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2 - 5 April
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ACTUARIAL SOCIETY OF SOUTH AFRICA

pre-funding for Healthcare Benefits After Retirement

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Cape Town

April 3rd 2019

Hosted by ACTUARIAL SOCIETY OF SOUTH AFRICA
SECTION COLLOQUIUM 2019

Agenda

- General Introduction
  - Healthcare as a Human Right
  - Healthcare in National Constitutions
- Healthcare as a Social Protection
  - Pillars of Social Protection -World Bank Approach
  - Proposed Pillars of Health Care Protection
- Complexity of Healthcare Financing
  - Healthcare vs Pensions
  - Increasing Cost of Healthcare
- Argument for pre-funding for healthcare benefits after retirement

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General Introduction

1. Healthcare as a Human Right
2. Healthcare in National Constitutions

Health Care is a Human Right

(Article 25 (1) Universal Declaration of Human Rights)

- ✓ Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including … medical care and necessary social services.

WHO Constitution

- ✓ The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without the distinction of race, religion, political belief, economic or social condition.

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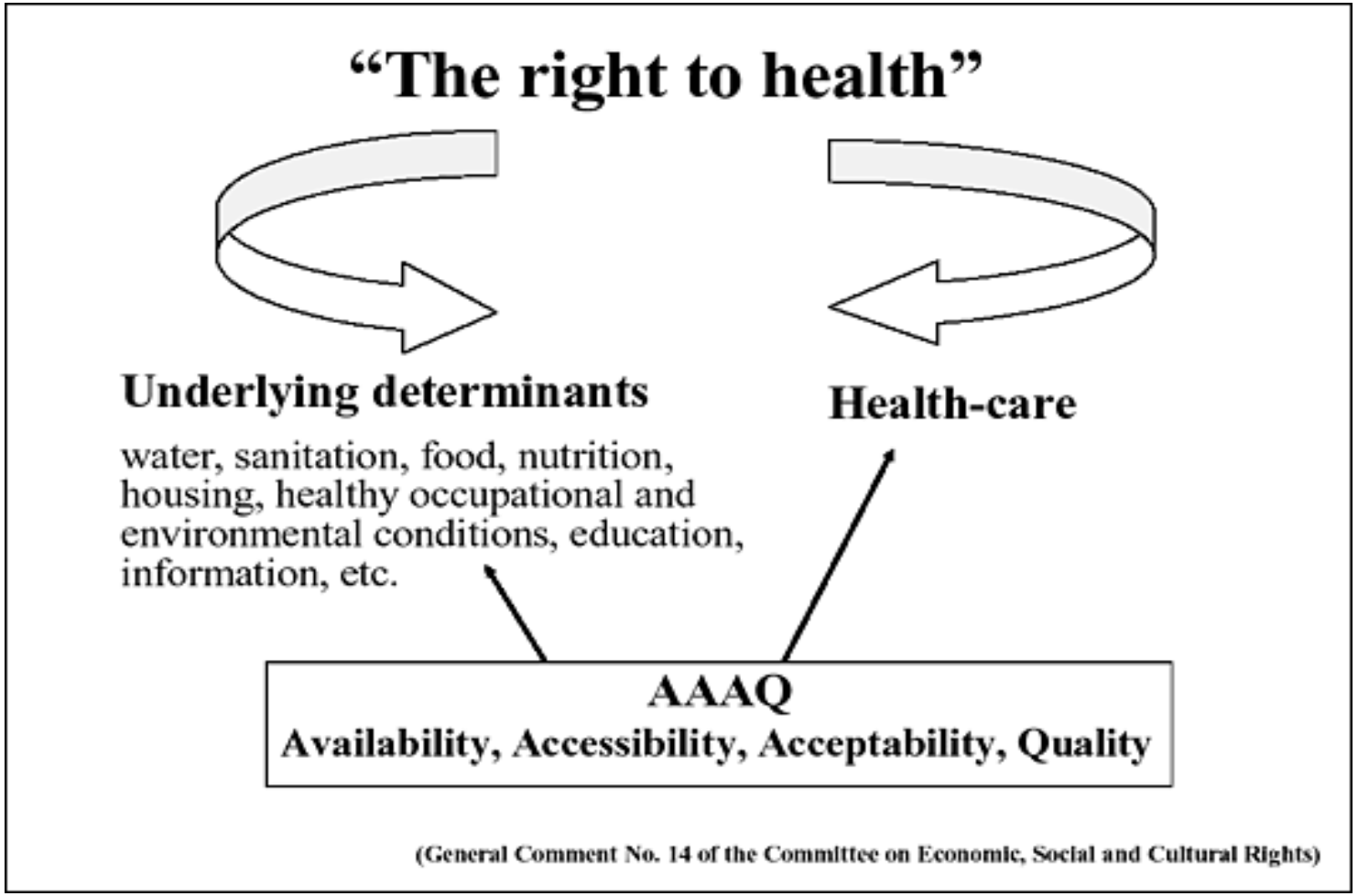
Health Care as a Human Right: WHO and the ILO



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Health Care as a Human Right

UN Human Rights treaties

- International Covenant on Economic, Social and Cultural Rights (ICESCR),1966
- Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW),1979
- Convention on the Rights of the Child (CRC),1989

Regional Human Rights treaties

- European Social Charter, 1961
- African Charter on Human and Peoples' Rights,1981
- Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights (the Protocol of San Salvador),1988

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Health Care in National Constitutions

Country	Adoption	Provision
France	1958 (as amended to 2003)	N/A
US	1787	N/A
Japan	1947	All people shall have the right to maintain the minimum standards of wholesome and cultured living. In all spheres of life, the State shall use its endeavors for the promotion and extension of social welfare and security, and of **public health**.
Brazil	1997 (as amended to 2002)	"Education, **health**, labor, housing, leisure, security, social security, protection … are social rights, in accordance with this Constitution."104 Art. 196. " **Health is the right of all** and the duty of the State and shall be guaranteed by social and economic policies aimed at reducing the risk of illness and other maladies and by universal and equal access to all activities and services for its promotion, protection and recovery

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Health Care in National Constitutions – few African Countries

Country	Adoption	Provision
Rwanda	**2003**	"The State, within the limits of its capacities, takes special measures for the welfare of the survivors of genocide who were rendered destitute by the genocide committed in Rwanda from October 1, 1990 to December 31, 1994, the disabled, the indigent, and the elderly, as well as other vulnerable persons." "All citizens have the right and duties relating to health. The State has the duty of mobilizing the population for activities aimed at promoting good health and to assist in the implementation of these activities."
Uganda	1995	"The State shall endeavor to fulfill the fundamental rights of all Ugandans to social justice and economic development and shall, in particular, ensure that all Ugandans enjoy rights and opportunities and access to education, **health services**, clean and safe water, work, decent shelter, adequate clothing, food security and pension and retirement benefits." "The State shall take all practical measures to ensure **the provision of basic medical services** to the population."

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Health Care in National Constitutions – few African Countries

Country	Adoption	Provision
Zambia	1991 (as amended to 1996)	"The following Directives shall be the Principles of State Policy for the purposes of this Part: . . . (d) the to 1996) State shall endeavor to provide clean and safe water, adequate medical and health facilities and decent shelter for all persons, and take measures to constantly improve such facilities and amenities." "It shall be the duty of every citizen to . . . (b) contribute to the well-being of the community where that citizen lives, including the observance of health controls[.]"
Tanzania	1977 (as amended to 1995)	".. Therefore, the state authority and all its agencies are obliged to direct their policies and programs towards ensuring that the use of national resources places emphasis on the development of the people and in particular is geared towards the eradication of poverty, ignorance, and disease[.]"

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Health Care in National Constitutions – few African Countries

Country	Adoption	Provision
Angola	1992	"(1) The State shall promote the measures needed to ensure the right of citizens to medical and health care, as well as child, maternity, disability and old-age care, and care in any situation causing incapacity to work. (2) Private and cooperative enterprise in health, social welfare and social security shall be exercised in accordance with the law.
South Africa	1997 (as amended to 2003)	"(1) Everyone has the right to have access to— (a) health care services, including reproductive health care; (b) sufficient food and water; and (c) social security, including, if they are unable to support themselves and their dependants, appropriate social assistance. (2) The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realization of each of these rights. (3) No one may be refused emergency medical treatment."

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Health Care in National Constitutions

✓No correlation between the number or strength of constitutional provisions and the amount of resources that countries spend on health care for their populations.

✓Countries with **great constitutional commitment** to health and health care:

- Average government per capita expenditure for health care = **$706** in 2017.

✓Countries with **no provision regarding health** or health care:

- Average government per capita expenditure for health care= **$1652** in 2017.

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Healthcare as a Social Protection

The System unfolded

UNDERSTANDING HEALTH CARE SYSTEMS

World Bank Five-pillar Social Protection Framework

PILLAR	1	2	3
Description	Public pension plan (Publicly managed)	Occupational or personal pension plans	Private schemes (Individual savings)
Who is covered	Formal sector	Formal sector	Middle & higher income persons
What is covered	Basic benefit replacing a portion of pre-retirement income (40%)	Additional benefit replacing an extra portion of pre-retirement income (+30%)	Savings & investments
Participation & Funding	Mandated / Contributions linked to earnings	Mandated / Defined Contributions	Voluntary / Contributions, Ind. savings or employer sponsored

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UNDERSTANDING HEALTH CARE SYSTEMS

World Bank Five-pillar Social Protection Framework

PILLAR	0	1	2	3	4
Description	Basic, social pension, or social assistance	Public pension plan (Publicly managed)	Occupational or personal pension plans	Private schemes (Individual savings)	Informal support, other formal social programs (e.g. **health**) & other individual assets
Who is covered	Life-time poor, Informal and formal sector	Formal sector	Formal sector	Middle & higher income persons	Life-time poor, informal and formal sector
What is covered	Basic protection for the elderly & the disadvantaged	Basic benefit replacing a portion of pre-retirement income (40%)	Additional benefit replacing an extra portion of pre-retirement income (+30%)	Savings & investments	Non Financial: **Health,** Homeownership, lands
Participation & Funding	Universal / General budget	Mandated / Contributions linked to earnings	Mandated / Defined Contributions	Voluntary / Contributions, Ind. savings or employer sponsored	Voluntary / Government and Individual assets

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UNDERSTANDING HEALTH CARE SYSTEMS

- Muhanna Proposed Pillars of Health Care

PILLAR	0	1	2	3
Description	Welfare and Basic Health Care Benefits	Social Insurance Benefits	Occupational Health Care Benefits	Private Health Insurance and OOP payments
Who is covered	Low income, Informal and formal sector	Formal Sector	Formal Sector	Middle & higher income
What is covered	Basic and primary health care services, (Preventive care, Maternity & Chronic Diseases)	Medical necessities, secondary, and tertiary care benefits with co-pays, class C	Top-up insurance, covering the co-pays, & costs not covered by pillar 1 & 2, Class B	Benefits covering extra amenities, elective coverage, Class A
Participation & **Pre-Funding**	Universal / General budget	Mandated / Contributions linked to earnings & sometimes General Budget	Mandated / Sponsor's and member's contributions	Voluntary / Individual Savings and OOP payments

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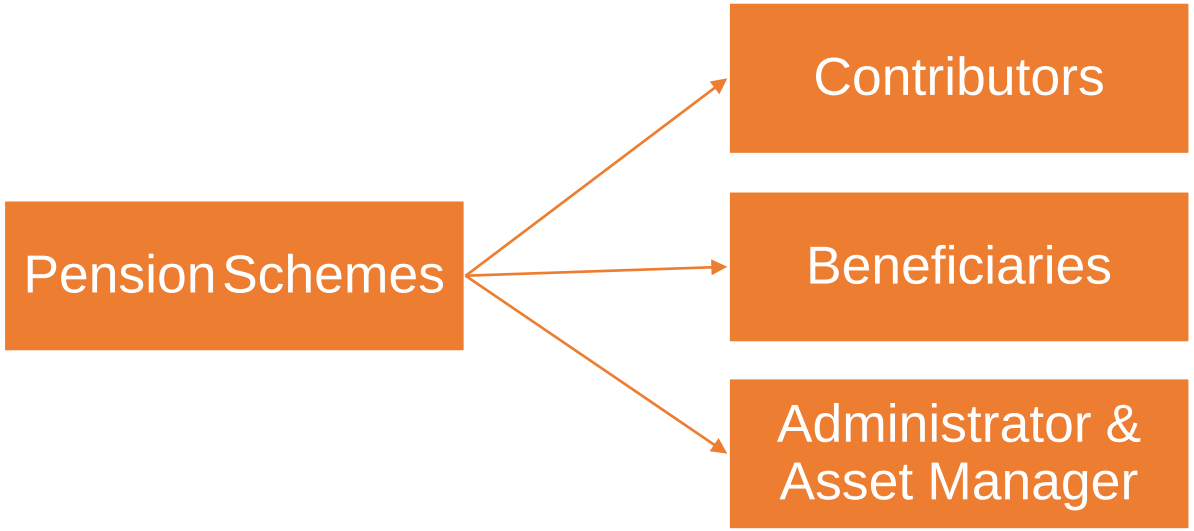
UNDERSTANDING HEALTHCARE SYSTEMS

Stakeholders involved



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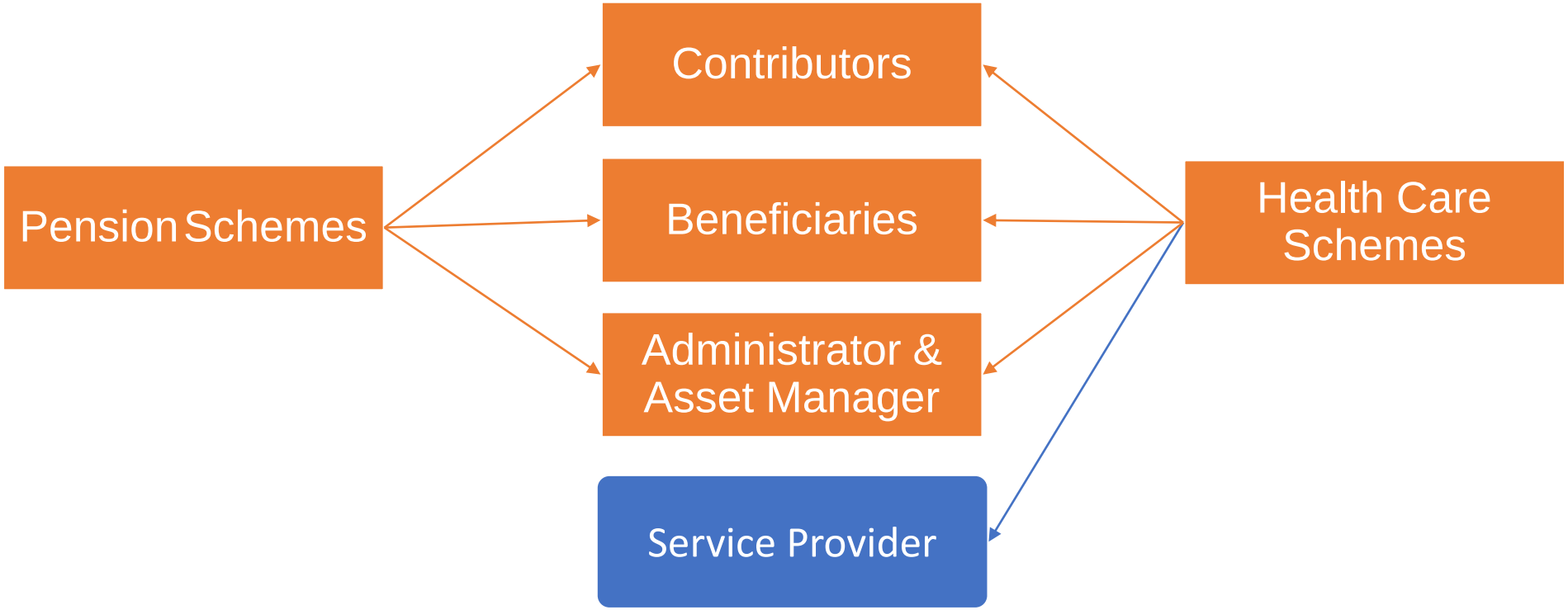
UNDERSTANDING HEALTH CARE SYSTEMS

Stakeholders involved



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UNDERSTANDING HEALTH CARE SYSTEMS

Factor/Aspect	Pension	Health Care
Earnings	Directly Related	
Contribution Period	Directly Related	
Inflation	Indirect Effect	
Mortality	Direct Effect	
Morbidity	Lower effect	
Anti-selection Risk due to eligibility	Low	
Third Party	Little Effect	
Benefits	Relatively easy to quantify	
Eligibility –Anti selection	Manageable	

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UNDERSTANDING HEALTH CARE SYSTEMS

Factor/Aspect	Pension	Health Care
Earnings	Directly Related	Indirectly Related
Contribution Period	Directly Related	Indirectly Related
Inflation	Indirect Effect	Direct (& Indirect) effect
Mortality	Direct Effect	Indirect effect
Morbidity	Lower effect	Higher effect
Anti-selection Risk due to eligibility	Low	High
Third Party	Little Effect	Large Effect
Benefits	Relatively easy to quantify	Harder to quantify
Eligibility –Anti selection	Manageable	Major effect

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Complexity of Healthcare Financing

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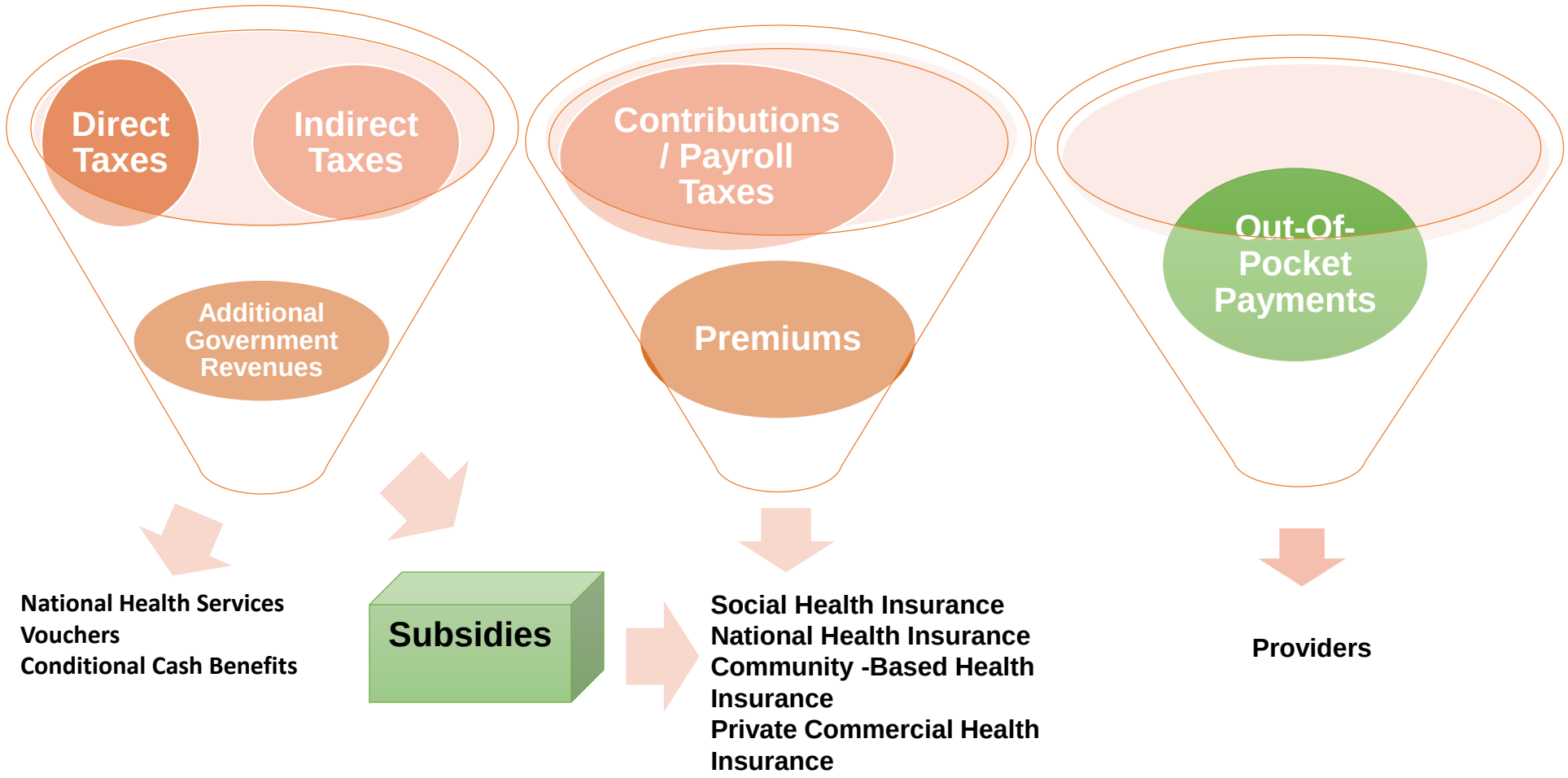
Social Health Protection Funding Resources



"Social Health Protection", An ILO strategy towards universal access to health care

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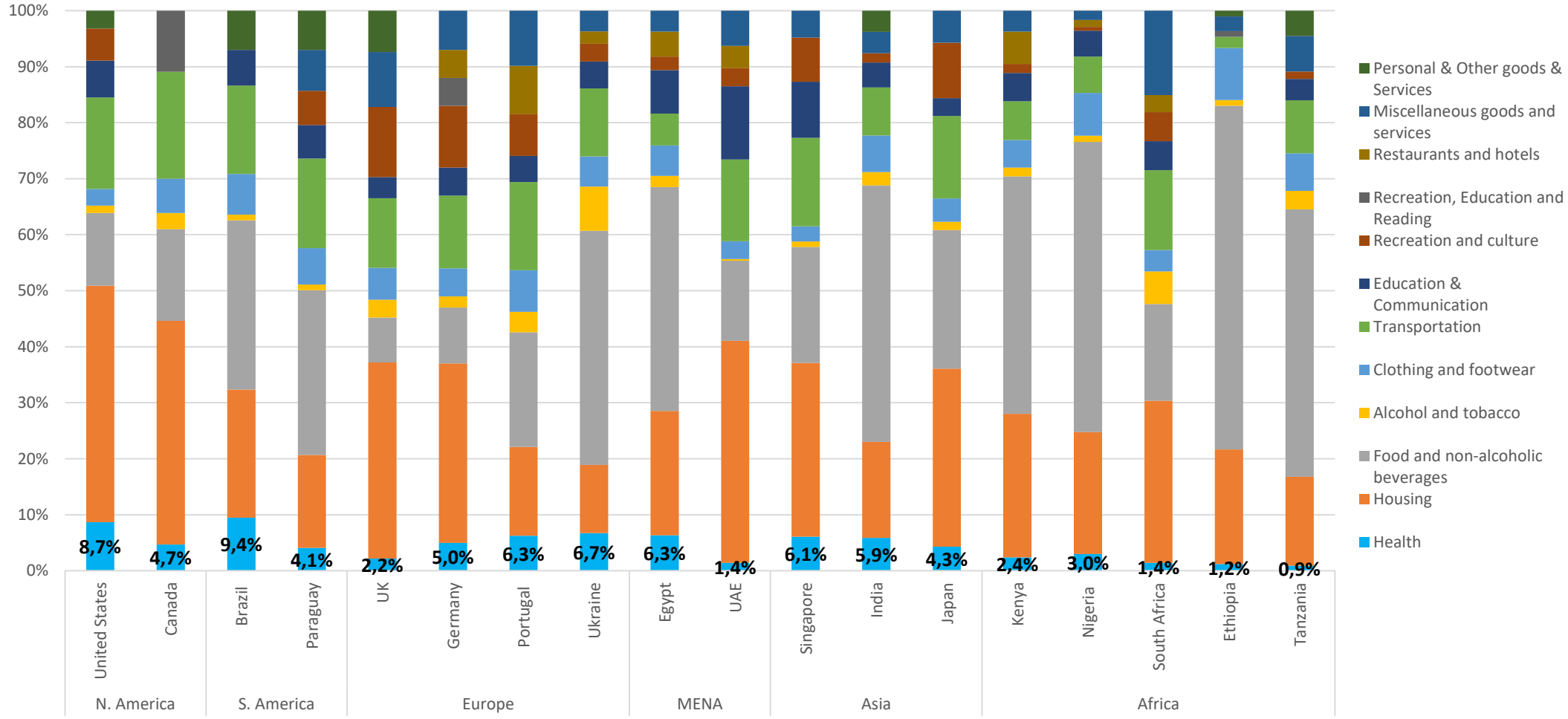
% of Healthcare Spending from Total Consumer Spending
(Based on Most Recent CPI Weights - upto 2018)



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Average increase per capita Healthcare Cost vs CPI

	Average 15 years (2003 -2017)		Average 10 years (2008 -2017)	
	CPI	Health	CPI	Health
Canada	1.79%		1.59%	
Japan	0.20%		0.32%	
Portugal	1.70%		1.20%	
United Kingdom	2.11%		2.21%	
United States	2.09%		1.69%	

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Average increase per capita Healthcare Cost vs CPI

	Average 15 years (2003 -2017)		Average 10 years (2008 -2017)	
	CPI	Health	CPI	Health
Canada	1.79%	3.86%	1.59%	2.80%
Japan	0.20%	5.59%	0.32%	5.74%
Portugal	1.70%	3.48%	1.20%	2.23%
United Kingdom	2.11%	5.63%	2.21%	5.09%
United States	2.09%	4.44%	1.69%	3.61%

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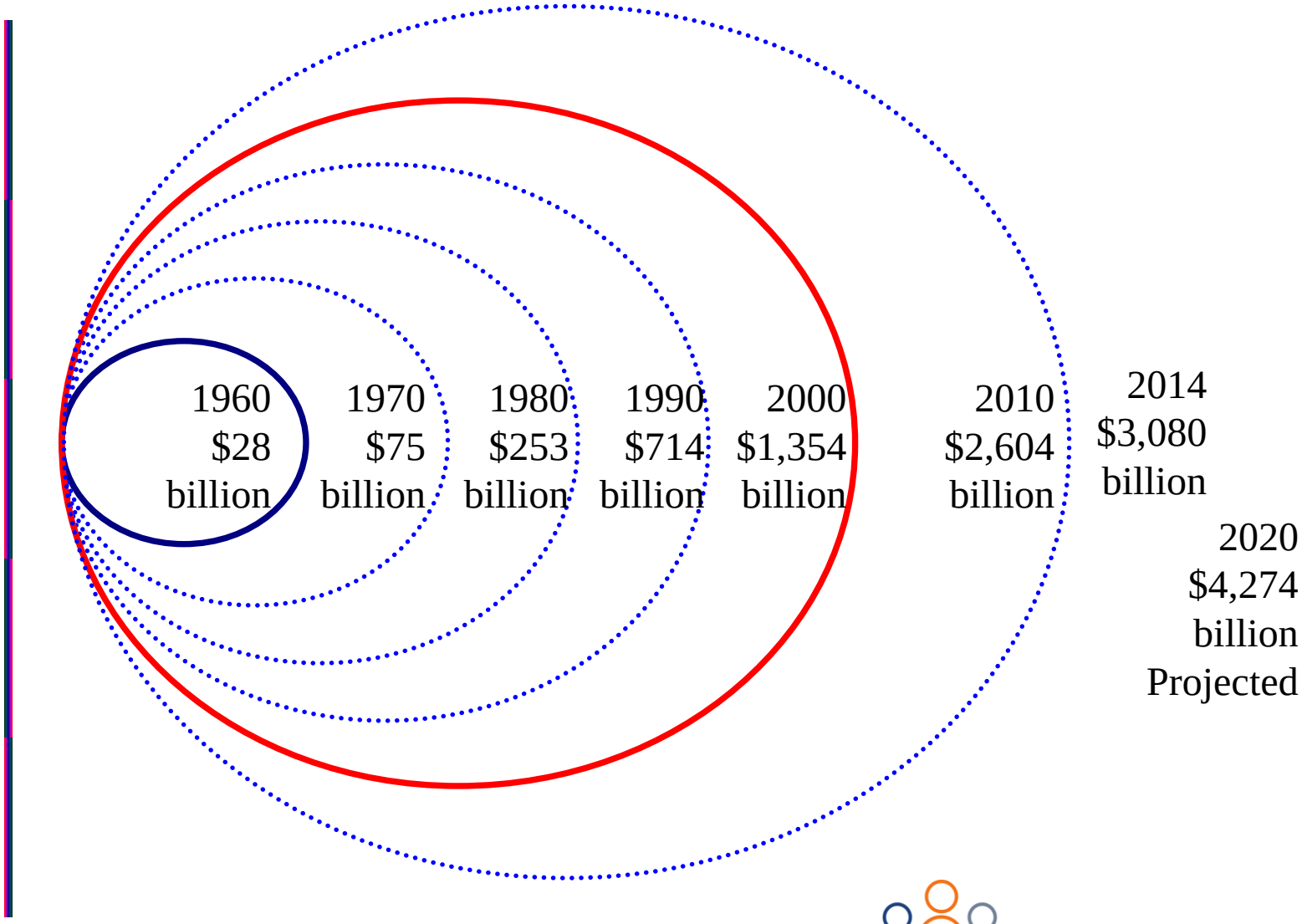
HEALTHCARE SPENDING

US National Healthcare Expenditure

Source: Centers for Medicare and - Medicaid Services - www.cms.hhs.go



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HEALTHCARE SPENDING

US MEDICARE IMPLICIT DEBT

- $65 Trillion in 2006
  - $51 Trillion – based on high discount rate
  - $86 Trillion – based on low discount rate
- $68 Trillion in 2007
- $70 Trillion in 2008
- $72 Trillion in 2009
- $75 Trillion in 2010
- $90 Trillion in 2014 estimated

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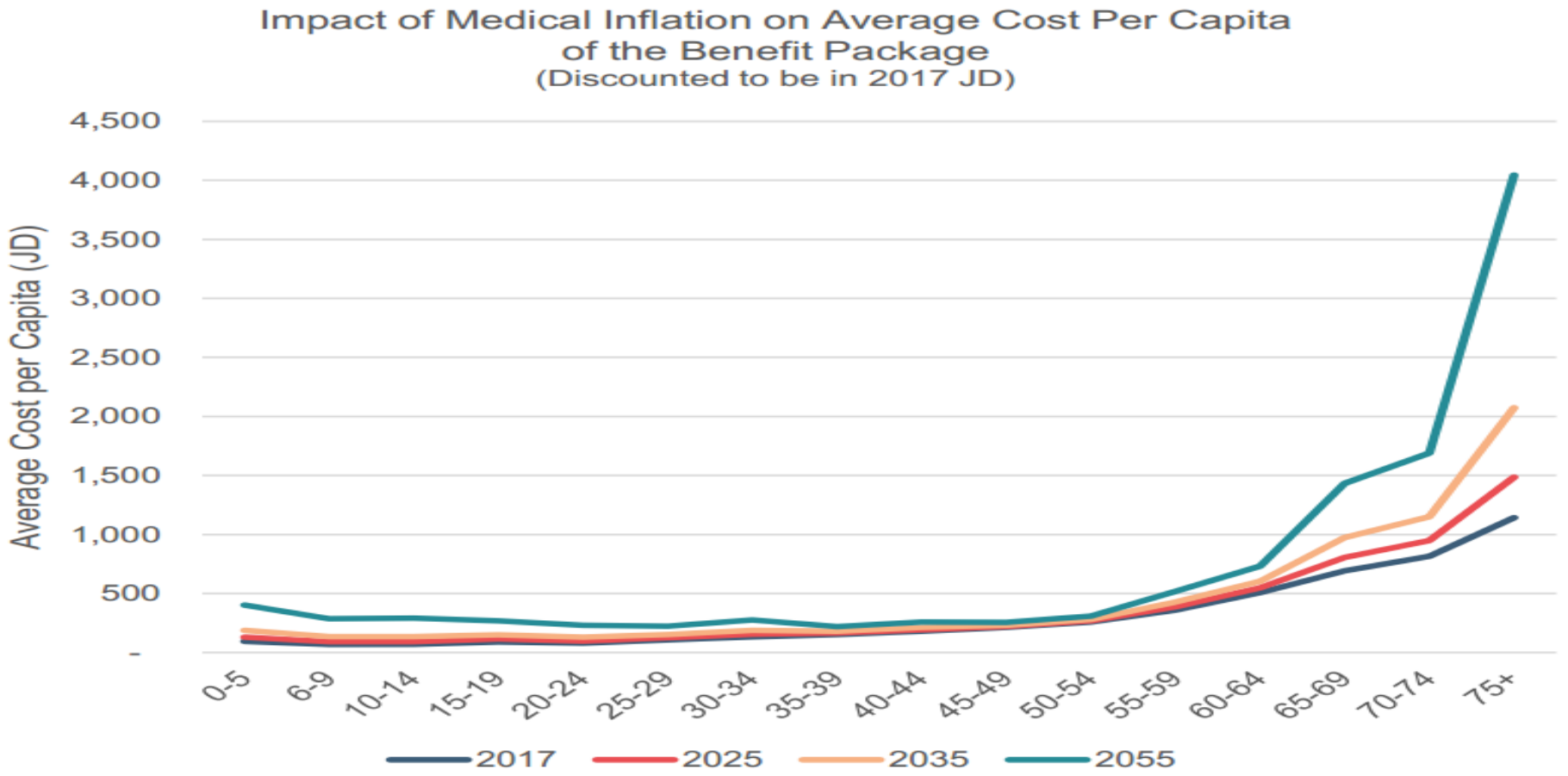
Projecting Costs By Age Group – Impact of Medical Inflation



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Argument for pre-funding for healthcare benefits after retirement

MAIN COMPONENTS HEALTH CARE COSTS

- Average cost of procedure – age sensitive
- Utilization rate – age sensitive

- Medical Inflation is:
  - age sensitive
  - Provider sensitive (public vs private)

- **Example a person Now Age 45 until Age of 85**

- Assumptions:
  - Inflation 3.5%
  - Salary Increase 5%
  - Pension increase 3%

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Example: Healthcare Cost indexed at age 45

AGES Up to	Average Cost
15	520
25	670
35	1090
45	1000
55	1270
65	1690
75	2150
85	2700

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Example: Healthcare Cost indexed at age 45

AGES Up to	Average Cost	Utilization Rate
15	520	15%
25	670	8%
35	1090	10%
45	1000	13%
55	1270	15%
65	1690	23%
75	2150	26%
85	2700	29%

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Example: Healthcare Cost indexed at age 45

AGES Up to	Average Cost	Utilization Rate	Burning Cost
15	520	15%	78
25	670	8%	54
35	1090	10%	109
45	1000	13%	130
55	1270	15%	191
65	1690	23%	389
75	2150	26%	559
85	2700	29%	783

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Example: Healthcare Cost indexed at age 45

AGES Up to	Average Cost	Utilization Rate	Burning Cost	Medical Inflation
15	520	15%	78	3%
25	670	8%	54	2%
35	1090	10%	109	1%
45	1000	13%	130	0%
55	1270	15%	191	1%
65	1690	23%	389	2%
75	2150	26%	559	3%
85	2700	29%	783	4%

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EXAMPLE: HEALTHCARE COST PERSON: AGE 45 NOW UNTIL 85

Age = x	Average Cost Indexed at x = 45	Burning Cost	Burning Cost at Age = x+t	Salary & pension at Age = x+t	Burning Cost as % of Income
25	750	60	45	2,261	2.0%
35	900	90	78	3,683	2.1%
45	1000	**130**	**130**	6,000	2.2%
55	1270	191	296 t=10	9,773	3.0%
65	1690	372	1,085 t=20	15,920	6.8%
75	2250	563	3,721 t=30	12,837	29.0%
85	2800	812	14,652 t=40	17,252	84.9%

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TOWARDS AN OPTIMUM HEALTHCARE FINACING SYSTEMS

- Demographic changes towards becoming ageing populations
  - burning costs is age sensitive
  - medical inflation is age sensitive
- **Prefunding** for healthcare benefits after retirement
- Health care costs of active population may continue to be paid on a pay-as-you-go basis

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Q& A - Thank You

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