

## HEALTH SAVING ACCOUNT - PRODUCT DESIGN AND PRICING ISSUES IN INDIA

By Biresh Giri &  
Rakesh Khandelwal

### Executive Summary

A health savings account (HSA) is an account that a person can put money into to save for future medical expenses. Unlike traditional savings vehicles, a health savings account allows an insured to make contributions (tax free in most cases) to the account and withdraw from the fund for medical expenses as per the plan. HSA products are prevalent in various parts of the world. In USA, the product has evolved from similar other products like Health Reimbursement Account, Medical Savings Account and Flexible Savings Account. HSA in the USA is offered with a high deductible health plan to meet the regulatory requirement to claim tax exemptions. In South Africa, these types of products have evolved in a less regulatory environment as compared to USA and the result has been products with varied designs to meet the needs of different segments of the population.

HSA products consist of two components - a savings vehicle and a health plan. This paper explains the possible benefit configurations for both of these components. The paper further discusses the issues related to pricing of such products and the result of a sample pricing and financial projection study done to analyze the extent of savings if a person subscribes to a health savings account paired with a traditional Medclaim plan.

### 1. Definition and some features of HSAs

A Health Savings Account (HSA) is a form of health service financing that includes two parts:

- A savings account — a savings account in which funds are deposited out of pre-tax income and interest accumulated is also tax free.
- A health insurance plan— usually a high deductible health plan to cover medical expenses in excess of the deductible.

The savings account can be used to:

- Pay medical expenses below the deductible,
- Pay medical expenses that the health plan does not cover like outpatient expenses, maternity cost etc; and
- To build funds for future medical expenses.

HSA plans can be offered as individual or family floater coverage. The product can also be offered as group coverage where the contribution towards the HSA plan would be made by the employer. The benefit design of HSA products is greatly influenced by the tax exemptions available. Tax exemptions influence the amount to be contributed to the HSA plan and the benefit covered by the paired health insurance plan. The fund in the HSA accounts can be managed by insurance companies, banks, financial institutions etc.

There are certain advantages associated with a health savings account, namely,

- There is choice available for:
  - o How much money to put into the account
  - o Whether to save the account for future expenses or pay current medical expenses

- o Which medical expenses to pay from the account
  - o Which type of funds should be invested in (more equities or more bonds)
- These accounts may be completely portable. It can be kept even if the insured:
  - o Changes jobs
  - o Changes medical coverage
  - o Becomes unemployed
- The tax advantages could be in one or all of the following forms:
  - o Business expense when the employer pays the contribution
  - o Tax deductions when contributed by an employee/self-employed individual;
  - o Tax-free earnings through investment; and,
  - o Tax-free withdrawals for qualified medical expenses.
  - o After death, the money in the account can be used by the legal heirs. The account can pass on to the beneficiary to be used as tax-free withdrawals for qualified medical expenses or the withdrawal can be treated as taxable income in the hands of the beneficiary.

However, there are certain disadvantages associated with these types of products, namely:

- It reduces the incentives for health insurers to directly manage health care service providers by shifting the risk and cost to policyholders.
- The plan performance may look very good if the majority of the members are healthy as the amount deposited in the fund will be high and little spending would have occurred..
- Reliance on an HSA to help fund retirement needs is somewhat problematic as it assumes that the individuals will not need to access these funds prior to retirement. This will likely be the case only if they are fortunate enough to be generally healthy throughout their pre-retirement years and/or are able and willing to pay for un-reimbursed medical expenses with other funds.

## 2. Product background in India

Even though there were no explicit regulatory restrictions for such products in India, due to ambiguity in tax benefits on premium, HSAs were not launched in India for a long time. Even now, technically HSA can be launched by both life and non-life insurance companies but there are different solvency requirements for a life and a non-life insurance company. We believe that there should be a standard capital requirement for this product irrespective of the type of company launching the product. Currently, there are a few products launched in India which are in a way similar to a HSA.

One variant of such products is a whole of life comprehensive health insurance policy which provides comprehensive hospitalization cover similar to benefits on a traditional 'Mediclaim' policy and reimburses all other medical expenses not covered in the hospitalization benefit by building a health fund. For the 'Mediclaim' coverage, a Hospitalization Insurance Benefit charge is deducted from the premium. The premium amount paid by the insured is deducted for the following charges:

- Hospitalization Insurance Benefit,
- Premium allocation charge,
- Policy administration charge

The premium amount net of these charges is credited to a separate fund and the fund is invested as per the choice made by the insured. The balance in the fund is available to the insured to utilize it towards expenses like:

- Medicines and drugs,
- Diagnostic expenses,
- Dental expenses,
- Co-pays or deductibles as part of the medical insurance cover; and
- Other miscellaneous medical expenses not covered under medical insurance.

Another variant consists of two components. The first component is a long term health insurance plan that provides Hospital Cash Benefit (HCB), Major Surgical Benefit and the second component is a ULIP fund (investment in the form of Units) created after deducting the charges for Insurance coverage and policy administration charges from the premium amount. The Principal Insured can withdraw an amount equivalent to the actual expense he or she has incurred in respect of any domiciliary treatment or to meet the medical expenses incurred over and above the hospital cash/major surgical benefits in respect of either oneself or others insured under the policy.

### **3. Evolution of HSA related products in USA and South Africa**

#### **3a) South Africa**

There is no insurance law in South Africa to dictate the design of HSA products. The insurers have been free to innovate and experiment. Hence, HSA plans developed in a relatively free market. Medical saving accounts (akin to HSA) have evolved at a much faster pace in South Africa after a favorable ruling from the tax authorities about the same tax treatment of employer deposits to MSAs and employer payment of third-party insurance premiums. The result was a far more interesting product - one better designed to meet customer needs. These plans were normally combined with a high deductible health plan. South African MSA plans typically have varying deductibles. For example, a representative plan has no deductible for hospital care (on the theory that patients exercise little discretion within hospitals), but a \$1,000 deductible for outpatient care (on the theory that patients have a lot of discretion in that setting). The high deductible also applies to medicines; but for chronic conditions, for which skimping on medicines could lead to more expensive care later, the deductible drops back to zero.

#### **3b) USA**

In contrast to South Africa, HSA plans in USA were introduced as part of Medicare Modernization Act of 2003. This law requires that HSAs must be paired with a high deductible health plan. The law further sets the limits for contribution, deductible amount and out-of-pocket maximum amount. These limits are reviewed annually in line with consumer inflation index movement. The tax exemptions played an important role in the growth of HSA plans and the enrolled population in HSA plans has increased from 1 million in 2005 to 6 million by the start of year 2008. The deductible on High deductible health plan acts as an across the board deductible covering all medical services. Prior to introduction of HSAs in

2003, there were other health care spending accounts including Health Reimbursement Account (HRA), Flexible Savings Account (FSA) and Medical Savings Account (MSA). Aside from HSAs, there are other types of tax-advantaged health care spending accounts.

Health reimbursement accounts (HRA) can be provided by employers in conjunction with high-deductible health plans and are used to pay for eligible health expenses defined by the employer. Unlike HSAs, only employers can contribute to HRAs. The funds in an HRA can accumulate and roll over to cover health expenses in subsequent years, but the funds typically remain with the employer at termination/resignation.

There are other products similar to HSAs but no new accounts are created now. Medical Savings Accounts (MSAs) is another type of healthcare spending account. In MSAs, either the employee or employer can contribute. The funds, however, were the property of the individual, regardless of who funded the accounts. Flexible Spending Accounts (FSAs) offered tax-advantaged health care spending accounts for employees with traditional health plans but did not require that employees be covered by a high deductible health plan. Employees can also contribute to these accounts. While HSAs allows rollover of funds from one year to next, no rollover of funds is allowed under FSAs and MSAs to the next year.

#### **4. Product design and pricing issues for HSA related products**

There are separate design issues with the savings component and the health plan. The savings vehicle can be linked to market performance or with guaranteed return. The health plan can be a traditional Medicaid coverage, critical illness insurance, long term insurance coverage etc. to meet the needs of various segment of the market.

##### **4a) Pricing and Product design issues specific to the savings component**

The saving account can be designed in any of the following ways:

- a) A Unit linked plan (ULIP) with the return on the fund linked to market performance
- b) A Unit linked plan (ULIP) with a guarantee about the minimum return
- c) A savings plan where return is not guaranteed but is linked to some index (one year fixed deposit rates or bond yields).
- d) A savings plan where return is totally at the discretion of the insurer (similar to the bonuses declared in Endowment policies)

If the product has a guarantee component as part of the fund performance, there would be investment risk for the insurer on the funds managed on behalf of the policyholders.

If the HSA fund design is similar to a ULIP Plan, the insurer needs to make sure that the charging structure of the product is in line with the regulatory guidelines regarding charges on ULIP products. The IRDA has mandated a cap on charges on ULIP policies vide its circular in July 2009. The charges cap is based on the difference between gross and net yields of the ULIP product. The difference between gross and net yields shall not exceed 300 basis points for product with tenure of less than 10 years and 225 basis points for products with tenure of more than 10 years. The fund management charges shall not exceed 135 basis points irrespective of the tenure of the contract. This cap excludes the following in the calculation of net yield.

- Mortality and Morbidity charges;
- Any extra premium due to underwriting emanating from extraordinary health conditions;
- Cost of all rider benefits;
- Service tax on charges; and
- Any explicit cost of investment guarantee.

For pricing of HSA, complete modeling of the product will need to be done at one time – taking both the savings and the insurance component together. Complete modeling will help in understanding the overview of the product structure and offsetting characteristics of the two components can be modeled. The loadings and charges should also be decided based on this comprehensive modeling to insure achievement of the target profitability from the product. In case there are guarantees offered in investment return then the guarantees will need to be priced. In the sections below, we discuss the pricing issues to consider in calculating the pure premium of various types of health insurance components. Later, in the case study section we have given an example of how complete modeling for the product can be done.

### **4b) Pricing and Product design issues specific to Health insurance component**

Pricing of a health insurance plan requires a range of assumptions including morbidity incidence rate and average claim cost, persistency, expenses, investment income, capital requirements and taxes. For the purpose of pricing the health insurance component of an HSA paired product, it will be sufficient to model only the pure claim cost and build that into the comprehensive modeling discussed above. The section below explains the possible product designs that can be paired with a health savings account and discusses the design and pricing issues related to them. Existing non-life insurance companies can use the experience data on their current Medclaim products to price the high deductible product. New companies can use the market statistics like TAC analysis reports or buy data from IIB set-up by IRDA recently.

#### **● Traditional Medclaim Plan**

A traditional Medclaim Plan is a one year term plan which indemnifies the insured for medical expenses incurred due to a hospitalization which is more than 24 hours. Now the plan also typically covers some named daycare procedures. The health insurance component of the HSA can be a traditional Medclaim plan.

The pricing for this plan usually involves estimating the incidence rate and average claim cost of hospitalizations. The pure claim cost is a multiple of incidence rate and average claim cost. It is useful to perform the incidence rate and average claim cost analysis by various dimensions like age, region, ICD codes etc. An analysis of claim probability distribution (CPD) is also useful to analyze the impact of deductibles or sum insured limits. Analysis of CPD becomes more useful in case of a family floater product where discounts are given for floating the sum insured across the family.

For loading the pure premium cost, the Medclaim product cannot be looked at in isolation. The associated savings components and its structure would need to be considered as there will be some income earned from that component and it may permit lower loadings than in a standalone Medclaim product. The final charge calculated can be kept at a level similar to the current Medclaim premiums in the market as policyholders would tend to compare the insurance charge deductions with these premiums.

- **High-Deductible Health insurance component**

In this type of plan, the medical expense indemnification is only the expenses in excess of a specified deductible, say Rs 100,000. In this case the insured will need to pay for the amount below the deductible from out-of-pocket or from another health insurance plan. The pricing method for such insurance will be similar to the traditional Medclaim component. The difference is modeling the impact of the deductible on pure gross claims cost. The CPD of gross claims will need to be used to estimate the impact on claim frequency and the average claim size with the change in deductible amount. If there is a no-claim-benefit, some claims marginally above the deductible amount may not be reported. This impact on claim incidence rate should be considered.

- **Hospital Cash plan**

These products pay a pre-specified cash sum on the occurrence of certain medical events (hospital stays, major diagnosis or surgery etc.). In the case of daily cash for hospital stays, the total payment will depend on the length of stay. The claim incidence rate under the traditional Medclaim product can be used as a starting point to price this product. As the benefit suggests a modeling for diagnoses by International classification of Diseases (ICDs) which lead to major surgeries will be needed. In case of daily cash for everyday of hospitalization, a modeling of incidence rates of various ICDs and their length of stay will be needed. The length of stay will depend heavily on age and any existing co-morbidities.

- **Critical Illness Plan**

A Critical illness insurance policy is a long term policy which provides a lump sum benefit on the diagnosis of an insured critical illness and is not intended to indemnify the claimant against medical costs or other financial needs.

Claim cost for pricing critical illness is difficult to obtain due to the lack of industry data and experience. There is some experience from other countries, but such data cannot just be taken without adjustment as the definitions and medical standard in these countries are not the same as in India. The expertise of reinsurers can be used who have experience of covering critical illnesses in other countries.

Future medical advancements are a direct threat to the profitability of this contract. The policy proceeds are paid on the diagnosis of the medical condition not its treatment, control or cure. Diagnostic improvements can advance the time that the medical condition is spotted thus advancing the time when the policy proceeds are paid. That is, the policy proceeds have to be paid earlier in the policy term even if the underlying sickness experience of policyholders is not changing. Some medical advances may eliminate current medical procedures covered under the contract, eg coronary artery by-pass grafts. Serious consideration has to be given to whether the policy wordings should be changed periodically in line with future medical advances as they arise.

The definition of critical illness needs to be simple enough to be understandable. However, the definitions must be tight enough so that only the illnesses that were part of the pricing exercise were accepted for valid claims. The use of waiting period (a period since the start of policy where no claim will be paid) and survival period (period of survival since the diagnosis/treatment of critical illness) can be used to reduce the overall claim cost.

- **Long-term Care Insurance Plan**

Long-term care insurance (LTCI) usually aims to provide financial protection when a person becomes unable to look after himself or herself. An individual will purchase LTCI with a view to financing the provision of care and assistance in old age. Traditionally it has been purchased by those in their late 60s but LTCI is now not uncommon for individuals who are in their 40s or 50s.

The benefit payment is dependent upon the claims definition, which may be triggered by a single or a multiple set of events. The single event may itself depend on a level of disability and its continuation for a specified period. Different benefits may also be payable depending on the level of disability. The type of benefit could be selected from a range of alternatives, including a single lump sum payment, an annuity certain, a lifetime benefit subject to ongoing disability, or a restricted benefit (e.g. payable for a maximum period, or to a maximum total amount) also subject to on-going disability.

Presently, LTCI as a standalone product is not available in India. So, there is no actual experience data to price this product. There is very little data available globally to price this product. This product is subject to maximum uncertainty as the claim takes a long period since the start of policy to emerge and further the claim payment period is long-term in nature. The degree of uncertainty can be reduced to an extent by providing cash benefits (fixed or linked to some index) instead of indemnifying the claim cost. Keeping the premium reviewable based on actual experience will lead to lower margin in pricing due to uncertainty. The reinsurers and actuarial consultants with their knowledge of developments in other markets about long-term care insurance can assist in the pricing of this coverage.

### **5. Sample study on a Health Savings Account paired with Mediclaim coverage**

We did a study to estimate the expected savings for an HSA with a traditional Mediclaim coverage. A comprehensive modeling was done to incorporate the details like deduction for a Mediclaim coverage charge, expected claim against a Mediclaim policy, expected claims for non covered other medical expenses, fund growth rate, charges for fund management, charges for guarantees and effect of the guarantees on the fund growth rate. The results of the study in the example are limited to demonstrating the fund value at the end of 20 years and the expected RoI for the insurer. This has been done for three age points of policy holders and three sum insured levels for the Mediclaim cover. The premium rates used were the published premium rates for a traditional Mediclaim coverage with an assumption of premiums increasing every year. There could be many other possible variations to the study including those listed below:

- Increase in sum-assured with time
- Use of other health insurance coverage as a bundled coverage with HSA plan
- Use of family coverage as opposed to individual coverage.
- This study has been done from an insurance industry perspective and is applicable not just for life but for non-life insurance companies also. This study doesn't consider the impact of some of effects of HSA products experience like withdrawal rate, preference of policyholder towards accumulation or utilization towards eligible expenses.

### 5a) Assumptions used in the study

The assumptions for the saving vehicle linked to HSA are shown below:

- Investment return on the HSA fund assumed as 8% per annum.
- The initial contribution is Rs. 15000 and it is assumed to increase at the rate of 5% per annum.
- The number of outpatient claims (out of the HSA fund) is assumed to have Poisson distribution with parameter 2. The individual claim amount is assumed to have Gamma distribution with parameters  $\lambda = 1000$  and  $\theta = 2$ .
- The number of claims paid out of HSA fund in excess of the Medclaim coverage is assumed to have Poisson distribution with parameter 0.10. The individual claim amount is assumed to have Gamma distribution with parameters  $\lambda = 25,000$  and  $\theta = 2$ .
- The claims inflation rate of 5% is assumed for the outpatient claims and claims in excess of the Medclaim coverage.

The benefit coverage cost is set equal to the premium on a Medclaim policy. The rates are taken from the published premium rates of one of Indian insurer's Medclaim policy.

The Insurer expenses are assumed as below:

- The loss ratio on Medclaim coverage is assumed to be normally distributed with mean loss ratio of 75% with a standard deviation of 10%. The simulations were performed using the Box-Muller method.
- Policy admin expenses are assumed to be Rs. 900 per policy for first year and Rs. 300 per policy from 2<sup>nd</sup> year onwards with 5% annual increase in charges.
- Commission is assumed to be 10% of contribution amount for the first year, 5% for the second year and 2.5% from third year onwards.
- Fund management charges are assumed to be equal to 0.5% of the ending fund value for each year.
- Insurer's other expense are assumed to be 5% of the contribution amount for the first year and 2% thereafter.

The insurer revenue items, in addition to the premium on Medclaim coverage, are shown below:

- 1.3% of ending fund value for each year as fund management charges.
- Premium allocation charges of 20% of contribution amount for the first year and 2% thereafter.

The inputs to the model include:

- Age of the account holder
- Sum assured on Medclaim policy

The profitability for the insurer is calculated assuming unit pricing method. The capital requirement for the insurer is calculated as equal to 15% of the contribution amount. This capital amount is assumed to earn interest at the rate of 6% per annum. The impact of reinsurance on the capital requirement and service-tax is ignored for the purpose of this study. The table below shows the assumptions used in the study. The model does not take into account any difference in fund utilization for policyholders with different age bands and sum-assured.



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**Table showing assumptions and parameters used in the study**

	Year	1	2	3	4	5
Claims	OP claim incidence per year	4	2	0	3	2
	OP average claim avg amount	965	1,138	1,119	1,158	1,283
	Occasional high claim freq	0	0	0	0	0
	Occasional high claim avg amt	25,809	26,636	28,124	29,824	31,144
	Loss ratio on Medicaid coverage	75%	63%	69%	94%	85%
Expenses	Fixed per policy	900	300	315	331	347
	% Premium	5%	2%	2%	2%	2%
	Commission%	10%	5%	2.50%	2.50%	2.50%
	% of Account Value	0.5%	0.5%	0.5%	0.5%	0.5%
Return on Fund	Investment Return%	8%	per annum			
	Increase in contribution	5%	per annum			
Charges	Fund Management charges	1.3%	per annum			
	Premium Allocation charges (1st year)	20%	per annum			
	Premium Allocation charges (Starting 2nd year)	2%	per annum			
Inflation	Claims inflation	5%	per annum			
	Expense inflation	5%	per annum			

From these assumptions and input parameters, the model projects the fund utilization each year and the accumulated balance at the end of each year. The results of 100 runs for each set of input parameters are analyzed further and the average fund values at different durations for three age-bands are plotted for further analysis. The table below shows the result of a simulation run for a person aged 40 years with sum insured of Rs. 500,000. The contribution amount has increased from Rs. 15,000 in year 1 to Rs. 37,904 with 5% annual increase in year 20. The premium charged is increasing with age.

Age at Policy Issue	40				
Sum Assured	500,000				
Year	1	5	10	15	20
Total Premium	15,000	18,233	23,270	29,699	37,904
Premium on Medicaid coverage	6,861	6,861	10,800	13,780	16,000
Premium Allocation charges	3,000	365	465	594	758
Starting Fund Value	5,139	42,090	102,778	141,377	270,242
Claims from the Fund	-	5,049	9,337	7,586	5,221
Investment Income on Fund	411	3,165	7,849	11,007	21,411
Year-end Fund Value	5,481	39,703	100,024	142,988	282,852
Insurer Actual Expenses	3,176	1,378	2,004	2,609	3,779
Fund Management charges	69	503	1,266	1,810	3,580
Claims on MediClaim coverage	5,878	6,061	9,711	11,493	12,123
Insurer Profit	1,012	453	1,026	2,349	4,778

**Result of a simulation run for a person aged 40 years at policy issue for sum assured of Rs. 500,000**

**6. Discussion on results of pricing work**

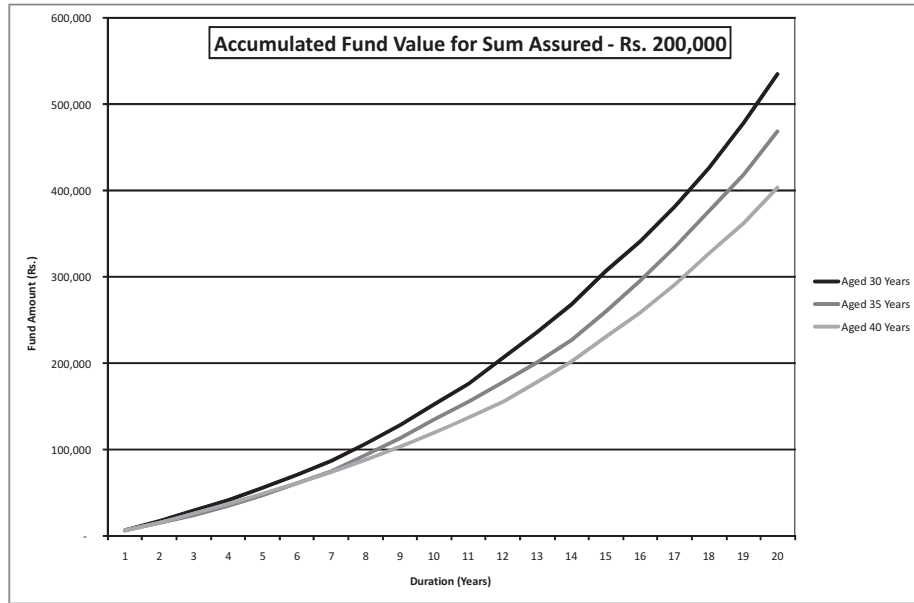
The model output for policyholders aged 30, 35 & 40 years at policy issue is tabulated for further analysis. The table below shows the accumulated value of total premiums paid,, accumulated value of total claims paid out of the HSA fund and the fund value at the end of 10 years and 20 years. The premiums and claims accumulation is done assuming an interest rate of 8% per annum. The fund value has been estimated with Medclaim coverages for sum assured of Rs. 200,000, Rs. 300,000 & Rs. 500,000.

Age at Policy Issue	Sum Insured	RoI for Insurer	Cumulative value at the end of 10 Years			Cumulative value at the end of 20 Years		
			Premiums net of Medclaim coverage	Total Claims from the fund	Total Fund Value	Premiums net of Medclaim coverage	Total Claims from the fund	Total Fund Value
30 years	200000	23.5%	499,242	72,085	152,255	885,596	294,607	534,997
30 years	300000	29.2%	467,274	76,232	133,460	833,586	307,881	474,567
30 years	500000	48.3%	379,351	64,810	103,840	688,532	271,040	373,249
35 years	200000	25.9%	497,519	74,999	147,966	863,077	293,569	512,602
35 years	300000	33.2%	463,603	72,864	135,217	801,912	282,481	468,532
35 years	500000	55.4%	361,931	66,034	94,653	628,763	280,839	307,107
40 years	200000	29.1%	474,289	77,851	133,914	823,383	300,936	467,891
40 years	300000	39.3%	431,020	72,796	119,386	745,767	293,494	403,601
40 years	500000	63.2%	307,678	65,706	69,117	548,907	269,442	242,658

**Table showing the study result for Policyholders aged 30, 35 & 40 years at policy issue**

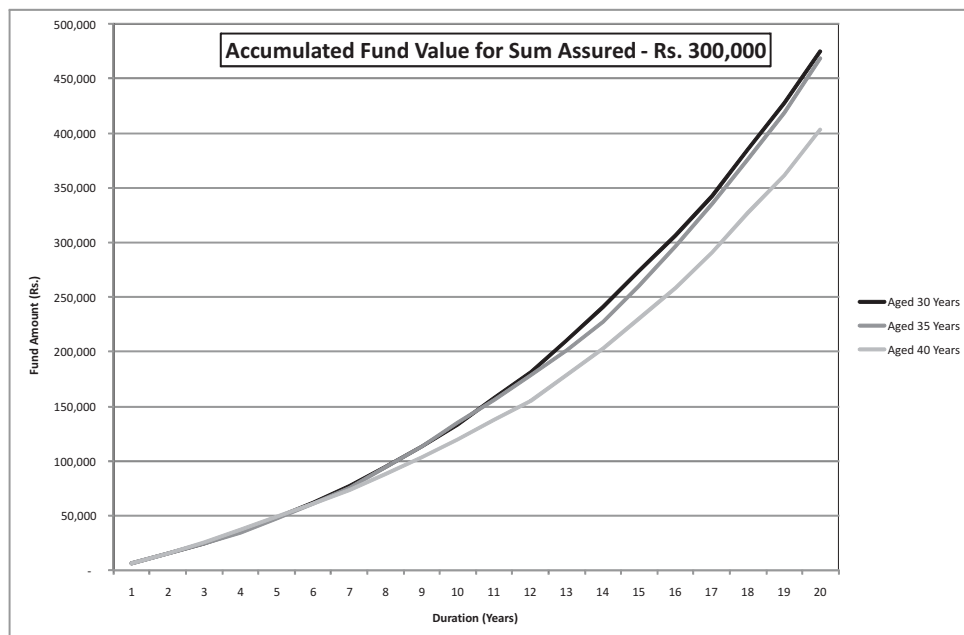
The accumulated fund value shows a decreasing trend with the increase in sum assured and with increasing age. This is due to the fact that the premium on Medclaim coverage increases with increasing age and sum assured.

The chart below shows the accumulated fund value for persons aged 30, 35 and 40 years for sum assured of Rs. 200,000.



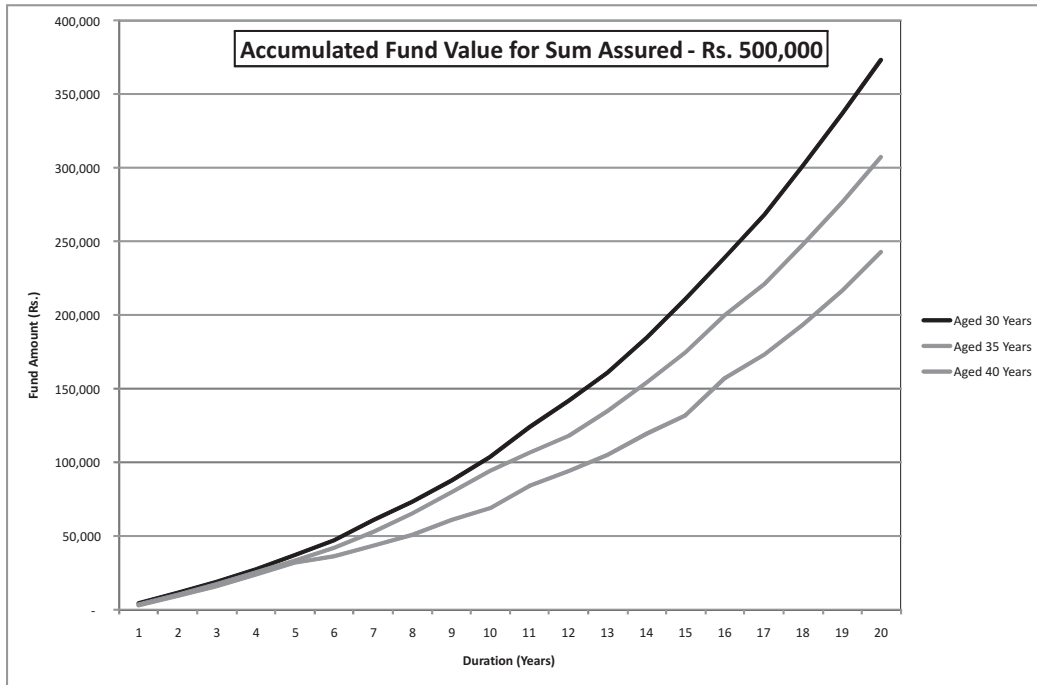
The accumulated fund value is higher for persons aged 30 years as compared to person aged 40 years at the start of the policy due to higher premium paid by person aged 40 years for Mediclaim coverage. The person aged 30 years will be aged 50 years in 20 years of policy duration and may have time to further accumulate funds till retirement age. However, the person aged 40 years at policy issue will be aged 60 years in 20 years time and may not have much time to accumulate funds for old age.

The chart below shows the accumulated fund value for persons aged 30, 35 and 40 years for sum assured of Rs. 300,000.



The accumulated fund value is getting lower with the increase in sum-assured limit.

The chart below shows the accumulated fund value for persons aged 30, 35 and 40 years for sum assured of Rs. 500,000.



The accumulated fund value for sum assured of Rs. 500,000 looks insufficient especially for person aged 40 years to meet the medical expenses after retirement.

## 7. Conclusion

Health savings account can provide an additional savings vehicle to help meet medical costs after retirement and consumer choice as a factor in healthcare purchase decisions. However, a person needs to invest in this product as early as possible to build sufficient corpus for his/her medical expenses in old age/after retirement. The contribution amount should be higher if people start investing in older age. The success of this product is dependent upon availability of health saving vehicle with various health plan designs like Mediclaim coverage, High deductible health plan, Hospital cash, Critical Illness, Long-term care insurance etc. to attract different segment of people. The existing claim experience from standalone Mediclaim coverage can be used to price some of the product designs like coverage similar to Mediclaim policy, hospital cash, and high deductible health plan. However, the data is not available in India to price critical illness and long-term care insurance. The experience from other countries and knowledge from actuarial consultants, reinsurers can be used to price these product designs.

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### **About the Authors :**

**Biresh Giri** is a Fellow of Institute of Actuaries of India. He is currently working with Milliman India as Consulting Actuary. In his current role, he has had opportunities to analyze India specific health data from various sources. Prior to Milliman, Biresh has over 5 years of experience in Property and Casualty (non-life) reinsurance pricing and modeling. Biresh has worked with a global reinsurer in the reinsurance pricing department for over 3 years and has experience of MTPL, GTPL pricing of European countries.

Biresh is also working with Future Generali India Insurance Co. Ltd. (FGI) as consultant Appointed Actuary (AA). Biresh's role as AA is as a consultant and his obligations to FGI are same as to any other client he works with. At FGI Biresh is responsible for IBNR calculations and review of product pricing and solvency margin calculations.

**Rakesh Khandelwal** holds Diploma in Actuarial Techniques from Institute of Actuaries of India and is pursuing Actuarial fellowship exams. He is a qualified Company Secretary and a law graduate. He joined Milliman India in May, 2006. His area of expertise includes portfolio analysis of health plans and assisting in pricing and reserving projects. He has previously worked with X L India in Reserving (Property & Casualty) department for three years.