims cost distribution.
- The period for which a claim may be payable is variable primarily due to the difficulty in predicting accurately the age of the policyholder when the claim incepts, and with continual medical advances, there is also increasing difficult in predicting the number of years for which a policyholder may need care when they are unable to perform a certain number of ADL's or are suffering from a significant cognitive impairment.

5.16 Pre-funded long term care policies are offered by a small number of specialist providers in the markets in which the product is available (predominantly Europe and the US). Such providers often offer long term care to demonstrate that they offer the full suite of health insurance products available, rather than viewing this product as a particularly viable one that will lead to a large revenue stream. In the UK, long term care was a 'hot topic' around 1996, but since then apathy from the market, the lack of volumes of business sold and a lack of any formal commitment from the government as to what they will provide, has led to this remaining a niche product.

Applicability to India

5.17 Of all the products discussed in this paper, long term care is likely to be the most difficult product to sell in India for a number of reasons:

- There is still very low insurance penetration in the Indian market, hence the population has a need for more basic types of cover, such as term/life insurance, and in the longer term there is a stronger need for personal pension products/savings rather than a product providing cover for long term care.
- The joint family system is common in India with older relatives generally being cared for by younger generations in the same household. Whilst there is some evidence to suggest that there is a gradual shift occurring to more 'nuclear' families, especially in the metro's, there is much less need for long term care products in India than in, say the US or UK, where older generations have to provide for their own welfare in old age.
- Many Indian families have domestic help at home. Some of the benefits applicable under a policy, say in the UK, which would provide for the cost of domestic help, are unlikely to be required, since the domestic help is likely to exist with or without the existence of the long term health care policy.

- There is likely to be strong resistance to moving into a long term residential health care facility, of which there are few in India, and there is no regulated residential healthcare industry in the country. Residential homes do exist but tend to be run by charities or for specific groups of the population, as opposed to for any private individual who can afford to pay for care.

5.18 On the flip side, there is absolutely no Government/State provision in India for the long term care of the elderly and hence for those who cannot rely on their family to look after them in the long term or those who do not have family, insurance may be the only viable solution to provide for long term health care costs.

5.19 The success of such a product generally depends on the tax incentives associated with self provision, and this is likely to be especially true in India, where a large proportion of consumers still make choices regarding investment in insurance based on the tax breaks available. Without government support, in terms of favourable treatment of the premiums paid into a long term care policy, there is unlikely to be a large market for long term care.

Issues in pricing and possible solutions

Issues

5.20 There is a lack of data on which pricing can be based for any type of long term care product, including setting impaired life annuitant mortality rates, the ages at which claims may be made under pre-funded plans, data relating to the current elderly population (including accurate measurement, for example, of the prevalence of Alzheimer's disease or dementia in the population) and so on.

5.21 The lack of demand may make claims costs highly variable resulting in unpredictable profitability. As a result premiums may have to be set at what might be seen as an unreasonably high level, due to the margins that may needed to be added in the pricing basis to try to ensure the book of business is profitable.

Possible solutions

5.22 Offer a pared down version of a long term care product where specified fixed monetary benefits are paid beyond a certain age (e.g. 65 or 70) when the policyholder is unable to perform a fixed number of ADL's, perhaps as a one-off lump sum, or for a fixed number of years or for the remaining lifetime of the policyholder.

5.23 Whilst the specified monetary benefits would not necessarily meet the costs of long term care for the policyholder, they would go some way to providing relief for health related costs the policyholder is likely to incur. The advantage of this approach is that it would enable the insurer to predict with some certainty the claims cost distribution and hence set premiums at a reasonable level.

5.24 By paying the benefits only from a certain age onwards, the insurer will also be able to predict with more certainty the period over which the claim will be paid.

5.25 Another possible solution may be to add some long term health care benefits to other types of health insurance products as rider benefits, and allowing some cross subsidy between the main product, where premiums may be set with more certainty, and the rider product.

Conclusion

5.26 Whilst long term care plans are unlikely to be popular or affordable to a large proportion of the Indian population, there is scope for insurers to consider the addition of long term care type benefits to both life and health insurance products – as well as the introduction of a fixed benefit type product when a particular level of incapacity is reached.

6 Medical savings accounts

A brief history

6.1 Medical savings accounts ("MSAs") were first introduced in Singapore with the launch of "Medisave" in 1984. A few other countries have also introduced MSAs including the US, South Africa, Hong Kong and China.

Product description

6.2 MSAs are individual savings accounts that are restricted to spending on health or medical care. The mechanics of MSAs vary according to their design, including the specific criteria for savings and withdrawals.

6.3 Broadly, MSAs can be classified between:

- Long term savings account type MSAs, which typically require mandatory contributions, for example Medisave in Singapore.
- Voluntary insurance type MSAs used to cover short term frequent medical costs like the Discovery products sold in South Africa.
- MSAs have typically been implemented for one or more of the following reasons:
- to encourage savings for the expected high costs of medical care in the future
- to enlist health care consumers in controlling costs
- to mobilize additional funds for health systems
- to maximise tax benefits of health premium

Advantages of the MSA model

6.4 It is usually observed that during an individual's working years, the savings made are greater than the amount spent on healthcare. However in retirement, individuals spend relatively more on health services than they can afford from their retirement income. By creating an individual savings account that restricts spending to health or medical care, MSAs help to smooth the burden of healthcare costs over time. It is important to note that although MSAs may serve to smooth the burden of healthcare costs over time, they alone are generally not high enough to protect a person from unexpectedly high cost diseases or chronic conditions. Hence, it is common for some sort of catastrophic health insurance plan to be offered along with MSAs.

6.5 MSAs provide consumers freedom to choose the services they require. This helps in promoting price competition among service providers, which helps to bring down cost of services.

6.6 In an aging society, MSAs help in lowering the burden on the working population as the accumulated savings provide resources for health spending in older age. Such an intergenerational burden usually exists in the pay-as-you-go models.

6.7 Proponents of the MSA model claim that MSAs help to curb moral hazard by promoting individual responsibility in health spending. It creates an incentive for consumers to purchase wisely since the money left in the account may be needed for future health care expenditure.

Disadvantages of the MSA model

6.8 One of the biggest criticisms against the MSA model is that it limits risk pooling between the rich and the poor and between the healthy and the sick. For example, those who are persistently unemployed or suffer from chronic illnesses will be very unlikely to accumulate sufficient savings to meet their healthcare expenditure requirements. Hence, many experts

claim that MSAs suffer from the "cream skimming" problem by attracting just the healthy and the rich.

6.9 It is also argued that MSAs encourage providers to spend consumers' monies on unnecessary services. It is also believed that the problem of moral hazard in health insurance is provider-initiated rather than consumer-initiated.

Experience in Singapore

6.10 Health care systems in Singapore have the following three major sources of financing in addition to the government budget and out-of-pocket household spending:

- Medisave, which is Singapore's version of individual MSAs and is mandatory for all Singaporeans
- MediShield and MediShield Plus, which play the role of voluntary backup catastrophic health insurance, with high deductibles and coinsurance characteristics.
- Medifund, which is an endowment fund established by the government to provide charity-style assistance to the poor and the elderly.

6.11 Medisave is managed by the Central Provident Fund. Statistics relating to 2002 indicate that between 6% and 8.5% of employees' wages were credited to individual Medisave accounts.

6.12 Initially, Medisave could only be used to pay for public hospital inpatient services and was subjected to a cap of S$300 per hospital day along with a certain limit of expenses per surgical operation per day. Since 1986, it has been possible to use Medisave to pay for private hospital inpatient services. The payment for selected expensive outpatient services, such as renal dialysis and cancer treatment, are now reimbursable as well. Moreover, MediShield, MediShield Plus or some private health insurance premium payments can also be made out of each individual account. The withdrawal of funds for other purposes is not allowed except in the case of death of the enrollee for which the remaining fund will be paid out in cash to the designated nominees.

Role of private health insurance

6.13 Private insurers are free to offer medical insurance schemes to the public in competition with MediShield and MediShield Plus. However, approval from the Ministry of Health is needed if they wish their policyholders to use their Medisave accounts to pay for premiums. In this case, the proposed scheme must include features that support the national objectives for health care financing such as requiring co-payments and guaranteeing the renewal of policies upon payment of the premium.

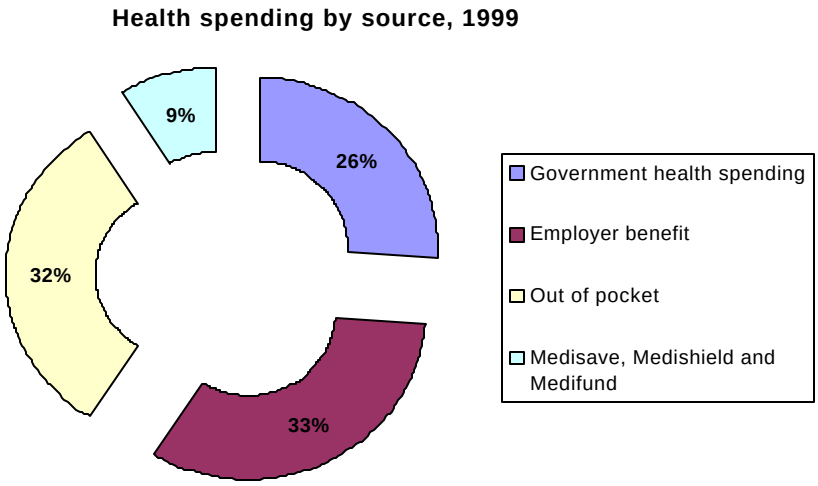
6.14 The private sector has tried to introduce Managed Care (Health Maintenance Organization style) since 1992, but this has not been very popular with the masses. The government has allowed Medisave enrollees to pay Managed Care premiums from their Medisave accounts. Limited choice of providers is claimed to be a major reason for the limited popularity of Managed Care in Singapore.

Evaluation of the performance of MSAs in Singapore

6.15 Specific evaluation of MSAs is not simple because of the following two reasons:

- It is difficult to distinguish the effect of Medisave separately from other components of the system as several policy initiatives were implemented at the same time
- There is limited access to data which has made it difficult to do proper evaluations.

6.16 There is some evidence to suggest that MSAs have been a minor element in the Singaporean system. The following graph shows the composition of health spending by source:



Source: CPF statistics 1999, Ministry of Health

6.17 In 1999 Medisave disbursements totalled S$346 million contributing around 8% of national health expenditure. Some researchers argue that one of the main reasons that Medisave has a very limited role in health financing may be the strict criteria applied to withdrawing funds. Medisave can be used mainly for inpatient services and there is an upper limit on the amount to be spent per day.

6.18 In terms of effectiveness in resource mobilisation, which was one of the main objectives when the Singapore government launched Medisave, at the end of 1999 there were more than 2.68 million Medisave accounts and the total Medisave balance stood at S$20.8 billion - an amount equivalent to over four times the total national health expenditure in that same year. In other words, Singaporeans have an average of about S$7,760 in each their Medisave accounts. The ratio of contribution to withdrawal remains fairly steady at 100 to 17 leading to a continuing increase in the cumulative Medisave balance. Hence, Medisave has the potential to play an increasingly important role in Singapore's health financing system in the future.

6.19 With regard to effectiveness of Medisave in reducing the problem of moral hazard, there have been some studies which suggest Medisave has not been successful in this aspect. One of the studies revealed a significant increase in the demand for private hospitals as against government facilities and another found that in a number of cases Medisave encouraged people to spend beyond their means by choosing higher-class wards than they could reasonably afford. It is suggested that people opt for better facilities because it is the only way to get their money out of Medisave which is locked in otherwise.

6.20 There is inconclusive evidence to prove that the introduction of Medisave has tackled the problem of rising health care costs. It could be that the effect of MSAs will only be felt in the future, when the country faces greater costs or has accumulated larger amounts of funds. It

could also be the case that concurrent events, such as rising incomes, new medical technologies, and other government health policies, have confounded the effects of MSAs. However, comparing the percentage of GDP spent on healthcare in Singapore with other developed nations suggests that the Singaporean society spends relatively less on health care, all things considered.

Experience in USA

6.21 The US government had approved the following two MSA models on a test-basis up to 31 December 2002:

- *Archer MSA:* This is a tax-exempt individual account offered by a financial institution or insurance company in which money can be saved for future medical expenses. This account must be used in conjunction with a high-deductible health insurance plan. The Archer MSAs program is limited to the enrolment of employees of small firms of less than 50 employees or self-employed persons. Archer MSA enrolees are not allowed to have other health insurance or Medicare coverage.
- *Medicare MSA:* This plan is described as a combination of a high-deductible health insurance plan and a contribution to a Medicare MSA. Each year, Medicare pays an amount equal to the difference between the annual Medicare+Choice capitation rate and the high-deductible health insurance premium into a beneficiary's MSA. To get health care services, enrolees pay up to the annual deductible level from their MSAs or out-of-pocket after which their insurance begins to come into play. The deductible varies according to the choice of high-deductible health insurance, but cannot exceed US$6,300. Insurance companies offering these plans must reimburse, at a minimum, all Medicare-covered services once the enrolee's expenses reach the plan's annual deductible. No high deductible insurance plan has been approved by Medicare due to cumbersome regulations and legislative obstacles.

Evaluation of the performance of MSAs in USA

6.22 It is difficult to draw conclusive evidence from the limited expansion of the MSA program in the US. A survey by the Government Accounting Office indicates that the insurance industry responded rapidly to the creation of Archer MSAs, with almost 60 companies offering qualified products by the summer of 1997. The majority of companies sell qualified plans bundled with the Medical Savings Accounts. However, according to the insurers, the supply of qualifying plans available and the enthusiasm with which they were marketed have been limited by features of the program's design. Also, consumer demand has been lower than anticipated which reflects, in part, the complexity of the qualified plan.

6.23 Some studies on employers offering MSAs to their employees indicated that the companies enjoyed significant decreases in costs and showed high levels of employee satisfaction.

6.24 The US interest in MSAs is largely aimed at containing the high cost of health spending in the country by giving consumers an incentive to choose appropriate and cost-effective care. There are some studies which suggest that the Archer MSA design may contain costs as has been claimed, but further evidence will be required in order to reach firmer conclusions.

Experience in China

6.25 In December 1994 China began a pilot study of MSAs in the cities of Zhenjian and Jiujiang. Until then, there were two main insurers that provided comprehensive health benefits with minimal cost-sharing for formal sector employees. The MSAs program was mandatory for all industrial workers and government employees. The government also

changed the way health care facilities were paid from retrospective fee-for-service reimbursement to prospective fee-setting for broad categories of services. In this prospective payment system, fees vary according to the types and levels of providers.

6.26 Evidence from the two cities suggests that the reforms were successful in containing health care costs. For example, in Zhenjian there was a 27% decrease in real health spending per beneficiary and 24.6% decline in total health spending from 1994 to 1995. The rate of outpatient visits and the length of inpatient stays were the same but there was a slight decrease in the admission rate. Much of the savings are claimed to have been derived from reducing the use of expensive diagnostic services and drugs.

6.27 However, it is difficult to conclude that MSAs are effective in cost-containment for the whole system. There is some evidence of cost shifting to the uninsured population because at the same time that spending under the MSA program declined, the health expenditure for non-enrollees rose substantially. Also, it is difficult to separate the effect of MSAs against other concurrent policy interventions.

6.28 In 1998 the Chinese government decided to implement health financing reform nationwide for all urban workers, based on the MSA model used in the two pilot cities. The program incorporates the use of individual MSAs, out of pocket deductibles, and limited benefit catastrophic health insurance. The level of contribution differs from the experiment and the program provides more room for local authorities to set additional rules on enrolment of the self-employed, voluntary supplementary insurance, co-payment level, and other management issues.

Experience in other countries

South Africa

6.29 Private insurers launched MSAs after the South African insurance market was deregulated in 1994. At present, there are multiple choices of MSA plans available with varying levels of contribution and deductibles in competition with indemnity-type and HMO-type insurance. Contributions to MSAs are limited to 25% of total health premium with the rest used to provide for indenity type benefits. Employer contributions to their workers' MSAs receive the same tax treatment as employer payments for indemnity insurance premiums. Some market analysts claim that MSA plans are popular among private health insurance consumers and create cost-savings.

Hong Kong

6.30 Hong Kong has developed a plan to use MSAs under the name of 'Health Protection Accounts'. Currently, the plan is under public consultation and a detailed study to examine the merits of the scheme in detail is ongoing. Health Protection Accounts are individual accounts to which contributions of around 1% to 2% of earnings from individuals aged between 40 years and 64 years would be mandatory. Withdrawals would be allowed only when individuals reach 65 years of age (or earlier in case of disability). Any unspent money could be passed on to family members.

Applicability to India

6.31 The mandatory MSA model like Singapore's Medisave may not be feasible to implement in India due to a large proportion of the population living below the poverty line. However, launching MSAs as a voluntary insurance product has certain characteristics which make it a feasible option to implement in India. Given the high prevailing income tax rates in India, if contributions to MSAs are made tax deductible they will be very popular among the high

income masses. Moreover introduction of MSAs will provide consumers freedom to choose what services they require promoting price competition among providers.

6.32 However, implementation of the MSA model will require government regulation and intervention which will imply a longer lead time before implementation. Moreover, with around 25% of the population living below the poverty line, it will be difficult to mobilise and administer contributions from the low income segments of the population. Hence, MSAs will suffer from the cream skimming problem mentioned in section 6.8 which implies that the government may not be very keen to implement it.

6.33 As mentioned in section 5.17, the prevalent joint family system in India suggests that the burden of health care costs is transferred to the younger members of a joint family. Hence, the case for introducing MSAs in India is not as strong as in some of the other countries where they have been introduced.

Issues and possible solutions

Issues

6.34 Unless contributions to MSAs are made mandatory, it will be popular only among the high income individuals, and only where tax incentives are given. Also, the Government's interest in introducing MSAs on a non compulsory basis may be very weak given the cream skimming problem mentioned above. This will imply a longer lead time before implementation and debates about allowing private insurers to sell MSAs.

6.35 If MSAs are introduced there will be a need for strict government regulation to curb moral hazard by service providers (like hospitals, nursing homes). There will also be issues surrounding the administration of MSAs and the investment management of MSA contributions.

Possible solutions

6.36 If private insurers are allowed to sell and administer MSAs, they may be implemented soon. MSAs will also be popular if health insurance premium payments are allowed from them.

6.37 The government can popularise MSAs among the lower income segments by contributing to these accounts. For example, if the government contributes Rs25 for every Rs100 contributed by an individual classified as low income, then there may be an incentive to contribute to MSAs by the lower income segments.

Conclusion

6.38 MSAs are likely to be popular amongst the middle and upper income classes but not amongst the lower income classes where they are unlikely to be affordable, which may limit Government interest in introducing these.

6.39 Private insurers are likely to be keen to launch and administer MSAs in India given their likely attractiveness to higher income groups. Moreover, MSAs attached to Mediclaim type policies may go some way towards allowing individuals to be more actively involved in the way in which they consume medical resources..

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7.12 The authors would like to thank their colleagues, Sue Elliott and Walter de Oude for their assistance in the production of this paper.

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