

Social Security and Healthcare in South Africa

IMSA Workshop
27 September 2007

integrated
healing



Brief

Outcomes:

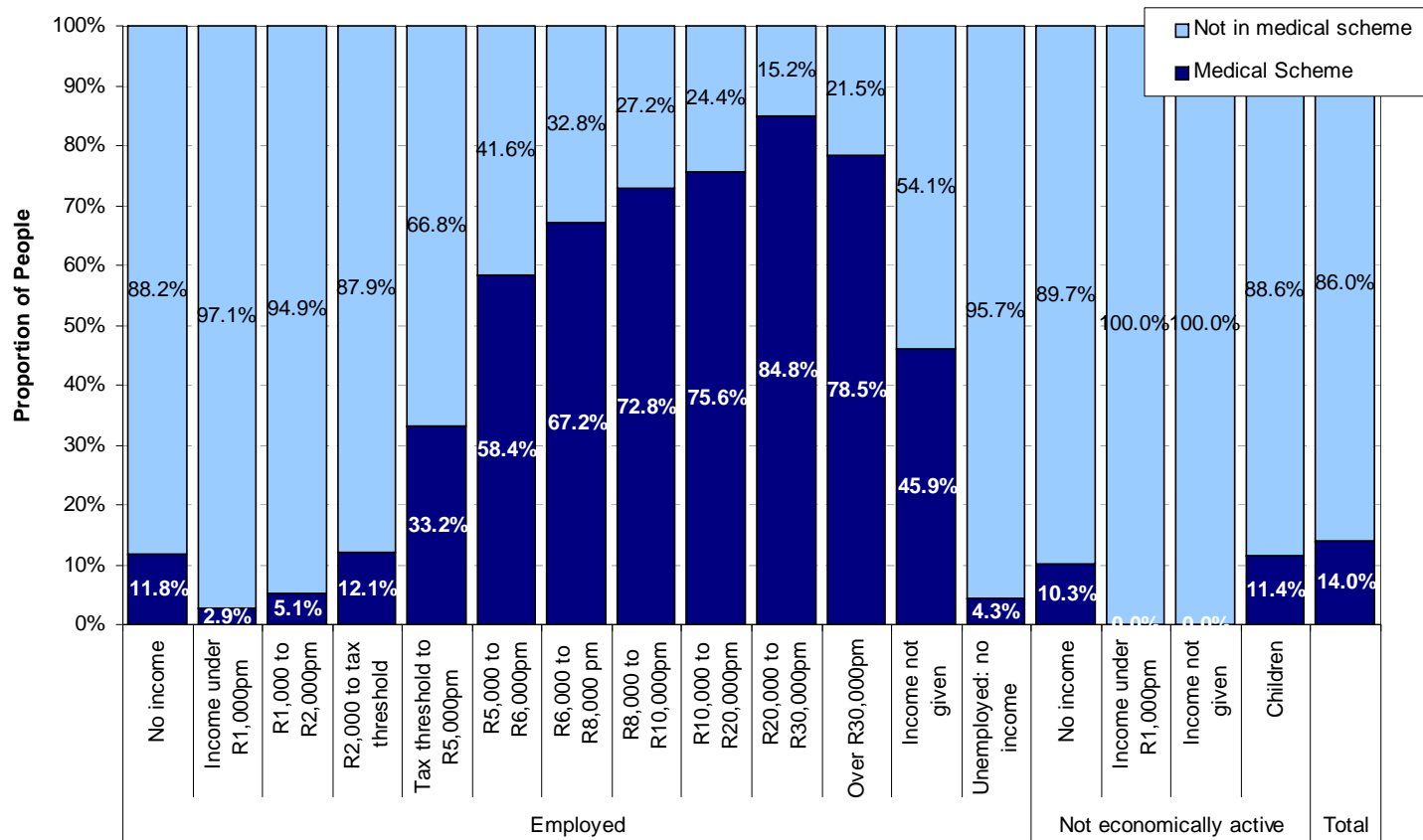
- Brief overview of SHI/NHI;
- Roles of public and private sectors.
- Understand in more depth some of the basic tenets of SHI / NHI (e.g. REF, basic package/common benefits, etc) and its operation in short-to medium term;
- Role in the common benefits of
 - Pricing/cost
 - Health outcomes and quality



Affordability of Private Healthcare



Medical Scheme Membership by Individual Income

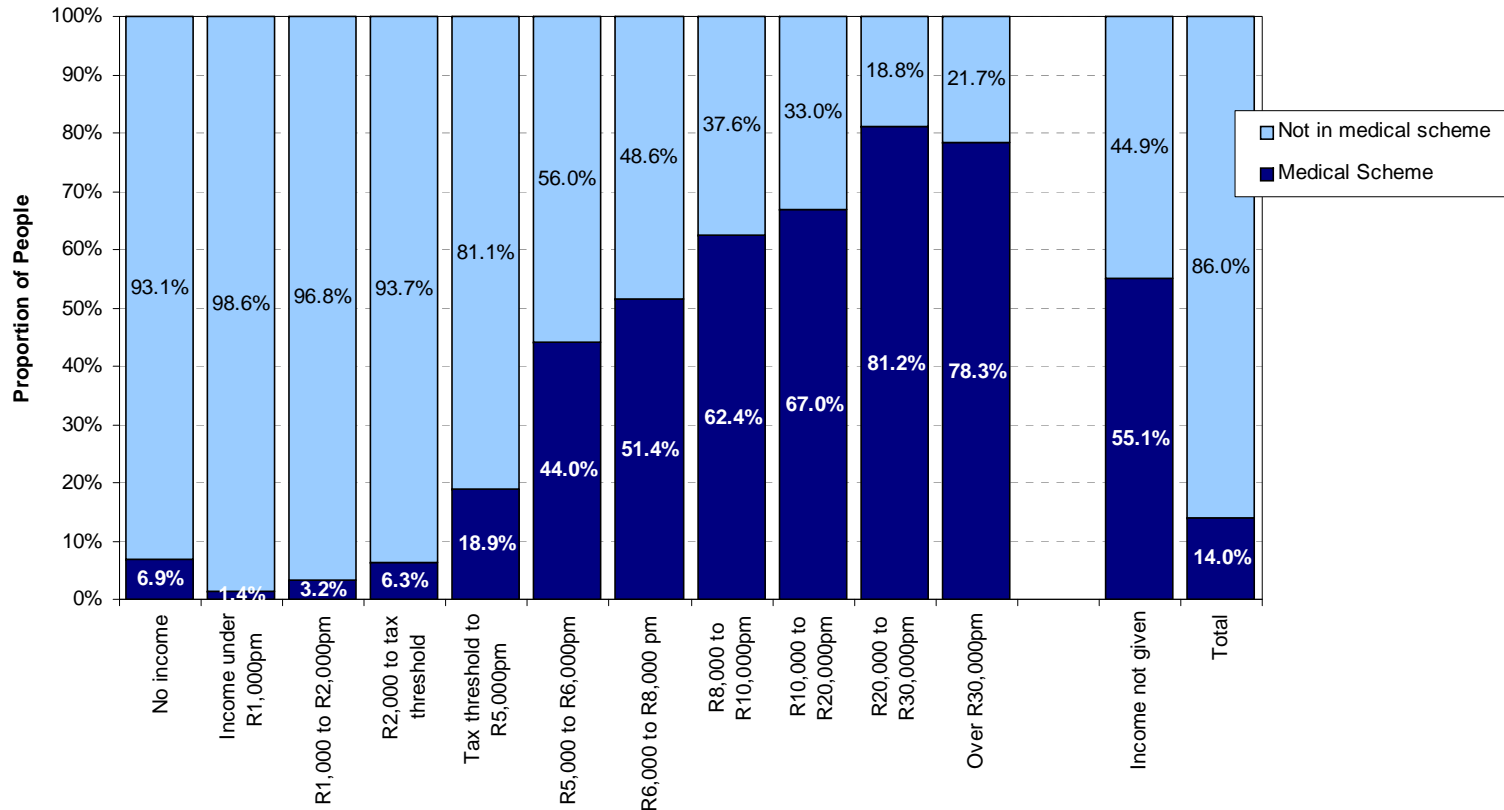


Affordability



Source: GHS2005

Medical Scheme Membership by Highest Household Income

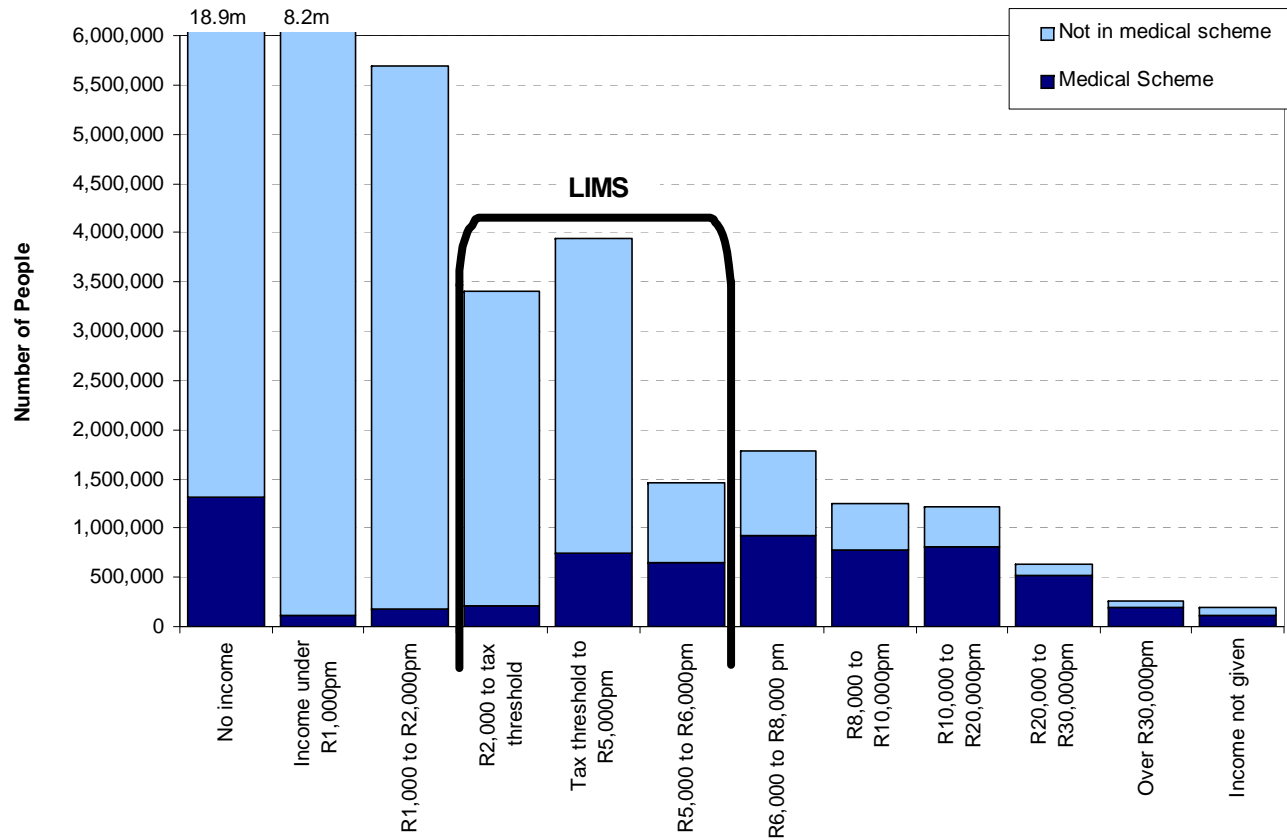


Affordability



Source: GHS2005

Medical Scheme Membership by Highest Household Income



Affordability



Source: GHS2005

Public and Private Healthcare



Purpose of Health Financing

- To make funding available, and set the right financial incentives for providers, to ensure that all individuals have access to effective healthcare.
- Reducing or eliminating possibility that an individual will be unable to pay for such care, or will be impoverished as a result of trying to do so.

Source: WHO World Health Report 2000



Purpose of Health Financing

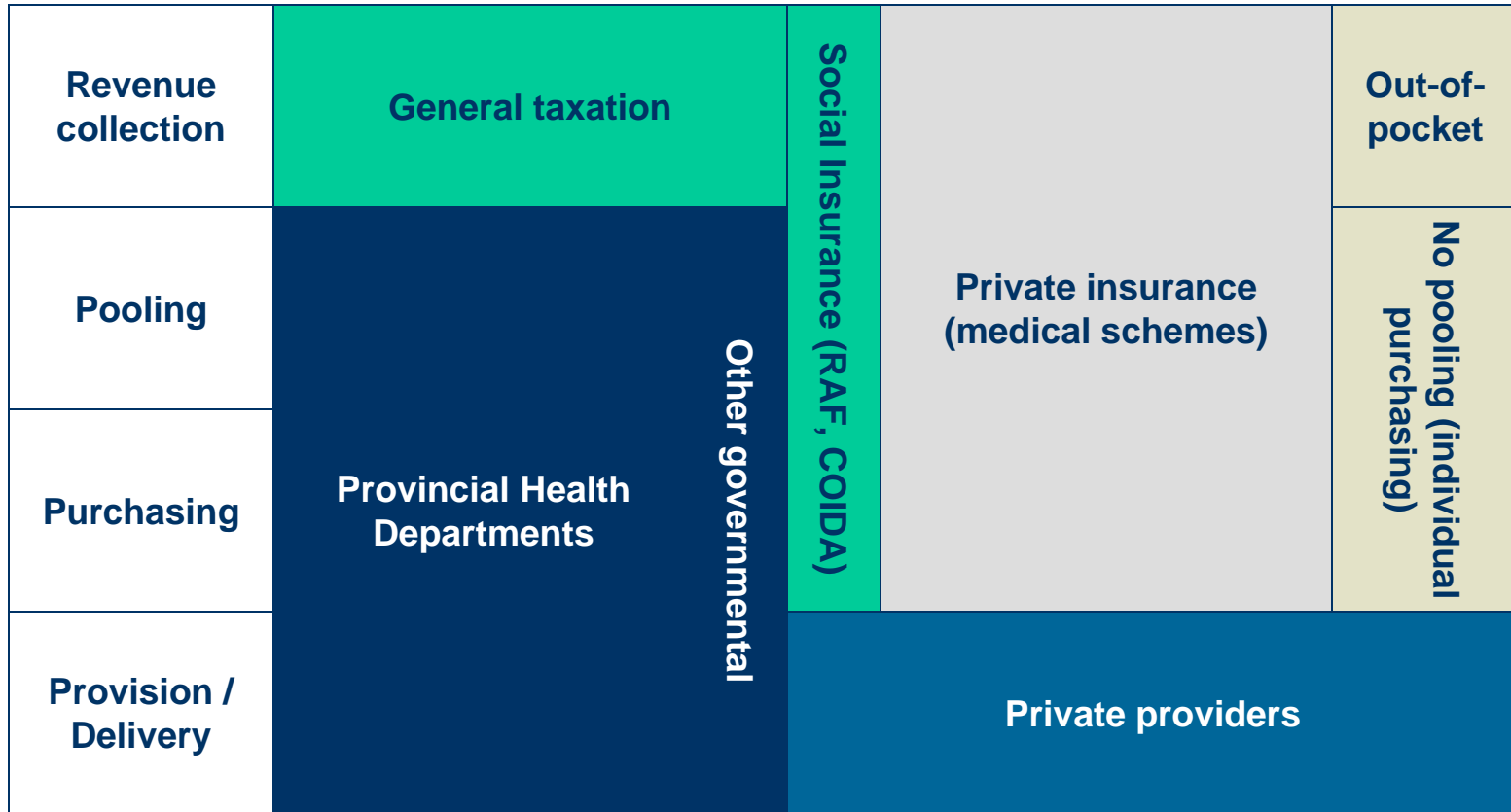
- To ensure access, three interrelated functions of health system financing are crucial:
 - revenue collection
 - pooling of resources
 - purchasing of interventions.
- For the ...
 - delivery of healthcare.

Source: WHO World Health Report 2000



South Africa: Current

Kutzin Framework diagram



Drawn using value of expenditure

Source: Ministerial Task Team on SHI



“Public vs. Private” Fight

- “Recent statements by the **chairman of the South African Medical Association (SAMA), Dr Kgosi Letlape**, about a single healthcare system in SA have caused some confusion in private healthcare circles, with some role-players expressing their concern **about the survival of private practice in such a system.**”
- Speaking at the SA Human Rights Commission's (SAHRC) public hearings on access to healthcare services ...
- SAMA statement ... “he was referring to a single healthcare funding system and that his remarks shouldn’t be seen as a threat to private health care.”



Public/Private is Technical Issue

- The division between the market and the state is always and everywhere an ideological bloodbath.
- The issue is much more fruitfully treated as a TECHNICAL issue:
 - there are clearly-defined theoretical circumstances in which markets will be efficient;
 - in which case distributional goals should happen via cash transfers;
 - equally, there are areas where, again for technical reasons, private provision will be inefficient or non-existent, in which case the state may need to step in.

Source: Nicholas Barr, Professor of Public Economics,
London School of Economics



Public/Private in Food

- UK has a National Health Service
- but **not** a National Food Service

- Nutrition and health are equally important, yet food and medical care are organised very differently: differences rest on **technical characteristics, not ideology.**

Source: Nicholas Barr, Professor of Public Economics,
London School of Economics



Public/Private is Technical Issue

- Markets are neither good nor bad; they are enormously useful in well-known and widely applicable circumstances, less useful in others.
- **Ideology** should come into the picture at the stage of setting the **objectives of policy** – how much redistribution should there be, how much weight should be given to promoting equal access to health care and education?
- **But once the objectives are set the method should be chosen mainly on technical grounds.**
- The state is much more than a safety net. It does things which private markets for technical reasons either would not do at all, or would do inefficiently.

Source: Nicholas Barr, Professor of Public Economics,
London School of Economics



Ideology in South Africa



ANC Health Plan, 1994

Principles for National Health Insurance:

- Current medical schemes form the basis.
- Membership compulsory all formal sector employees and dependants.
- Schemes may not exclude high risk.
- Basic package of care to be statutorily defined.
- Contributions for basic package will be income-related.
- Pooled in central equalisation fund; each scheme paid according to risk profile i.e. a risk adjusted capitation fee.
- Schemes can offer cover above essential package.
- Long term goal for all citizens, including unemployed, to be covered under the NHI system.



1995 National Health Insurance Committee of Inquiry

- Medical scheme reform featured prominently. Policy objectives:
 - Reinforce *agency function* of third-party payer [Medical schemes as purchasers of care for their members].
 - Reinforce *uniformity* in the benefit structure of medical schemes.
 - **Schemes should operate on the basis of *solidarity***, i.e. groups not treated differently within a scheme.
 - Risk-sharing between as large a group as possible. Long-term, ensure *minimum level of cover* for all within the public and private sectors.

Medical Schemes to operate on the basis of solidarity.



Return to Solidarity Principles

1989 and 1993 Reforms

Mutuality = commercial insurance

Voluntary membership. Risk-rating and underwriting.

Contribute according to risk.

Medical Schemes Act, 1998
implemented January 2000

**Open Enrolment
Community Rating
Minimum Benefits**

Solidarity = social insurance

Compulsory membership for all or defined group.

Contribute equally or according to ability to pay.



National Health Act, 2003

- ... recognising the socio-economic injustices, imbalances and inequities of health services of the past
- ...the right of everyone of access to health services
- ...reasonable measures, within available resources to achieve the progressive realisation of these rights
- .. to establish a national health **system which encompasses public, private and non-governmental providers of health services**; ...

Progress measured against goals of **equity, efficiency and access to the healthcare system**



Taylor Committee Report, 2002

Transforming the Present, Protecting the Future

**Report of the Committee of Inquiry
into a Comprehensive Social
Security System for South Africa**

March 2002



Taylor Committee of Inquiry

- Committee of 20 members appointed by Cabinet, chair Vivienne Taylor. Work began in mid 2000.
- Final report March 2002, released by Cabinet 2 May 2002.
- Terms of reference included :
 - National retirement system
 - Social assistance grants
 - Social insurance schemes
 - Unemployment insurance
 - Health funding and insurance



Comprehensive Social Protection Package

| | Application | Key components |
|--------------------|---|--|
| Income poverty | Universal (a) | <ul style="list-style-type: none"> • Basic Income Grant • Child support grant • Maintained state Old Age grant |
| Capability poverty | Universal/ Eligibility criteria (b) | <ul style="list-style-type: none"> • Free and adequate publicly-provided healthcare • Free primary and secondary education • Free water and sanitation (lifeline) • Free electricity (lifeline) • Accessible and affordable public transport • Access to affordable and adequate housing • Access to jobs and skills training |
| Asset poverty | Universal/ Eligibility criteria (c) | <ul style="list-style-type: none"> • Access to productive and income-generating assets such as land and credit • Access to social assets such as community infrastructure |
| Special needs | Eligibility (d) criteria | <ul style="list-style-type: none"> • Reformed disability grant, foster care grant, child dependence grant |
| Social insurance | Eligibility (e) | <ul style="list-style-type: none"> • Cover for old age, survivors', disability, unemployment, and health needs |

Source : Social Security Committee Report 2002



Taylor Committee, 2002

Private Social Insurance

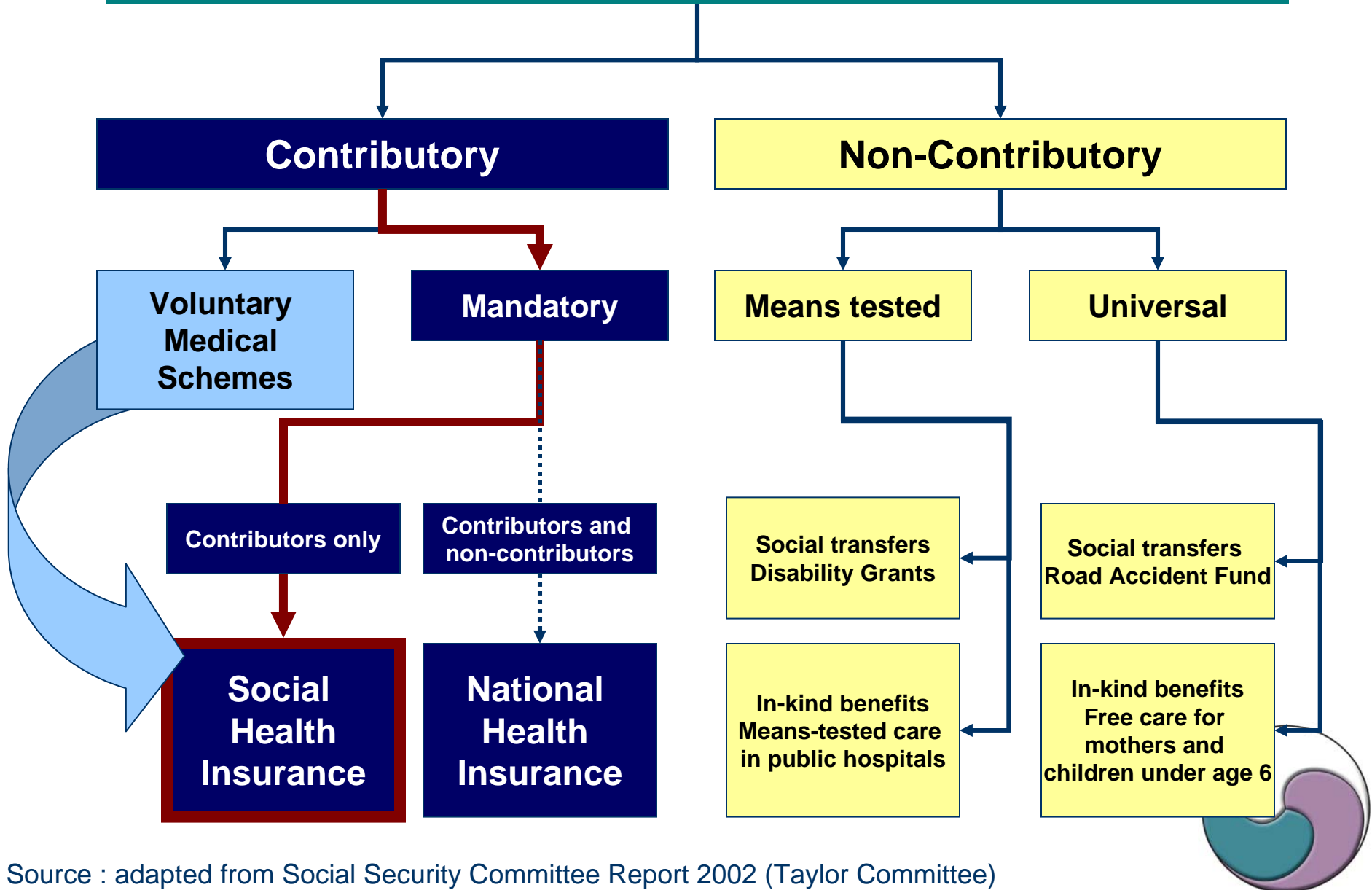
Action required in a number of areas :

- Of countries at comparable levels of development, South Africa is unusual in not mandating cover.

Mandatory Contributions
Mandatory Cover

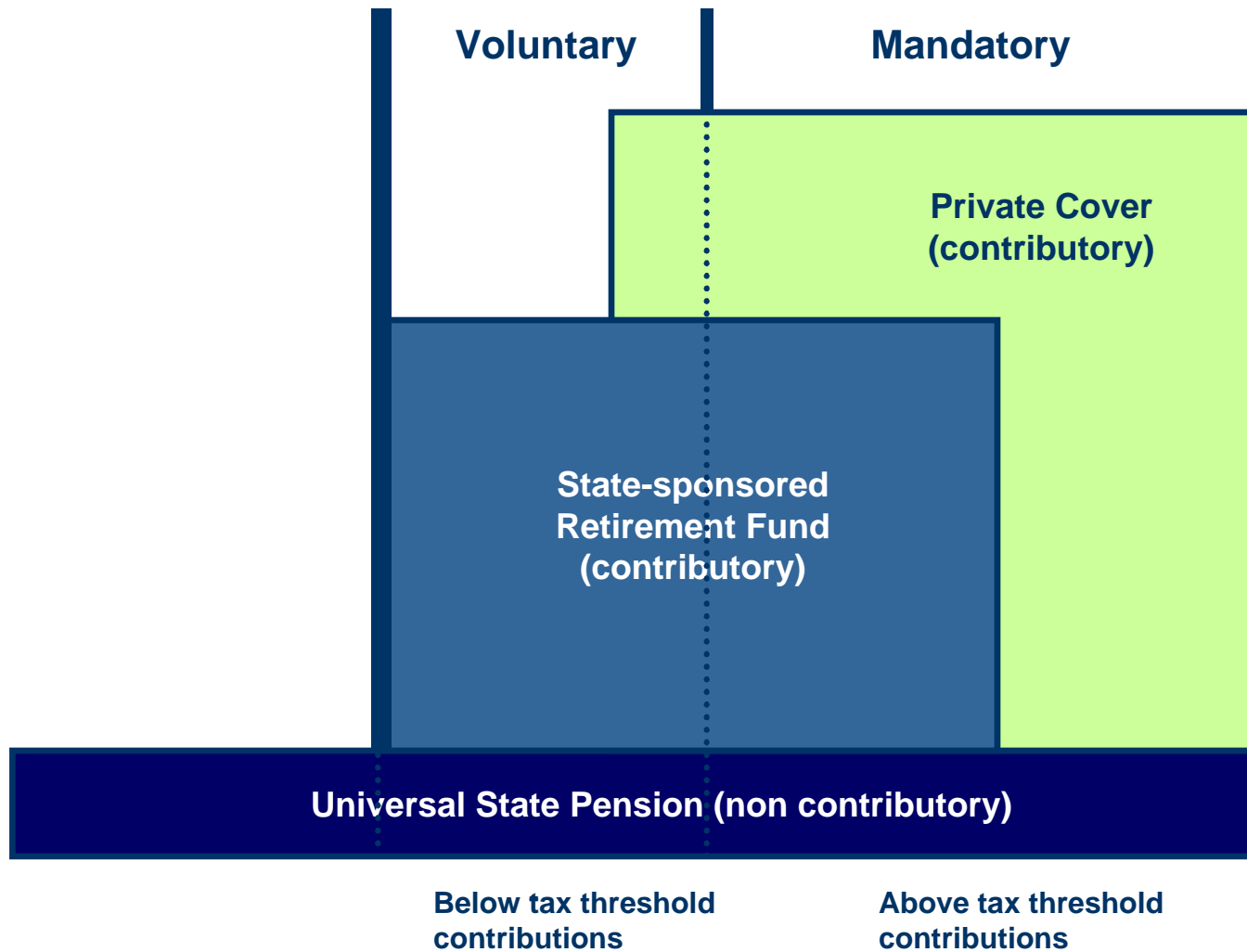


Social Security System for Healthcare



Source : adapted from Social Security Committee Report 2002 (Taylor Committee)

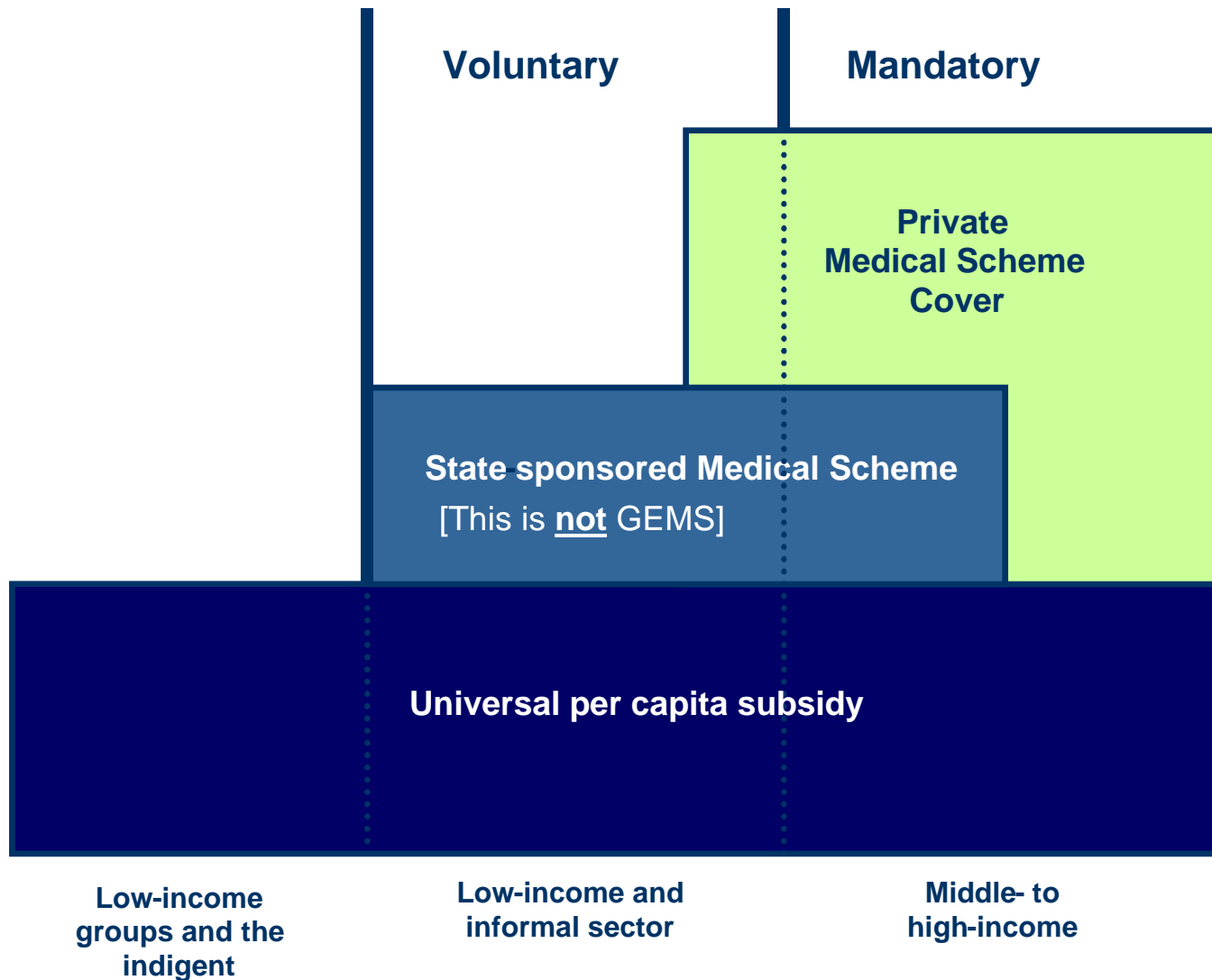
Retirement Provision



Source : Social Security Committee Report 2002



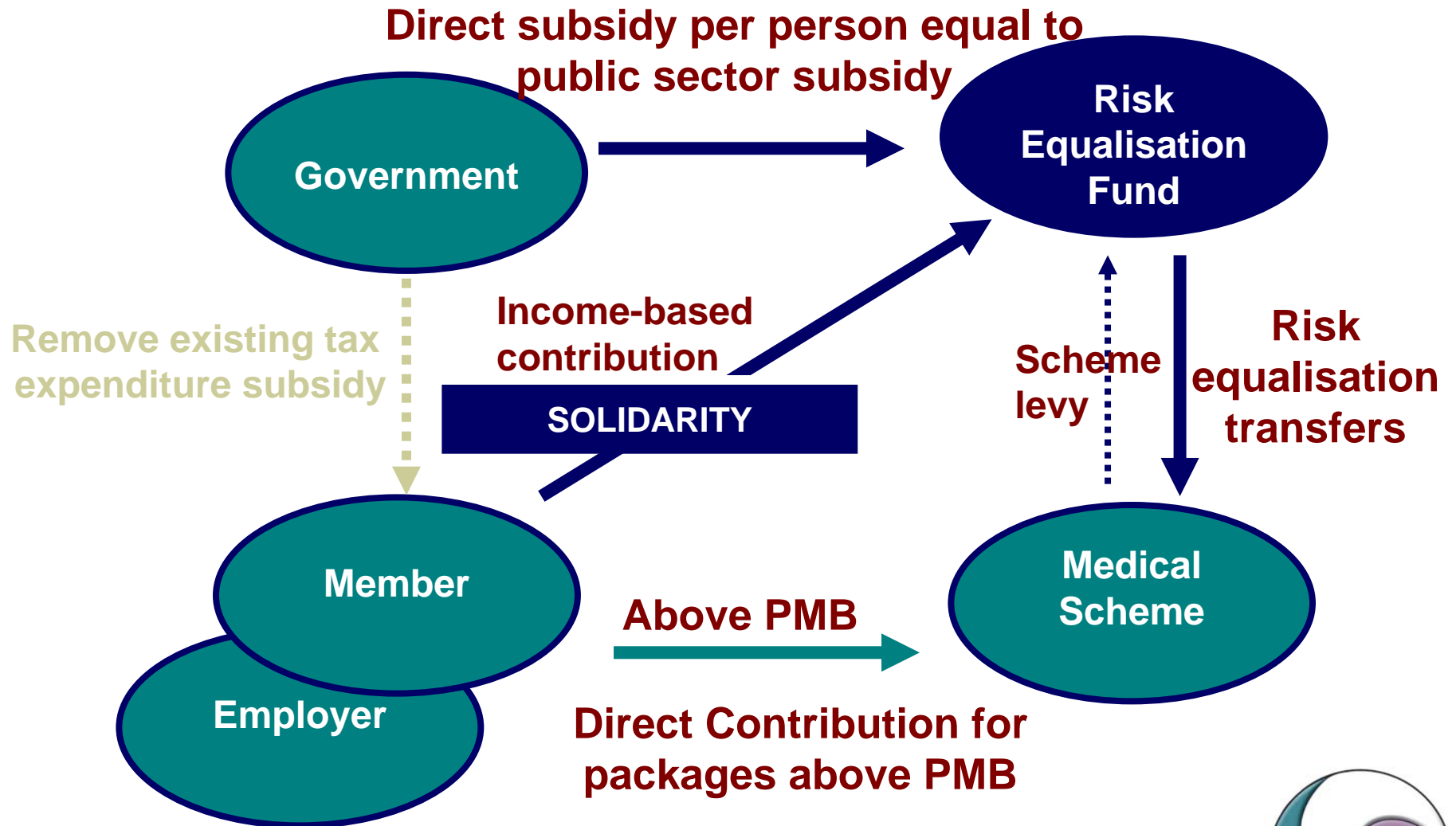
Healthcare Cover



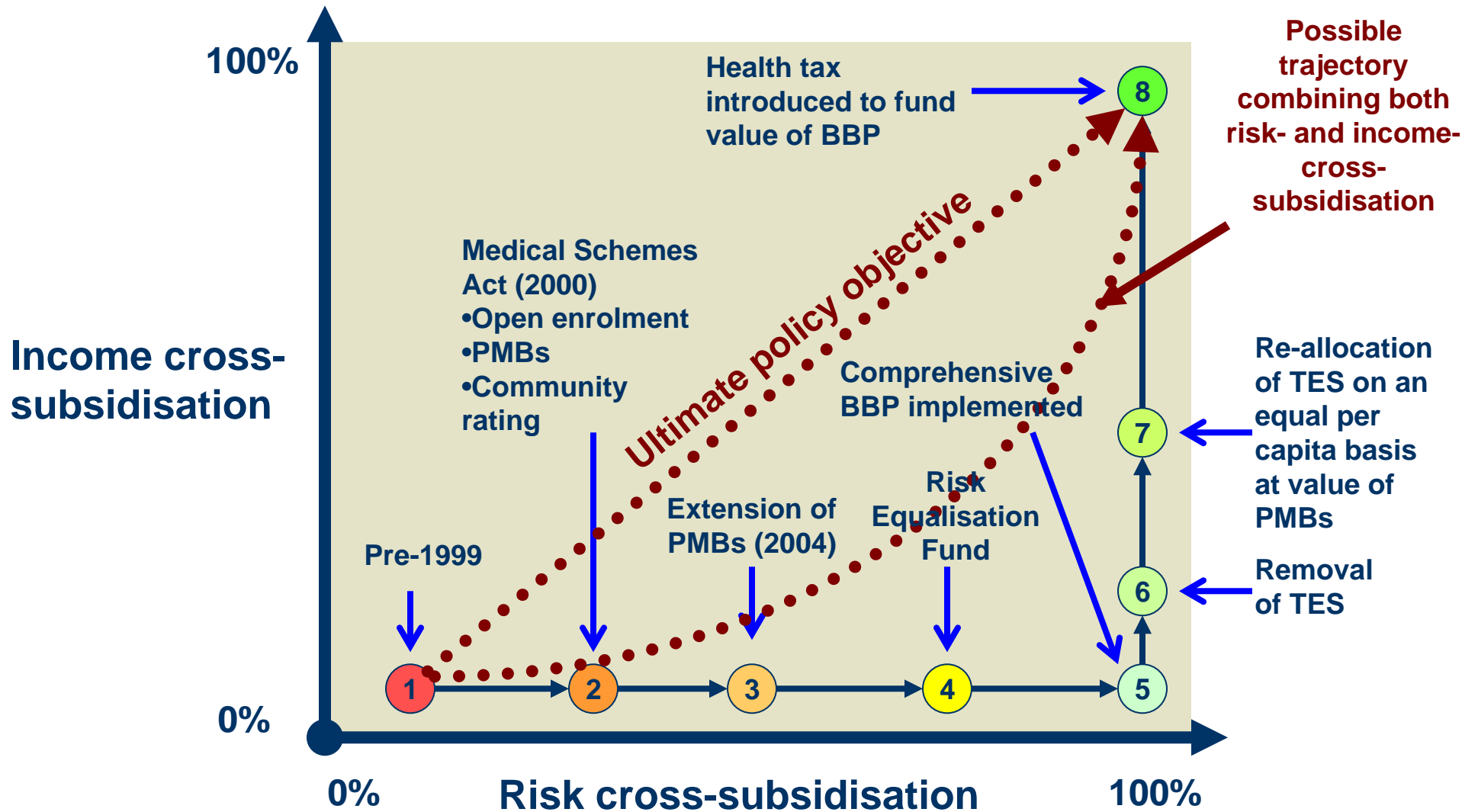
Source : Social Security Committee Report 2002



Social Health Insurance



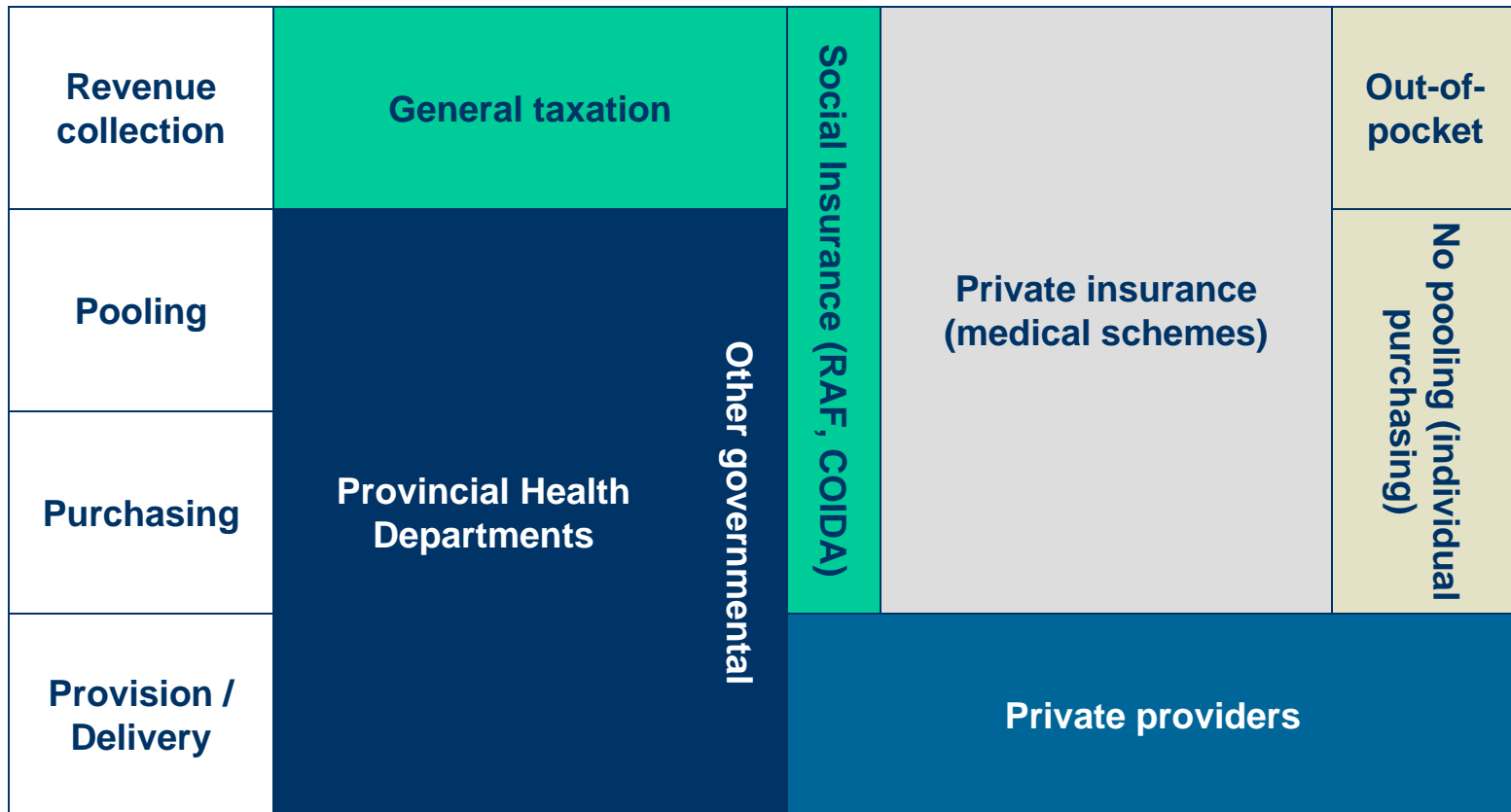
Policy Objective and Trajectory



Source: MTT July 2005

South Africa: Current

Kutzin Framework diagram



Drawn using value of expenditure

Source: Ministerial Task Team on SHI



South Africa: Social Health

Kutzin Framework diagram

| | | | | |
|----------------------|-------------------------------|-------------------------------|-------------------------------------|--|
| Revenue collection | General taxation | Social Insurance (RAF, COIDA) | Social Insurance (payroll tax) | Out-of-pocket |
| Pooling | Provincial Health Departments | | Risk Equalization Fund | No pooling (individual purchasing) |
| Purchasing | | | Private insurance (medical schemes) | |
| Provision / Delivery | | | Other governmental | Private providers (including public hospitals) |

Source: Ministerial Task Team on SHI



South Africa: National Health

Kutzin Framework diagram

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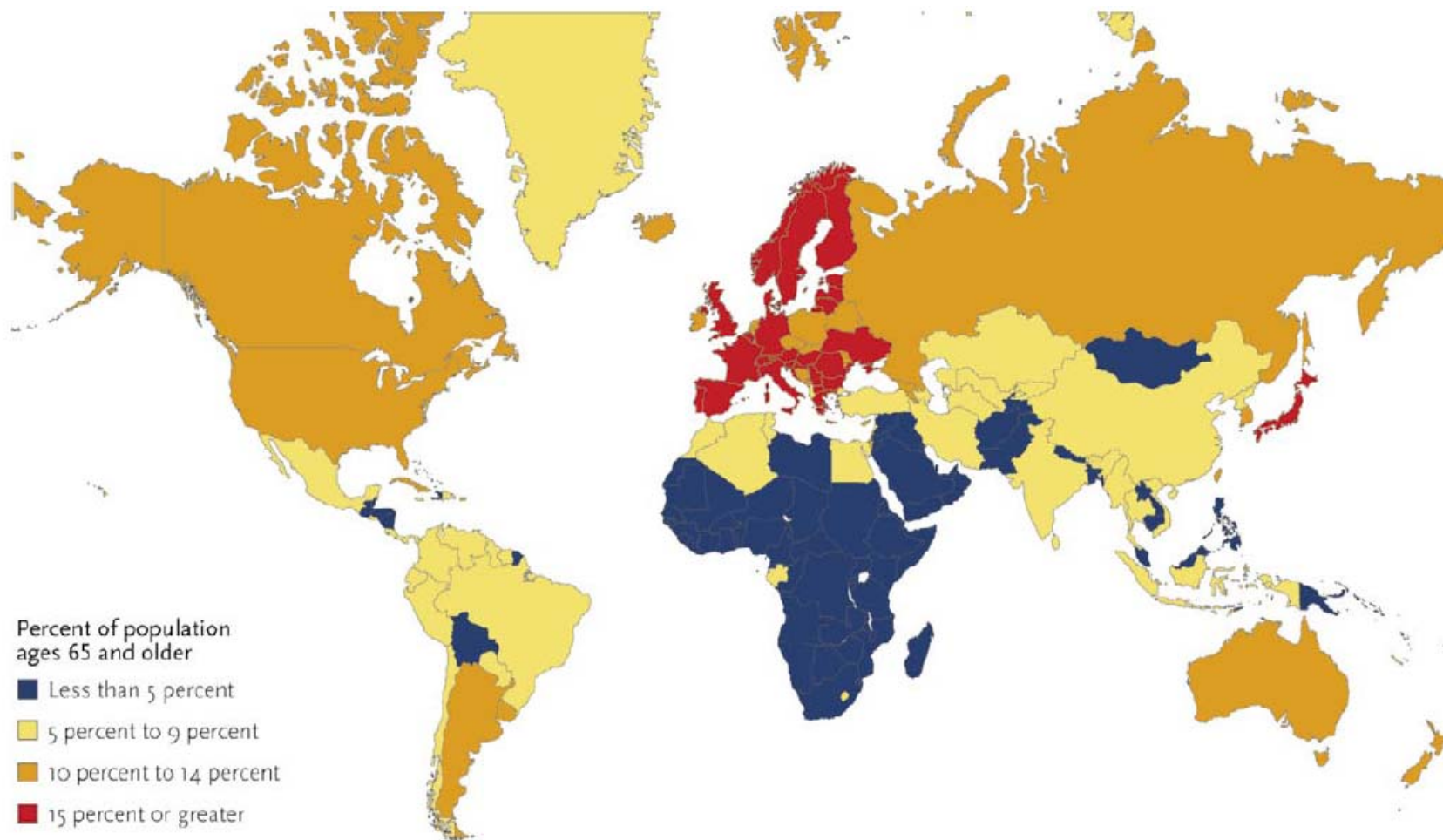
Source: Ministerial Task Team on SHI



Realities of Social Security in South Africa



World Aging and Countries



African countries at much lower levels than the rest of the world.

Source : Population Reference Bureau, 2007



World Aging and Regions

| | Percent of Persons Ages 65 and Older | | |
|---------------------------|--------------------------------------|-----------|-----------|
| | 2007 | 2025 | 2050 |
| WORLD | 7 | 10 | 16 |
| Industrialized Countries | 16 | 21 | 26 |
| Developing Countries | 6 | 9 | 15 |
| Europe | 16 | 21 | 28 |
| North America | 12 | 18 | 21 |
| Oceania | 10 | 15 | 19 |
| Latin America & Caribbean | 6 | 10 | 19 |
| Asia | 6 | 10 | 18 |
| Africa | 3 | 4 | 7 |

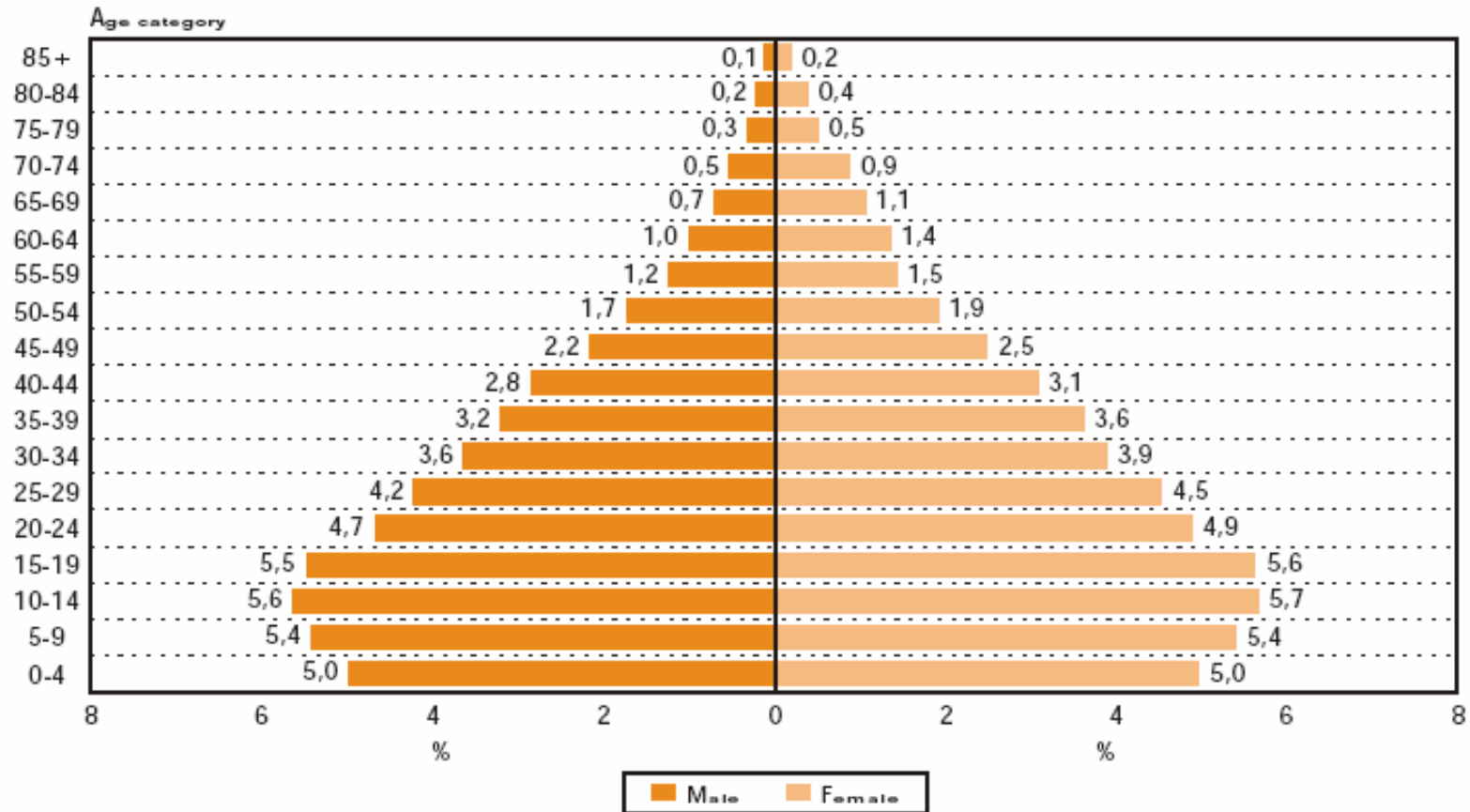
SOURCES: C. Haub, 2007 World Population Data Sheet, and United Nations Population Division.

Africa region at much lower level than the rest of the world.



Source : Population Reference Bureau, 2007

South African Population Pyramid

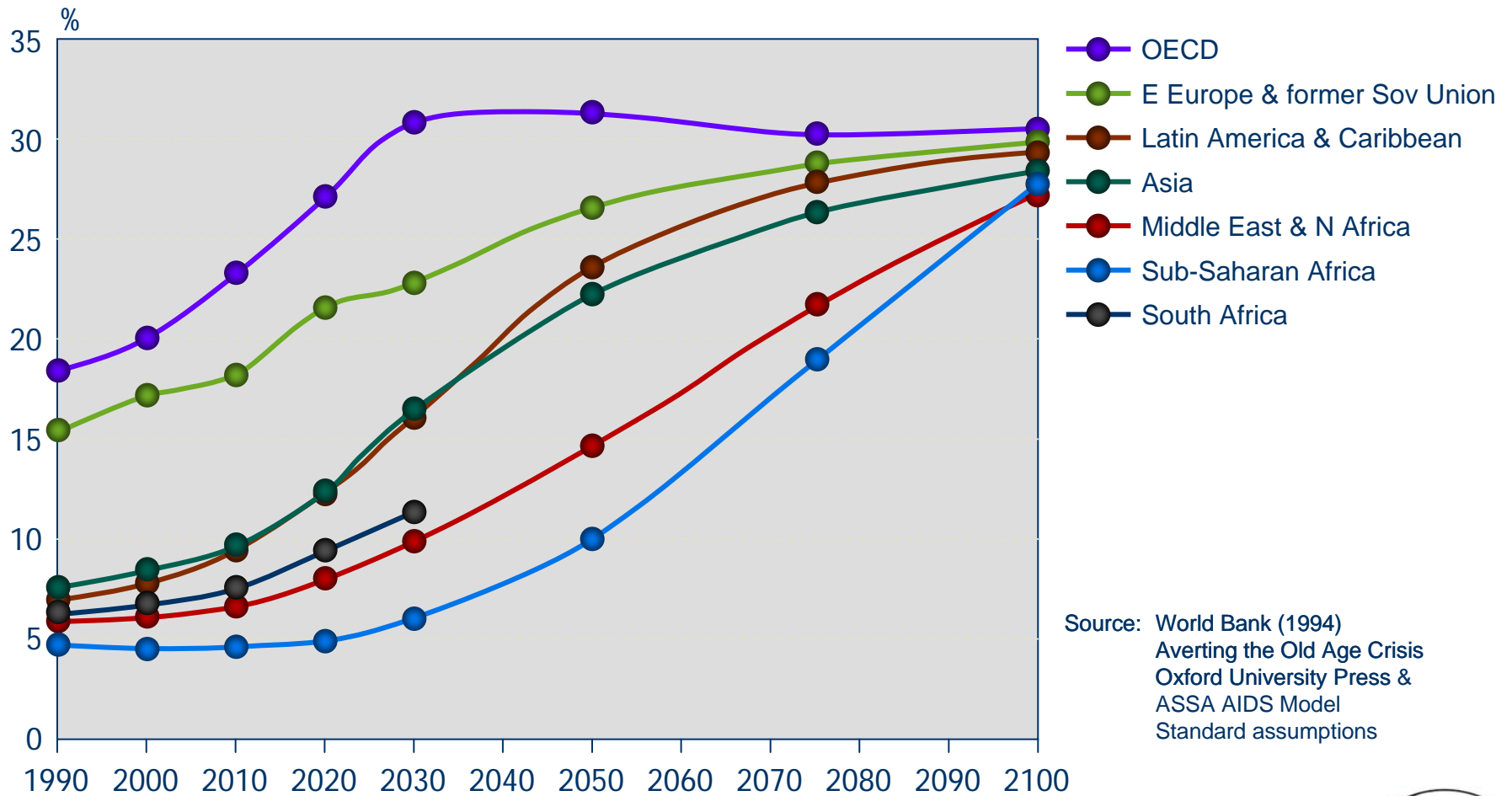


**Total population mid-2006 estimated to be 47.4 million people.
 42.6% are under age 20 and 61.5% are under age 30.
 Only 5.0% of the population are over age 65.**

Source: StatsSA Census 2001 and mid-year 2006 population estimate



World Aging and South Africa



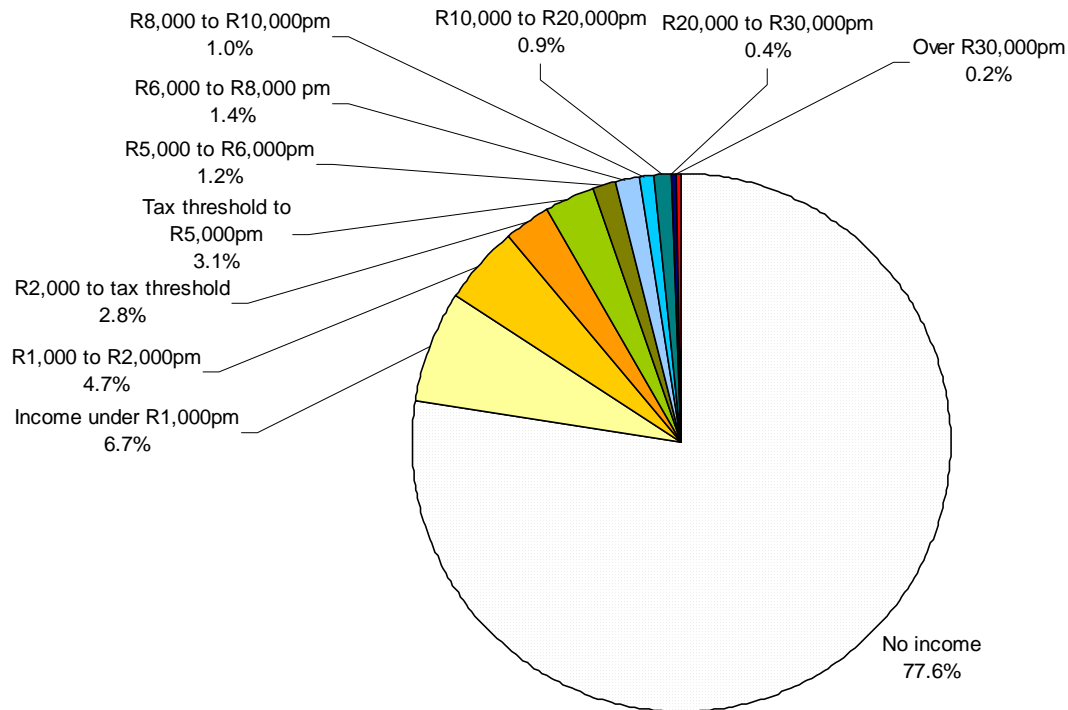
Population over 60 years old expected to grow rapidly

Source : Rob Rusconi



Individual Income Group

Total Population



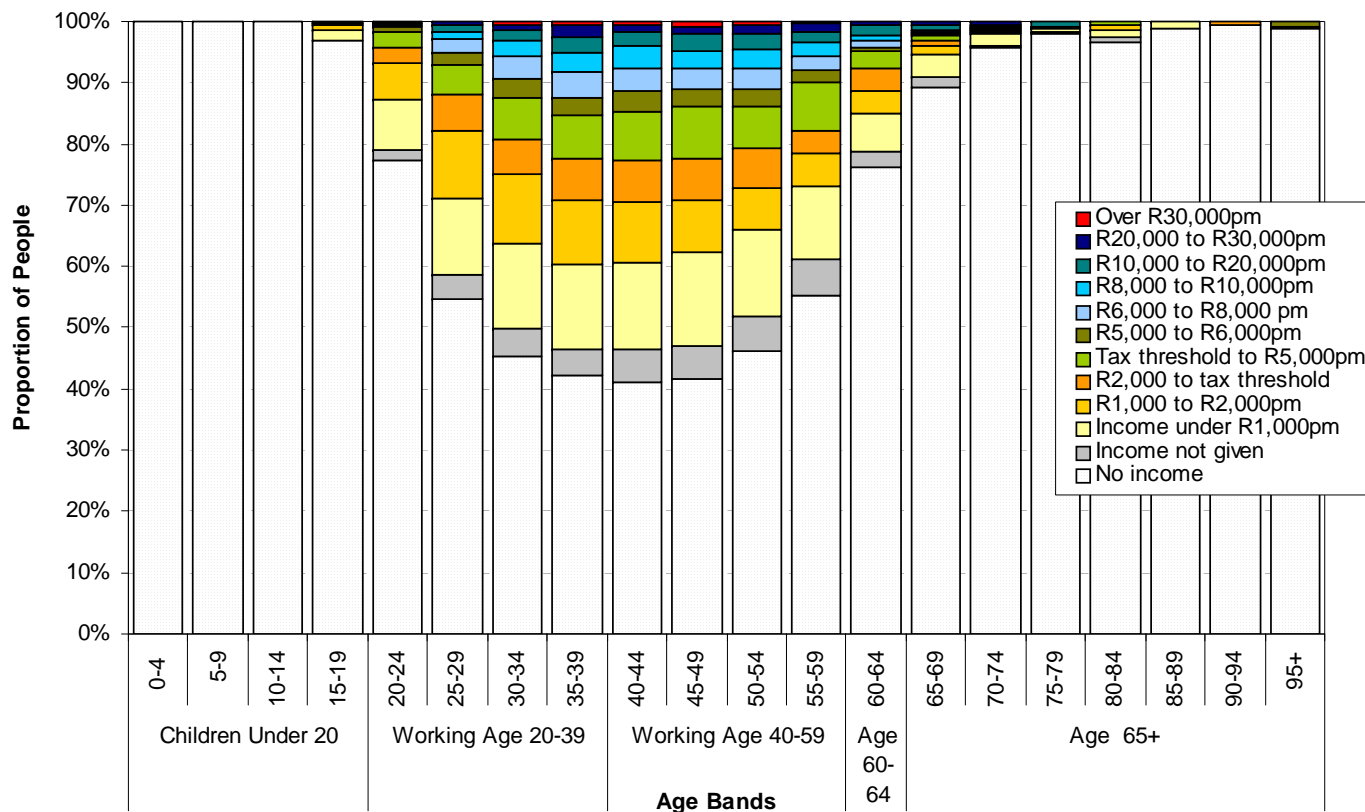
Only 22.4% of individuals report having income.

Only 8.2% of individuals have income above the tax threshold.

Source: GHS 2005 data



Individual Income in South Africa

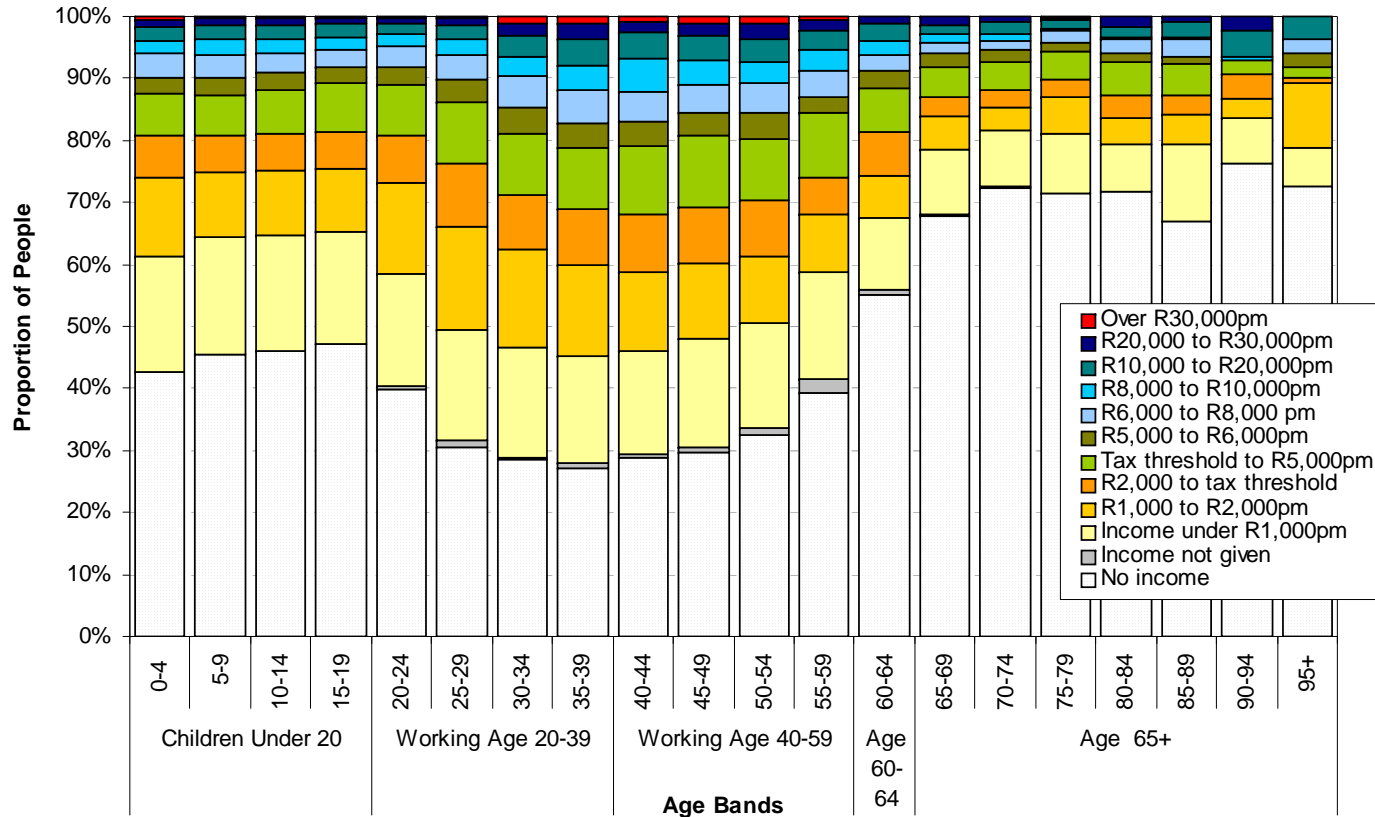


54.0% of the working age population do not earn any income.

Source: Extracted for DoSD using GHS 2005 data



Highest Household Income

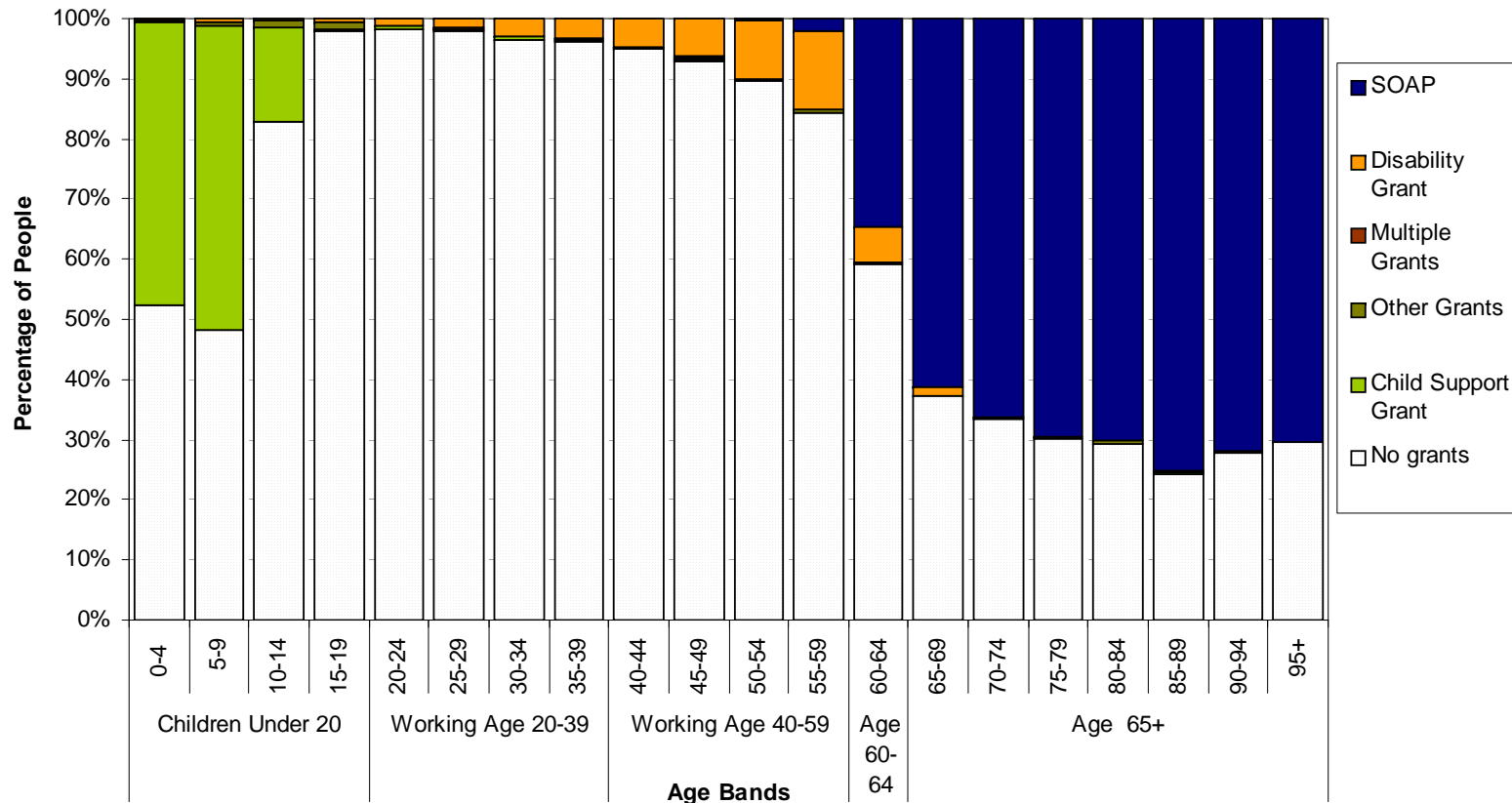


**Attach everyone in household to income level of highest earning person in that household.
40.3% live in a household where there is no-one who earns an income.**

Source: Extracted for DoSD using GHS 2005 data



Individuals Receiving Social Security by Age

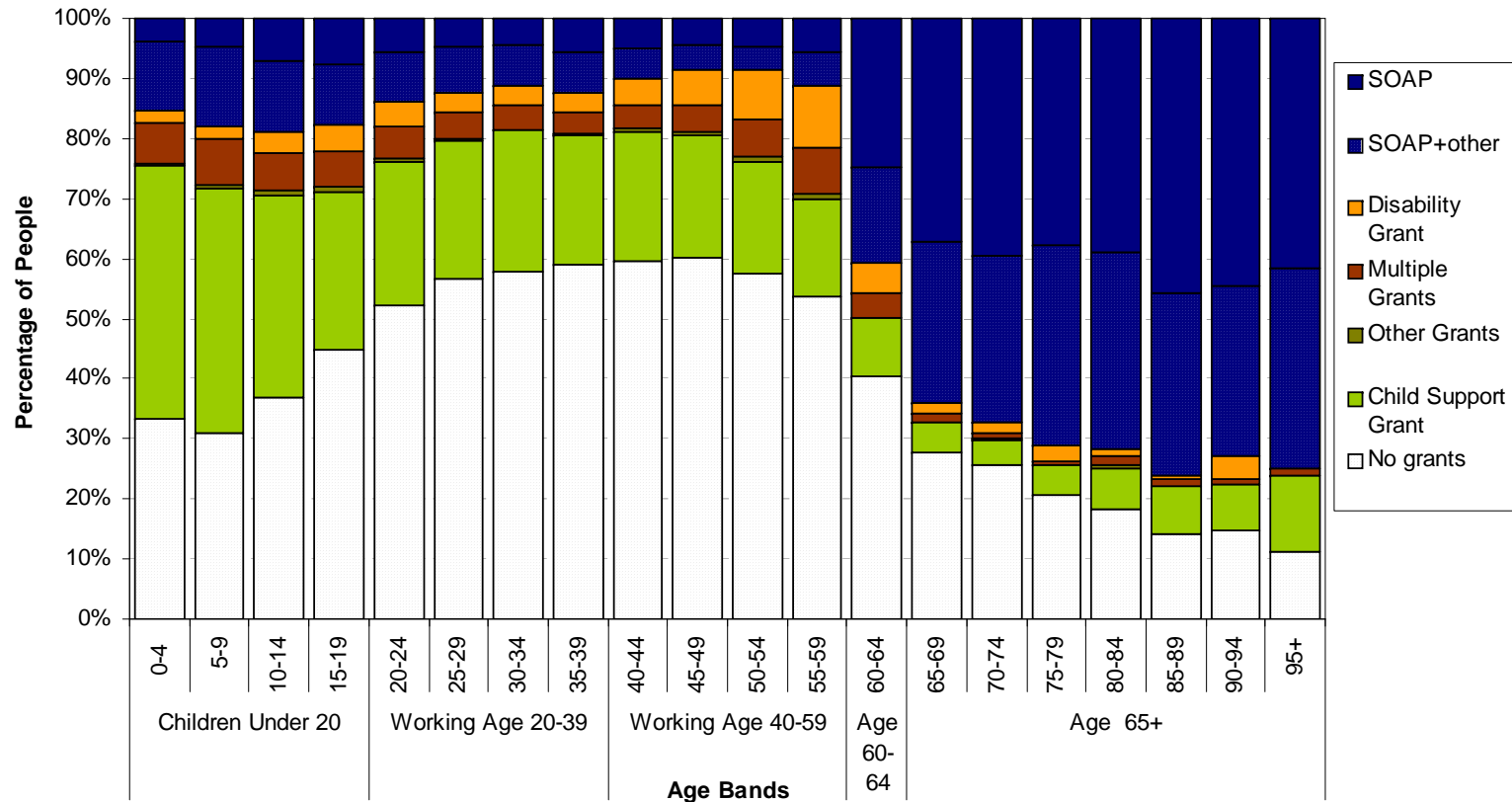


19.5% of individuals in the country receive a Social Security grant of some form. SOAP, Disability and Child Support are major grants.

Source: GHS 2005 data



People in Households Receiving Social Security



54.0% of people are in households receiving a Social Security grant. SOAP and Child Support have major effect on households

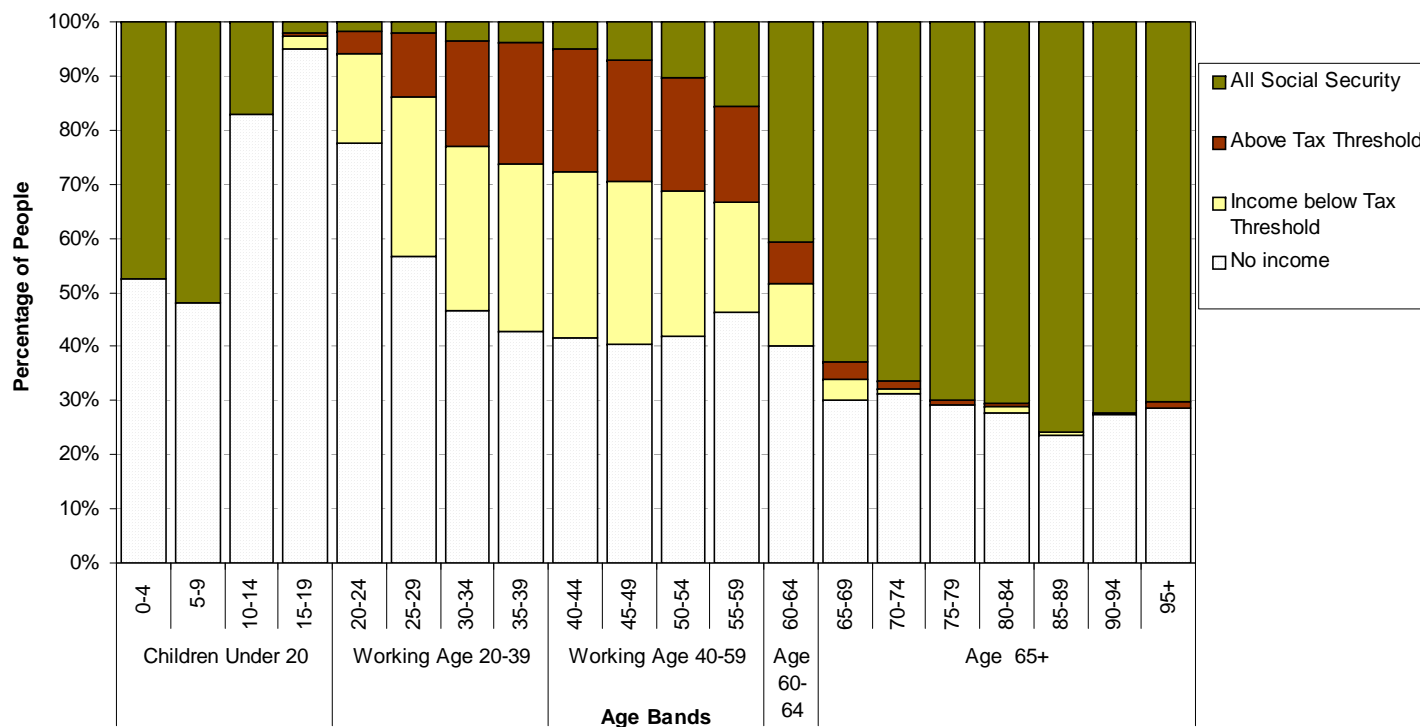
Source: GHS 2005 data



Design of the Social Security System



Income and Social Security by Age



Combines recipients of Social Security and those with incomes. Recipients and contributors via income tax. (Note VAT collections from all).

Source: GHS 2005 data



Identifying Contributors

Scenario 1



Earning above tax threshold:
4.8 million contributors

Scenario 2

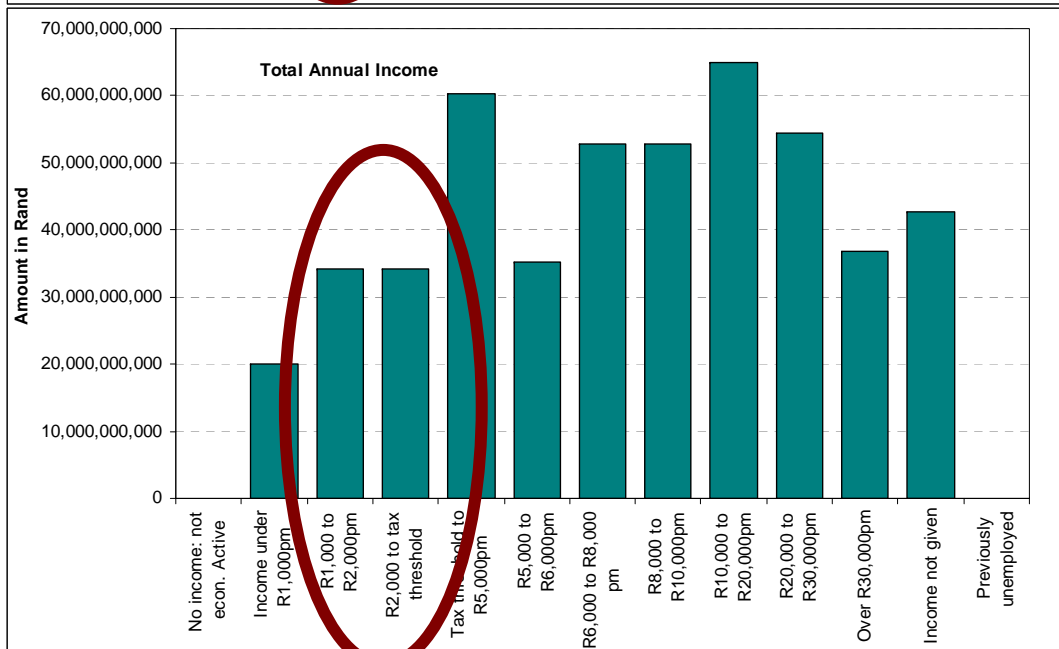
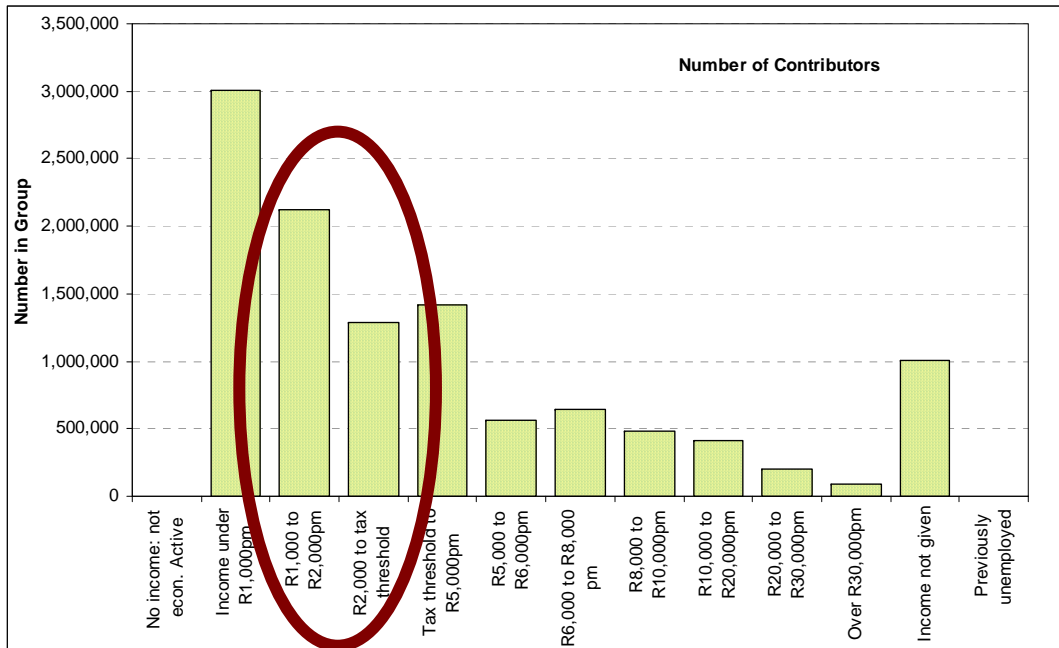


Earning above R2,000 pm
6.0 million contributors

Scenario 3



Earning above R1,000 pm
8.0 million contributors



Source: One year Social Security model, 2005 Rand terms



**What do we mean by
SOLIDARITY ?**

**What degree of
SOLIDARITY do we design
into the mandatory
system?**



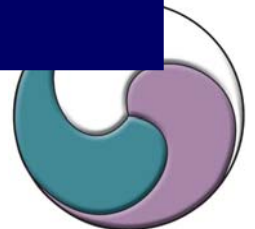
Suggested Principles of Solidarity

- Contributions and benefits for South African citizens.
- Compulsory contributions for all earning over the defined income threshold. (Three possibilities explored: tax threshold, R2000 per month, R1000 per month).
- Contributions while earning between ages 20 and retirement age.
- Retirement age initially set at 65, increases as life expectancy increases.
- Includes self-employed but not foreign workers. Methods to include domestic and farm workers to be pursued.
- Contribute according to **ability to pay**.

Solidarity = social insurance

Compulsory membership for all or defined group.

Contribute equally or according to ability to pay.



Estimate of Social Security Contribution for Health

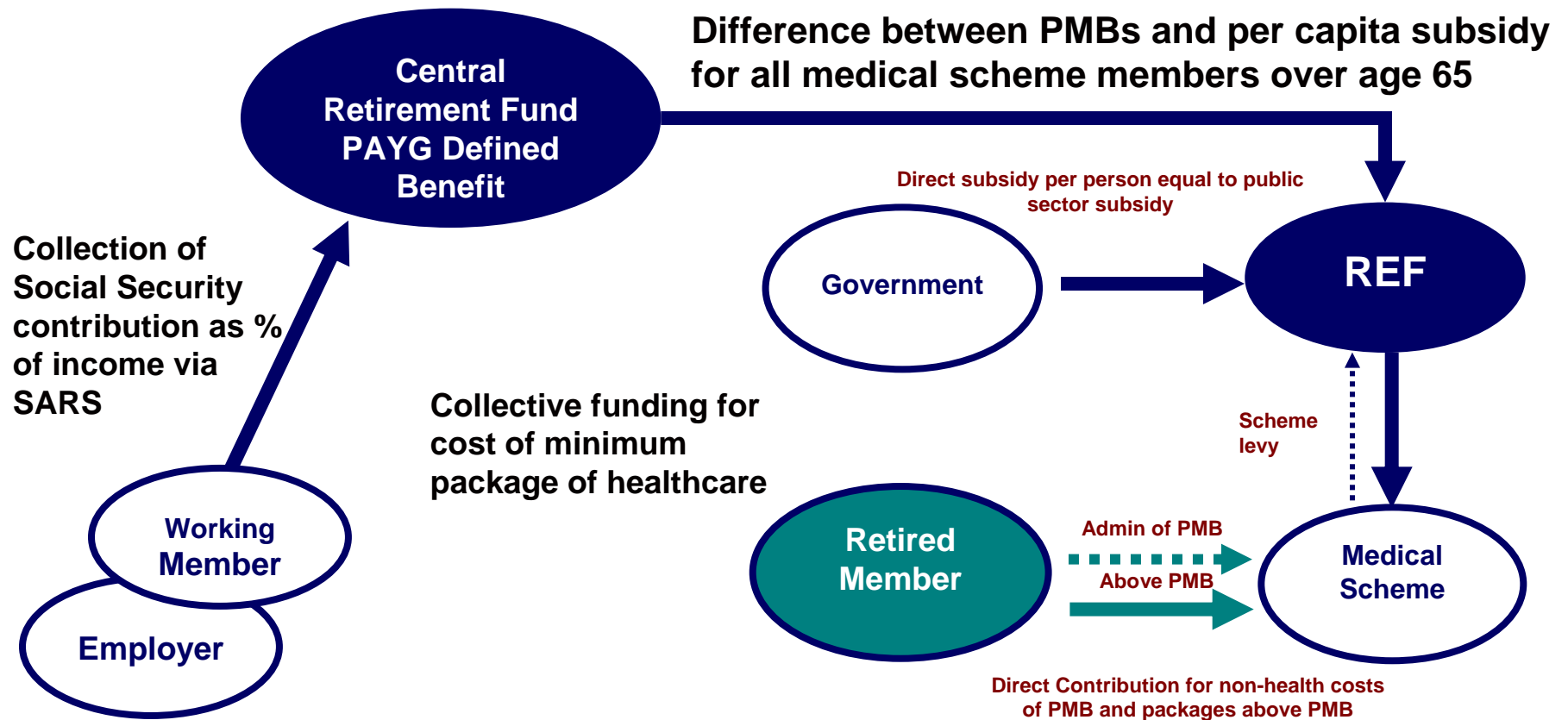
| | Scenario 1 | Scenario 2 | Scenario 3 |
|--|---|---|---|
| | Contributors are those earning above the tax threshold. | Contributors are those earning above R2,000 pm. | Contributors are those earning above R1,000 pm. |
| Social Security Contribution for Working Age and Children as % of income of Contributors | 3.0% | 3.3% | 3.8% |
| Social Security Contribution needed to fund over age 65s as % of income of Contributors | 0.1% | 0.1% | 0.1% |
| Total Social Security Contribution as % of income of Contributors. No Contributions paid if over age 65. | 3.1% | 3.4% | 3.9% |
| Wage Subsidy required to pay total Social Security Contributions for people earning below the tax threshold (R million) pa | not applicable | 1,137 | 2,541 |
| Extra Social Security Contribution for extra R10 of benefit in minimum package | 0.4% | 0.5% | 0.6% |

Estimates using REF Study 2005 and GHS2005. All figures in 2005 Rand terms.

Source: Framework for Post-Retirement Protection in Respect of Medical Scheme Contributions. Prepared for Department of Social Development, June 2007.



Possible Mandatory Funding of Post-Retirement Healthcare



REF receives amount from GSRF for all retired members in lieu of any income-related payment after age 65.

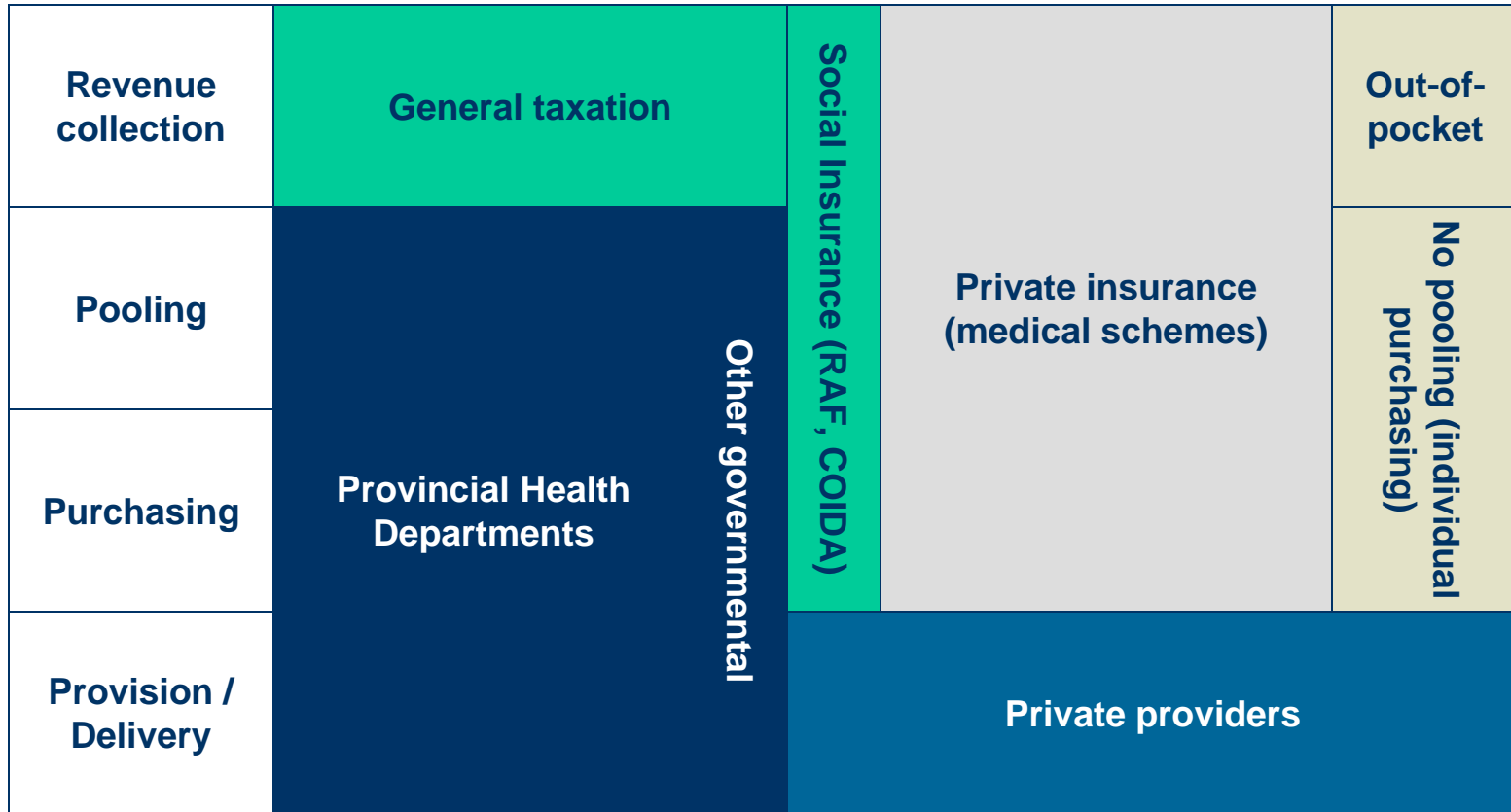


Functions of the Health System



South Africa: Current

Kutzin Framework diagram



Drawn using value of expenditure

Source: Ministerial Task Team on SHI



Revenue Collection

- Process by which the health system receives money from **households** and **companies**, also **donors**.
- Ways of collecting revenue:
 - general taxation;
 - mandated social health insurance contributions (usually salary-related and almost never risk-related);
 - voluntary private health insurance contributions (usually risk-related);
 - out-of-pocket payments;
 - donations.

Source: WHO World Health Report 2000



Pooling

- **Pooling** is the accumulation and management of revenues to ensure that the risk of having to pay for health care is borne by all the members of the pool and not by each contributor individually.
- The **“insurance function”** within the health system, whether explicit (people knowingly subscribe to a scheme) or implicit (tax revenues).
- Main purpose is to **share the financial risk** associated with health interventions for which the need is uncertain.
- Consumer preferences for insurance packages often focus on interventions of high probability and low cost (relative to the household capacity to pay).
- **Pooling reduces uncertainty** for both citizens and providers.

Source: WHO World Health Report 2000



Purchasing

- **Purchasing** is the process by which pooled funds are paid to providers in order to deliver a specified or unspecified set of health interventions.
- **Passive purchasing** implies following a predetermined budget or simply paying bills when presented.
- **Strategic purchasing** involves a continuous search for the best ways to maximize health system performance by deciding which interventions should be purchased, how, and from whom. It involves the use of selective contracting and incentive schemes.
- Purchasing uses different instruments for paying providers, including budgeting.

Source: WHO World Health Report 2000



Medical Schemes and Collection

- 71.8% of beneficiaries, 72.3% of revenue collection via open schemes.
- Increase in open schemes from 50% in 1993 – coincides with under-the-table use of brokers.
- End 2005: **9,425 individual health brokers** accredited with Council for Medical Schemes. Estimated to be some **7,000 general practitioners**.
- Insufficient incentive for brokers to encourage growth at the low end of the market.



Medical Schemes and Collection

- Total acquisition costs (included marketing and advertising) by open schemes was 2.7% of gross contribution income in 2005. Five restricted schemes paid brokerage. **Industry acquisition costs increased by 22,0% to R939m.**
- Presence of brokers symbiotic with competitive dynamics between open schemes; need for brokers sustained by benefit differentiation; overly **short-term nature of the industry.**

**Are we getting value for money for this
R1 billion?**

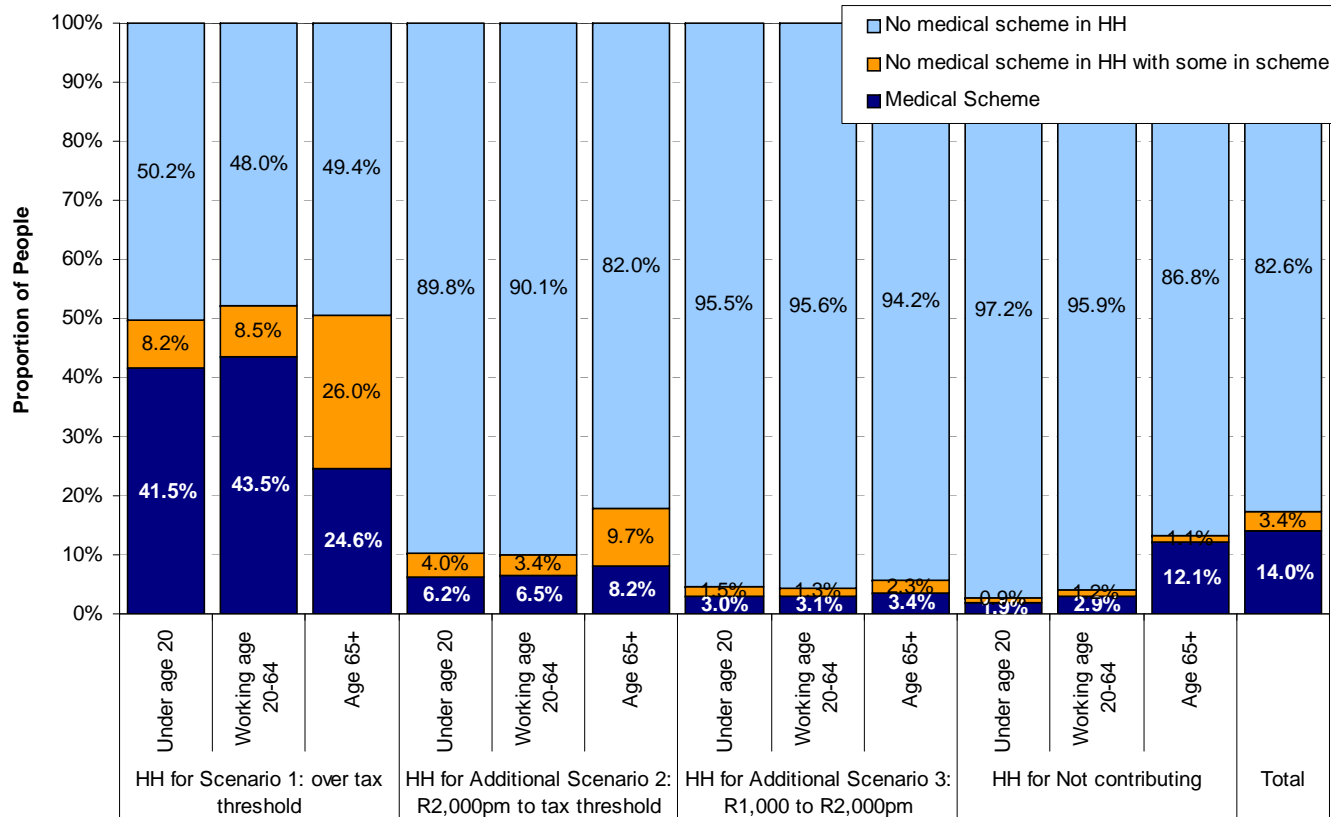


Medical Schemes and Collection

- Old Mutual Survey 2003: employers have engineered “a fairly constant employer cost of healthcare over the past 10 years (as a percentage of payroll).” This has been achieved by **increasingly passing the risk of escalation in healthcare costs to employees.**
- Old Mutual Survey 2005: found that “**many individuals are not able to make use of (employer subsidy)** because it is too small in relation to the total contribution”.
- Fewer children covered. 1.5 million uncovered people living in partially covered households.



Medical Scheme Membership by Scenario



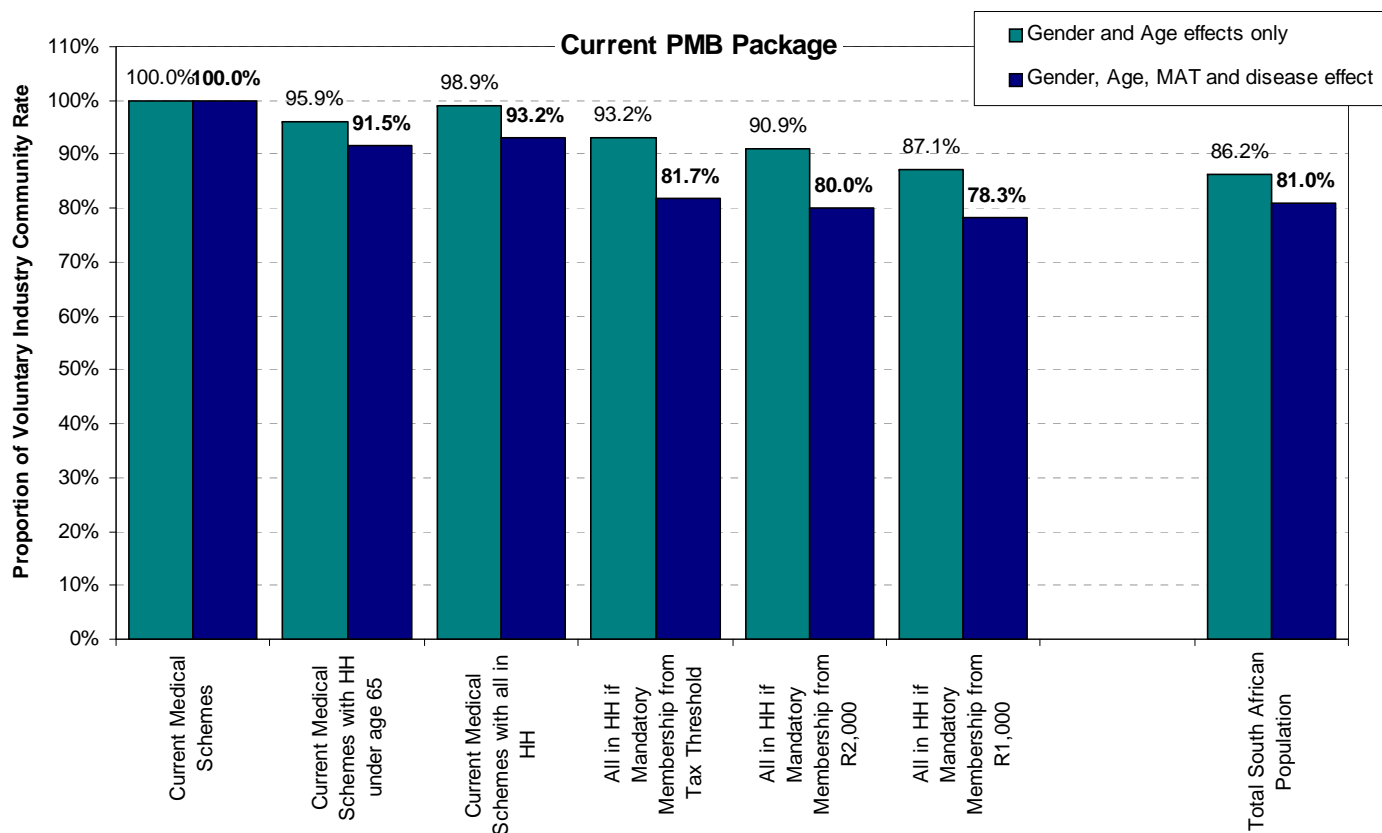
Most people already in Medical Schemes are in Households where someone earns above the tax threshold.

1.3 million uncovered people living in households of contributors.

Source: EPRI GHS2005



Mandatory Membership and PMBs



If SHI implemented from income of R1,000 pm, then cost of PMBs falls to 78.4% of current level.

Source: Derived from REF Contribution Table 2007, with GHS2005 data from EPRI



Medical Schemes and Collection

Post-retirement Time Bomb

- Old Mutual Surveys: in 1995, **89%** of companies surveyed were providing funding of health benefits for pensioners, falling to **43%** in 2003 and only **29% offering some form of post-retirement subsidy in 2005.**
- Percentage of companies **not offering healthcare subsidies in retirement to new employees** estimated to be **85% - 95%** in 2005.



Medical Schemes and Collection

- Major positive development is return by Government to a restricted scheme for public sector workers.
- Combination of high subsidies for low income workers, income-related contribution tables and bargaining power: **a low-wage-earning civil servant and family is able to join the lowest cost option, Sapphire, without making an out-of-pocket contribution.**
- May 2007: GEMS had reached 127,000 principal members or some 355,000 lives, making it already the fourth largest medical scheme in South Africa.

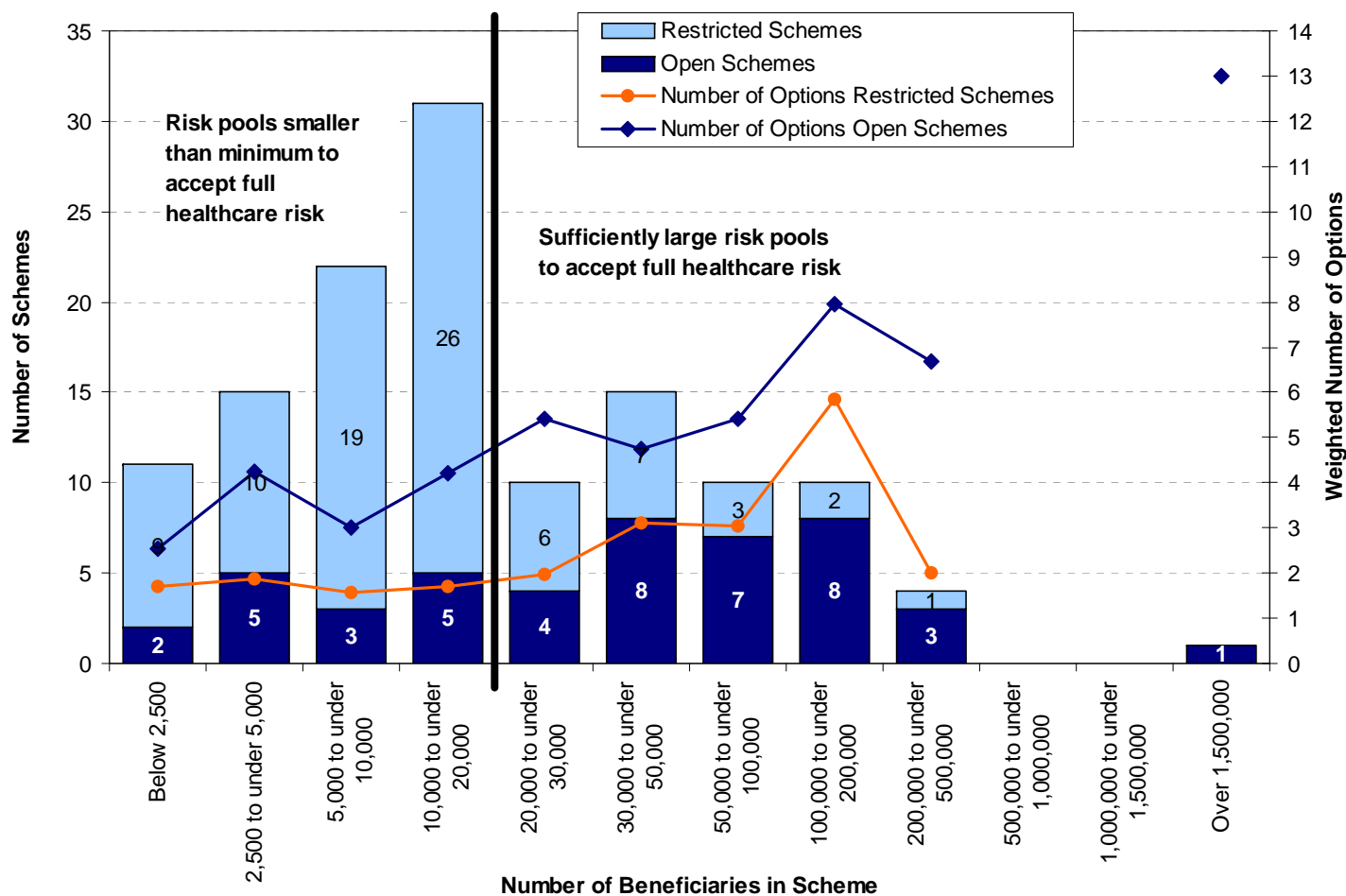


Medical Schemes and Pooling

- Steady decline in the number of schemes while beneficiary numbers begin to increase after years of stagnation.
- The larger the risk pool the more stable and predictable the results and the lower the risk of insolvency.
- **Risk Equalisation Fund**, although delayed, will create effectively one risk pool across entire industry for PMBs.



Medical Scheme Size and Options

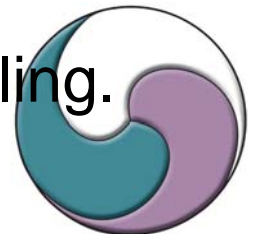


In USA minimum size to accept full healthcare risk is 20,000 beneficiaries. 2005: 67% of open schemes and only 23% of restricted schemes were that large.



Medical Schemes and Pooling

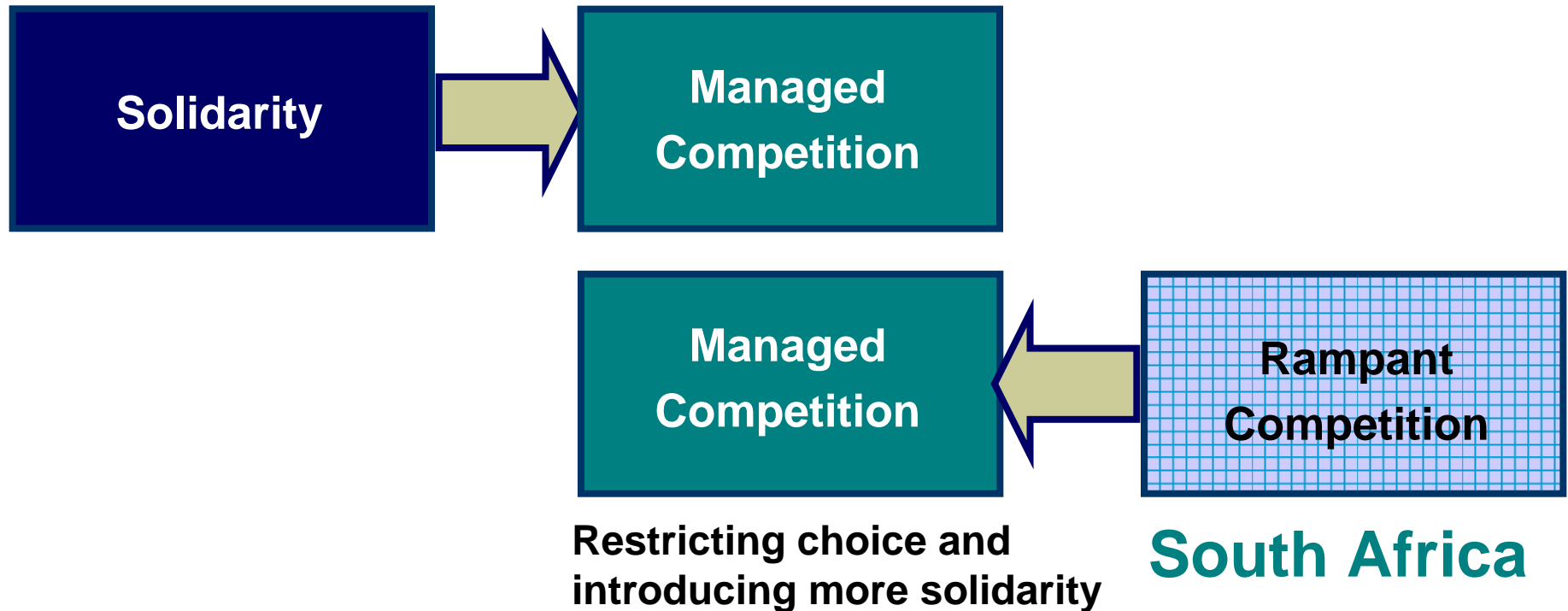
- **Benefit design problems**
- **381 options** registered in 2006 (401 options in 2005). Very high number of options is worrying as **each represents a separate distinct package of benefits.**
- Not good for consumers or providers. Increases administration costs and acquisition costs.
- PMBs only about half of total benefit expenditure. Significant incentive for open schemes to **use benefit design to continue to risk-rate.**
- Schemes increasingly cover hospitals and specialists and not primary care.
- Use of savings accounts and deductibles dilutes pooling.



Europe and South Africa

Europe

Adding more choice and competition



Agreement on the use of competing insurers, under a framework which offers protection for vulnerable groups:

Open Enrolment, Community Rating, Minimum Benefits, Risk Equalisation



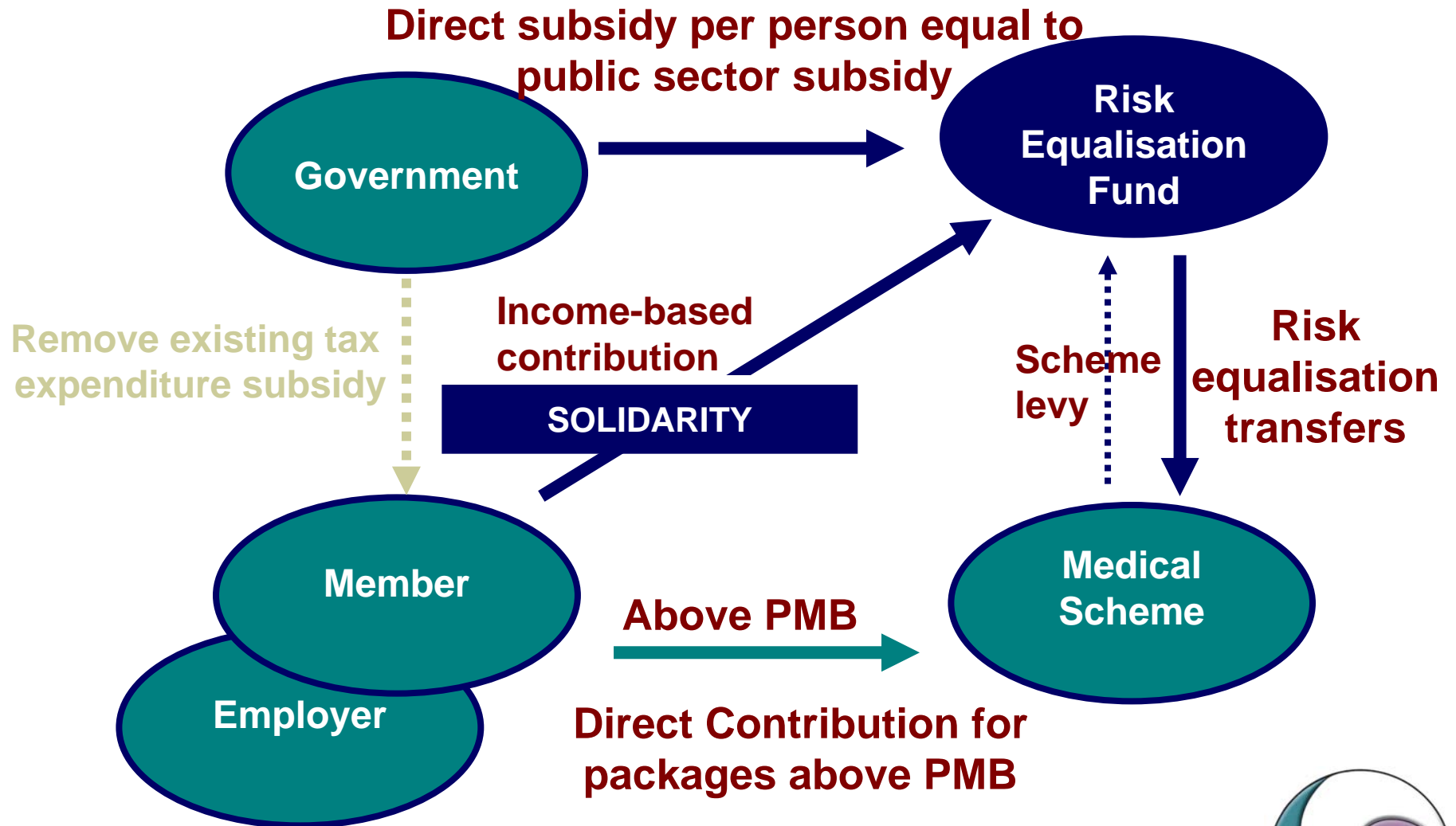
Equity and Fairness

- Fairness of financial risk protection requires the highest possible degree of **separation between contributions and utilization**.
- Prepayment makes it possible to spread the financial risk among members of a pool - particularly for interventions that are high cost relative to the household's capacity to pay.
- In majority of health systems, **risk and income cross-subsidization** occurs via a combination of pooling and government subsidy. Can also use explicit risk and income equalisation mechanisms.

Source: WHO World Health Report 2000



Social Health Insurance



Most to do ...

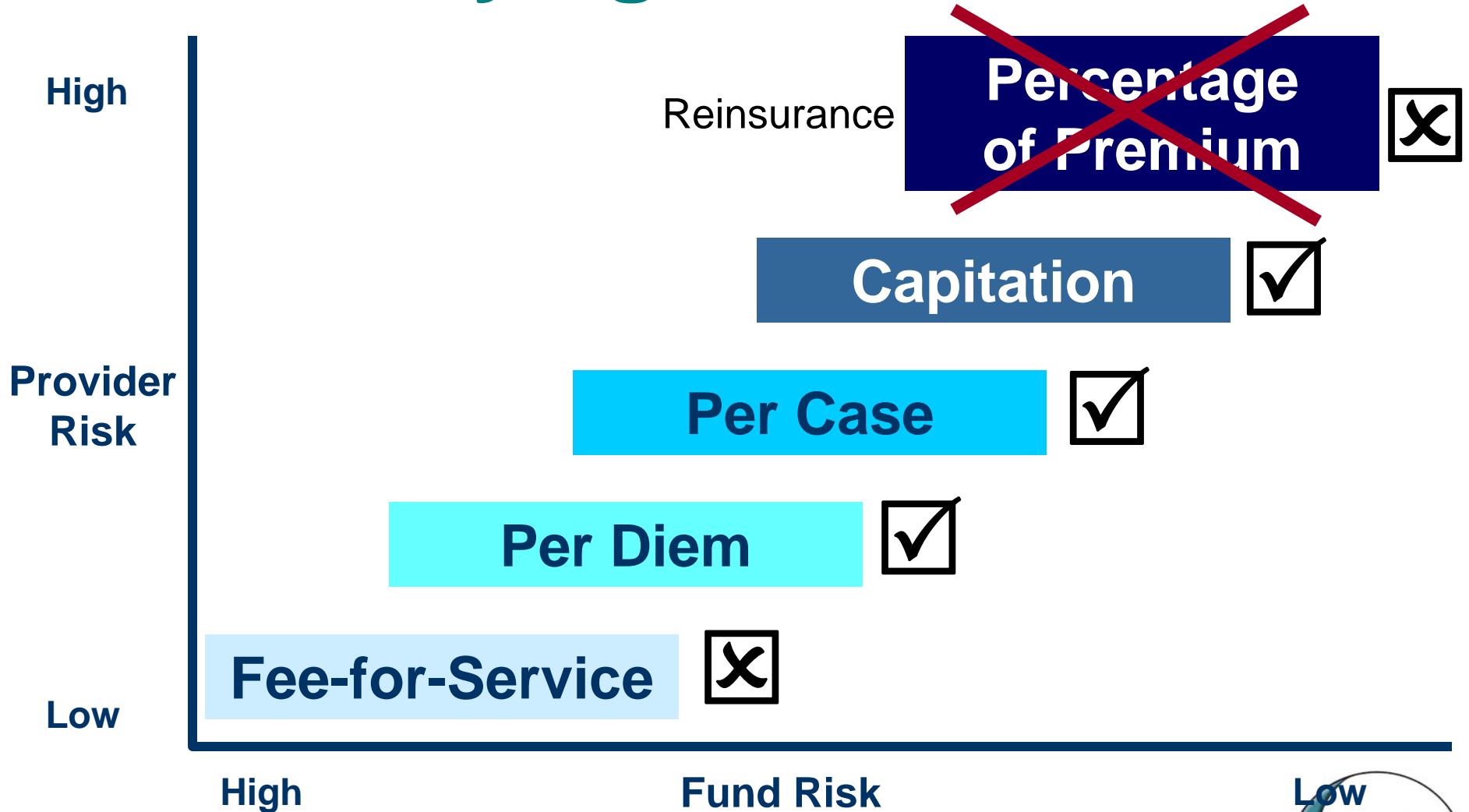


Medical Schemes and Purchasing

- Mostly still **passive purchasing** - paying bills when presented.
- Schemes struggling with lack of purchasing power
- Need more **strategic purchasing** - a continuous search for the best ways to maximize health system performance by deciding which interventions should be purchased, how, **and from whom.**
 - Network formation ...
 - More contracting ...
 - More risk-sharing ...
 - Quality measurement ...



Paying Providers



Source : Garofalo et al, *Managed Care Contracting*, 1999



Delivery of Healthcare

- A **National Health System** which encompasses
 - **Public;**
 - **Private; and**
 - **Non-governmental** providers of health services.
- Traditional healing will become an integral and recognised part of health care in South Africa.
- People have the right of access to traditional practitioners as part of their cultural heritage and belief system.
- Some 34,000 doctors; 11,000 pharmacists; 100,000 professional nurses; 84,000 staff nurses and auxiliaries; 3,600 CAM practitioners; and 200,000 traditional practitioners.

Sources: National Health Act, 2003. ANC Health Plan, 1994. SAHR.



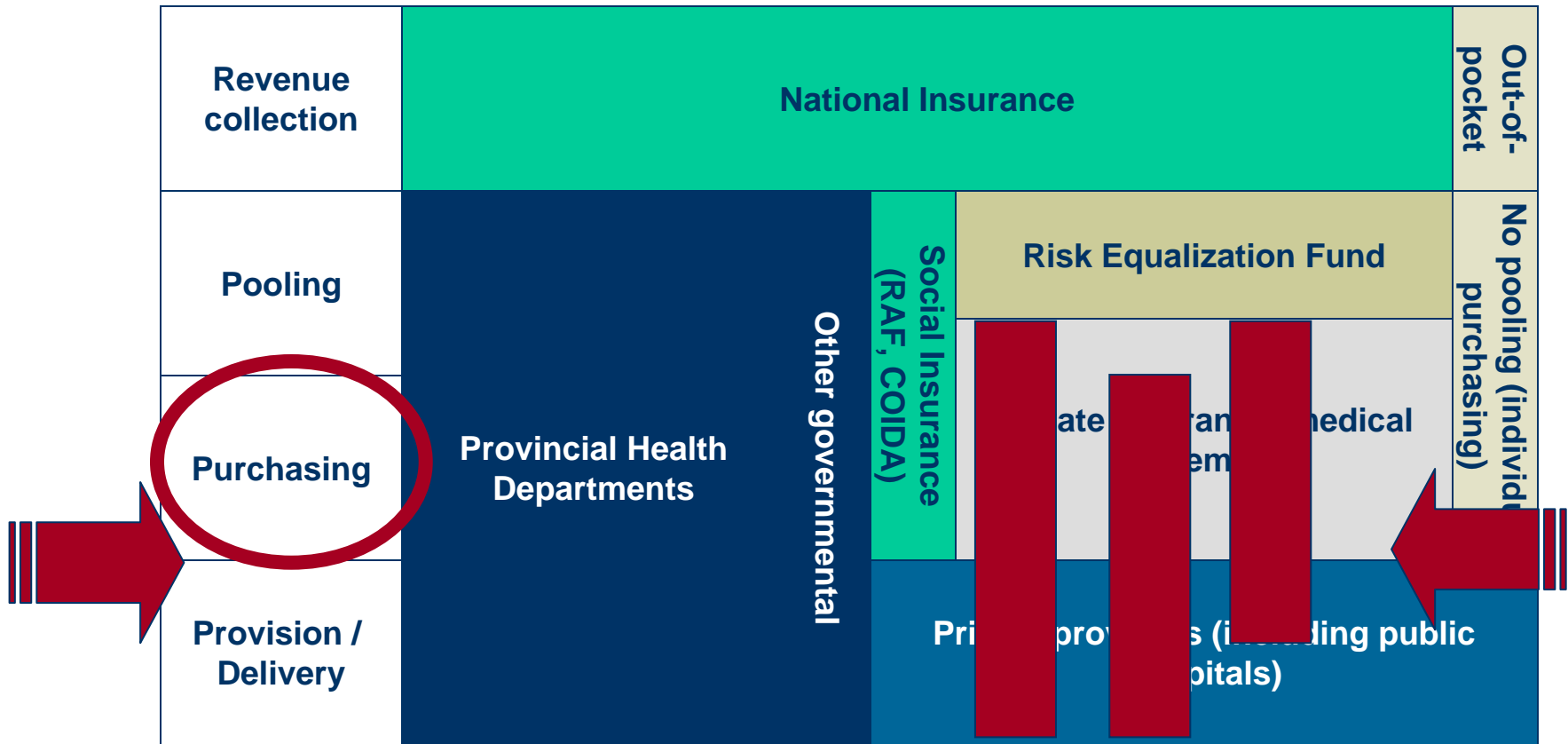
Integration Challenges

- Harmonization of regulatory frameworks between various statutory bodies:
 - **Professional Ethics** governed by Health Professions Council
 - **Competition Act** governed by Competition Commission
 - **Managed care** provisions of Medical Schemes Act, governed by Council for Medical Schemes



The Most Appropriate Vehicle ?

Kutzin Framework diagram



How do we best align incentives in the interests of the members ?



Medical Schemes and MCOs as a Technical Issue

- What is the best way to organize for **efficient delivery** of healthcare?
- Medical Schemes Act allows schemes to deliver care – very few do so.
- What is the private sector really good at? What is it not good at?
- Should schemes be “de-mutualised” and have member shareholders? Member and provider shareholders? Member, employer, union and provider shareholders?
- Should MCOs be allowed to gather and pool funds?
- Should schemes be different from MCOs?



Thoughts for Healthcare Providers

Charles Darwin - 'It is not the strongest of the species that survives, nor the most intelligent, but the one more responsive to change'.

Origin of Species.

PMB Package Design



Pooling: still to do ...

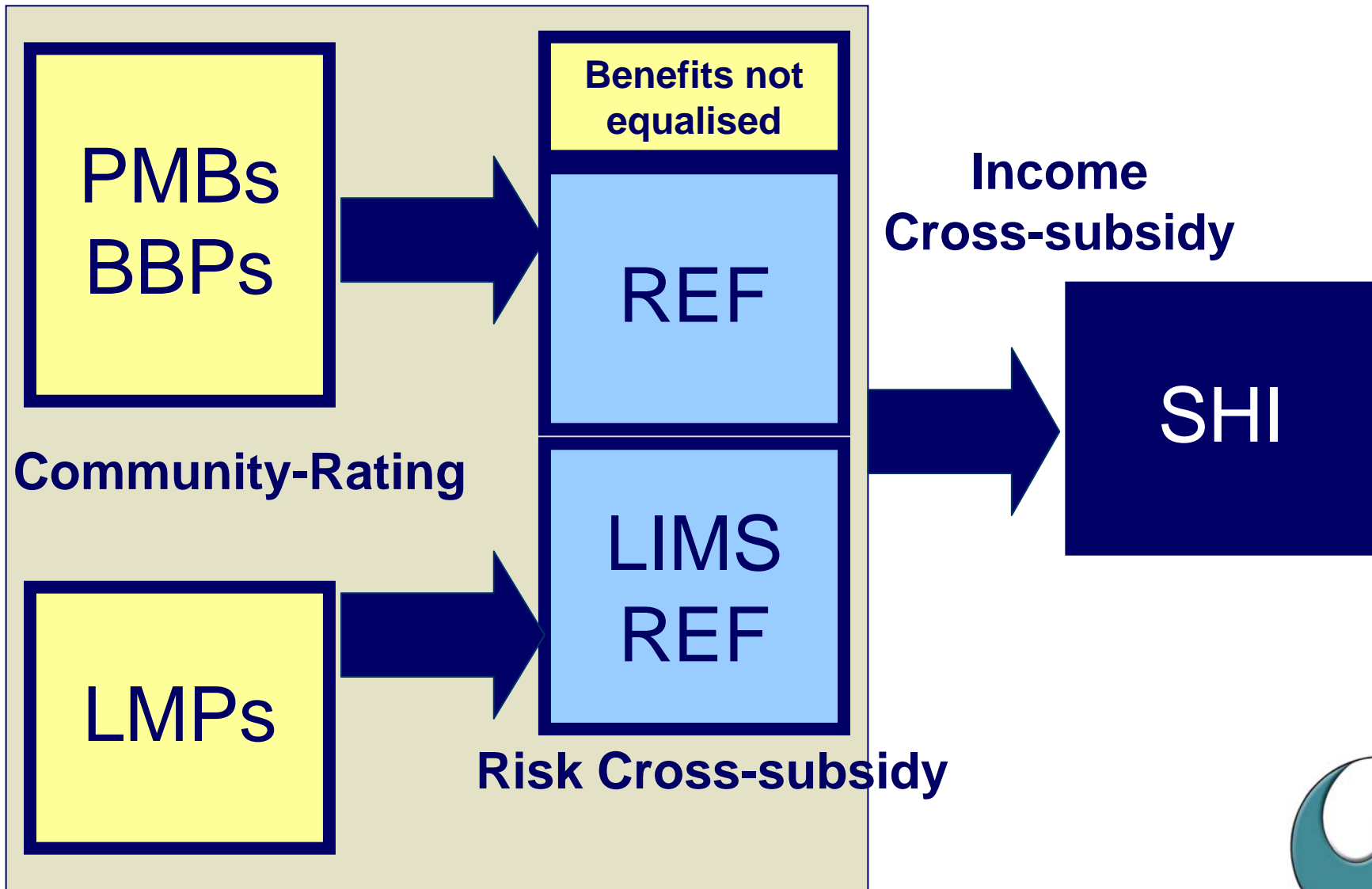
Kutzin Framework diagram

| | | | | | |
|----------------------|-------------------------------|--------------------|--|------------|------------------------------------|
| Revenue collection | General taxation | Other governmental | Social Insurance (payroll tax) | Above PMBs | Out-of-pocket |
| Pooling | Provincial Health Departments | | Risk Equalization Fund | Above PMBs | No pooling (individual purchasing) |
| Purchasing | | | Private insurance (medical schemes) | | |
| Provision / Delivery | | | Private providers (including public hospitals) | | |

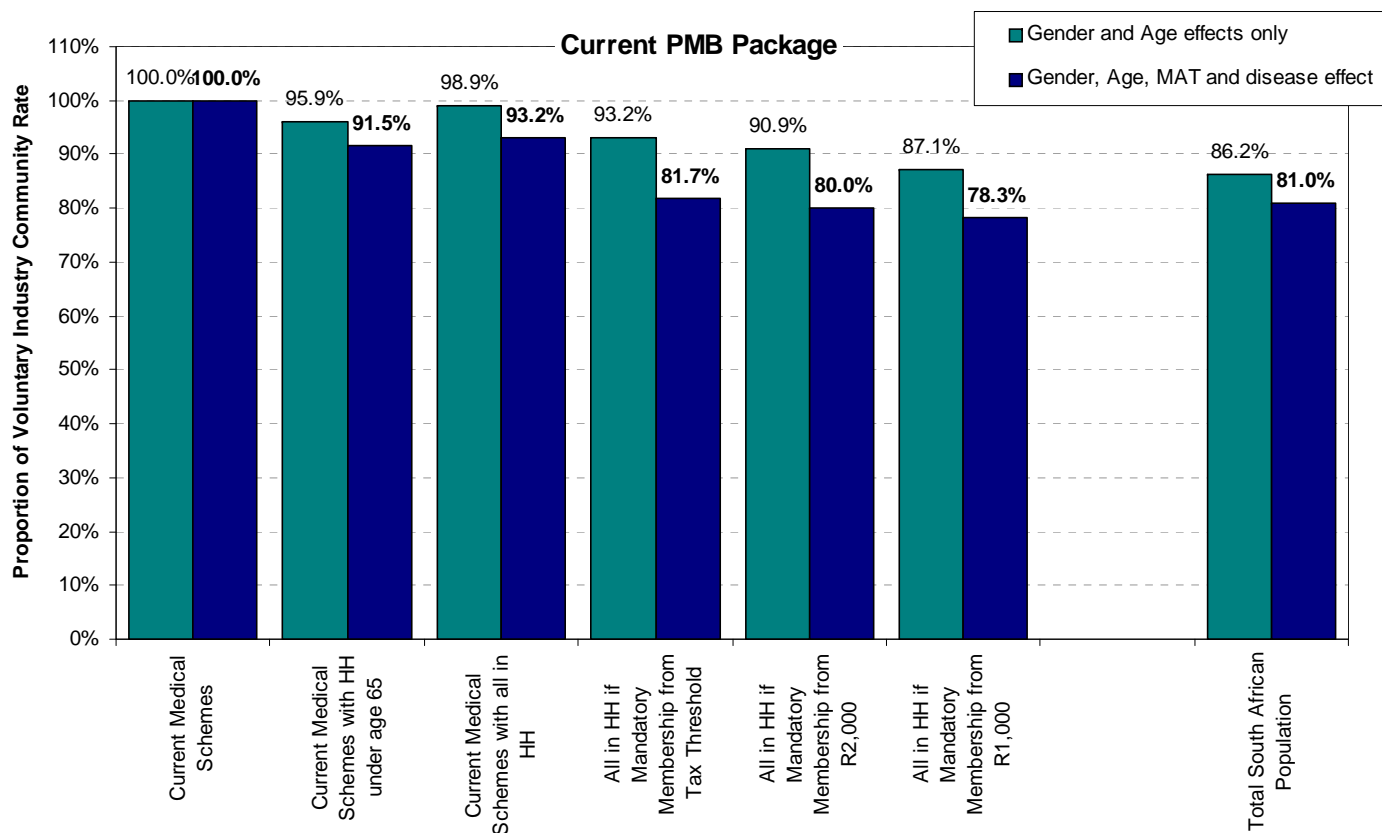
**PMB design and LIMS package
Option design and Circular 8 issues**



LIMs and Circular 8 Reforms



Mandatory Membership and PMBs



If SHI implemented from income of R1,000 pm, then cost of PMBs falls to 78.4% of current level.

Source: Derived from REF Contribution Table 2007, with GHS2005 data from EPRI



Prescribed Minimum Benefits

- The PMBs are set out in the Regulations made in terms of the Medical Schemes Act and consist of:
 - A list of 271 diagnosis and treatment pairs (**PMB-DTP**).
 - Emergency medical conditions (included in PMB-DTP).
 - Diagnosis, treatment and medication for 25 defined chronic conditions (The Chronic Disease List (CDL) or CDL conditions) (referred to here as **PMB-CDL**).
- Missing from PMBs: **Primary healthcare package**



Public and Private Sectors

- The public sector establishes services, which provide comprehensive cover for an undefined range of conditions, qualified through the use of protocols.
- The private sector has a positive list of conditions and treatments which must be covered by all medical schemes.
- Government has to move toward defining basic essential services, which all citizens must be covered for.
- Within medical schemes these would be regulated as **Prescribed Minimum Benefits**.
- Within the public sector a similar process would occur and be framed as **minimum norms and standards**.





1998



Söderlund's Pricing to Define the PMB Package

Oregon Health Services Commission 1988 to 1994

- “Basic” services to be prioritised for coverage by all public and private programs.
 - Benefit-cost formula
 - Duration of benefit
 - Values placed on outcomes by residents
 - Cost of treatment
- Ranked 709 services in order of priority.
- Could initially afford the top 587 services : provided universal access.
- 122 services uncovered : access to be an individual responsibility.



1998 Purpose

- 1995 Committee of Enquiry into National Health Insurance (NHI) recommended that formally employed individuals and their employers, be required fund at least a minimum package of hospital cover for employees and their dependants.
- **Target population:** Formally employed South Africans without current access to medical scheme cover, and their dependants.
- Research aims to **define and cost** a suitable possible minimum package of essential hospital care for competing (public and private) health insurers in South Africa.

Source : Söderlund, Peprah (1998) *An Essential Hospital Package for South Africa*



Oregon Categories Omitted in Original PMB Design

| | | |
|----|--|--|
| 4 | <i>Preventive care for children</i> | |
| 8 | <i>Preventive dental care</i> | |
| 9 | <i>Proven effective preventive care - adults</i> | <i>BP screening, cervical cancer screening</i> |
| 16 | <i>Less effective preventive care - adults</i> | <i>Sigmoidoscopy for under 40's.</i> |

- “**Primary care** and chronic psychiatric/infectious disease treatments were **excluded** at the outset because the public good nature of these interventions suggested that they would be more appropriately **funded from tax revenue**, rather than insurance.”

Source : Söderlund, Peprah (1998) *An Essential Hospital Package for South Africa*



Pricing of PMBs

- 1998 price by Neil Söderlund and Enoch Peprah
- 2001 pricing for Council for Medical Schemes by Heather McLeod, Alan Rothberg, Therese Fish and Deus Mubangizi.
- 2002, 2003 and 2004 REF pricing for Formula Consultative Task Team by Pieter Grobler, Heather McLeod, Helena Theron and Brett Mill.
- 2005 REF pricing for RETAP by Pieter Grobler and Heather McLeod.
- 2006 REF pricing for RETAP by Pieter Grobler, Heather McLeod and Boshoff Steenekamp.
- Completely new study for 2007 REF pricing: the REF Study 2005.



1998 Data Sources

- Combine data such that the strengths of one data source complement the weaknesses of others. The result is a hybrid set of utilisation and cost data that comes from no single population, but which is thought to best represent the likely utilisation and cost patterns of target population.
- Hospital inpatient utilisation data: mine hospitals and private medical schemes in South Africa, and NHS hospitals in the United Kingdom .
- Data age-sex standardised to represent formally employed South Africans without current medical scheme cover.
- Costed using mine hospital cost data.
- Utilisation levels of outpatients services - assumed current experience of mine hospital users would apply to insured population (after addition of capital and administration costs).

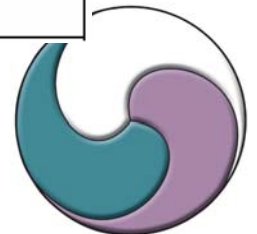
Source : Söderlund, Peprah (1998) *An Essential Hospital Package for South Africa*



Data Used 1998 PMB Definition

| Characteristic | Mine hospitals | Medical schemes | English NHS |
|---|---|---------------------------------------|-------------------------------------|
| Denominator population size (person years) | 648 000 | 153 000 | 16.4 mill |
| Age-sex representation | women, children, and elderly under-represented. | Full | Full |
| Same country as target population | Yes | Yes | No |
| Racial / socio economic mix (relative to target population) | Similar | Black working class under-represented | Significantly higher average income |
| Complete coverage for non-urgent, elective care | No | Yes | Intermediate |
| Complete coverage for high cost events (e.g. transplants) | No | No | Yes |
| Complete coverage for emergency care | Yes | Intermediate | Yes |
| Procedures coded | Yes | Yes | Yes, but not CPT-4* |
| Diagnoses coded (ICD-9) | Yes | No | Yes |
| Cost data present | Yes | Charges only | Relativities only |
| Costs meaningful given likely providers for core package | Yes | Partially | Weakly |

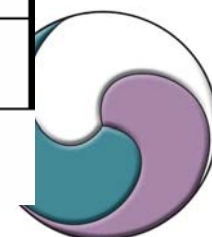
Source : Söderlund, Peprah (1998) *An Essential Hospital Package for South Africa*



Weighting of Data Sets

| Oregon category | Description | Medical/ surgical* | Data source | | |
|-----------------|--|-----------------------|--------------|--------------|--------------|
| | | | Mine Hosp. | UK NHS | Med. Schemes |
| 1 | Acute fatal - full recovery | Med Surg | 0.66 0.5 | 0.33 0.25 | 0 0.25 |
| 2 | Maternity care | | 0.33 | 0.33 | 0.33 |
| 3 | Acute fatal - partial recovery | Med Surg | 0.66 0.5 | 0.33 0.25 | 0 0.25 |
| 5 | Non-urgent fatal - treatment improves life span or QoL | Med Surg | 0.66 0.5 | 0.33 0.25 | 0 0.25 |
| 6 | Fertility control | Surg | 0.33 | 0.33 | 0.33 |
| 10 | Acute non-fatal - treatment effective | Med Surg | 0.66 0.5 | 0.33 0.25 | 0 0.25 |
| 11 | Chronic non-fatal - one off treatment improves QoL | Med Surg | 0.33 0.25 | 0.66 0.25 | 0 0.5 |
| 12 | Acute non-fatal - treatment causes partial improvement | Med Surg | 0.33 0.25 | 0.66 0.25 | 0 0.5 |
| 13 | Chronic non-fatal - ongoing treatment improves QoL | Med Surg | 0.33 0.25 | 0.66 0.25 | 0 0.5 |
| 14 | Acute non-fatal - treatment symptomatic only | Med Surg | 0.33 0.25 | 0.66 0.25 | 0 0.5 |
| 15 | Infertility services | Med Surg | 0.33 0.25 | 0.66 0.25 | 0 0.5 |
| 17 | Treatment for conditions with minimal symptoms | Med Surg | 0.33 0.25 | 0.66 0.25 | 0 0.5 |

* Where both medical and surgical interventions were contained within the same DT pair, the pair was classified as medical.



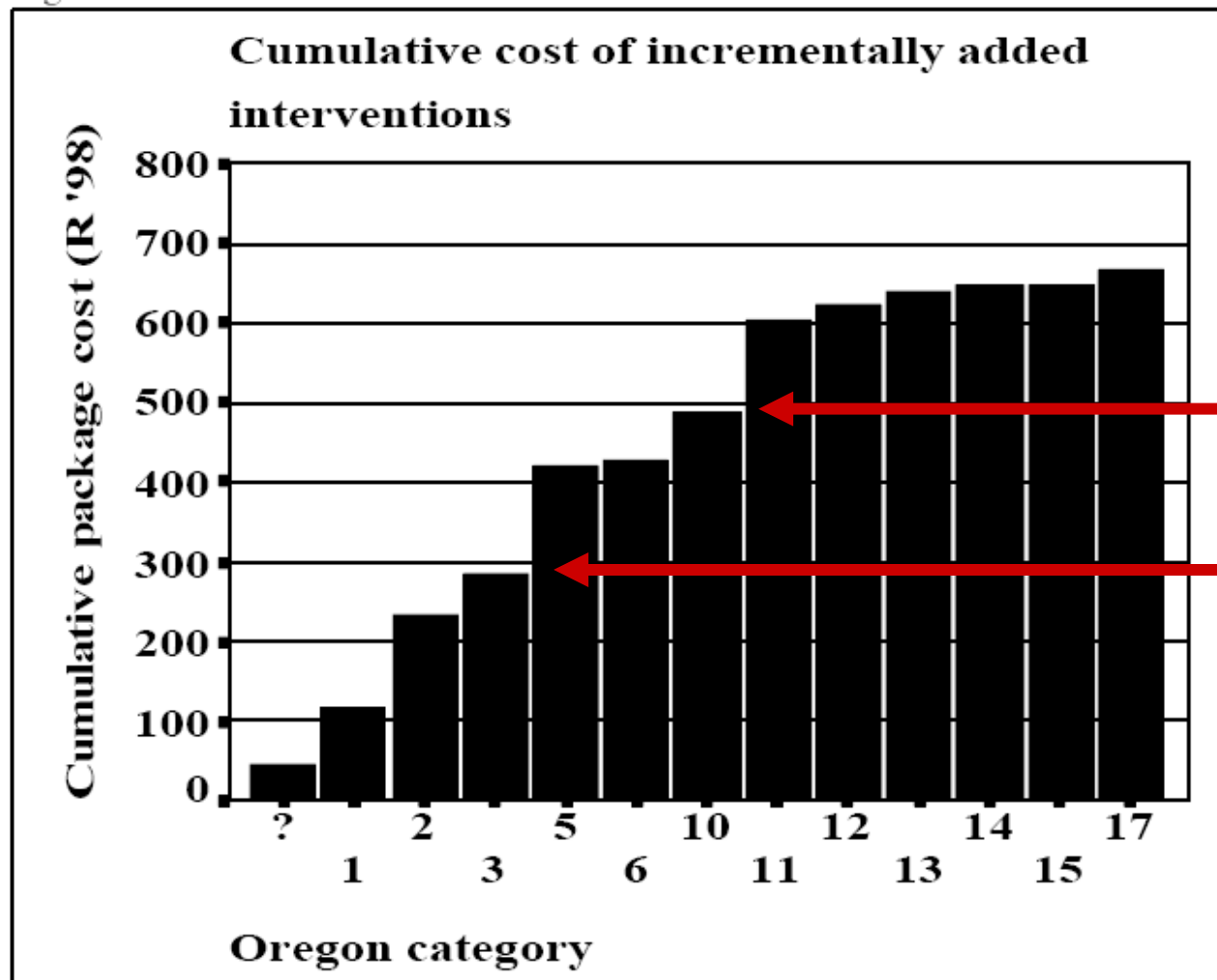
Medical Scheme Admissions

- Small medical scheme sample : 153 000
- Elective surgery : Category 11: Chronic, non-fatal, one-off treatment improves quality of life
- South African medical schemes had
 - double the admissions of the NHS.
 - four times the admissions of mine hospitals.

Source : Söderlund, Peprah (1998) *An Essential Hospital Package for South Africa*



Cumulative Cost of Oregon Categories



one-off treatments for non-life threatening chronic conditions (cat. 11)

chronic life threatening conditions (cat. 5)



Source : Söderlund, Peprah (1998) *An Essential Hospital Package for South Africa*

Definition of Package

- The criteria used to define the essential package were, in order of priority:
 - extent to which there was another responsible party who should pay for treatment;
 - urgency (or degree of discretion) of required treatment;
 - cost-effectiveness of treatment.
- It included all non-elective surgical procedures, elective surgical admissions for life-threatening conditions, maternity care, comfort care for the terminally ill, and virtually all medical admissions.

Source : Söderlund, Peprah (1998) *An Essential Hospital Package for South Africa*



Essential Hospital Package SA

- Age-sex standardised to employed population not covered by a medical scheme
- Estimated “core inpatient package” would cost R502 per beneficiary per annum in 1998 prices. Expected outpatient costs were R183 pbpa. It was thus estimated that the total inpatient and outpatient package would cost R685 pbpa in 1998 prices
- Affordable to those earning over R20 000 pa
- Additional 7m people could be covered
- Sensitivity to age (by including existing medical scheme members) and HIV/AIDS.

Source : Söderlund, Peprah (1998) *An Essential Hospital Package for South Africa*



Oregon Categories Omitted

| | | |
|----|--|--|
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- “**Primary care** and chronic psychiatric/infectious disease treatments were **excluded** at the outset because the public good nature of these interventions suggested that they would be more appropriately **funded from tax revenue**, rather than insurance.”

Source : Söderlund, Peprah (1998) *An Essential Hospital Package for South Africa*



Summary 1998

- “We do not to propose that the technical package defined become the essential hospital package for South Africa, but rather that it be used to inform the expert, public and political debates which we hope to stimulate.”

Source : Söderlund, Peprah (1998) *An Essential Hospital Package for South Africa*



Söderlund Definition of PMBs

- DIAGNOSIS: FRACTURE OF JOINT, CLOSED (EXCEPT HIP)
 - ICD-9 CODE:
810.0,811.0,812.0,812.4,813.0,813.4,814.0,815.0,816.0,
817.0,819.0,821.
 - TREATMENT: REDUCTION
 - CPT-4 CODE: 20690,20692-20694,20900,23500-
23515,23570-23630,24530-24587,24650-2468



1999 PMBs in Regulations

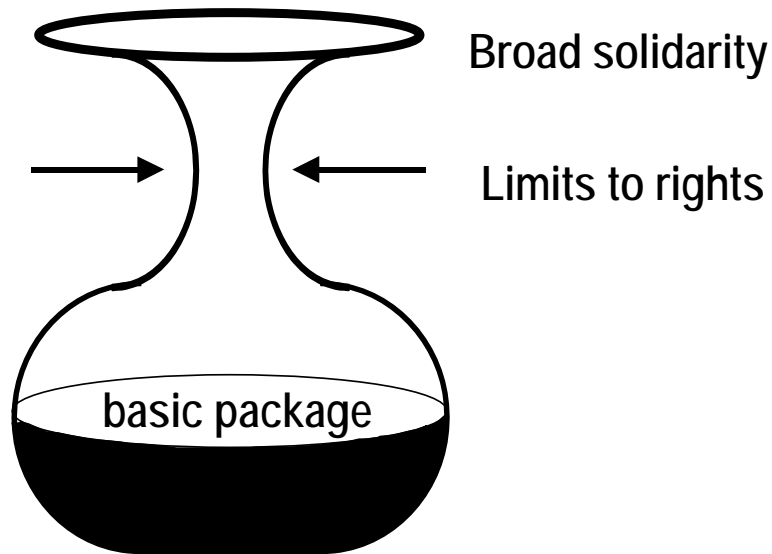
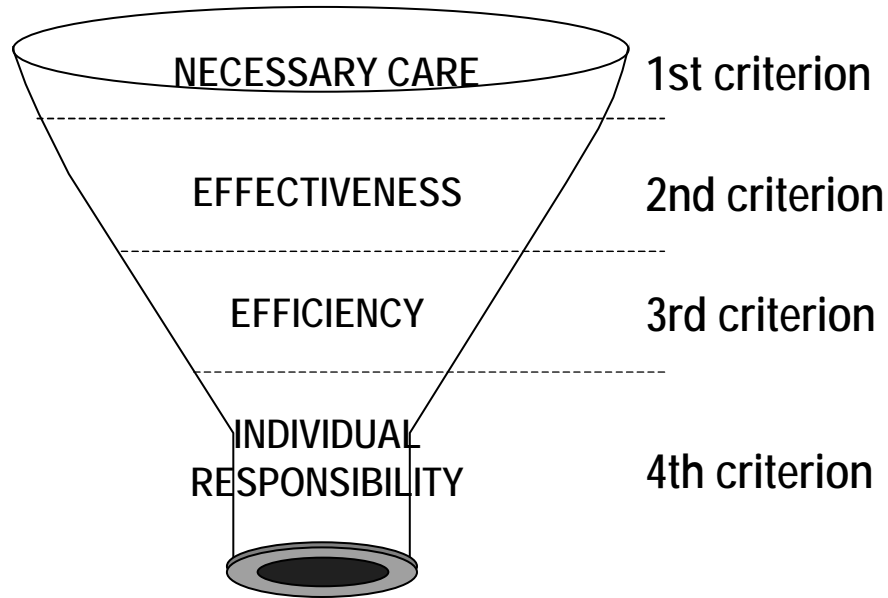
- **CODE: 902E**
 - Diagnosis: disorders of arteries: visceral
 - Treatment: bypass graft; surgical management
- **CODE: 910G**
 - Diagnosis: gallstone with cholecystitis and/or jaundice
 - Treatment: medical management; Cholecystectomy; Other open or closed surgery
- **CODE: 950H**
 - Diagnosis: cancer of bones - treatable
 - Treatment: medical and surgical management, which incl. chemotherapy and radiation therapy



Approaches to PMB Package Design



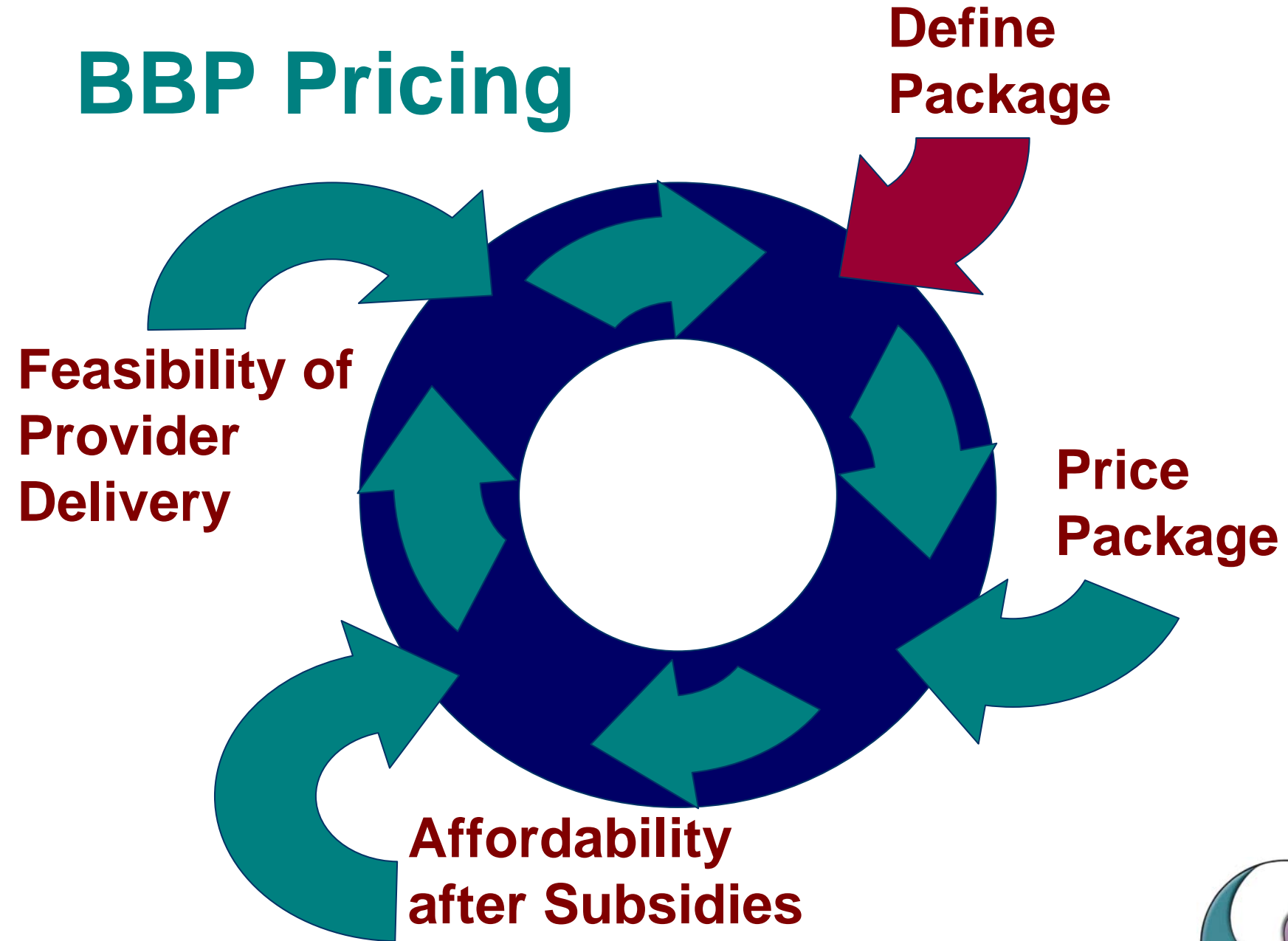
Guild Prioritisation Model



Source : Guild, *Rationing
Healthcare Resources*, 1994



BBP Pricing

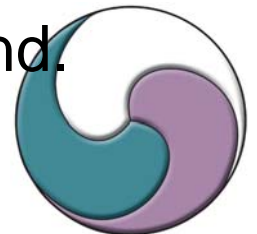


Provider Driven

- Consider care that can be delivered, then define and then price. Data on affordability ?
- Tendency to ration using standard of care, use of expensive drugs and use of diagnostic technology.
- Trustees shift to being concerned about quality.

Funder Driven

- Define package first, then price, test affordability, then finally talk to providers
- Tendency to use financial limits, co-payments, visit limits to ration care.
- Makes for very complex oversight of providers and tension between funders and providers.
- Members and providers struggle to understand.



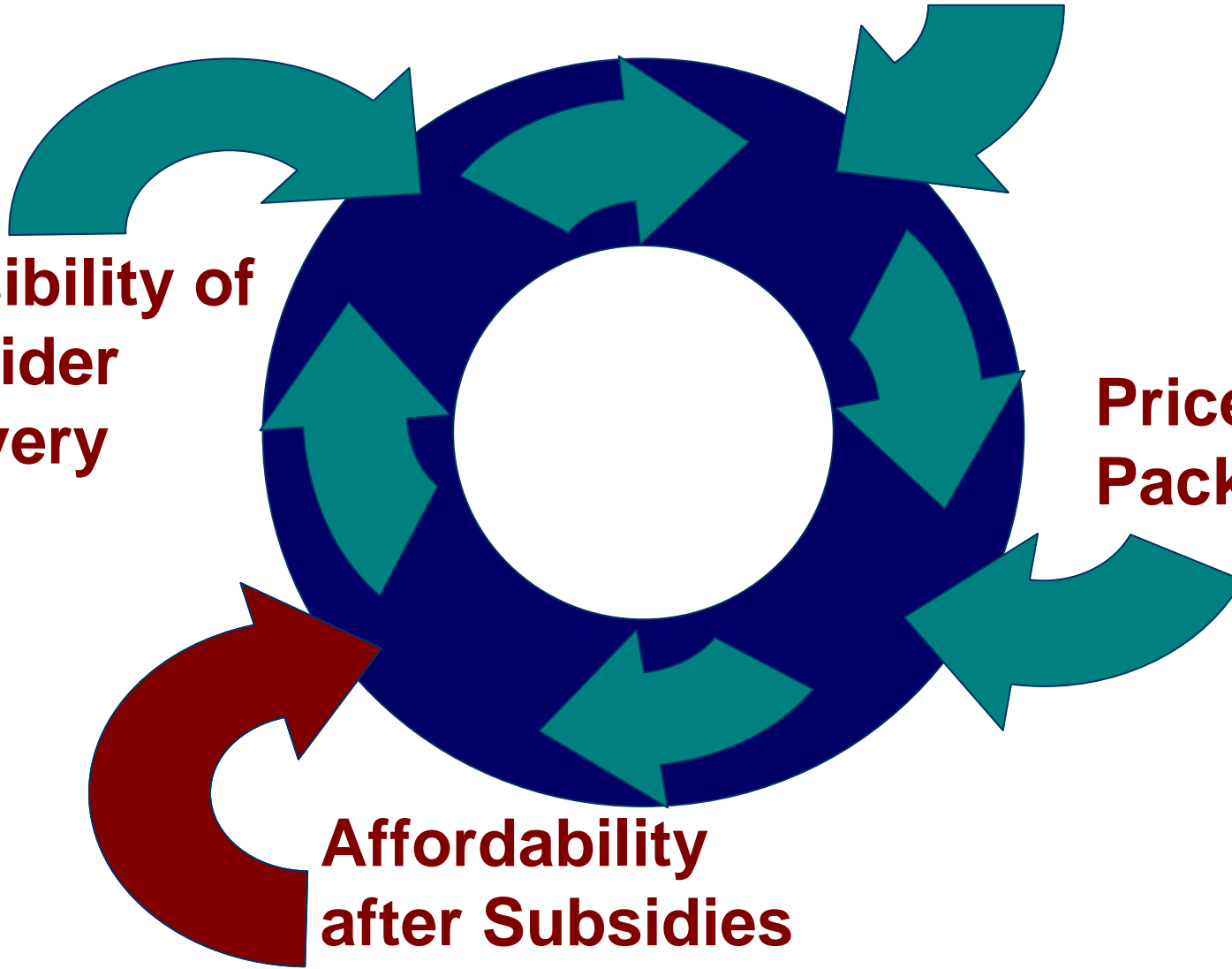
BBP Pricing

**Define
Package**

**Feasibility of
Provider
Delivery**

**Price
Package**

**Affordability
after Subsidies**

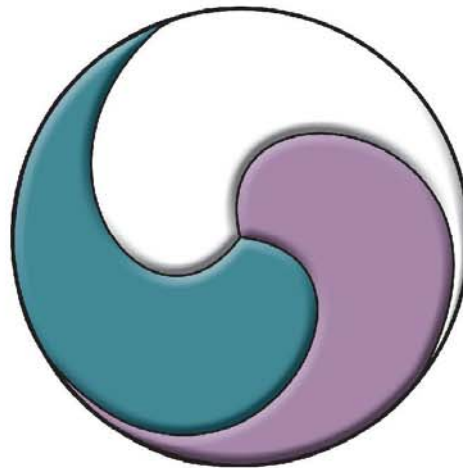


BBP that begins with Affordability

- Define affordability level with the help of unions.
- Change tax break to give a per capita subsidy per person.
- Risk-adjusted per capita subsidy plus amount members can personally afford is available to buy benefits.
- Schemes go out on tender for how much cover they can get at that price.
- Those providers who can deliver and want to participate, do so.
- If cover proves too low, then define the level of income cross-subsidy needed under Social Health Insurance.
- Renegotiate.



integrated
healing



Body, Mind, Soul

Professor Heather McLeod
hmcleod@iafrica.com
www.hmcleod.moonfruit.com