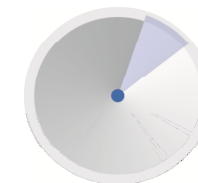




# Review of the South African Market for Hospital Cash Plan Products

28 August 2012

Presented by Daniël Erasmus



Lighthouse  
Actuarial  
Consulting

# Contents



- 
- Research – Background and Aims
  - Market Development and Regulation
  - Market Structure and Products
  - Membership Dynamics
  - Analysis and Comparison Modeling
  - Impact of Revised Demarcation and NHI
  - Concluding Remarks

## Research – Aims

---



- Commissioned by the Finmark Trust
  - Making financial markets work for the poor
- Key aims:
  - Provide overview of the size, nature and dynamics of HCP market,
  - Consider role of HCP in defraying the cost and loss-of-income, consequences of health events for lower income consumers,
  - Consider current regulatory environment, including proposed revised demarcation,
  - Financial and benefit value of HCP.

## Research – Background

---



- Unique South African dynamics and structure
- Only 16.6% (CMS, 2010 & Stats SA P0302, 2010) of the population are MS members, though possibly up to 30% use private providers (Econex , 2010)
- Public healthcare is available to all and subsidised according to income
- Risk to uncovered population

# Research – Process

---



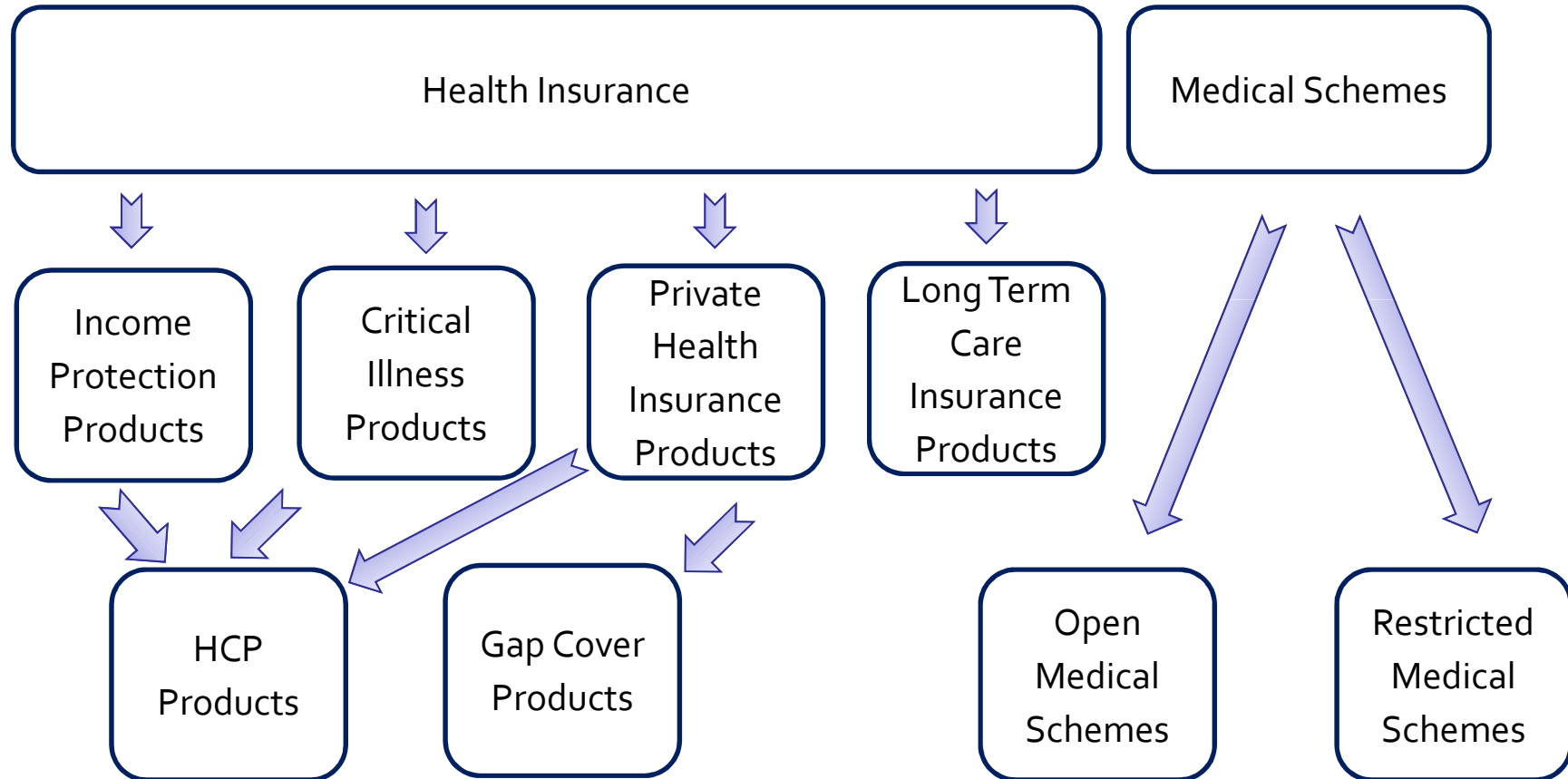
- Primary research
- Literature reviews
- Stakeholder interviews
- Actuarial modeling (Signal model)

## Overview and Regulation

# Healthcare Funding overview



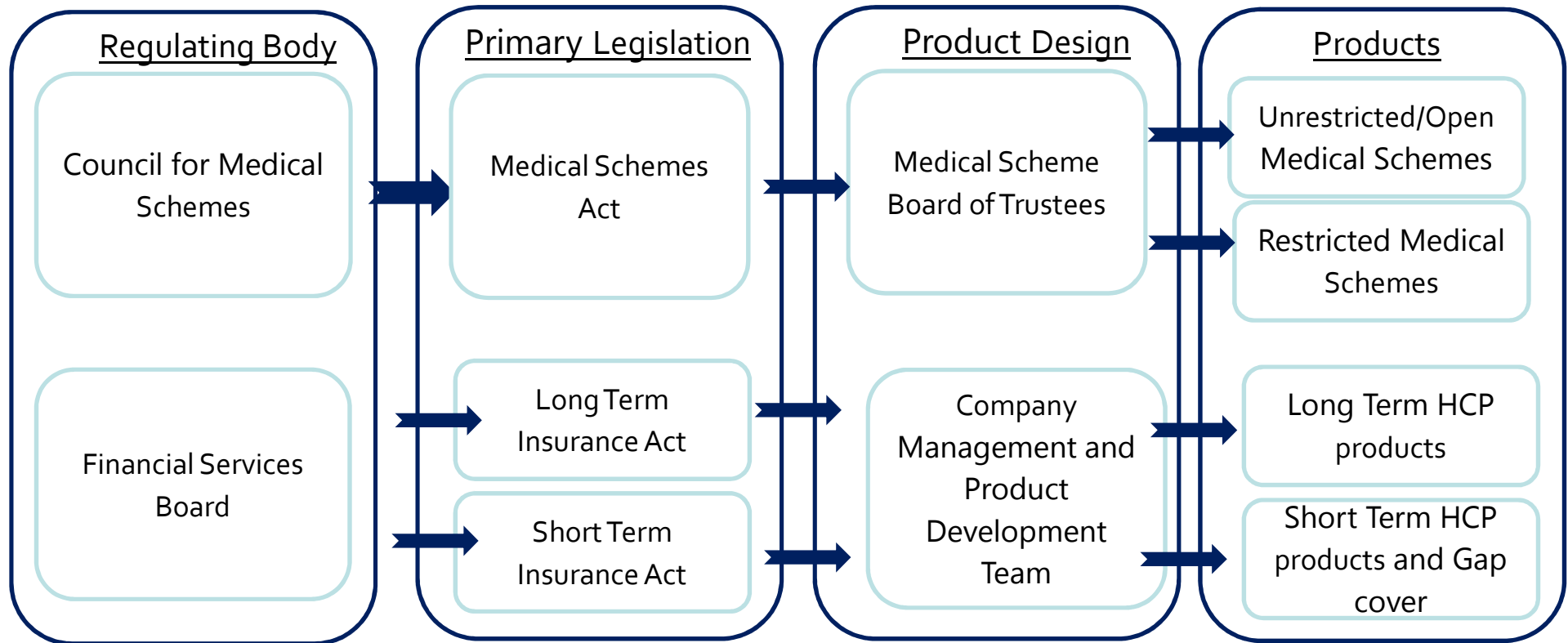
## Health Product Classification



# Overview and Regulation



## Regulatory Structure



Source: Relevant legislation.



# Health Insurance vs. Medical Schemes

---



- Hospital Cash Plans
  - Insurance products (either long or short term)
  - Regulated by FSB
  - Stated cash benefits paid to policyholder
- Medical Schemes
  - Non for profit pooled set of funds
  - Regulated by CMS
  - Close to indemnity benefits (PMB cover at cost), paid to provider/member
- Gap Cover
  - Insurance products (short term)
  - Regulated by FSB
  - Fund MS shortfalls, benefits paid to member

# Demarcation

---



- Current
  - Interpretation of MS Act key
  - Enforcement (self regulation/legal precedent)
  - Product design (some pushing the envelope)
- Disputes
  - Gap cover (2008 Supreme Court Ruling)
  - Increase in number of products
- Proposed Revised Structure
  - Comments being reviewed
  - Likely the end of Gap cover
  - HCP severely restricted

## Market structure and product types

# Market Size and Growth

---



- Recent rapid expansion in HCP market
  - 50 000+ new policies per month (last 12 – 18 months)
  - Multiple policies and high initial lapse rates
  - Market could equal 1 – 1.5 million policies, 2 – 3 million lives (approximately 27% of MS market)
- Medical Scheme market stable
  - 3.6 million principal members, 8.3 million lives (CMS, 2010)
  - Affordability issues
- Gap Cover
  - Significantly smaller approximately 250 000 – 350 000 policies
  - Limited market

# HCP Key Product Traits

---



- Stated benefits - wide variety of needs (member choice)
- Windfall claims possible
- Underwriting usually light (small premiums and simple product structure)
- Products seem to be “sold”
- Fraud is a significant risk to market
- High initial lapse rates (20% - 30%)
- Policyholders buying per affordability level (cover level likely proxy for income)
- Market expansion to higher cover levels recent (R 3,000 – R 5,000 per day benefit levels)

# Stated Benefits Example Shedule



Benefits	Product A	Product B	
Daily Cash	Selected level of cover from 3 <sup>rd</sup> day only.	Selected level of cover from 3 <sup>rd</sup> day backdated to first day.	
Accidental Disability Benefit	Per schedule below, no cover for children		
Accidental Death Benefit	N/A	Cover up to age 80 per schedule below, no cover for children	
Dread Disease Benefit	N/A	On diagnoses, per schedule below	
Maternity Benefit	12 month waiting period		
ICU Benefit	50% additional Daily Cash benefit		
Cash Back	1 year premiums after every 5 years (regardless of claims).		
Schedule of Stated Additional Benefits			
Selected Cover Level	Accidental Disability Benefit	Accidental Death Benefit	Dread Disease Benefit
1	R 100 000	R 100 000	R 50 000
2	R 200 000	R 200 000	R 100 000
3	R 300 000	R 300 000	R 150 000
4	R 400 000	R 400 000	R 200 000
5	R 500 000	R 500 000	R 250 000

Source: Product brochures.

# Structural Overview



Product Class	HCP	Medical Schemes	Gap Cover
Benefit Basis	Stated benefits	Benefits linked to cost of care and scheme rules	Benefits linked to cost of care and medical scheme benefits
Major Medical Benefits	Benefits dependant on cover level, days hospitalised and care ward	PMB benefits paid at cost, other benefits per benefit schedule	Cover applies mainly to non PMB, in - hospital procedures
Day to Day benefits	No cover*		Limited cover for certain specified conditions
Chronic/Dread disease benefits	No direct cover, can be in the form of tied products		
Possible Additional or Ancillary benefits	Benefits for accidents or public transport incidents, premium holidays and death benefits	Maternity programs and loyalty programs for some of the options	N/A
Cash Back	Policyholder retention incentive	N/A	
Loyalty Program	N/A	Incentive for members to remain healthy, only available on some products	N/A
Number of Providers	30 - 40	99	15 – 20

Source: Authors own representation, benefit brochures.

# Contributions



- 
- Hospital Cash Plans
    - Significantly cheaper level than Medical Schemes
    - Risk rated (age, income), group discounts available
    - Limiting ages
  - Medical Schemes
    - Open enrollment policy
    - Community rated
    - Differ by income and family size only
  - Gap Cover
    - Risk rated, group discounts available
    - Limiting ages
    - Uniform family rates



# Contribution levels



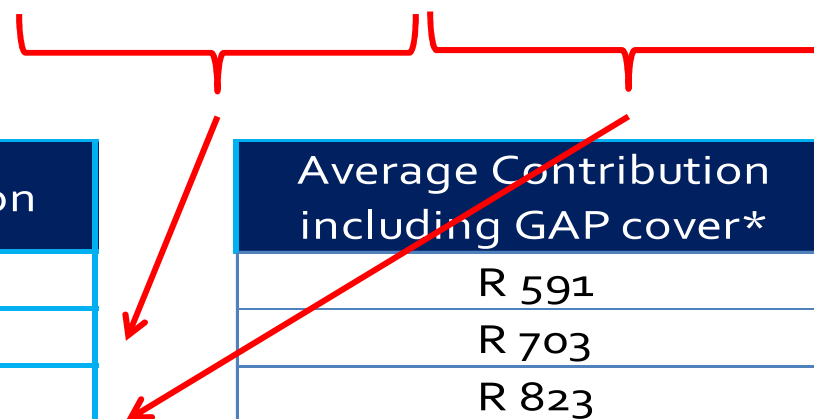
## Hospital Cash Plan Contributions

		Cover Level						
		250	500	750	1 000	2 000	3 000	5 000
Age	18 - 24	R 96	R 106	R 129	R 156	R 238	R 261	R 450
	25 - 34	R 98	R 109	R 132	R 162	R 257	R 273	R 510
	35 - 44	R 98	R 116	R 137	R 170	R 269	R 333	R 550
	45 - 54	R 99	R 121	R 137	R 182	R 303	R 377	R 730
	55 - 65	R 100	R 134	R 153	R 205	R 340	R 445	R 850

## Income Rated Medical Scheme Contributions

Monthly Income	Average Contribution
0 – R 4 000	R 491
R 4 001 – R 6 000	R 603
R 6 001 – R 8 000	R 723
R 8 000+	R 1 051

Average Contribution including GAP cover*
R 591
R 703
R 823
R 1 151



Higher cover levels would require income vetting.

Source: Product brochures and contribution tables.

# Premium breakdown

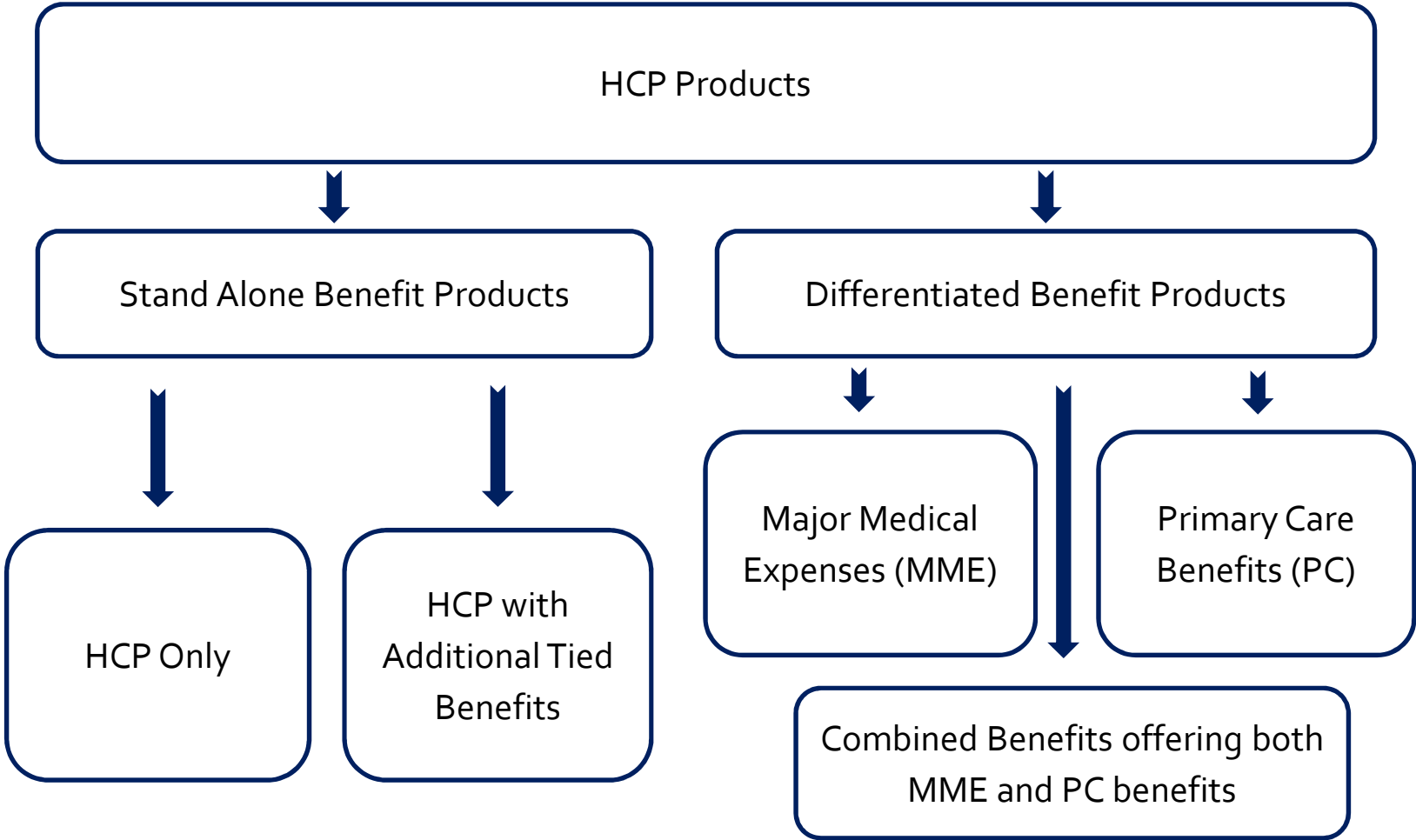


	HCP	Medical Scheme	Gap Cover
Cost of benefits	20% – 35%	75% - 90%	35% - 50%
Administration Expenses	25% - 35%	7% - 10%	20% - 30%
Managed Care Expenses	N/A	5% - 7%	N/A
Commission	Variable - Many sold Directly	3% (open schemes)	15% - 20%
Profits/Reserves	25% - 35%	Target break even/build solvency	10% - 20%

	HCP	Medical Scheme	Gap Cover
Total Average Monthly Premium	R 130	R 723	R 100
Cost of benefits	R 26 - R 46	R 542 - R 651	R 35 - R 50
Administration Expenses	R 33 - R 46	R 51 - R 72	R 20 - R 30
Managed Care Expenses	N/A	R 36 - R 51	N/A
Commission	Variable - Many sold Directly	R 22	R 15 - R 20
Profits/Reserves	R 26 - R 46	Target break even/build solvency	R 10 - R 20

Source: CMS,2010 and stakeholder interviews.

# Alternative Product Classification



Source: Authors own representation benefit brochures.

# HCP Product Examples



Benefits	Clientèle		Hollard	Prime Meridian		Day 1*
	Standard Options	Premium Option	Day - Aid	Standard Options	Plus Option	Option 2
Daily Cash	Cover from 3 <sup>rd</sup> day	Backdated to day 1 if hospitalised for 3+ days		Cover from 3 <sup>rd</sup> day		From 1 <sup>st</sup> day
Accidental Disability Benefit	Per defined schedule, no children		R50 000 + R10 000 (public transport)	Up to age 75, no children	Up to age 65, no children	R 250 000 (Principal Member Only)
Accidental Death Benefit	n/a	Up to age 80, no Children	R50 000 + R10 000 (public transport)	n/a		R 15 000 (Principal Member Only)
Dread Disease Benefit	n/a	5 Categories	n/a			Separate Benefit. Up to R 185 000 per annum
Maternity Benefit	12 month waiting period					n/a
Cash Back	Loyalty reward		1 year prem for every 5 years (regardless of claims)	Loyalty reward (25% if no claim)	Loyalty reward (50% if no claim)	n/a

Source: Product brochures.

# Product Summary



	HCP Insurance Products			Income Rated Medical Scheme Products		Gap Cover Insurance Products	
Product Classification	Stand-alone benefit offering	Combination benefit offering	Differentiated benefit offering	Restricted Medical Scheme	Open Medical Scheme	Pure Gap cover product	Hybrid Gap cover product
Benefits	Stated Benefits		Stated or related benefits	Benefits differentiated on cost of treatment			Combination of stated benefits and cost of treatment
Pay-out on	Hospitalisation		Hospitalisation and day to day events	Incurring costs for a medical events within the schemes rules and benefit		In hospital procedures (limited additional benefits)	
Needs met	Unspecified		Most likely cost of treatment	Cost of treatment			Cost of treatment and unspecified
Underwriting	Age, Income and family size		Family size	Income and family size		Medical scheme membership, Age	
Contribution Ranges*	Low to Medium		Medium	Medium to high		High given medical scheme membership requirement	
Target Market:	LSM 4 - 7			LSM 7 - 9		LSM 7 - 10	
New principal member age at entry restrictions	18 - 65		18 – 65, elderly specific products for persons above age 65 also available	18+		18 - 65	
Profitability	20% – 40%			Non for profit		Historically similar to HCP but has declined in recent years to 10% to 20%	
Benefit Overlap with other products**	Low		Medium to High	Low (Comprehensive offering)		Low (top up benefits)	

Source: Product brochures and authors own representation.

## Membership Dynamics

# Membership Dynamics

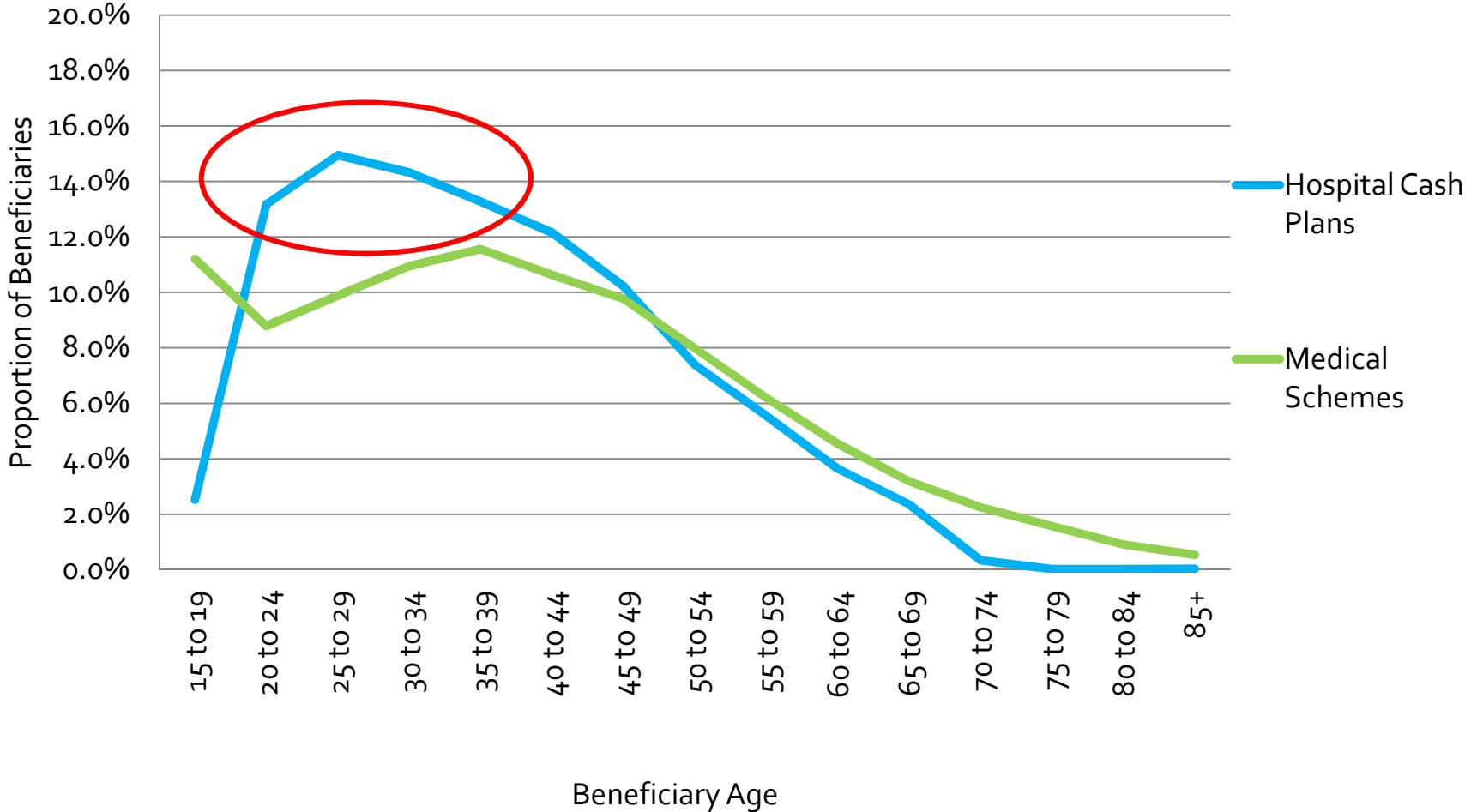


- Complete market figures not available for all parties
  - Results below based on industry data from a survey (ASISA) in 2009 (115 178 policies representing 221 425 lives) and insurer data for 2012 (101 240 policies representing 186 853 lives)
- Unlikely that HCP are seen as substitute for MS
  - Clear marketing requirements
  - Will depend on personal/individual understanding
  - Different target markets
  - Benefits structured differently
  - Not accepted at hospitals as cover
- Some medical scheme representatives see unregulated insurance products as a possible treat
  - Threat to risk pool
  - Cannot compete (regulation)
  - Death spiral
  - Increasing costs, affordability is a key consideration

# Beneficiary Comparison



HCP Membership likely concentrated at younger ages compared to more even spread on medical schemes



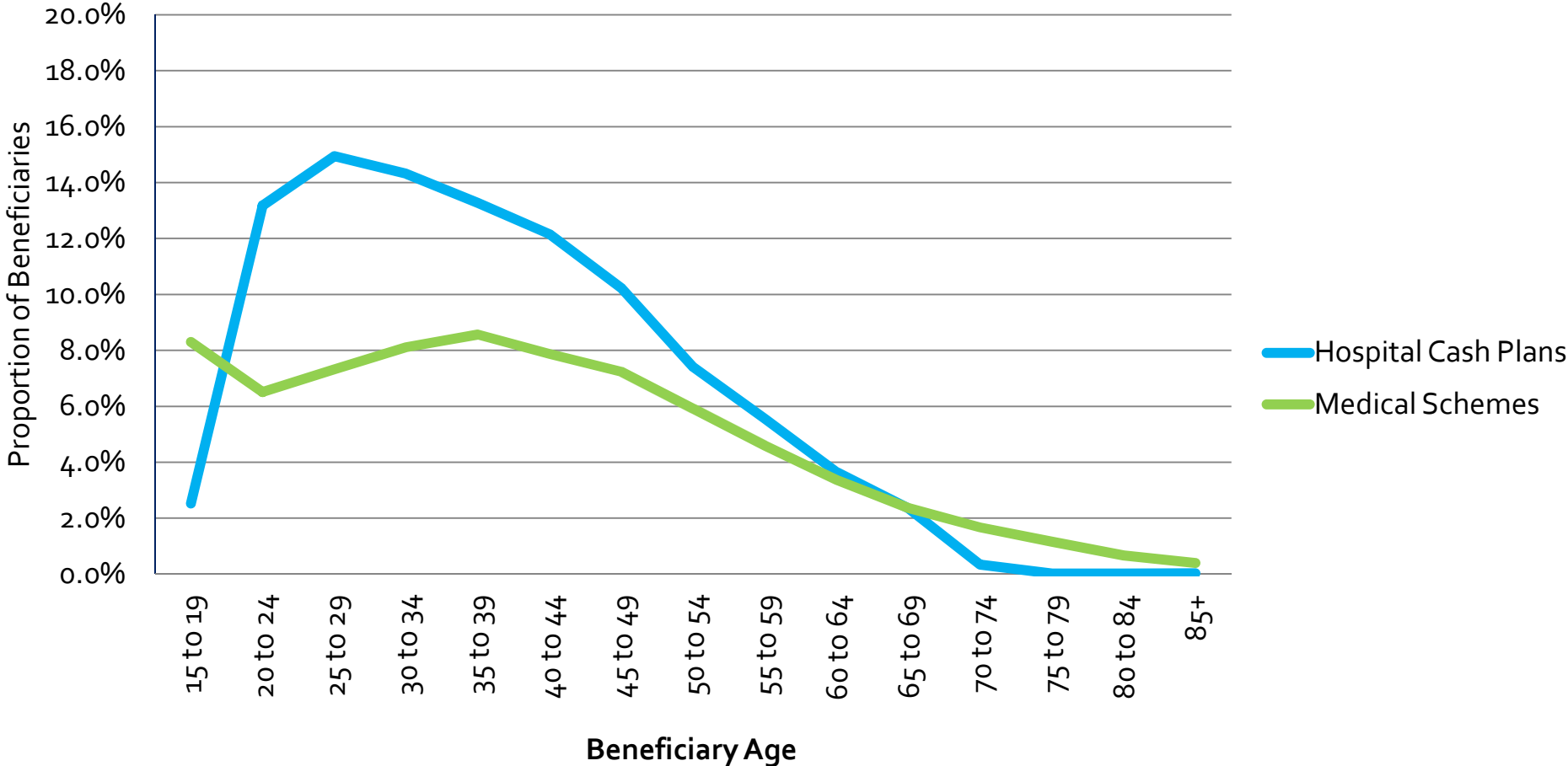
Source: CMS, 2009 and ASISA summary data.



# Beneficiary Comparison

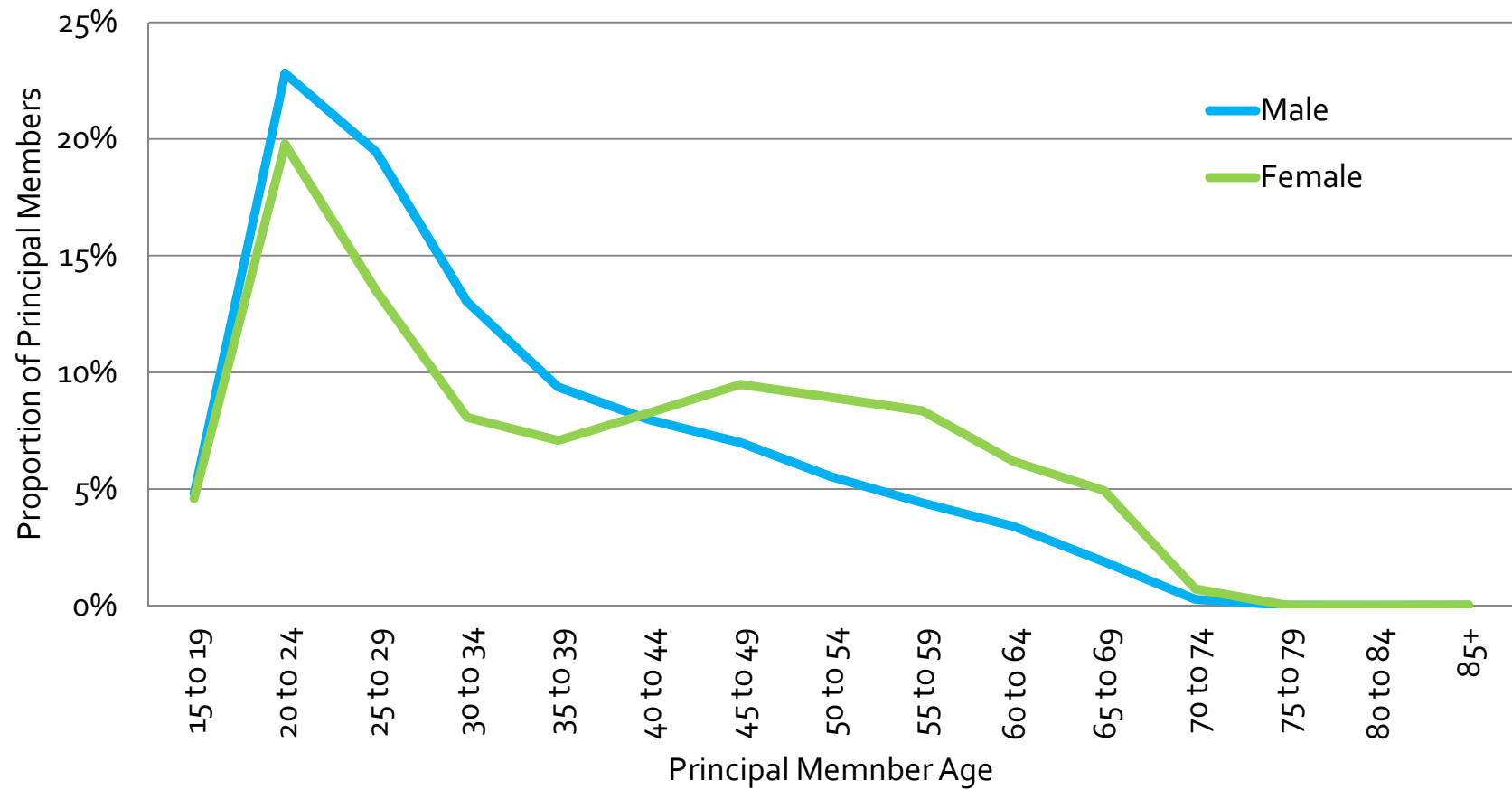


HCP Membership concentration seems to have shifted to a more balanced membership base



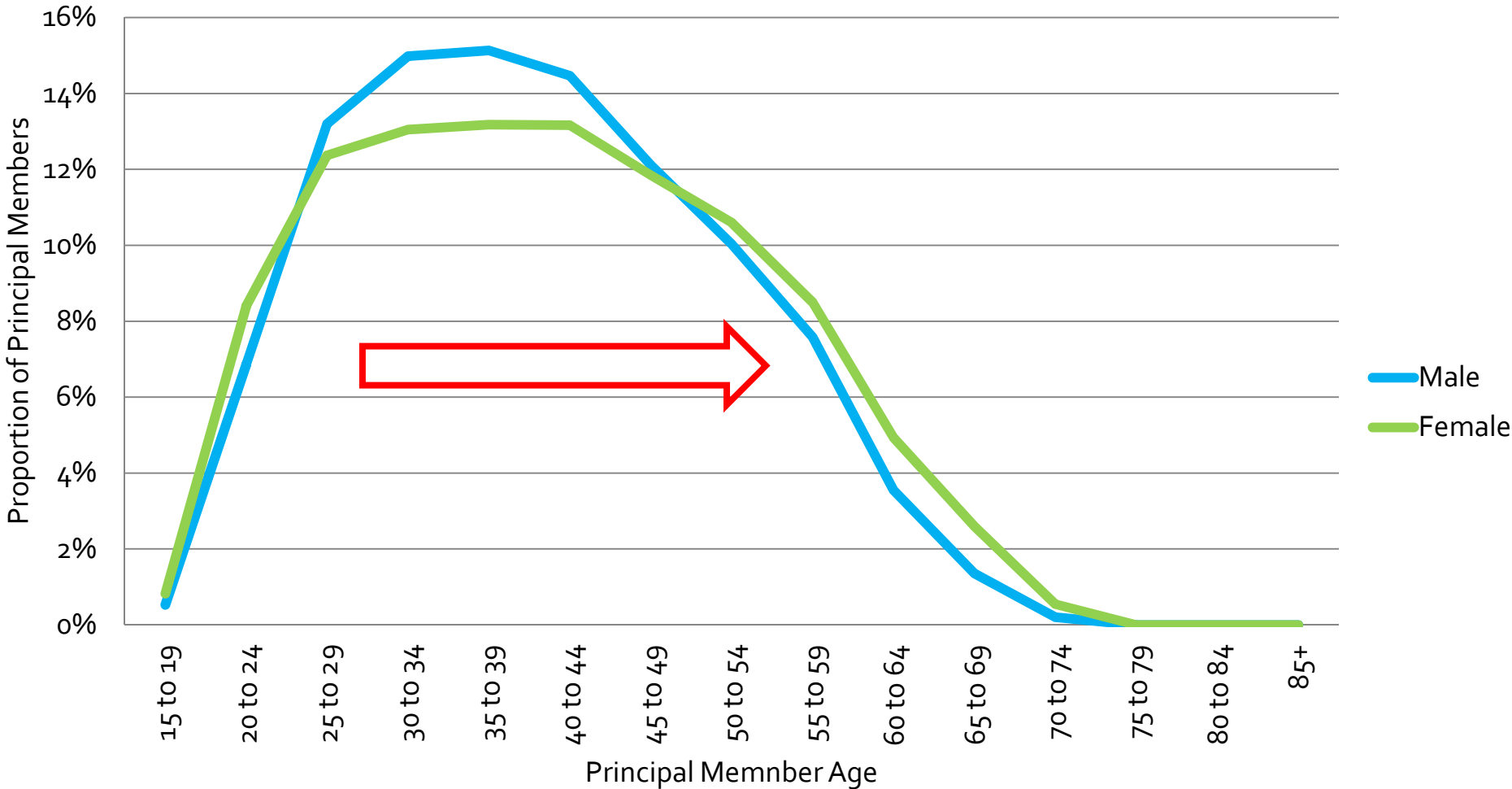
Source: CMS reports and data provided by Insurers.

# HCP Policyholder by age and gender (2009 Data)



Source: CMS, 2009 and ASISA summary data.

# HCP Policyholder by age and gender (2012 Data)

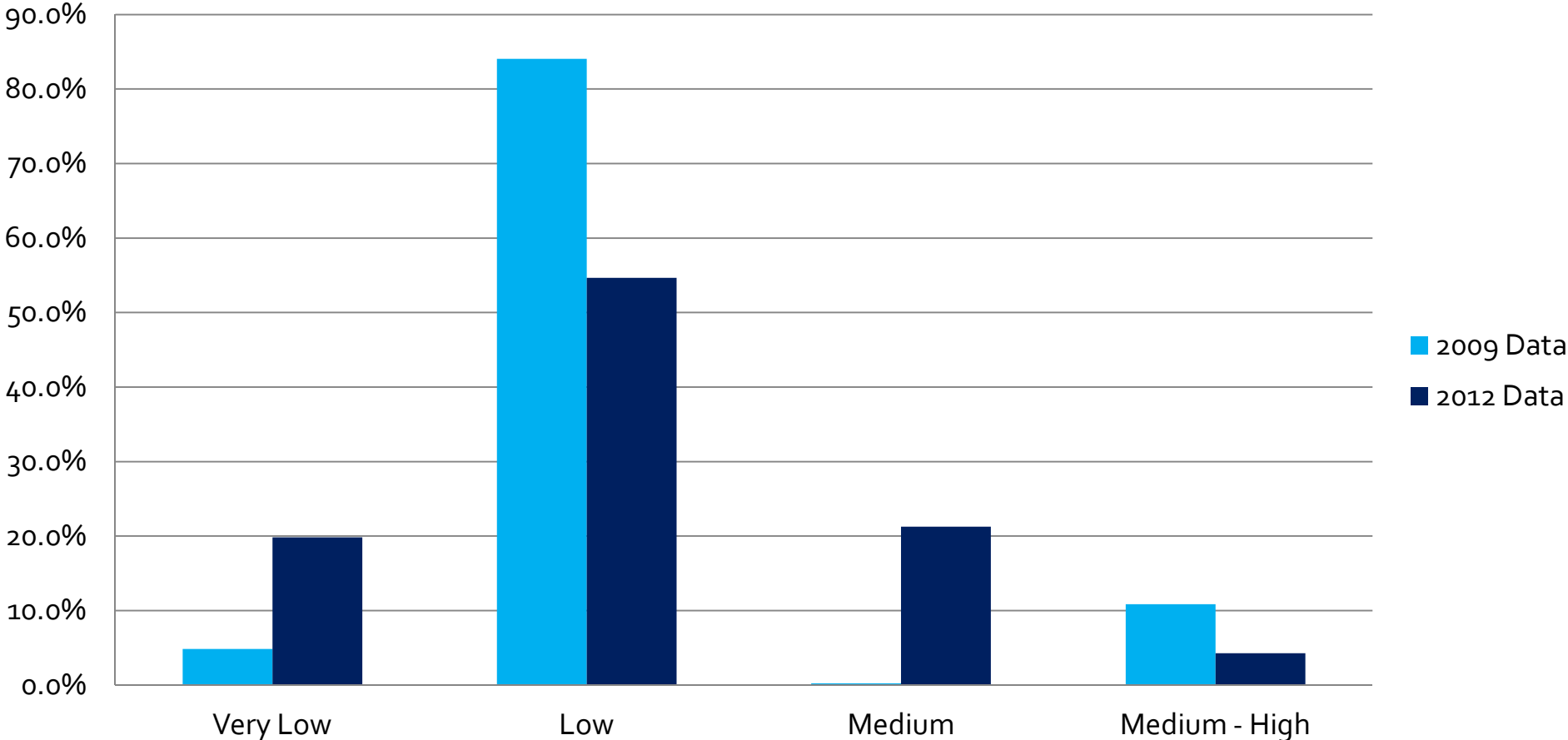


Source: Insurer Data

# Distribution of Income (cover level as Proxy)



HCP Membership still concentrated at the low cover and income sector and would likely represent little overlap with medical scheme members



Source: ASISA summary data and 2012 Insurer information.

# HCP Likely Membership Summary



Demographic	Core Market
Age	20 - 40
Income Distribution	LSM 4 – 7 (possibly higher)
Gender	No distinction
Disease Profile	Likely low due to age profile and underwriting
Lapse Rates	20% - 30% Up to 50% for some products
Needs	Wide variety, possibly cost of care and related costs

Source: CMS, 2009, ASISA summary data and authors own representation.

## Analysis and Modeling

# Affordability



- 
- The key consideration
  - Illustration based on two different salary levels:
    - Level A:
      - R 3,000 per month
      - H<sub>1</sub> under state means test
    - Level B
      - R 5,000 per month
      - H<sub>2</sub> under state means test

# Affordability – Salary A: R 3,000 pm



## HCP Contributions

		Cover Level						
		250	500	750	1 000	2 000	3 000	5 000
Age	18 - 24	R 96	R 106	R 129	R 156	R 238	N/a	N/a
	25 - 34	R 98	R 109	R 132	R 162	R 257	N/a	N/a
	35 - 44	R 98	R 116	R 137	R 170	R 269	N/a	N/a
	45 - 54	R 99	R 121	R 137	R 182	R 303	N/a	N/a
	55 - 65	R 100	R 134	R 153	R 205	R 340	N/a	N/a

Income rated MS contributions would amount to R490 without Gap cover and R 590 with Gap cover for a person in this income bracket

## Contributions as a Percentage of Income

		HCP Cover Level							Medical Scheme**
		R 250	R 500	R 750	R 1 000	R 2 000	R3 000*	R5 000*	
Age	18 - 24	3%	4%	4%	5%	8%	N/a	N/a	16% - 20%
	25 - 34	3%	4%	4%	5%	9%	N/a	N/a	16% - 20%
	35 - 44	3%	4%	5%	6%	9%	N/a	N/a	16% - 20%
	45 - 54	3%	4%	5%	6%	10%	N/a	N/a	16% - 20%
	55 - 65	3%	4%	5%	7%	11%	N/a	N/a	16% - 20%

Source: Product brochures and authors own calculations.



# Affordability – Salary A: R 5,000 pm



## HCP Contributions

		Cover Level						
		250	500	750	1 000	2 000	3 000	5 000
Age	18 - 24	R 96	R 106	R 129	R 156	R 238	R 261	N/a
	25 - 34	R 98	R 109	R 132	R 162	R 257	R 273	N/a
	35 - 44	R 98	R 116	R 137	R 170	R 269	R 333	N/a
	45 - 54	R 99	R 121	R 137	R 182	R 303	R 377	N/a
	55 - 65	R 100	R 134	R 153	R 205	R 340	R 445	N/a

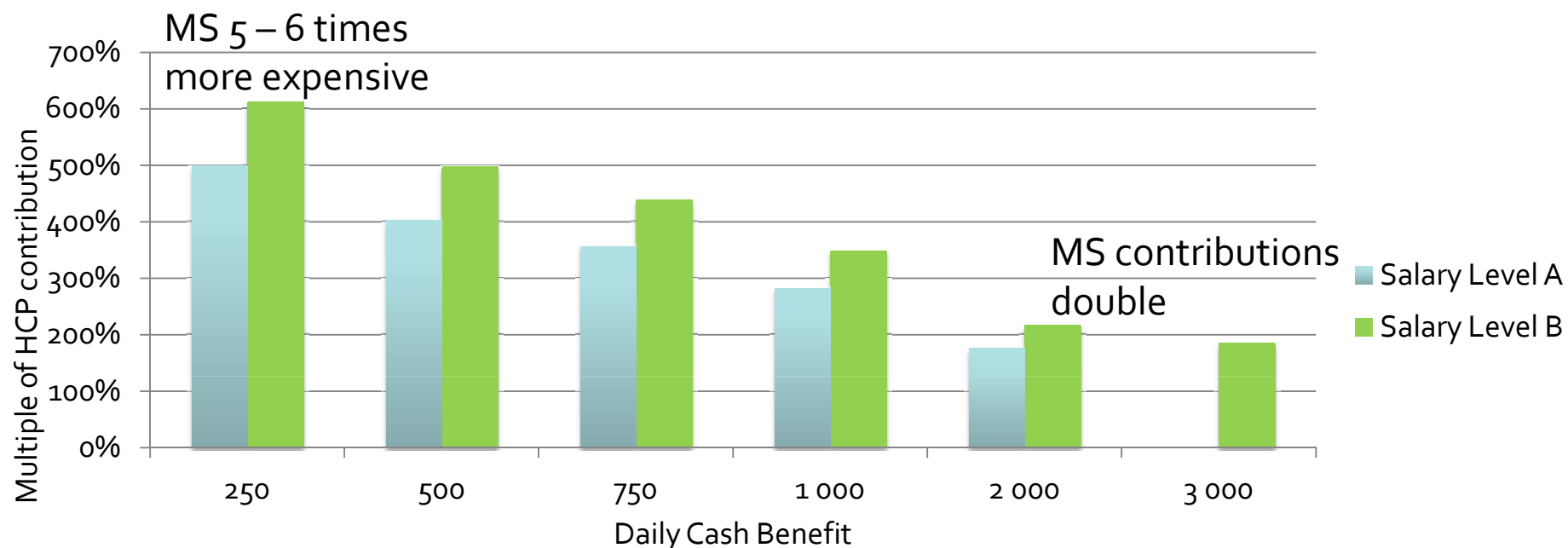
Income rated MS contributions would amount to R 600 without Gap cover and R 700 with Gap cover for a person in this income bracket

## Contributions as a Percentage of Income

		HCP Cover Level							Medical Scheme**
		R 250	R 500	R 750	R 1 000	R 2 000	R 3 000	R 5 000*	
Age	18 - 24	2%	2%	3%	3%	5%	5%	N/a	12% - 14%
	25 - 34	2%	2%	3%	3%	5%	5%	N/a	12% - 14%
	35 - 44	2%	2%	3%	3%	5%	7%	N/a	12% - 14%
	45 - 54	2%	2%	3%	4%	6%	8%	N/a	12% - 14%
	55 - 65	2%	3%	3%	4%	7%	9%	N/a	12% - 14%

Source: Product brochures and authors own calculations.

# Contribution Trade-off Illustration



Income	HCP Cover Level							Medical Scheme	
	R 250	R 500	R 750	R 1 000	R 2 000	R 3 000	R 5 000	No Gap	Gap
R 2 000	5%	6%	7%	9%	14%	N/a	N/a	25%	31%
R 5 000	2%	3%	3%	3%	6%	7%	N/a	12%	14%
R 7 000	1%	2%	2%	2%	4%	5%	9%	10%	11%
R 8 000	1%	2%	2%	2%	4%	4%	8%	max 13%	Max 14%

Income rated MS contributions unlikely to be affordable for lower income bands (regressive)

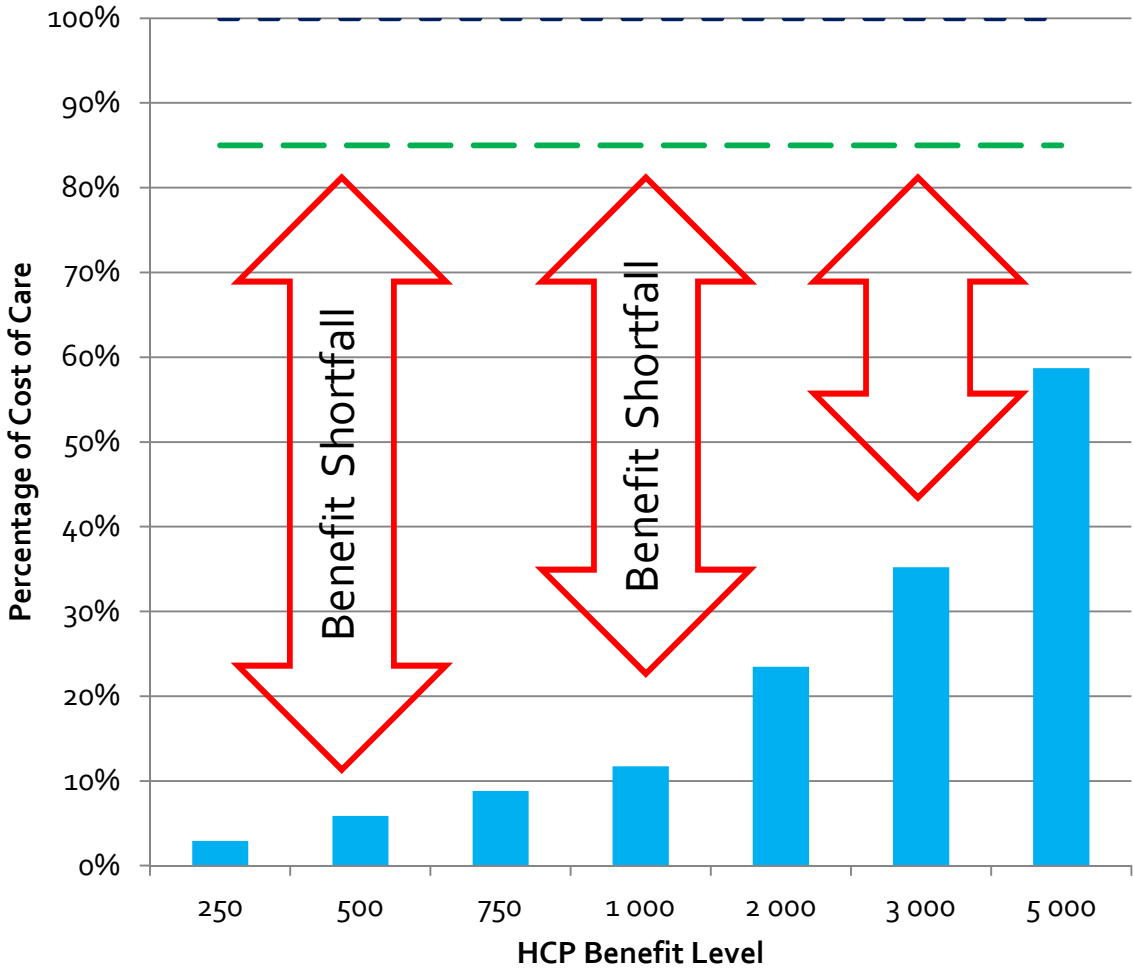
Source: Product brochures and authors own calculations.

# Private Facility Benefit Quantification Signal Model



- Comparison Model that rates and quantifies benefit value
- Based on more than 1,000,000 hospital admissions (MMI data)
- Outputs illustrate the percentage of claims met
- Richness values also compared to contributions to illustrate 1 to 1 comparison and relative value offering
- Results based on average HCP offering
  - Min of 3 days hospitalisation and 50% additional ICU benefit
- Medical Scheme richness values based on average income rated open medical scheme offering
  - 100% of scheme tariff
  - PMB's at cost

# Private Facility Benefit Quantification (Signal)



Non-medical scheme policyholders will likely be required to make large up-front cash payments to access a private facility. These payments will not be matched to HCP benefit pay-outs, which are only processed after the period of hospitalisation, thus there are likely to be access restrictions.

- HCP Products
- - - Medical Scheme (No Gap Cover)
- - - Medical Scheme (Gap Cover)

Source: LAC Signal model, MMI data and product brochures and benefit schedules.

# Private Facility Benefit Quantification (Signal)



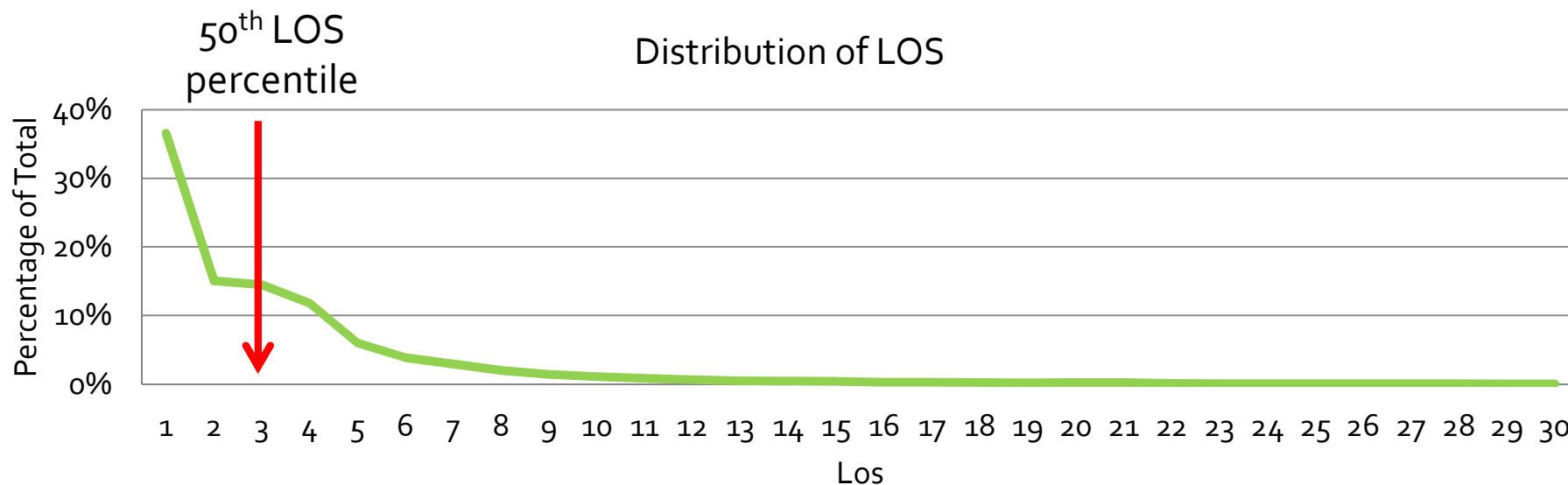
		Cover Level						
		R 250	R 500	R 750	R 1 000	R 2 000	R3 000	R5 000
Age	18 - 24	3%	5%	8%	11%	21%	32%	53%
	25 - 34	3%	6%	9%	12%	24%	36%	59%
	35 - 44	3%	6%	9%	12%	24%	36%	60%
	45 - 54	3%	6%	9%	12%	25%	37%	62%
	55 - 65	3%	5%	8%	11%	21%	32%	53%
Average		3%	6%	9%	12%	23%	35%	59%
Medical Scheme (No Gap Cover)		85%						
Medical Scheme (With Gap Cover)		100%						

Source: LAC Signal model, MMI data and product brochures and benefit schedules.

# Private Facility Benefit Quantification (Signal)

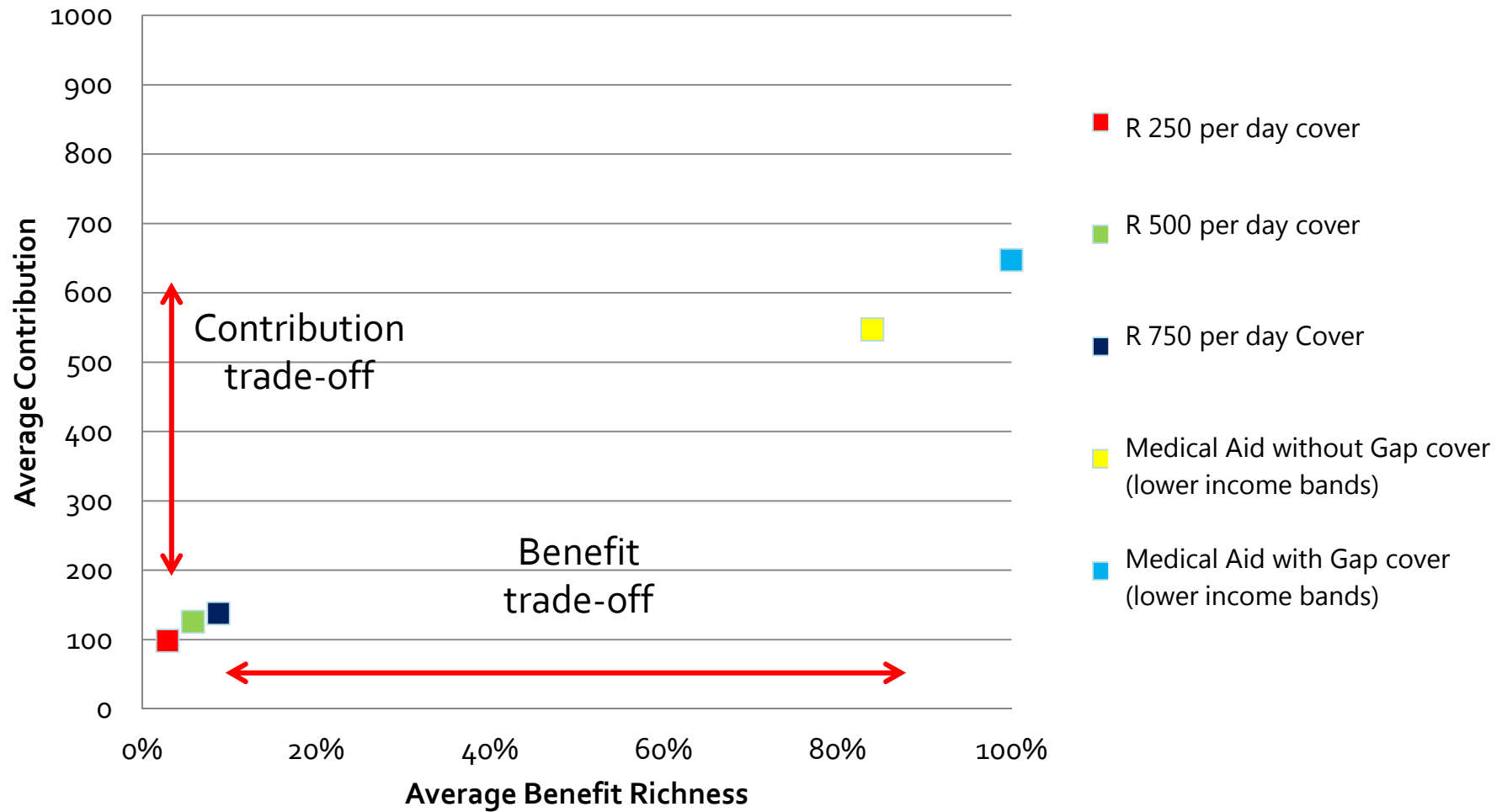


		LOS	Average Cost per Day Hospitalisation Only	Average Cost per Day Related Costs Included
Age	18 - 24	2.9	R 4 412	R 6 461
	25 - 34	3.3	R 4 492	R 6 564
	35 - 44	3.6	R 4 620	R 6 925
	45 - 54	3.9	R 5 075	R 7 630
	55 - 65	3.9	R 6 267	R 9 312



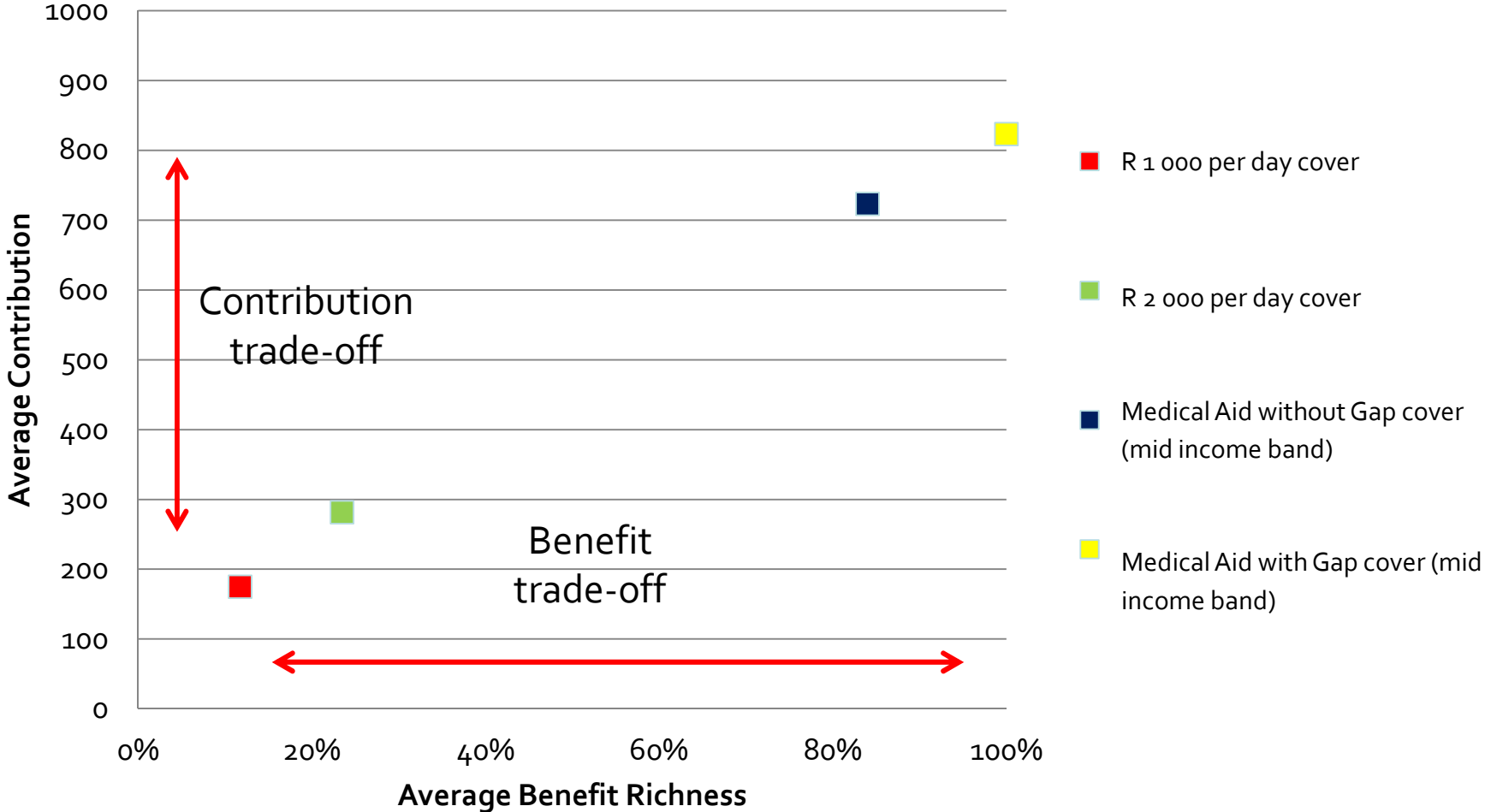
Source: MMI Data extracts.

# Low Cover Level HCP Comparison



Source: LAC Signal model, MMI data and product brochures and benefit schedules.

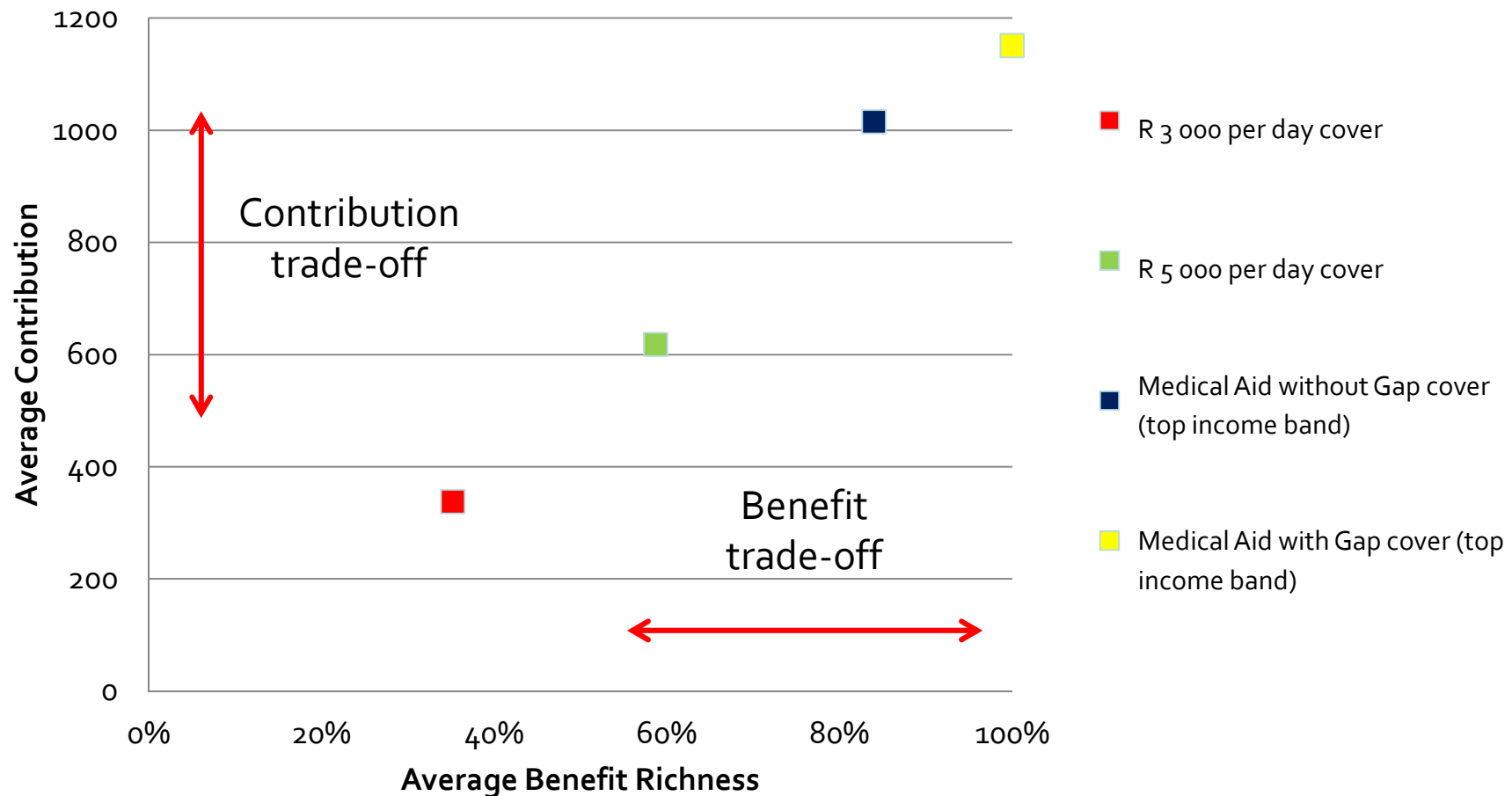
# Medium Cover Level HCP Comparison



Source: LAC Signal model, MMI data and product brochures and benefit schedules.



# High Cover Level HCP Comparison



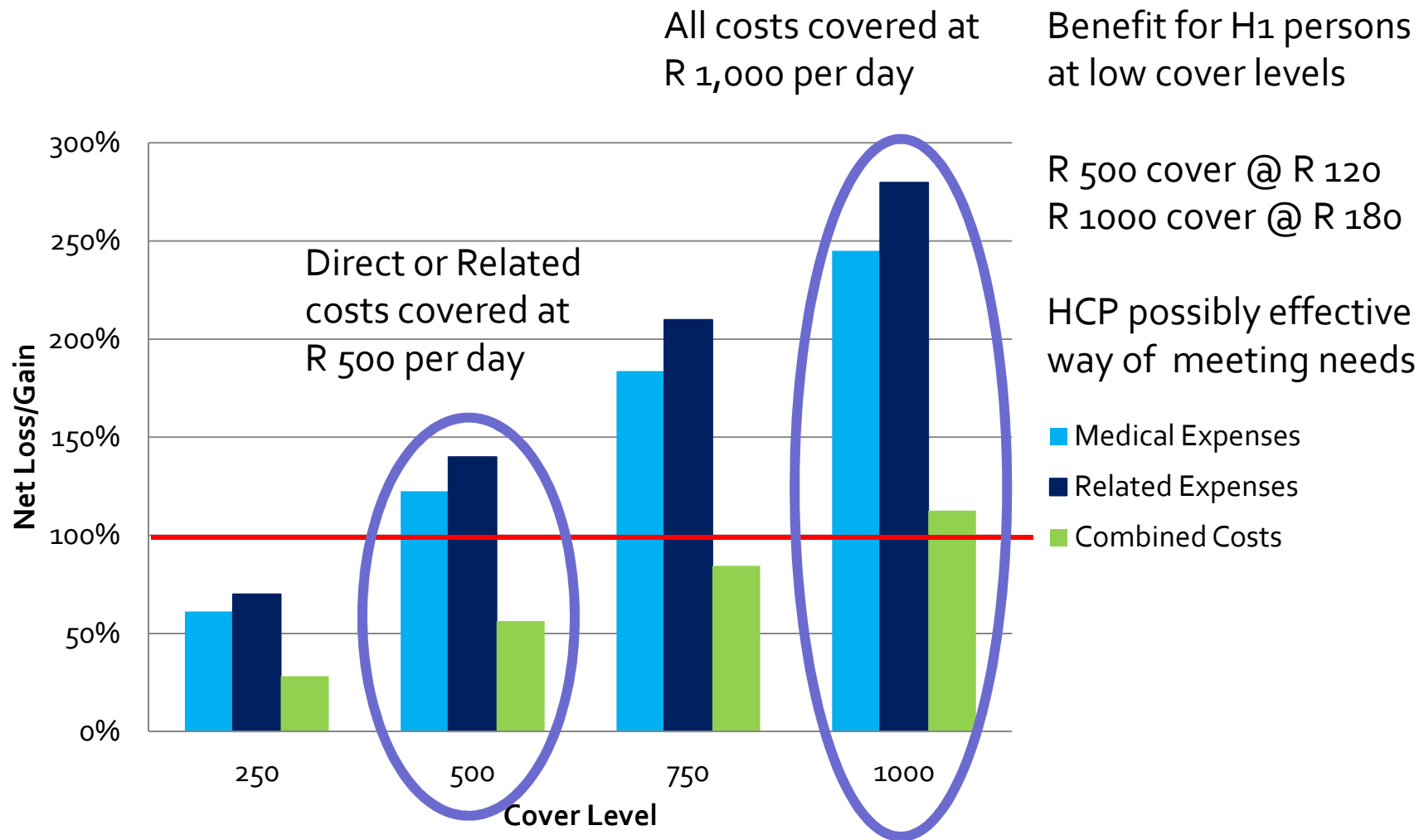
Source: LAC Signal model, MMI data and product brochures and benefit schedules.

# UPFS Tariff Structure



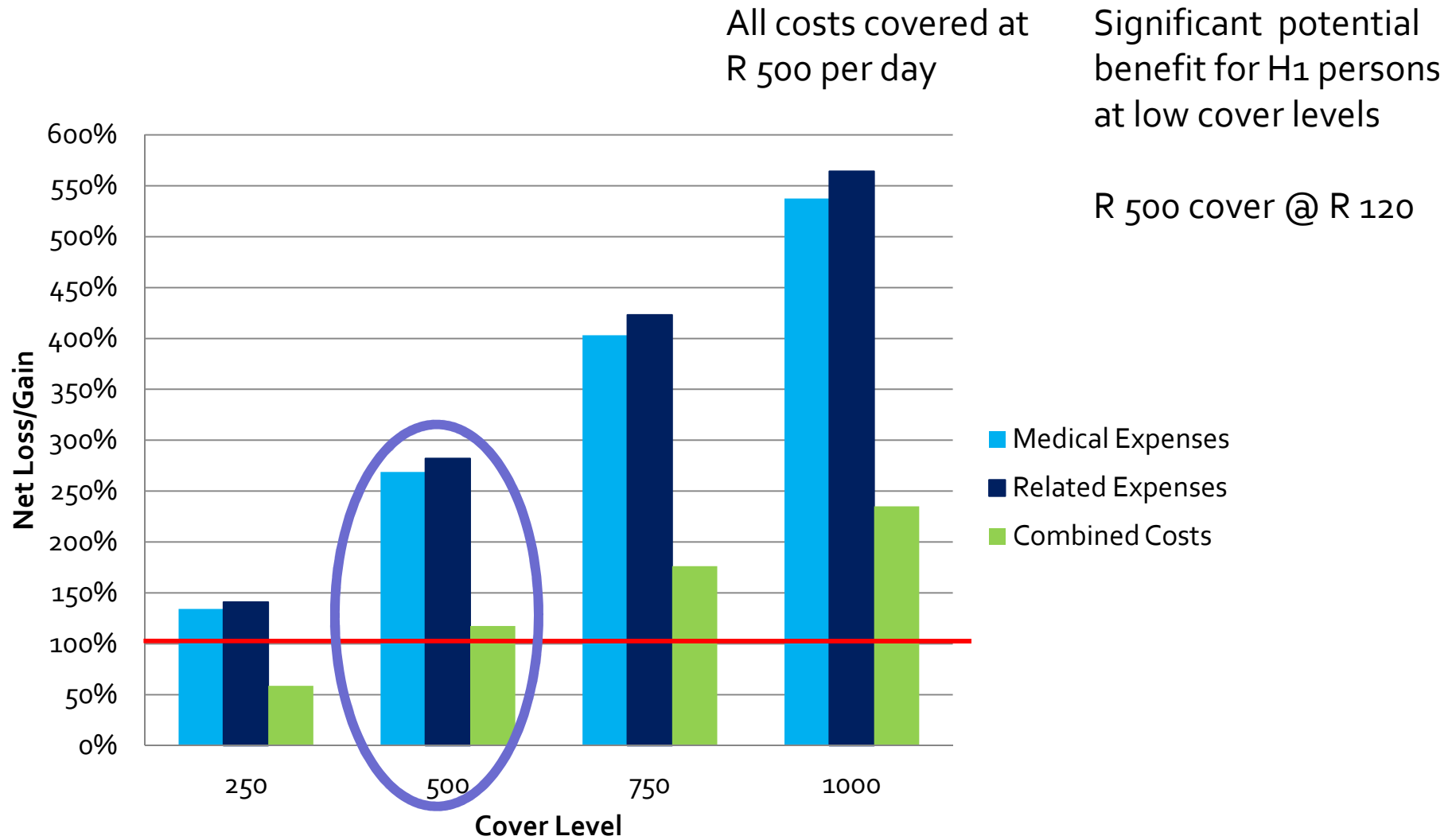
Level	Means Test	Amount paid by patient	
		Consults	Other
H0	Unemployed, Social Pension, Government Subsidies	0%	0%
H1	Individual less than R 3 000 , Household less than R 4 167	20%	20% for consultations, 1% of UPFS general ward day tariff, maximum 7 days for each 30 days in hospital.
H2	Individual R 3 001 - R 6 000, Household R 4 168 - R 8 333	70%	70% for consultations, 7% of UPFS per day for in-patient stays, differentiation by bed type.
H3	Individual more than R 6 001, Household more than R 8 334	100%	100% (full UPFS rate)

# State Hospital Analysis - Benefit Richness Values H1



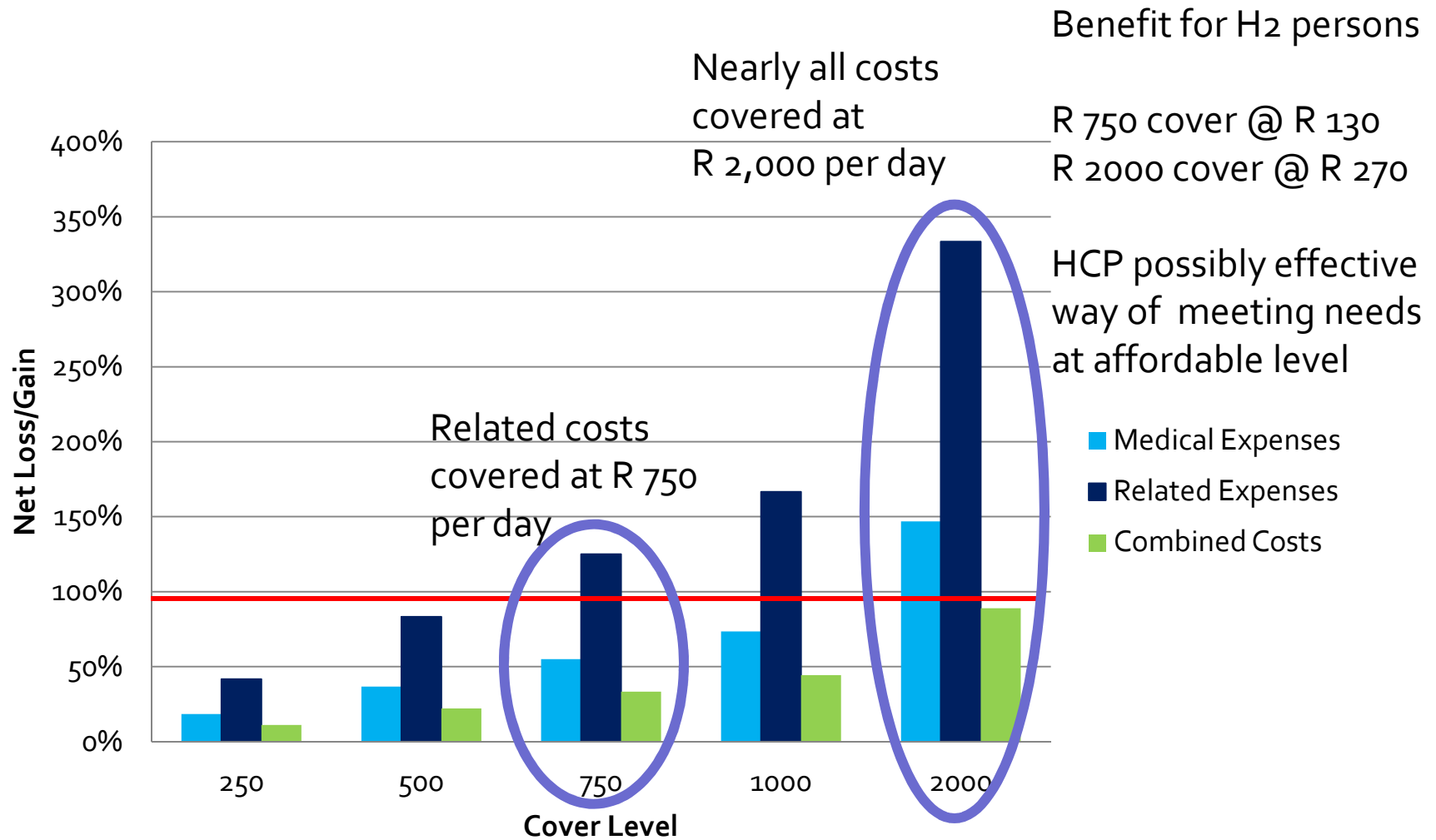
Source: LAC Signal model, MMI data and product brochures.

# State Hospital Analysis - Benefit Richness Values H1 (LOS >2 days)



Source: LAC Signal model, MMI data and product brochures.

# State Hospital Analysis - Benefit Richness Values H2



Source: LAC Signal model, MMI data and product brochures.

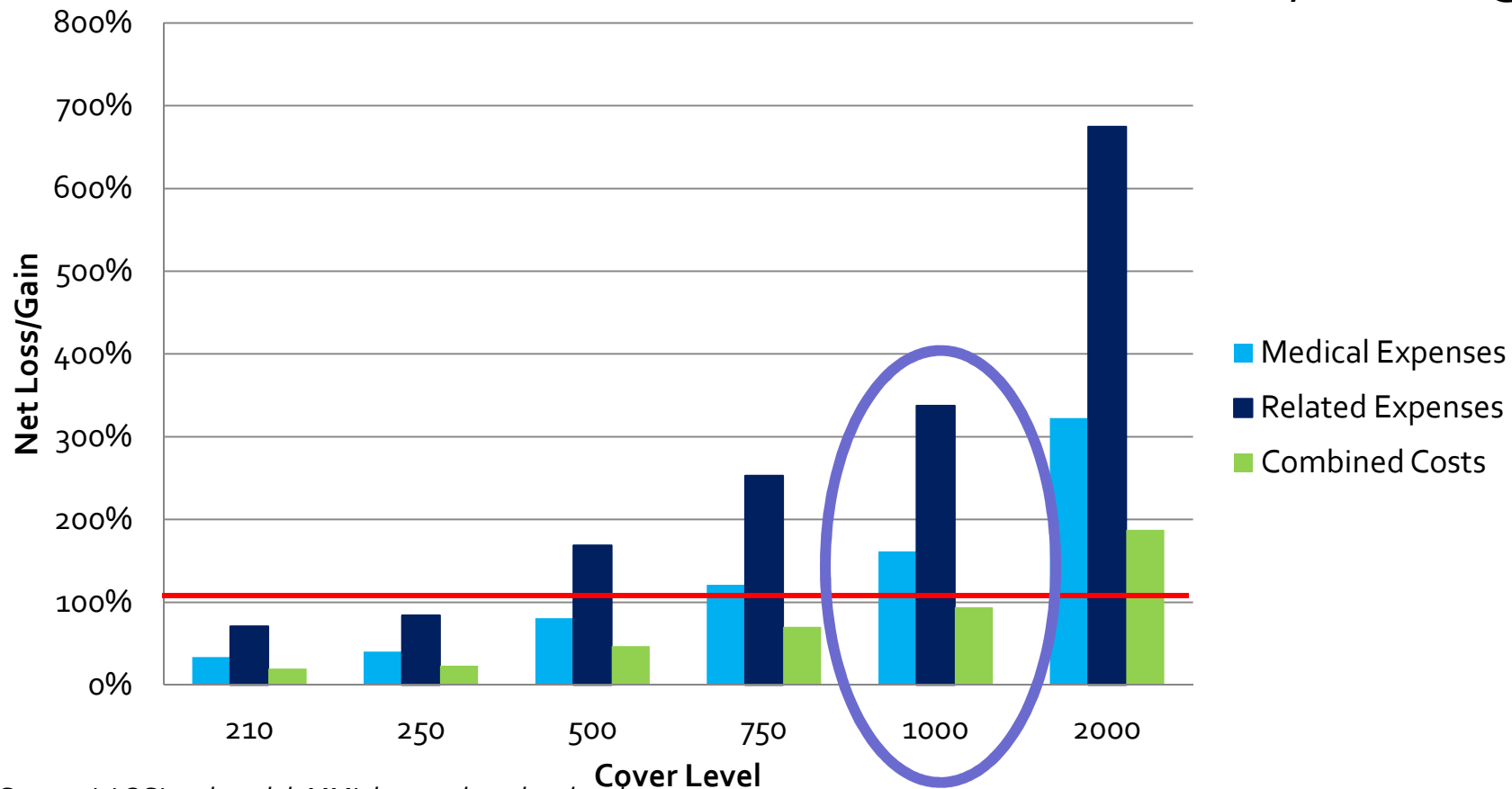
# State Hospital Analysis - Benefit Richness Values H2 (LOS >2 days)



Nearly all costs covered at R 1,000 per day

Significant potential benefit for H2 persons

R 1,000 cover @ R 180



Source: LAC Signal model, MMI data and product brochures.

# State Hospital Scenario Analysis

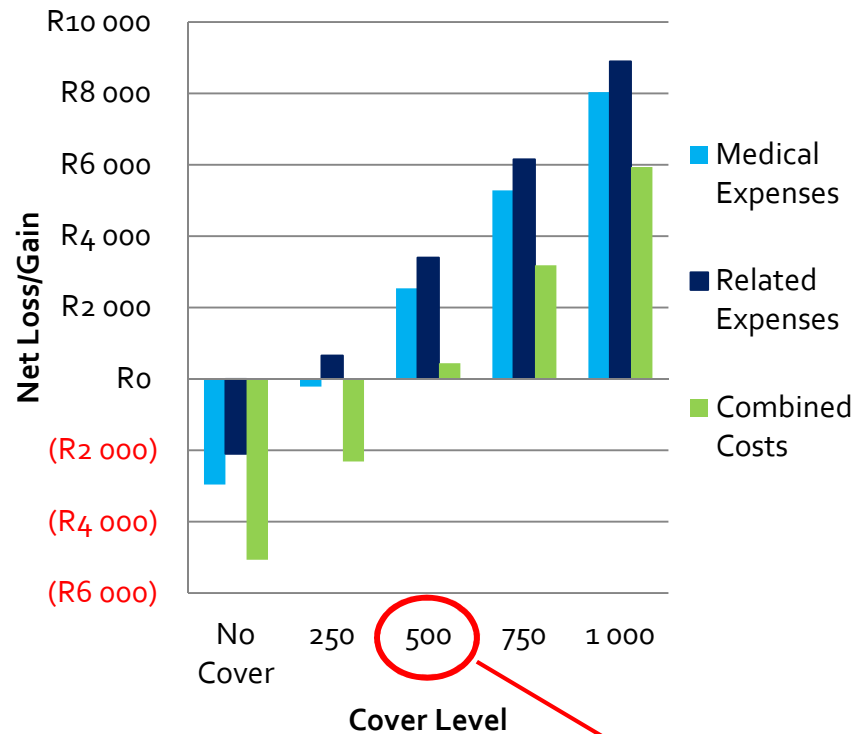


- Scenario 1
  - Pneumonia
  - Total LOS 19 days with no ICU Days
  - Direct medical costs R 19,767 (Before UPFS tariff discount)
- Scenario 2
  - Cranial Injury
  - Total LOS of 30 days with 14 days in ICU
  - Direct medical costs R 104,777 (Before UPFS tariff discount)

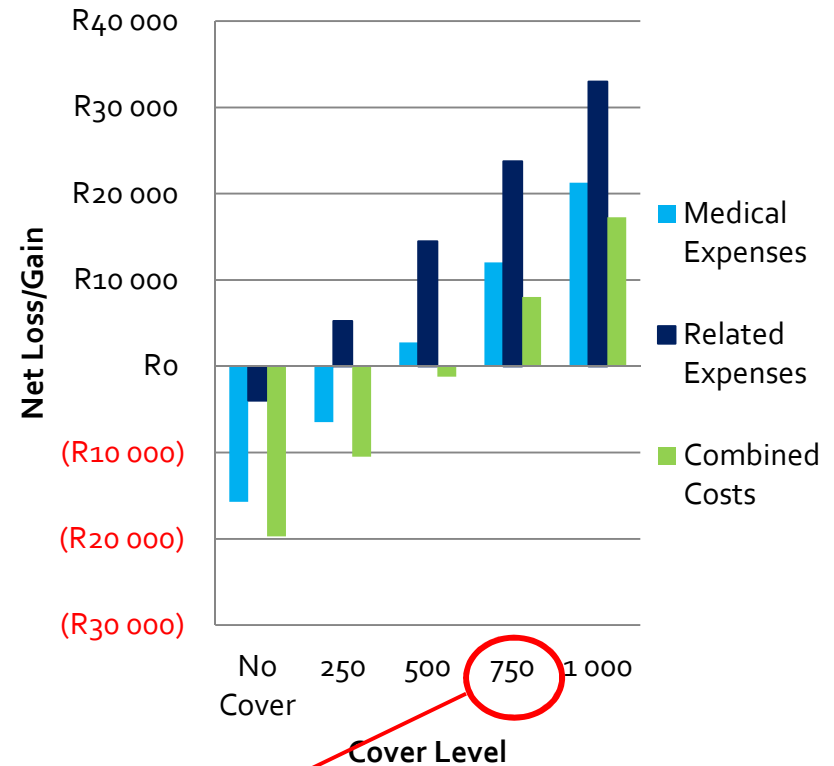
# State Hospital Scenario Analysis (H1)



Gain/loss per cover level - Scenario 1



Gain/loss per cover level - Scenario 2



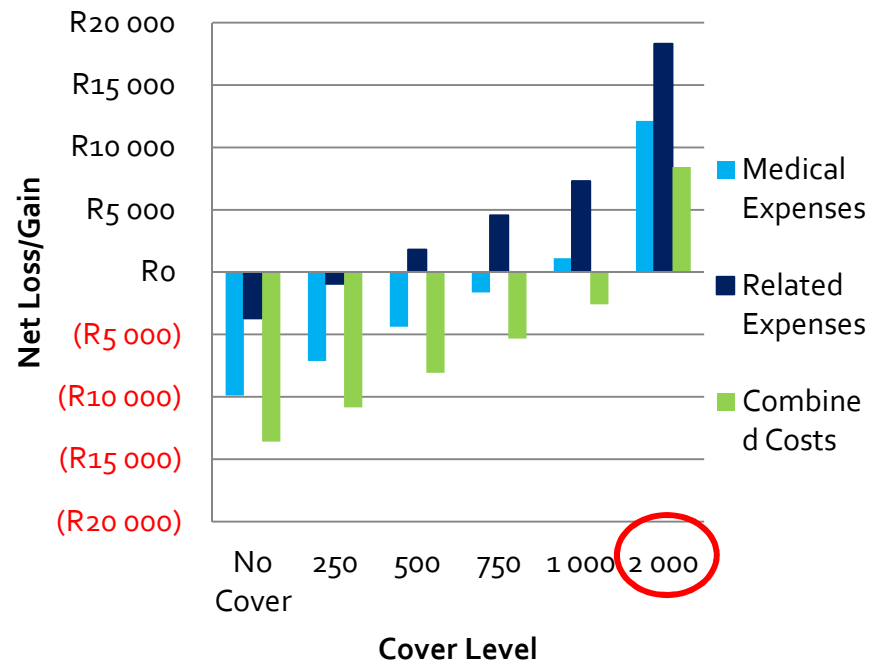
All costs covered



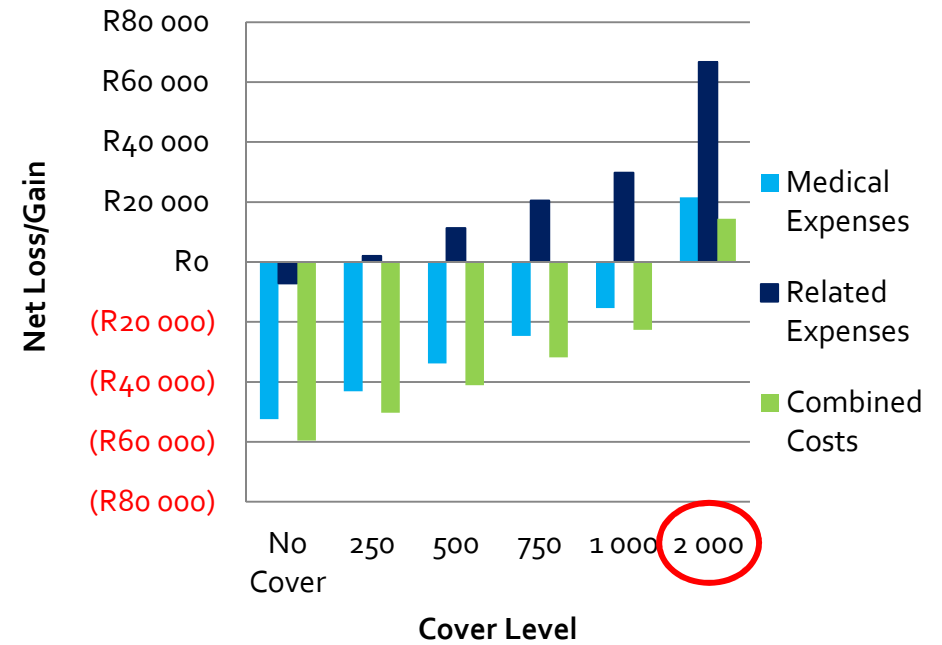
# State Hospital Scenario Analysis (H2)



Gain/loss per cover level - Scenario 1



Gain/loss per cover level - Scenario 2



All costs covered at R 2,000 per day benefit

## Demarcation and NHI

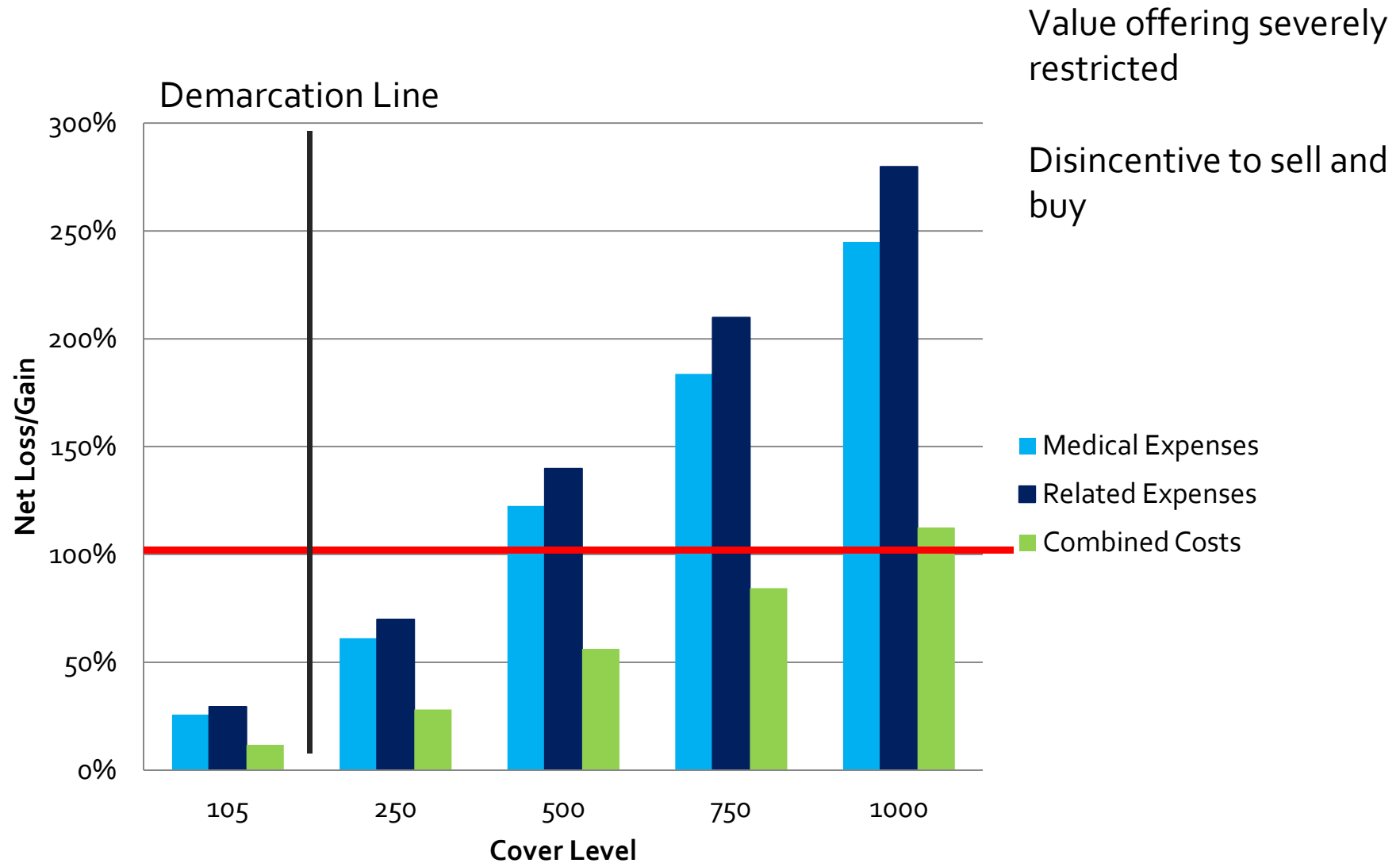
# Impact of Revised Demarcation and NHI



- Draft demarcation agreement
  - Public comments currently being reviewed
  - Aim to protect Medical Scheme risk pools
- Would likely have significant impact on market
  - Outlaw Gap cover
  - Severe restriction on HCP products

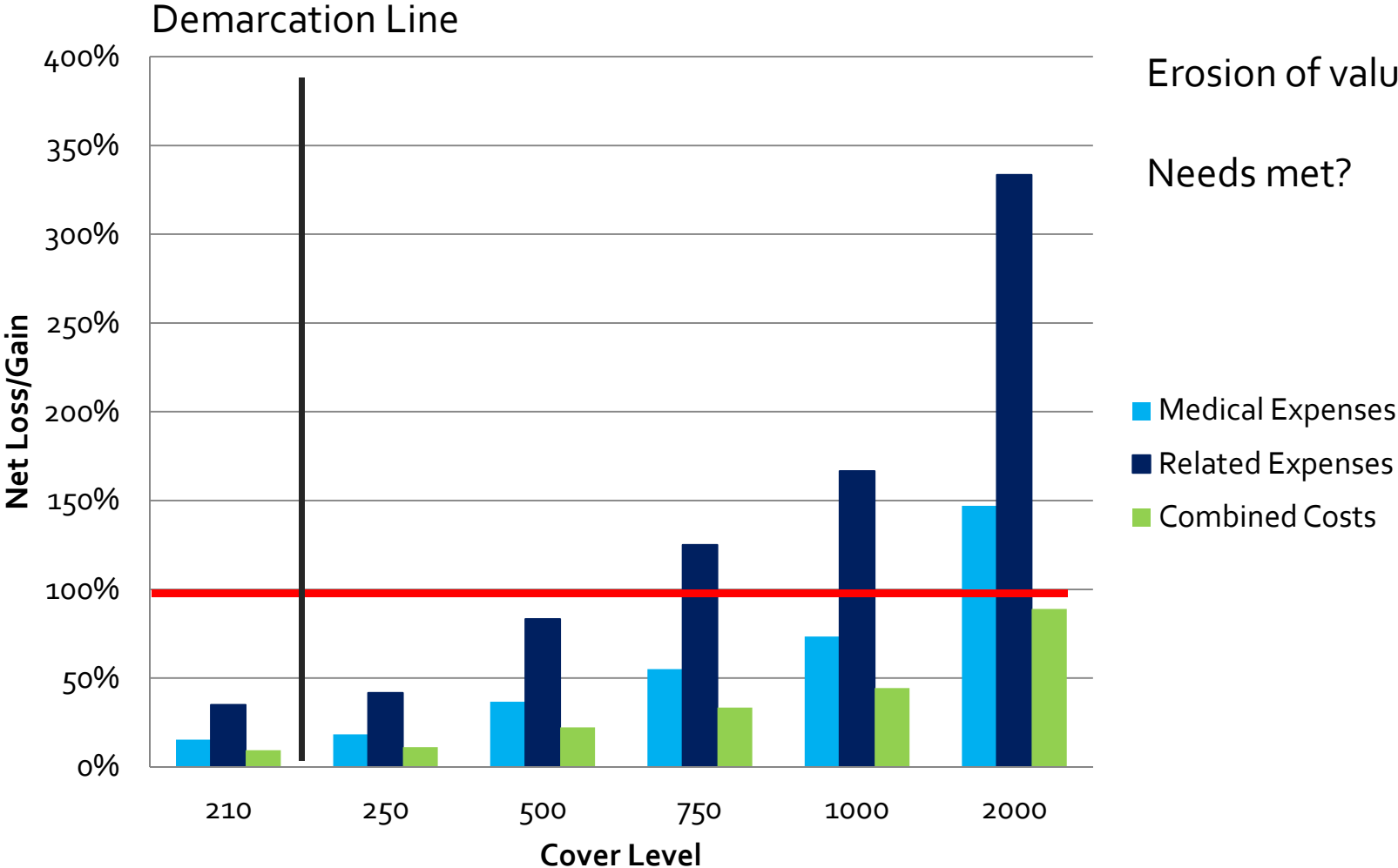
Income	Current Demarcation	Revised Demarcation
H <sub>1</sub>	Up to R 1,000 (contribution less than 10% of income for all ages)	Maximum benefit of R105 per day
H <sub>2</sub>	Up to R 2,000 (contribution less than 10% of income for all ages)	Maximum benefit of R210 per day

# Impact of Revised Demarcation (H1)



Source: LAC Signal model, MMI data, RPDA, 2012 and product brochures.

# Impact of Revised Demarcation (H2)



Source: LAC Signal model, MMI data, RPDA, 2012 and product brochures.

## Concluding Remarks

---



- 70% cap would likely do more harm than good
  - Make product inefficient
  - Reduce incentive for insurers
  - Increase overhead costs
  - Restrict eligibility
- Private health insurance is usually a feature of an NHI type system, but SA products and market could benefit from greater transparency (possible regulatory requirement)
- Structure of NHI could impact on the demand for both HCP and Gap cover products

# Concluding Remarks



- 
- Key Results:
    - HCP are significantly cheaper than Medical Schemes but are not able to provide cover for private facility costs
    - HCP could be an effective vehicle to fund both the direct and related costs of a major medical event for low income persons in state facilities – questions about value
    - The revised demarcation aims to protect medical scheme risk pools, but could eliminate a possibly effective product class