

IMPROVING ACCESS TO MEDICINES IN SOUTH AFRICA

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Cape Town
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The
I7th Annual
**BHF Southern
African Conference**

A Roadmap to Universal Healthcare




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Disclaimer

This presentation reflects my own views and does not reflect the views of the SA government or any other organization or committee that I am affiliated with.



Outline

Setting the scene

- UN High-level Panel on access to medicines
- WHO framework for access to essential medicines

Factors influencing access to medicines

Improving access to medicines

- Patient empowerment
- Health outcomes measurement
- Task shifting
- Change in prescriber habits
- Management within benefits

Concluding remarks



The United Nations secretary-general's high-level panel on access to medicines

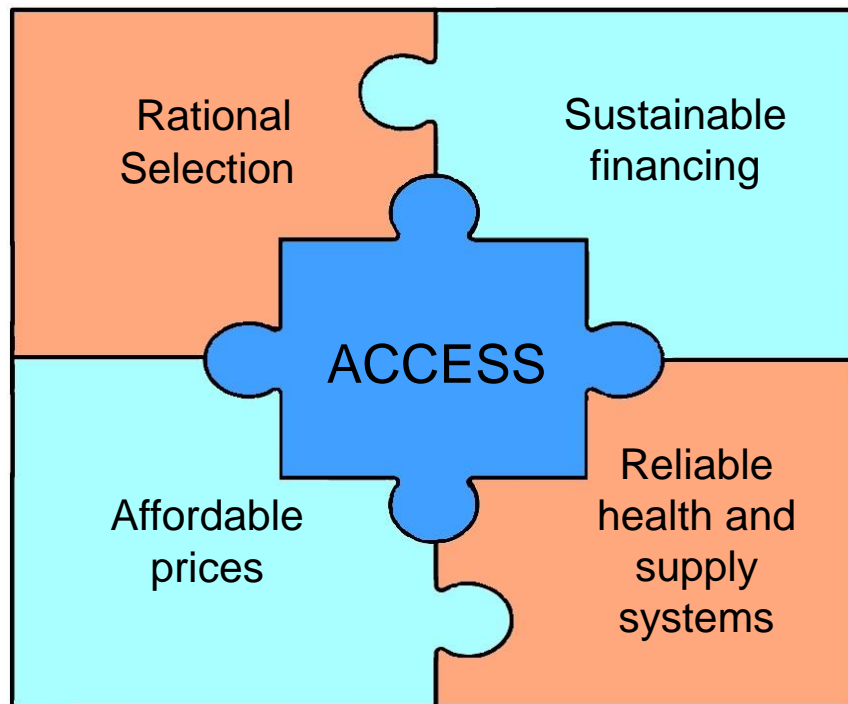
Expand access to health technologies

- (1) **Review and assess proposals** for their potential to improve health technologies innovation and access, and make recommendations
- (2) Hold **public hearings** that facilitate multi-stakeholder dialogues
- (3) Request additional **research** on issues relevant to its enquiry



- National treatment guidelines
- National EML
- Rational use of EML

- Price information
- Price competition
- Bulk procurement
- Generic policies
- Equitable pricing
- Reduction or elimination of duties and taxes
- Local production of assured quality



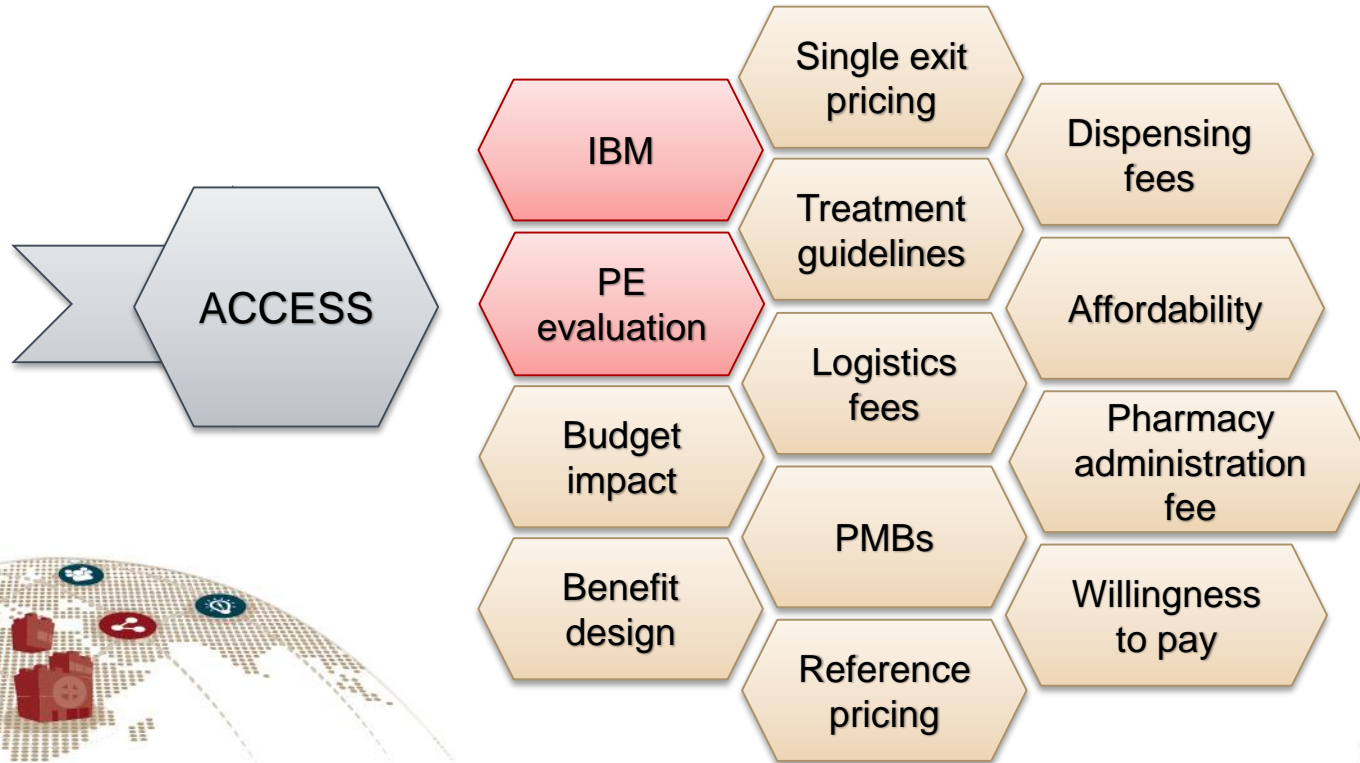
- Increased public funding
- Out-of-pocket spending
- Cost sharing with patients
- Donor assistance
- Donation of medicines

- Health sector development
- Public-private-NGO mix
- Regulatory control
- Procurement co-operatives
- Traditional and complementary medicines



WHO framework for access to essential medicines

Factors Influencing access to medicines

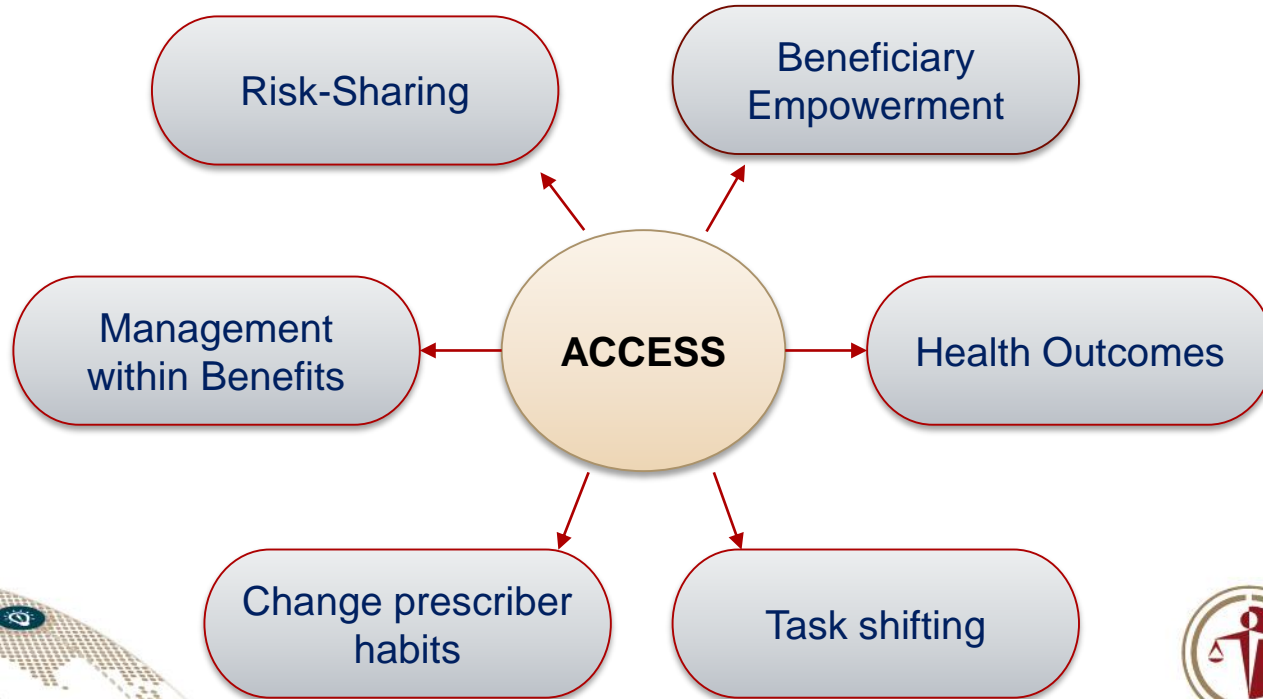


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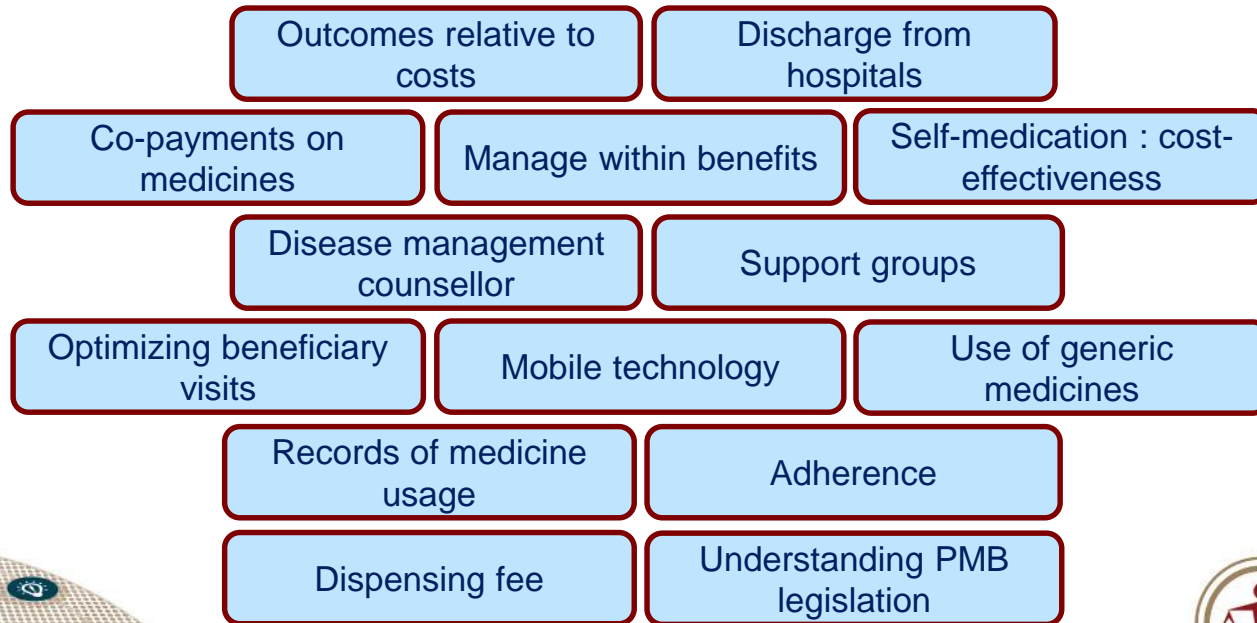
IT SYSTEMS



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Beneficiary Empowerment



Task shifting: rational redistribution of tasks among health workforce teams

Global recommendations and guidelines. 2008, WHO

Process whereby specific tasks are moved, where appropriate, to health workers with shorter training and fewer qualifications – save on costs.

- more efficient use of existing human resources
- ease bottlenecks in service delivery



‘Outcome measurement is perhaps the single most powerful tool in revamping the health care system’

‘Measure outcomes for every patient’

Porter ME. What is value in health care? NEngl J Med 2010; 363: 2477-81

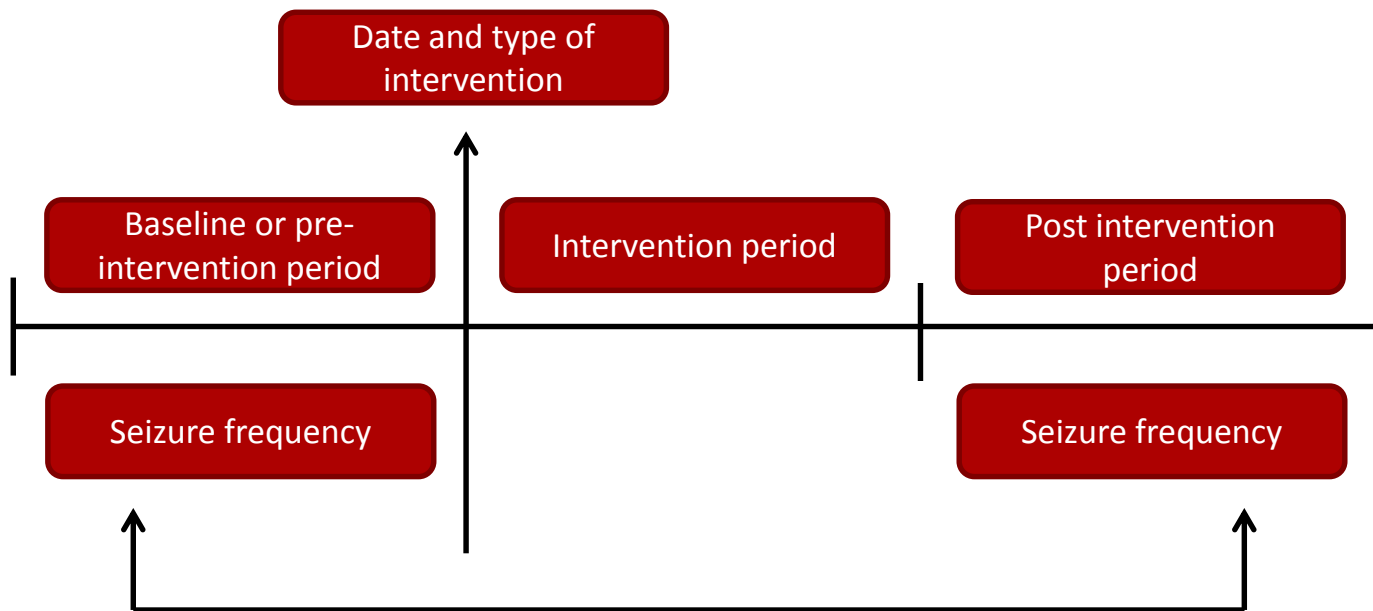


Phenytoin study in the Western Cape

- Phenytoin
- Practical application of improved access to treatment
 - Task shifting
 - Health outcomes measurement
 - Rational use of medicines
- Clinical pharmacokinetic service – GSH and CHCs



Health Outcomes Assessment



Difference = Outcome

Value of healthcare intervention



Results

- Reduction in seizure frequency = 65%
- Reduction in adverse effects

Visit	% patients
First visit	20,5%
Last visit	3,2%

Based on phenytoin blood samples

P. Valodia, PI Folb, BM Kies, MA Seymour. Benefits of a clinical pharmacokinetic service in optimizing phenytoin use in the Western Cape. SAMJ.1998,88:873-875



Learning points from phenytoin study

- Impact of task shifting
- Value of measuring health outcomes
- Extent of inappropriate use of phenytoin



$$Cp_{ss} = -\frac{1}{2} \left[\left(\frac{Vm}{Cl} + Km - \frac{R}{Cl} \right) - \sqrt{\left(\frac{Vm}{Cl} + Km - \frac{R}{Cl} \right)^2 + \frac{4 \cdot R \cdot Km}{Cl}} \right]$$

$$Vm = (\theta_1 * WT * \theta_3) RACE * SMK * ALC * SEX * AGE * EXPn_1$$

Where
 RACE = θ_4 if coloured, otherwise = 1
 SMK = θ_5 if smoker, otherwise = 1
 ALC = θ_8 if drinker, otherwise = 1
 SEX = θ_9 if male, otherwise = 1
 AGE = θ_{10} if ≥ 65 years, otherwise = 1

$$Km = \theta_2 * RACE * AGE * EXPn_2$$

where
 RACE = θ_7 if coloured, otherwise = 1
 AGE = θ_{11} if ≥ 65 years, otherwise = 1

$$Cl = \theta_{11} * EXPn_3$$

P. Valodia et al. Factors influencing the population pharmacokinetic parameters of phenytoin using non-linear mixed effects modelling in adult epileptic patients in South Africa. Therapeutic Drug Monitoring. 1999.21: 57-62



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Concluding remarks

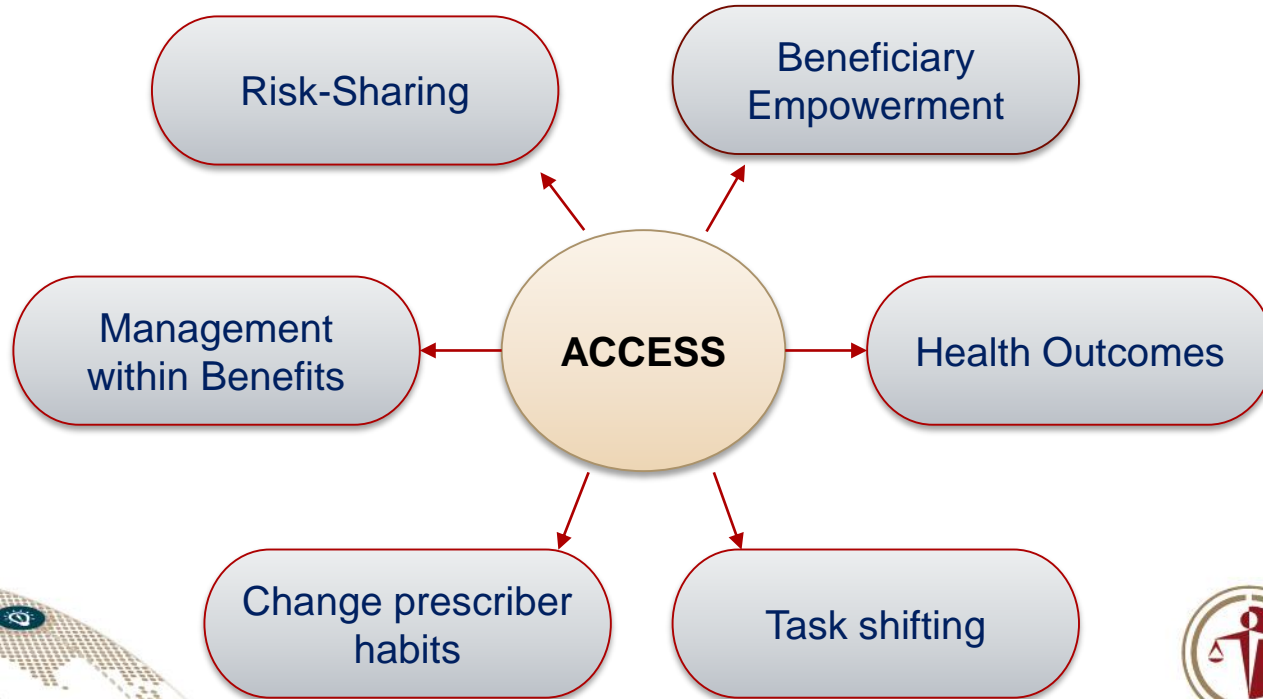


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Need a paradigm shift in our thinking!!

Need experimentation and adaptation

Implement formalised peer review process



THANK YOU



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