Risk Adjustment – A Global Perspective

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Risk Adjustment – A Global Perspective

Every nation that provides health care faces the same dilemma.

How can scarce resources be allocated fairly across plans and other risk bearing entities?

Risk adjustment is one tool of redistributing payments to risk-bearing entities, to accurately align these payments with the level and risk of services provided to their members.

Risk Adjustment – A Global Perspective

"Risk Adjustment in Health Care Funding", Contingencies Jan./Feb. 2011

Sponsored by the Academy's Health Practice International Task Force (HPITF)

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風險調整- 全球性的視野

HIPTF委員會的任務

探索 風險調整的

什麼

為什麼

誰

如何

Risk Adjustment – A Global Perspective

WHAT?

Tool used to adjust payments to health plans to accurately reflect the health status of their members

- Relies on risk assessment →

  Review the risk adjusters for each country

- Relies on available data →

  Universal, consistent, current, verifiable, feasible to collect, plausible and confidential

Risk Adjustment – A Global Perspective

WHY?

Enhance solidarity

- Protect open enrollment & community rating
- Respond to consumers' preferences

Prevent antiselection

- Create a level playing field

Improve efficiency

- Encourages fair competition

Ensure quality and appropriateness of care

Establish a sustainable health care system

- Market stability

Risk Adjustment – A Global Perspective

	UK	Israel	Netherlands	Chile	South Africa
Health Financing System	Public	Mandatory	Mandatory	Voluntary	Voluntary
Health Insurers	Primary Care Trusts (PCTs)	Non - Profit Sick Funds	For - Profit Sick Funds	For - Profit Isapre (Instituciones de Salud Previsional)	Non - Profit Medical Schemes
# of Insurers	152	4	~20	13	~100
Implemented	Started in 1976 PCTs in 2006	Sick Funds 1950's Risk Fund in 1995	Started in 1990 Mandatory in 2006	Started in 1990 Fund in 2005	Schemes in 1967 Task Force in 2003 Implemented ??
Models	Budgets	Prospective	Prospective / Retrospective	Prospective	Prospective
Special Features	Person-Based Resource Allocation (PBRA) model for General Practitioners	3-Tiered System	In 2006, moved to mandatory private health care	Explicit Health Guarantees	Risk Equalization Fund is Transparent

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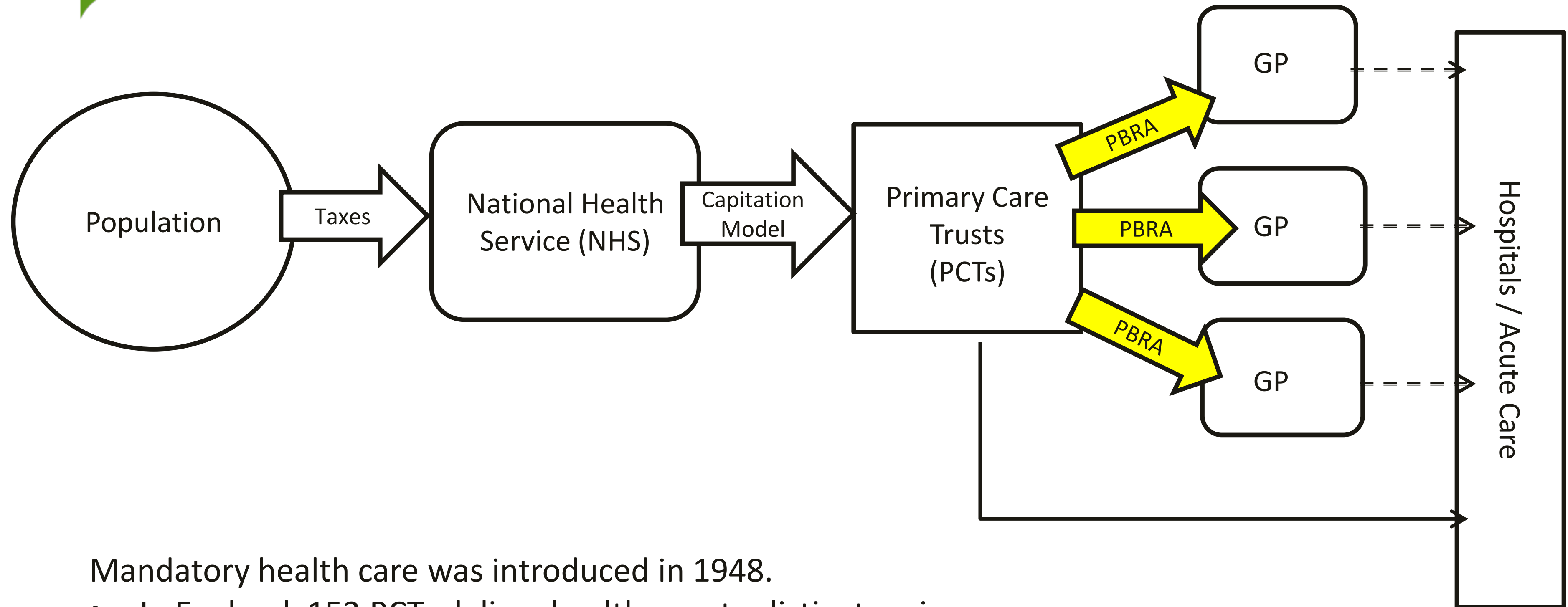
Risk Adjustment - UK



Mandatory health care was introduced in 1948.

- In England, 152 PCTs deliver health care to distinct regions.
- Typically a few PCTs will fail to stay within their allotted budget, and the government will bail them out.
- Person-Based Resource Allocation (PBRA) model predicts the General Practitioner (GP) practice budgets.

Risk Adjustment – UK

Person-Based Resource Allocation (PBRA)

- National predictive model, introduced in 2009, that links physician, hospital and social care information to predict future costs of care. Mental health, maternity and community based services are excluded.

- PBRA was able to predict the next year practice level expenditure within 10% for about 2/3rd of the practices.

- PBRA determines the next year's budget on the patients registered with that GP. At the end of the year there is a reconciliation between the amount of hospital care used by that GP and predicted budget. The idea is that GPs will want to reduce unnecessary hospital care. Presently, they are only used for benchmarking, with the PCT picking up the slack. The PCTs will be replaced by a GP consortia, who will assume more risk for their members.

PBRA Risk Adjusters – UK

Age / Gender - 18 age bands

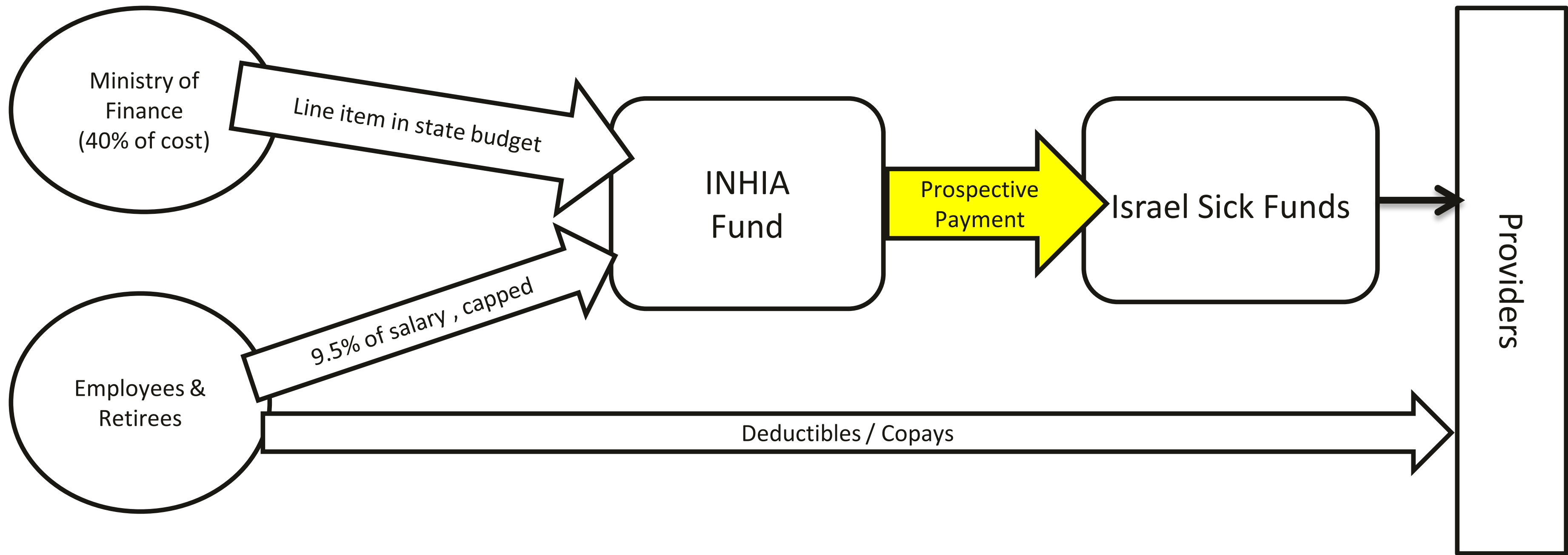
152 Morbidity Markers

- Consists of contiguous ICD-10 codes, which are comparable to the US's 70 Hierarchical Condition Categories (HCC)

Local Neighborhood Health Indicators

- Residents in public housing
- Disability
- Residents between 16 & 74 lacking education qualifications
- Residents who sought private medical care in last 2 years
- Students

Risk Adjustment - Israel



Israel's 4 Sick Funds have been delivering health care since the mid-1950s.

- The Israel National Health Insurance Act (INHIA) was established in 1995.
- Sick funds receive a prospective payment (for the basic/universal coverage) that accounts for over 95% of compensation, with the remaining coming from a retrospective payment.

Risk Adjustment – Israel

Israel has a 3-tier health care structure, which leads to a complex risk adjustment environment

Tier 1 Basic Coverage	Tier 2 Supplemental Health Care Services (SHCS)	Tier 3 Commercial Insurance
Hospital Care	More Choices- Selection of surgeon	Dread Diseases
Physician Services	Limit Increases- Additional IVF trials	Disability
Prescription Drugs	Services Not Covered- Orthodontic	Long Term Care
Home Health Care	Other out-of-network	Extension –RX
Psychiatric Care		Fixed compensation for medical treatment
		Workmen’s compensation

Risk Adjusters - Israel

Basic Tier

- Age(11 age bands) accounts for 93% of allocation
- Severe diseases accounts for 6% of allocation
  Renal failure requiring dialysis
  Gauche
  Talasemia
  Hemophilia
  AIDS
- *Age and distance from medical services is going to be added*

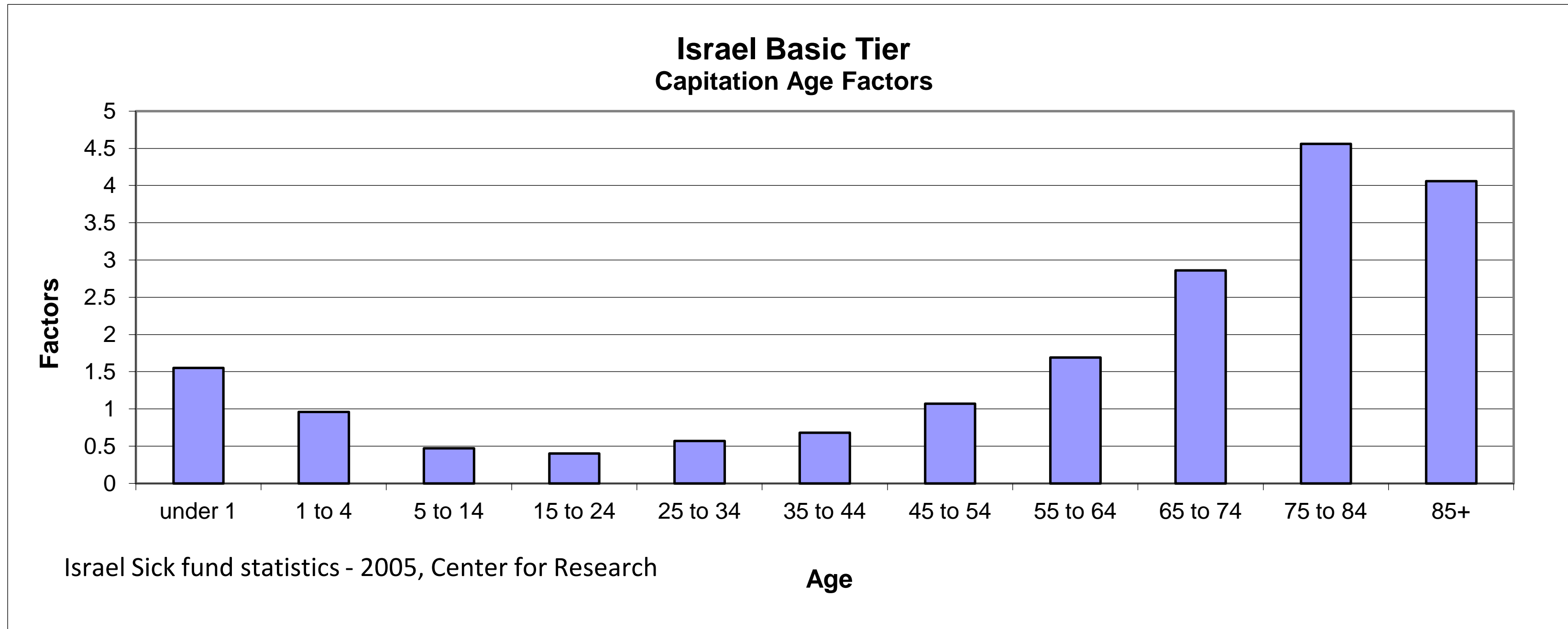
SHCS's only risk adjuster is age

- An individual can only join the SHCS that is offered by his sick fund
- Uses waiting periods to mitigate risk
- About 75% do purchase SHCS

Commercial Insurance uses underwriting techniques

- Pre-existing
- Medical history
- Waiting periods
- Exclusions

Risk Adjustment – Israel

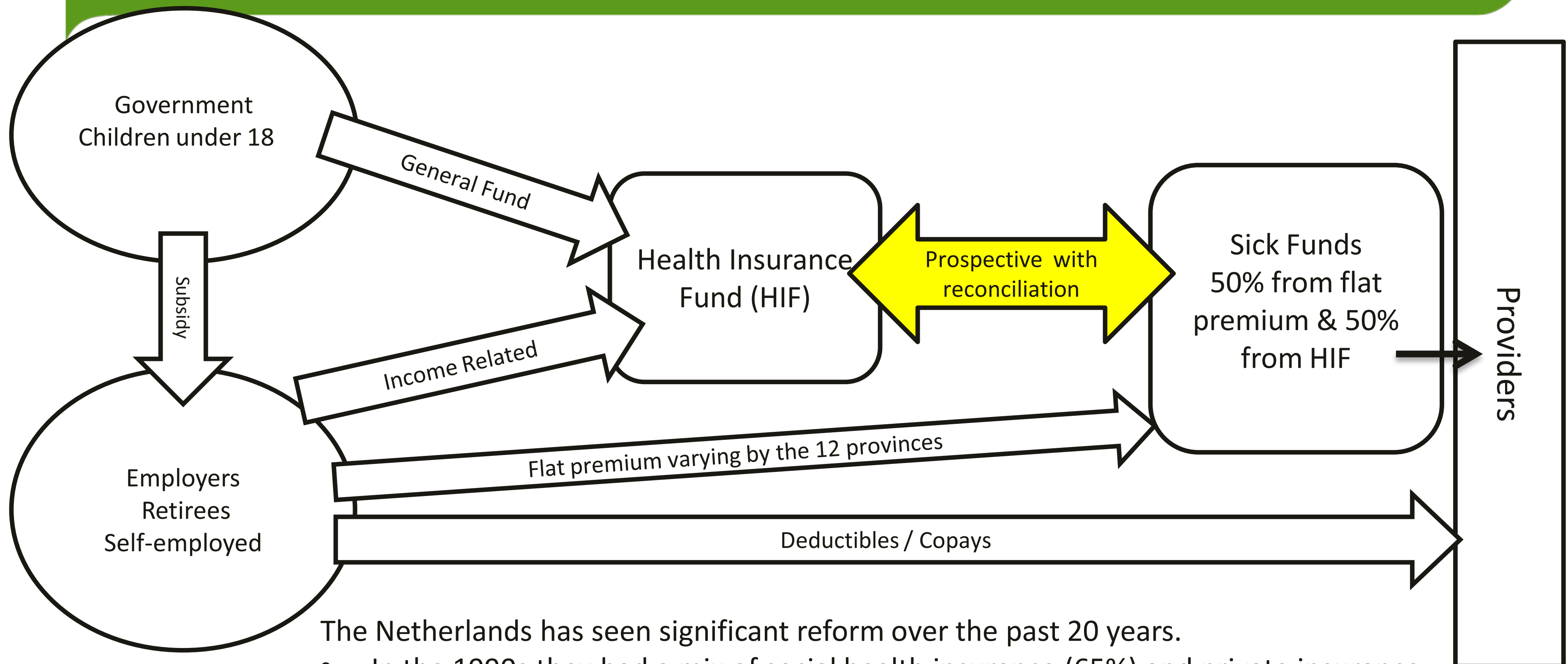


Israel Sick fund statistics - 2005, Center for Research

Age is the driver of the fund allocation. Some argue that children are overvalued.

- Data is based on inpatient services and visits to outpatient clinics

Risk Adjustment – The Netherlands



The Netherlands has seen significant reform over the past 20 years.

- In the 1990s they had a mix of social health insurance (65%) and private insurance (35%). They changed to a mandatory system in 2006.
- About 20 private insurance companies must accept any applicant for basic care.
- Employers pay 7.2% of employee's salary (capped)
- 2/3rd receive subsidies for the flat premium

Risk Adjusters – The Netherlands

Age / Gender – 18 age bands 1991

Urbanization 1996

- 10 regional clusters based on non-Western immigrants, average income, % of single people, death probability, proximity of hospitals & doctors, number of nursing homes

Pharmacy-based cost groups (PCGs) 2002

- Out-patient drugs
- Not an incidental user (6 months usage)
- Linked to about 20 chronic conditions

Diagnostic cost groups (DCGs) 2004

- Based on diagnosis when discharged from hospital

Source of income 2007+

- Disability
- Receiving income support
- Unemployment
- Self-employed
- Employed

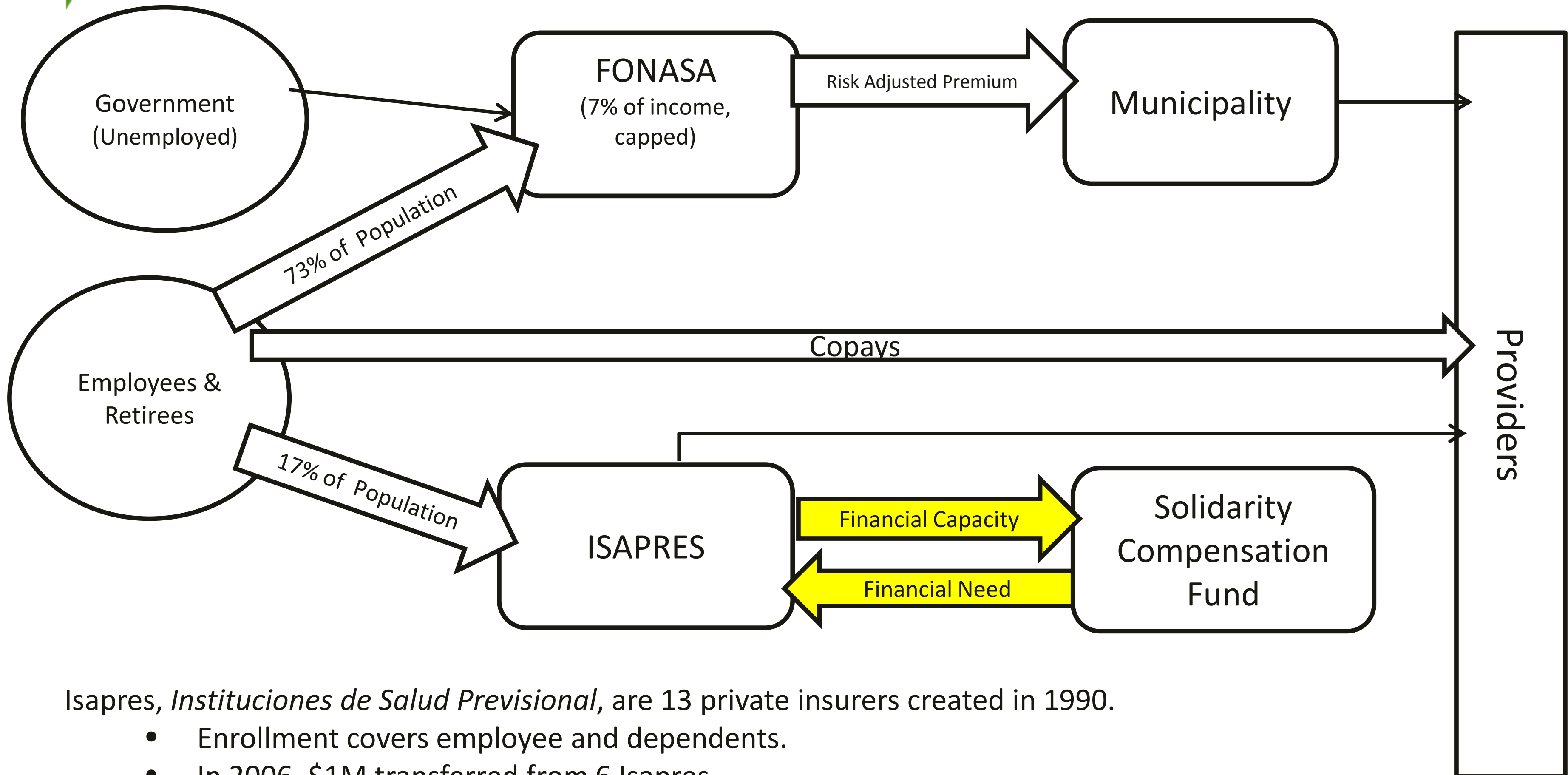
Risk Adjustment – The Netherlands

Risk Adjuster	Woman Age 67, Rural, Thyroid disorder	Man Age 19, City, Student No chronic disorder
Age/Gender	970	389
Urbanization	-31	36
PCG	174	-109
DCG	-97	-97
Source of Income	0	-20
Total	1,016	199

The sick fund receives the monthly amount (in EURs) minus the policyholder's flat rate premium.
Final payments are adjusted retrospectively.
Privacy is maintained by assigning each insured a Pseudo-identity number.

"Risk Adjustment under the Health Insurance Act in the Netherlands", Ministry of Health, Wellness and Sport

Risk Adjustment - Chile



Isapres, *Instituciones de Salud Previsional*, are 13 private insurers created in 1990.

- Enrollment covers employee and dependents.
- In 2006, $1M transferred from 6 Isapres.

FONASA, *Fondo Nacional de Salud* , is the state insurance fund.

Risk Adjustment – Chile

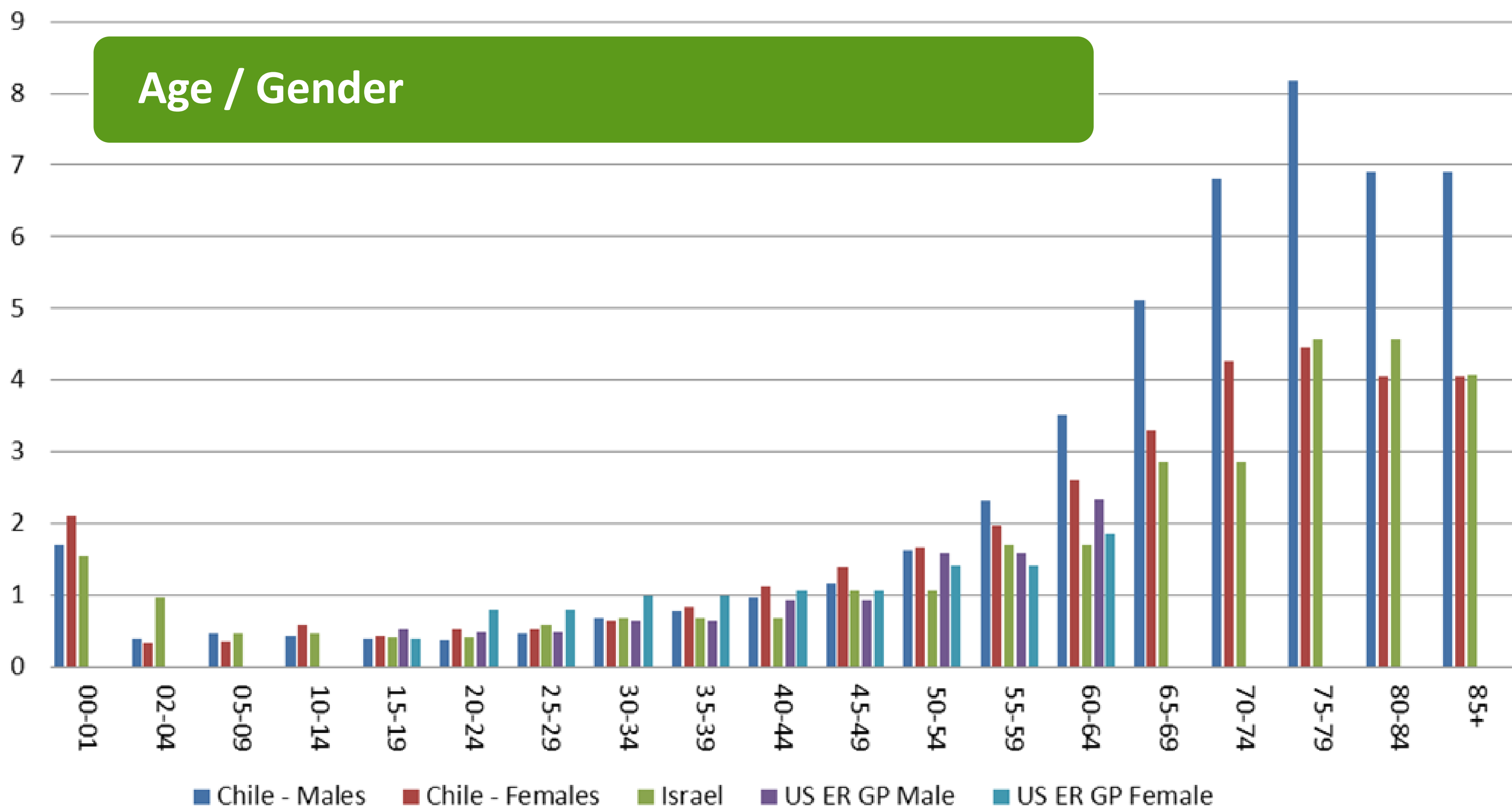
The Fund for Solidarity Compensation, created In 2005, attempts to equalize health risks among Isapres beneficiaries as relates to explicit health care guarantees.

Year	# of Conditions
2000	25
2007	56
Current	69

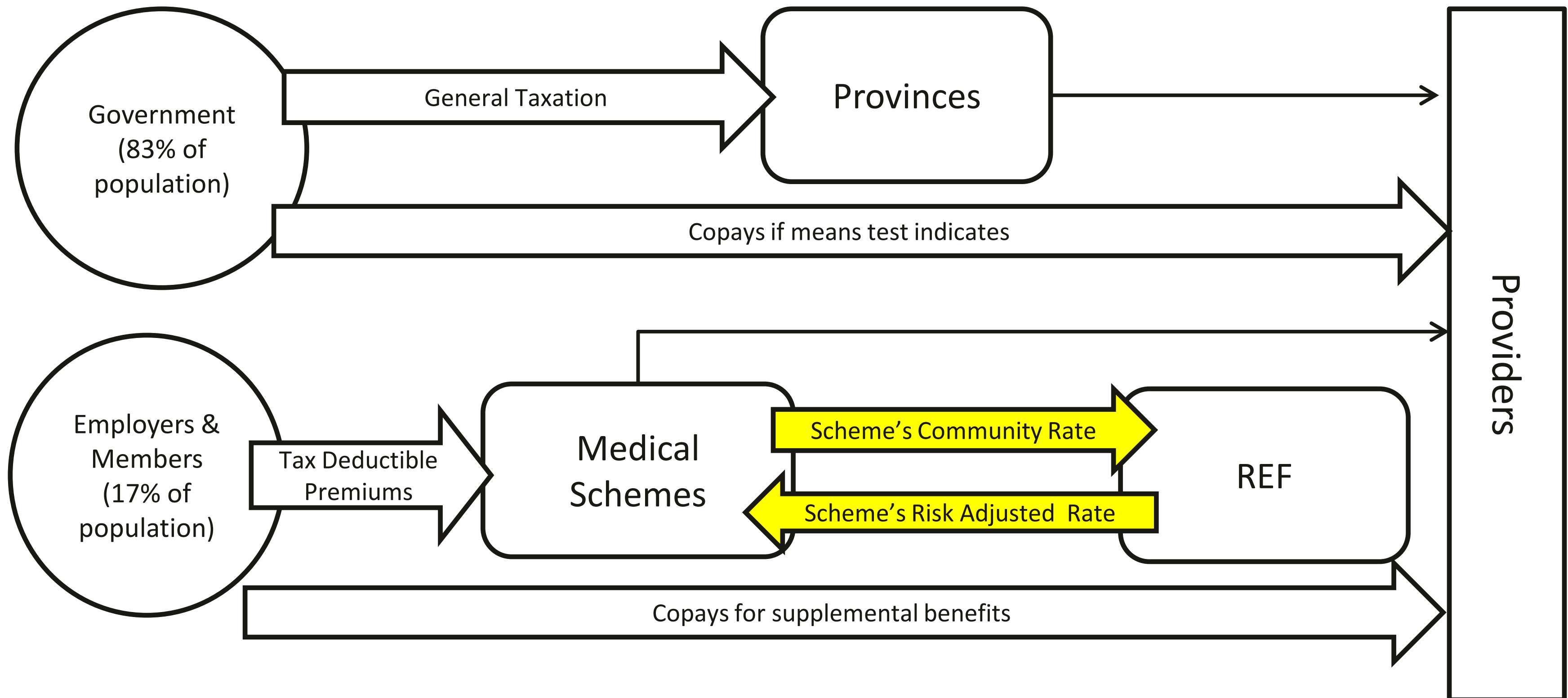
Example - A patient with a heart attack has the below guarantees:

- Within 30 minutes from arriving at health care center– EKG diagnostic and treatment with thrombolytic medication if indicated
- After discharge –secondary prevention visit within 30 days of discharge, monthly visits thereafter

Risk Adjusters – Chile



Risk Adjustment – South Africa



Medical Schemes consists of about 100 non-profit private insurers. They must cover the Prescribed Minimum Benefits (PMBs), but are allowed to include supplemental benefits.

- Risk Equalization Fund (REF) was created in 2004, but is still not implemented.

Risk Adjustment – South Africa

The REF is responsible for collecting and redistributing funds only for the prescribed minimum benefits (PMBs). These are defined using ICD-10 codes, with the goal of ensuring that all medical scheme members have access to certain minimum health services, regardless of the benefit option they have selected.

Medical Schemes must cover the costs of:

- Emergency conditions
- Set of 270 medical conditions defined as Diagnosis Treatment Pairs (DTPs)

DTP Code	Diagnosis	Treatment
109A	Vertebral dislocation/fractures with injury to spinal cord	Repair/reconstruction; medical management; inpatient rehabilitation up to 2 months

- Chronic Disease List (CDL)
- HIV/AIDS

Risk Adjusters – South Africa

Age – 19 age bands

Chronic diseases & number of chronic diseases

- 25 chronic diseases
- HIV/AIDS on ARV therapy

Maternity cases – counted separately

Risk Adjustment – South Africa

70 yr old female with diabetes (DBI) and coronary heart failure (CHF)
Maximum of (3745, 1791) + 246 = 3,992

REF Contribution Table [Base 2005, Use 2010] Combined	Expected Industry REF Community Rate	340.95	The actual Industry Community Rate for each payment period is determined according to the REF Grids that are approved for shadow payments.
Per Beneficiary Per Month			

Age Bands	No CDL Diseases NON	Chronic Disease List (CDL) Conditions								
		ADS	CHF	CMY	DBI	DM1	DM2	DYS	EPL	HAE
Column	1	2	6	7	11	12	13	14	15	17
Under 1	669	0	0	0	0	0	0	0	0	0
1-4	115	294	3,066	1,632	1,112	1,893	665	868	1,004	13,132
40-44	218	397	3,169	1,735	1,214	1,995	767	970	1,106	13,234
70-74	794	973	3,745	2,311	1,791	2,572	1,344	1,547	1,683	13,811
85+	706	884	3,657	2,223	1,702	2,483	1,255	1,458	1,594	13,722

Combined Female and Male table for use in Shadow Year 2010

Age Bands	Chronic Disease List (CDL) Conditions				Modifiers	Modifier for number of chronic conditions				
	HYP	IBD	RHA	SCZ		Number	2	3	4 or more	MAT
Column	19	20	24	25			CC2	CC3	CC4	
Under 1	0.0	0.0	0.0	0.0		All Ages	246	673	1,373	23,192
1-4	324.4	632.8	587.5	891.2			246	673	1,373	23,192
40-44	426.9	735.3	689.9	993.7			246	673	1,373	23,192
70-74	1,003.5	1,311.8	1,266.5	1,570.2			246	673	1,373	23,192
85+	914.8	1,223.1	1,177.8	1,481.5			246	673	1,373	23,192

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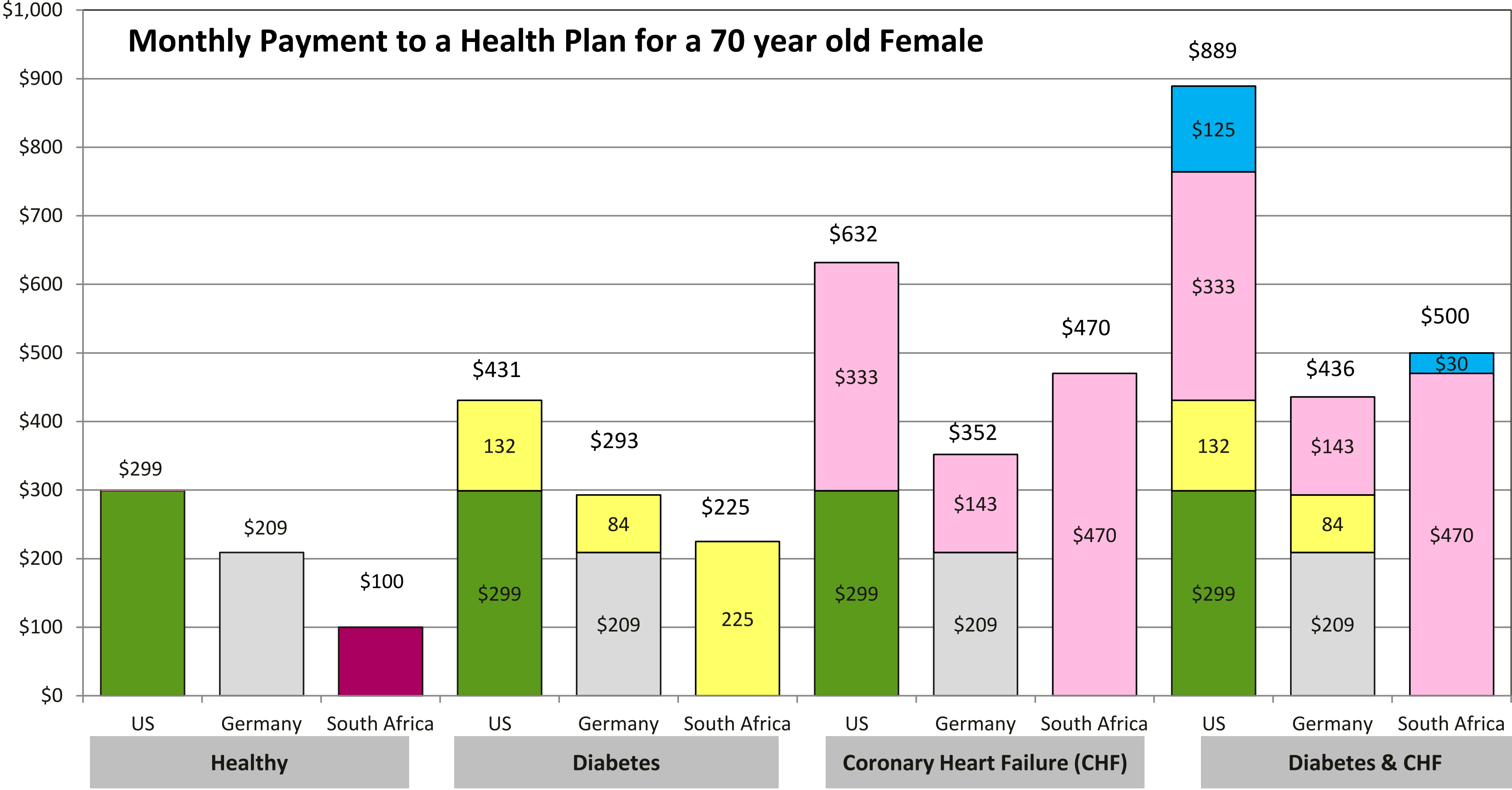
Source: South Africa, REF Contribution Table 2010

Risk Adjustment – South Africa



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Adapted from Contingencies Jan./Feb. 2010 “HCR: Germany”

Risk Adjustment – A Global Perspective

Risk Adjusters	UK	Israel	Netherlands	Chile	South Africa
Demographic	Age (18 bands) Gender	Age (11 bands) Gender (expected)	Age (18 bands) Gender	Age (18 bands) Gender	Age (19 bands)
Health Status	Morbidity Markers	5 Severe Diseases	PCGs / DCGs		Chronic Diseases # of Chronic Diseases Maternity
Socio-Economic	Neighborhood Health Indicators		Source of Income		
Geography		Distance from services (expected)	Urbanization		
Achieving Goals	Improve efficiency Ensure quality & appropriate care	Enhance solidarity Sustainable system	Prevent antiselection Improve efficiency	Enhance solidarity Ensure quality & appropriate care	Prevent antiselection Sustainable system

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Resources:

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