Innovative spending in health: a case study of Zimbabwe, South Africa and United Kingdom

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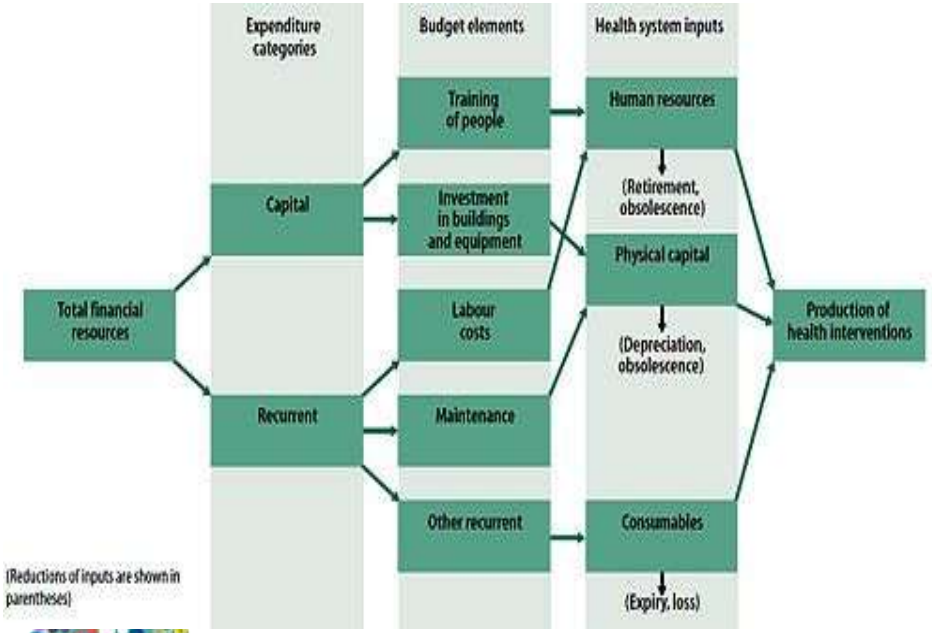
Indeed healthcare is a puzzle!



What is a puzzle?

- *verb*

cause (someone) to feel confused because they cannot understand something.

- *noun*

1. a game, toy, or problem designed to test ingenuity or knowledge.

2. a person or thing that is difficult to understand or explain; an enigma.

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Summary

- Although health care challenges vary from region to region, health systems of every type around the world have the same objective: to finance and deliver the highest possible quality of care to the maximum number of people at the lowest possible cost
- Health systems and other sectors of the economy will forever be in need of more money and other resources
- In this reality, innovative ways of spending money, time and other resources to create and diffuse technologies, products and processes for cost-effective and sustainable health outcomes, cease to be an option
- This presentation builds a case for identifying, reflecting and building on the 'innovations in health spending' championed by a diverse set of actors ranging from the government, private and civil society sectors, to communities, households and individuals in different countries

Innovation and this study

- Defining innovation broadly as the creation and use of new, better, more effective and more acceptable products, technologies, processes and ideas, this presentation emerges from a study which is advancing the notion of ***innovative spending***, looking at how available resources are being or can be spent more imaginatively in order to achieve effective, timely, affordable and equitable health delivery through the development and diffusion of relevant health technologies, products and services.
- The main question being asked by the study is **"what should money (and other resources) be spent on to make health innovations (or health systems) more effective?"**

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Innovation (contd)

- *National systems of innovation are now known* **not** *to emerge automatically from industrialisation or technological advancement efforts (Schumpeter), but require deliberate development and embedding within country-specific institutional and technological contexts (Lundvall, Freeman, Nelson, Winter and others)*
- *Edquist (1997) observed that "the process of innovation is lengthy, interactive and social; many people with different talents, skills and resources have to come together".*

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Methodology

- This is a case study of the health systems of two countries, South Africa and Zimbabwe mainly (and also UK) looking at decision-making processes, innovations in health spending and their impact on health systems
- Data is being gathered through a multi-method approach encompassing interviews, observations and document reviews.
- So far talked to more than 50 respondents, these being mainly actors in the national health systems

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Zimbabwe Key Demographics

- 2014 population estimated to be 14.75mn by World Population Review
- More than 60% of the population lives in the rural areas
- Over 70% of the population is made up of women and children
- 41% of the population are children under 15 years of age
- Older persons make up 4% of the population
- A very large and increasing number of orphans and vulnerable children
- Unplanned peri-urban settlements without social services
- Resettled farmers without social services

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South Africa - Key Demographics

- 61% of the country's ~ 53mn people lives in urban areas
- 30.1% of the population are children under 15 years of age
- 60% of the population is made up of children under 15 and woman in the 15 to 49 age group
- Older persons make up about 4.6% of the population
- Female % increases with age, up to 70.5% for those 85 years and over
- A very large and increasing number of orphans and vulnerable children
- SA faces immense mobility and migration challenges
- Increasing poverty levels

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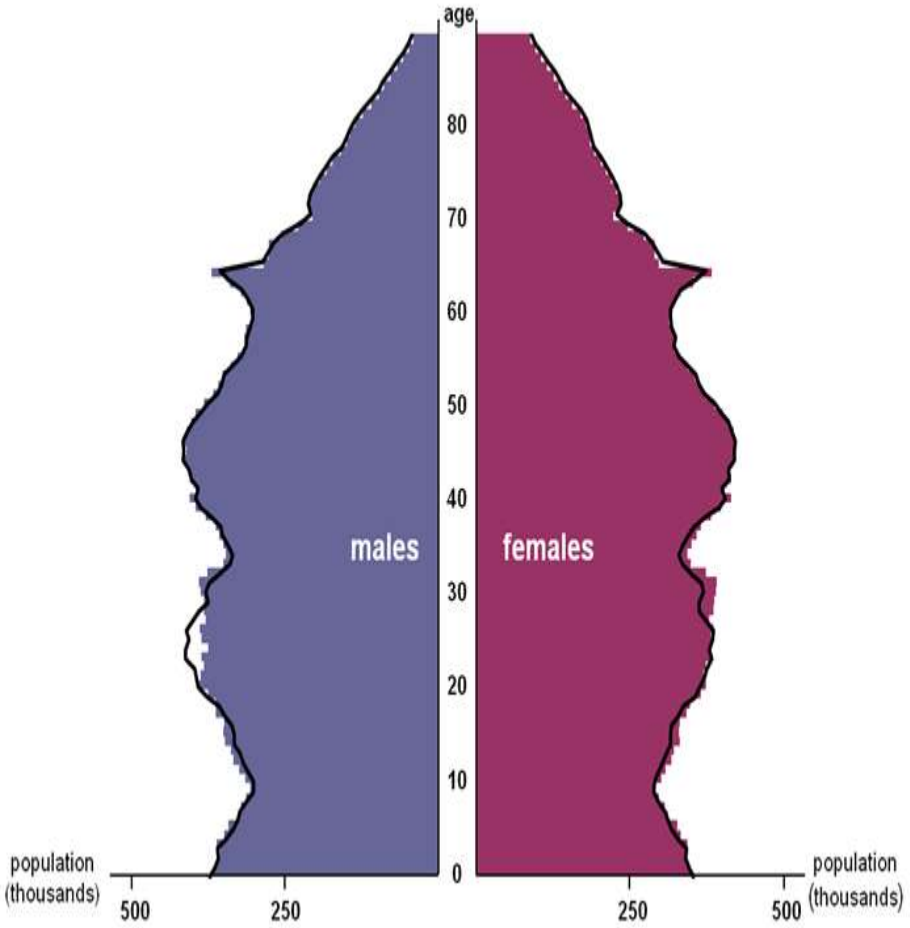
UK Key Demographics

- UK population stood at 64.1 million in mid 2013, up by 5 million from the 2001 count
- Natural change (births minus deaths – 200k) contributed slightly more than net international migration (183k) to the population gain in the year 2012 – 2013
- The population of the UK aged 65 and over was 11.1 million (17.4% of the UK population)
- 2011 census shows 45.7 million (81.5%) of the England and Wales population is resident in urban areas, while 10.3 million (18.5%) were resident in rural areas.



http://www.worldlifeexpectancy.com/united-kingdom-population-pyramid

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Some key health challenges – Zim and SA

- High HIV prevalence and high TB morbidity rate
- Cultural and historical issues impeding access
- Shifting health-seeking behaviours; 'buying up the chain' – impacting primary health care
- Increasing tobacco smoking, alcohol use levels and accidents
- Increase in non-communicable and life style diseases & mental health
- High cost of medicines – generics v brands
- Prevalence of counterfeit medicines and devices – problems with logistics and diminishing role of local pharma companies

Some key health challenges - UK

- An ageing population
- Lifestyle factors – drinking, smoking, low fruit and vege intake, low physical activity levels, obesity (about 1 in 4 adults are obese) (HSCIC, 2014)
- The change in public expectations
- Unnecessary A&E attendances estimated to cost NHS £100m a year (from false nails, hair dyes to hangovers!)
- Rising costs – of services, energy and supplies; innovations and technological breakthroughs

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Good news – they all have health systems!

- *Service delivery centres*
- *Health workforces*
- *Information mechanisms*
- *Medical products, vaccines and technologies*
- *Financing mechanisms*
- *Leadership/Governance mechanisms*

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There are numerous inadequacies confronting the health systems

Studies and lived experience have confirmed inadequacies of the health system building blocks, including:

- *'Rising costs and poor access to generic medications, an overemphasis on cure instead of prevention, and insufficient regulatory control' – SA Health Minister, Sept 12, 2013*
- *Declining staff numbers and skills shortages*
- *Inadequacy of health facilities (1 clinic per 14k people c.f. 1:10k – WHO)*
- *Rise and rise of the 'procurocrats' – what do they know about health?'*
- *Inadequate funding and declining infrastructure*
- *Conflict of interest and trust issues across the system*

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Local health system realities – through the media lens

- ARV national drug stocks improve - Zw
- Health decisions are being made based on politics not evidence" say public health professionals - UK
- Nurses to prescribe ARVs to HIV positive patients - Zw
- Patients bring own water to hospitals - Zw
- Woman in court for possessing unregistered drugs - SA
- Global Fund donates $21,8m for ARVs - Zw
- Cancer levy in the offing - Zw
- Technology won't save us, people will - UK
- Digital health comes to the UK - UK
- We need more people helping in hospitals - UK
- How complaints can stimulate innovation in public services - UK

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Local health system realities (2)

- Adoption of WHO guidelines to increase ART demand - Zw
- Health sector suffers from underfunding - SA
- Debt gobbles hospitals' 2014 budget allocation - Zw
- Africa must take own approach to improve immunization - SA
- More specialist clinics on the way - SA
- Malaria still a burden in border areas - SA
- Private wards in public hospitals to be closed - SA
- UK Ebola nurse gets test drug - UK
- Pre-cook barbecue food, warns agency - UK
- Fluoridisation of water is a step towards tackling health inequalities - UK

Who decides and what motivates them?

Decision Level	Decision criteria	What to spend on
Global	*Standards, numbers, accountability*	*Training, medicines supply*
National	*Wide spread access, political mileage*	*Setting up facilities, availing staff*
Sectoral (Gvt Dept)	*Deliver within budget*	*Items budgeted for*
Organisational (e.g. clinics)	*Budgets, reputations, profits, timeliness*	*Good infrastructure, competent staff,*
Community	*Access to facilities, friendly & competent staff*	*Cures, compatible support structures*
Household	*Accessible, effective and efficient systems*	*Effective medicines, relevant information*
Individual	*Accessible, cost-effective and efficient systems*	*Facilities and medicines of choice*

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Observations

- Governments, like individuals, are much more careful and strategic when its their own money being spent
- ‘Free health’ encourages wasteful spending and use of health facilities
- Government-run health care said to be morally superior to market based approaches because ‘you can’t put a price on human life’
- Demands in the healthcare puzzle encourage a ‘solutions thinking’ approach, which limits staying in the ‘problem space’, resulting in premature elimination of other potential solutions
- There is need for front end and rear end innovation

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Some innovations in spending on health in SA and Zim

- Both countries - high activity in basic, pre-clinical and clinical research – e.g SA candidate drug for malaria
- Joined up approaches – e.g. Ketlaphela partnership between DST, T&I, Health, Economic Development with Swiss pharma company, Lonza to set up a pharma plant
- New partnerships e.g. Negotiated Service Delivery Agreement (NSDA) – & community health monitoring programmes - dealing with overlaps and interfaces
- National health insurance (both) >80% not covered
- 'Catalytic' funding streams - Health transition fund & Target approach fund (Zw) & health delivery models – (private, mission hospitals & home-based care)
- Nurse-led management of antiretroviral therapy (both)

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Some innovations in spending on health in SA and Zim (contd)

- Players:  the value chain; new entrants too (both)
- Govt & industry involvement in curriculum development, e.g. for pharmacy and MPH degrees (both)
- Health information systems, telemedicine, including call centres and hotlines (both)
- Human resource and infrastructure development schemes set out in NDP 2030 (SA)
- Community-based ownership and management of health facilities
- Emphasis on indicators and measurement

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Some innovations in health spending - UK

- Some key innovations relate in particular to cure failures at Mid Staffordshire Foundation trust and the subsequent Francis report (2013). These include appointment of an ambassador for cultural change; value-based recruitment, 'spending to save', and use of nursing indicators

Other innovations:

- Workforce innovation – modernising scientific careers by Office of the Chief Scientific Officer
- UCL Hospital – staff-led service improvement
- Low-cost care homes to free up hospital beds
- Patient and carer-led service improvement through the Centre for Patient Leadership
- Use of telephonic and online help advice to cut waiting times and reduce hospital admissions

What other 'innovative spending' can health care funders champion?

In addition to the numerous imaginative activities being done already …

- Health innovation awards?
- Designing medical care league tables?
- Identifying, profiling and funding low cost health innovations?
- Stimulating innovative infrastructural maintenance options – e.g. use of hospital parking fees
- Funding patient leadership platforms?

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Some food for thought as decisions on innovative spending in health are being made

- How did we get here in the first place? **(retracing the steps)**
- How are standards being ensured, and whose standards?
- What are the back-up arrangements?
- How are the innovations buffered/cushioned? **(sustaining momentum)**
- Are there limits to incentives, interconnectedness?
- Who is liable when innovations fail?
- What can be learned from other sectors?

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Acknowledgements

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