



# Acknowledgements

This presentation draws on:

- research funded by the Alliance for Health Policy and Systems Research at WHO, and
- reflections on working with DFID since 2010



# How systematic reviews differ

- Aggregating evidence to test hypotheses
- Configuring research to develop theory
- Development reviews doing both
- Reviews as public goods or tailored to context
- and questions about how they are used?



# Aggregating or configuring

Research findings for development



# Aggregating evidence...

#### For testing a hypothesis... and greater precision:

A statistical meta-analysis

Impact of lay health workers on exclusive breastfeeding

				Risk Ratio	Risk Ratio					
Study or Subgroup	log[Risk Ratio]	SE	Weight	IV, Random, 95% CI	IV, Random, 95% CI					
Muirhead 2006	1.61740608	1.54860848	2.1%	5.04 [0.24, 104.86]	- Familiar?					
Agrasada 2005	3.82100361	1.42014362	2.4%	45.65 [2.82, 738.36]						
Anderson 2005	2.58701187	1.02638872	4.1%	13.29 [1.78, 99.35]	<del></del>					
Morrow 1999	1.54543258	0.51571153	9.2%	4.69 [1.71, 12.89]	<del></del>					
Coutinho 2005	2.07944154	0.4624221	10.1%	8.00 [3.23, 19.80]						
Haider 2000	2.47485631	0.3582266	11.9%	11.88 [5.89, 23.97]	_ <del>-</del>					
Morrell 2000	0.16551444	0.24536071	13.8%	1.18 [0.73, 1.91]	<del> -</del>					
Dennis 2002	0.35767444	0.13399651	15.4%	1.43 [1.10, 1.86]	<del>-</del>					
Graffy 2004	0.18232156	0.12427121	15.5%	1.20 [0.94, 1.53]	<del>-</del>					
Leite 2005	0.2390169	0.12148831	15.5%	1.27 [1.00, 1.61]	-					
Total (95% CI)			100.0%	2.78 [1.74, 4.44]	•					
	eterogeneity: Tau <sup>z</sup> = 0.35; Chi <sup>z</sup> = 68.46, df = 9 (P < 0.00001); $I^z$ = 87% est for overall effect: Z = 4.27 (P < 0.0001) Favours									

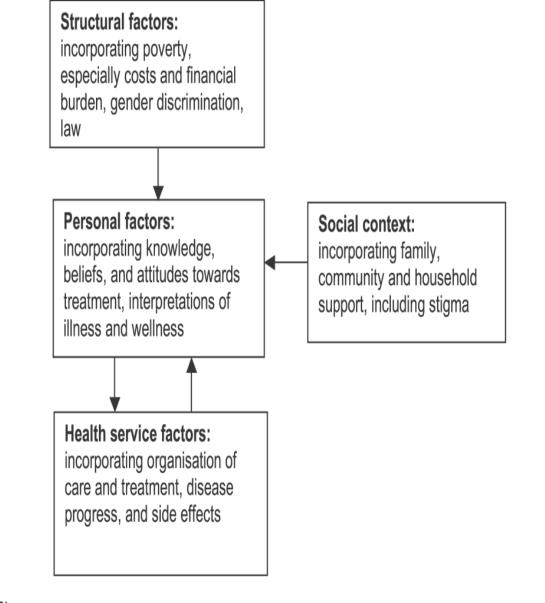
#### Institute of Education

# Configuring evidence

For building theory... and greater understanding

A meta-ethnography: Factors influencing adherence to TB treatment

Lewin et al Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases. Cochrane Database of Systematic Reviews 2010, Issue 3. Art. No.: CD 004015.



#### Note:

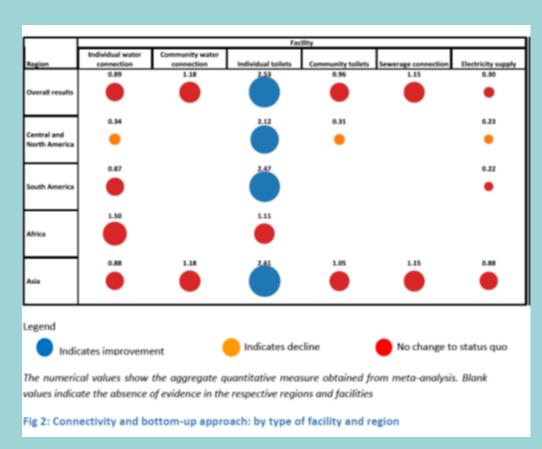
↓ ↑ suggest a bi-directional relationship between factors. For example, health service interventions directed at patients are likely to influence patient adherence behaviour through the filter of "personal factors." Similarly, patients' interactions with health services are likely to be influenced by their knowledg attitudes, and beliefs about treatment as well as their interpretations of illness and wellness.



# Aggregating & configuring evidence

# For policy relevant development reviews

A mixed methods review: Access to water, sanitation and electricity services in low-income or informal settlements



Annamalai TR, Devkar G, Mahalingam A, Benjamin S, Rajan SC, Deep A (2016) What is the evidence on top-down and bottom-up approaches in improving access to water, sanitation and electricity services in low-income or informal settlements? London: EPPI-Centre, Social Science Research Unit, UCL Institute of Education, University College London.



## **Questions?**

What are broad development reviews *used* for?

- Effects of specific interventions? (study averages)
- Effects in specific contexts? (single studies)
- Understanding of how interventions (do not) work?
- Understanding of how context matters?



# Public goods or local goods?

Systematic reviews for development



# Reviews as public or local goods?

- Public goods reviews: Use global knowledge to inform local knowledge to maximise rigour of research for decisions
- Tailored to context reviews: Use local knowledge to shape global knowledge to maximise relevance of research to area of interest



# Public goods reviews

# Generalisable evidence for common problems

- Consensus on key concepts and priorities
  - Taxonomies and core outcome sets; priority setting
- Multi-stakeholder involvement
  - International 'peer' review
  - Advisory groups
- Emphasis on effectiveness
  - Clear methods guidance





Better evidence for a better world





# Public goods\* health reviews

- Vitamin A supplementation to prevent blindness due to childhood measles
- Condom effectiveness in reducing heterosexual HIV transmission
- Corticosteroids for treating nerve damage in leprosy
- Glasses, masks and respirators, hoods, clothing and shoes or boots to protect health care workers from viral or bacterial infections



# Public goods\* development reviews

- Vocational and business training programmes on women's income, working conditions, societal worth, and economic empowerment
- Agricultural input subsidies on agricultural productivity and beneficiary incomes and welfare
- Promoting sanitation and hygiene behaviour change in communities in low- and middle income countries



# Public goods reviews

#### Typically

- Narrow-ish questions
- Populations, interventions, outcomes defined in advance
- Emphasis on effectiveness, and a quality threshold



#### Tailored to context reviews

#### Responsive to local need

- To inform specific immediate problems
  - Framed by funders'/ policy teams' interests
- Local stakeholder involvement
  - Advisory groups
  - Knowledge broker support
- Emphasis on context
  - Variety of methods to suit purposes of reviews











# DFID policy makers' questions

- What policies and interventions have been strongly associated with changes in in-country income inequality?
- What policies and interventions have been strongly associated with the translation of growth into reductions in income poverty?
- What is the evidence supporting the technology selection for low-volume, rural roads in low-income countries and what evidence is there to support the sustainability of different rural road technologies?
- Under what conditions do inspection, monitoring and assessment improve system efficiency, service delivery and learning outcomes? [3 questions]



# Policy makers' questions

#### **Typically**

- Open questions (What interventions...?)
- Multi-dimensional questions
- Complex outcomes (resilience, inequality, sustainability)
- Sometimes, scaling up questions

Reviews not just testing hypotheses, but ALSO seeking to understand complex issues & variation



# Evidence products for development

Implications for relevance and use



# Human settlements evidence map

#### **Outcomes**

Human Settlements Medium Term Strategic Framework

			Constitutional Right to Housing					Functional Residential Property Market					Good Governance							
			Improved/Quality Living Conditions					Participation by Low/Middle Income	Poverty Re	duction	Procedural Justice	Fiscal Sustainability	Town and Land Use Planning				Inter-Governmental Relations			
			Shelter/Houses	Municipal/Basic Services	Sustainable development	Other	Access	Affordability	Housing Assets Affordability	Integrated Settlements			Revenue for Municipalities	Legal By- Laws, Town Plannig, Town Tenure and Building Regulations	Town/urban planning	land tenure	Building regulation	Sectoral Integration (National Provincial & Local)	National/Provincial / Local	
	Demand-Side Subsidies		90				83	190												
	Supply-Side Subsidies		•	•				•	•	0				•						
	Housing Grants		•				21		٠	12				8						
	Capital Subsidies		•					•	•	•			100	•						
		Loans					8		•											
	Development Finance	Guarantees																		
		Conditional	er.										41	41 Supporting Evidence						
	Inter-Governmental Fiscal Transfer	Supplementary											Liber	Title Public Housing for Whom? Experiences in an Era of Mature Neo- Liberalism: The Netherlands and Amsterdam Waiting for the State: a Politics of Housing in South Africa Oldfield, S. & Greyling, S.						
		Non- Conditional											Hori: Plan	Watering for the States a rotation or notating in sount writical Horizontal Coordination, Government Performance and National Planning: The Possibilities and Limits of the South African State South African Housing Policy over Two Decades: 1994 – 2014 Huchtgermeyer & Karam						
MINIS	Regulation					•				•	The	The impact of globalization on the composition of government . expenditures: Evidence from panel data  Dreher, A. et al.								
Non-tru	Policy & Legislation			•				•		•										

> Africa Centre for Evidence, University of Johannesburg Department for Planning, Monitoring and Evaluation, South Africa





# What do we know from living and working here?

Local knowledge: Department for Planning, Monitoring and Evaluation, South Africa

What do we know from studies globally?

Africa Centre for Evidence University of Johannesburg

**Public goods reviews**: Use global knowledge to inform local knowledge to maximise rigour of research for decisions

**Tailored to context reviews**: Use local knowledge to shape global knowledge to maximise relevance of research to area of interest





### **Questions?**

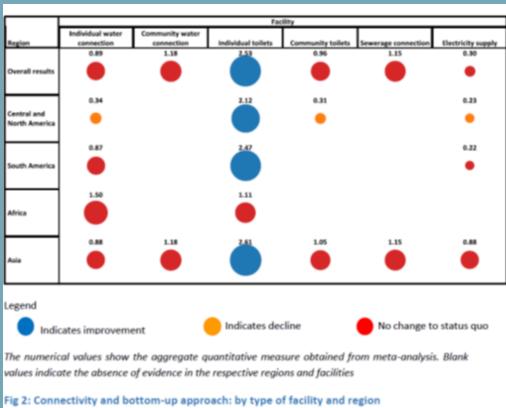
Is this map a global good or a local good?

Is it valuable for....

- South Africa?
- Countries like South Africa? With similar...
  - Socio-economic indicators?
  - Physical geography?
  - Policy priorities?
- Is being informed by South African policy makers sufficient for a global good?



Access to water, sanitation and electricity services in low-income or informal settlements



Annamalai TR, Devkar G, Mahalingam A, Benjamin S, Rajan SC, Deep A (2016) What is the evidence on top-down and bottom-up approaches in improving access to water, sanitation and electricity services in low-income or informal settlements? London: EPPI-Centre, Social Science Research Unit, UCL Institute of Education, University College London.





# What do we know from living and working here?

Local knowledge: Corporation of Chennai; Chennai City Connect (urban stakeholders outside government; IL&FS an Indian infrastructure development and finance company; DFID South Asian Research Hub



What do we know from studies globally? Indian Institute of Technology Madras, India

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### **Questions?**

Is this review a global good or a local good? Is it valuable for....

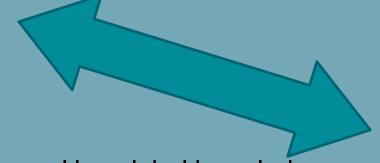
- South Asia? Countries in South Asia
- Countries like South Asia? With similar...
  - Socio-economic indicators?
  - Physical geography?
  - Policy priorities?
- Is being informed by South Asian stakeholders sufficient for a global good?





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#### **Questions?**

Is 'local knowledge' defined by geography or organisations?

Is this review valuable for....

- DFID South Asia Research Hub? Elsewhere?
- Organisations like DFID and other Advisory Group members? Similar ...
  - International donors (but not iNGOs)?
  - City Corporations?
  - Urban stakeholders outside government?
- Is being informed by these stakeholders sufficient for a global good?



#### **Conclusions**

#### Systematic reviews...

- Typically aggregate evidence to test hypotheses or configure evidence to develop theory
- Development reviews often broad and doing both
- Does this make a different to how they are used?
- Typically are public goods or tailored to context
- Are development reviews merging the two?
- Does this make a different to how they are used?



#### References

- Gough D, Oliver S, Thomas J. (2017 2<sup>nd</sup> Edition) *Introduction to systematic reviews*. London: Sage.
- Oliver S, Dickson K (2016) Policy-relevant systematic reviews to strengthen health systems: models and mechanisms to support their production. *Evidence and Policy*. 12 (2) 235-259
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- Oliver S, Roche C, Stewart R, Bangpan M, Dickson K, Pells K, Cartwright N, Gough D, Hargreaves J (2018) Stakeholder engagement for development impact evaluation and evidence synthesis. Centre for Excellence for Development Impact and Learning (CEDIL), London



#### Thank you

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