

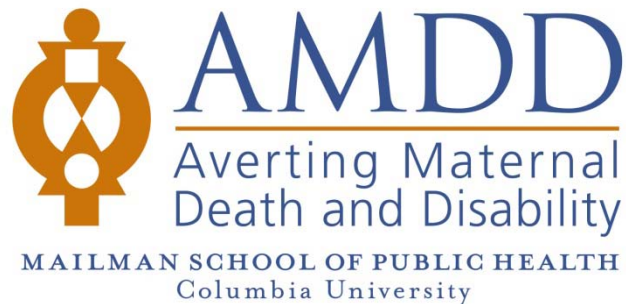
Implementation and implementation science

Lynn Freedman

SG's global strategy:

Getting it done

19 January 2011

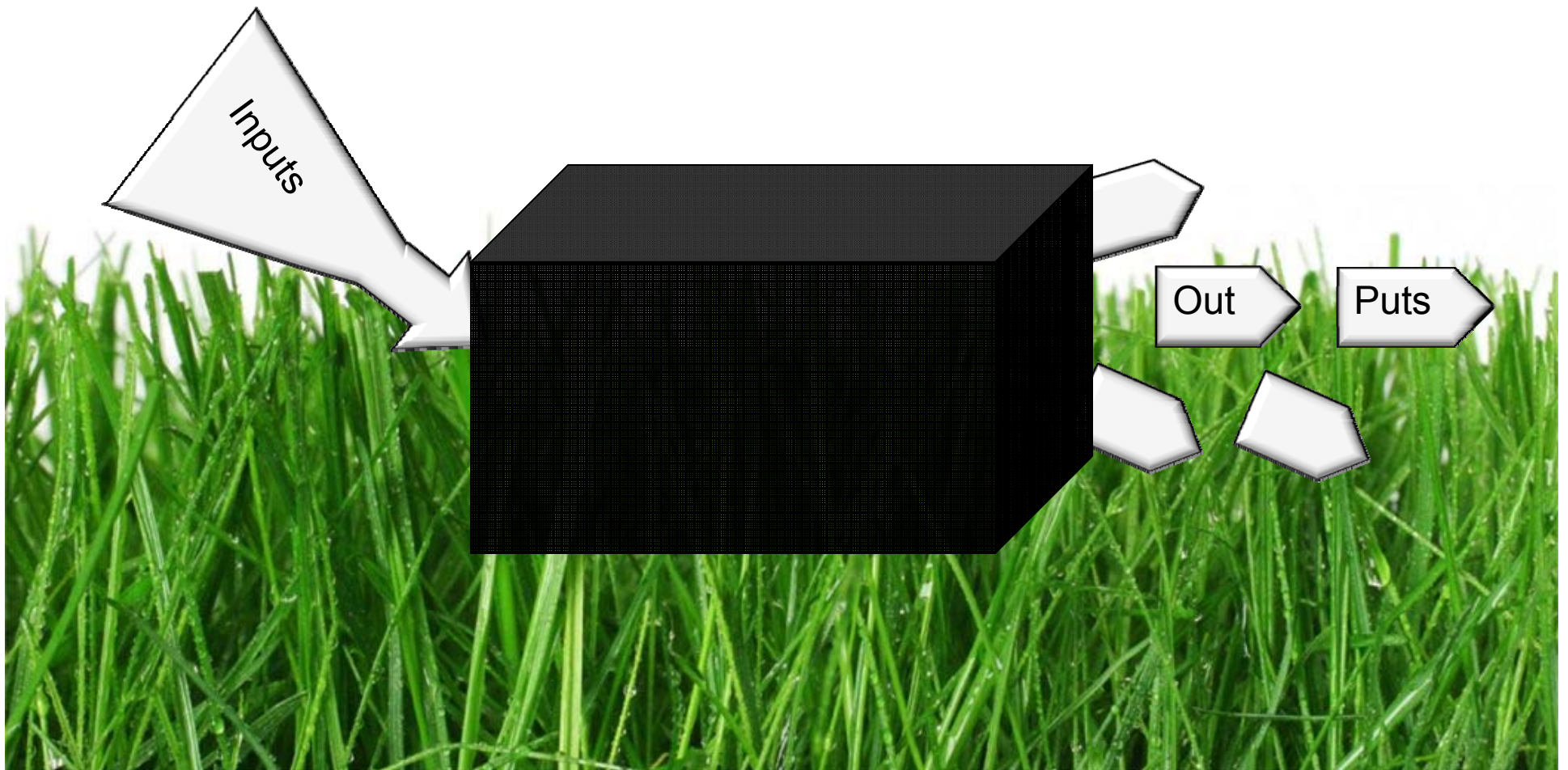


When it comes to implementation of effective interventions, we engage in



magical thinking

**rarely peering into the black box of what
actually happens in implementation
efforts on the ground**



Paradox of evidence-based practice:

**Most of the evidence is not very
practice-based**

Lawrence Green

AJPH 2006

Decreasing community effectiveness

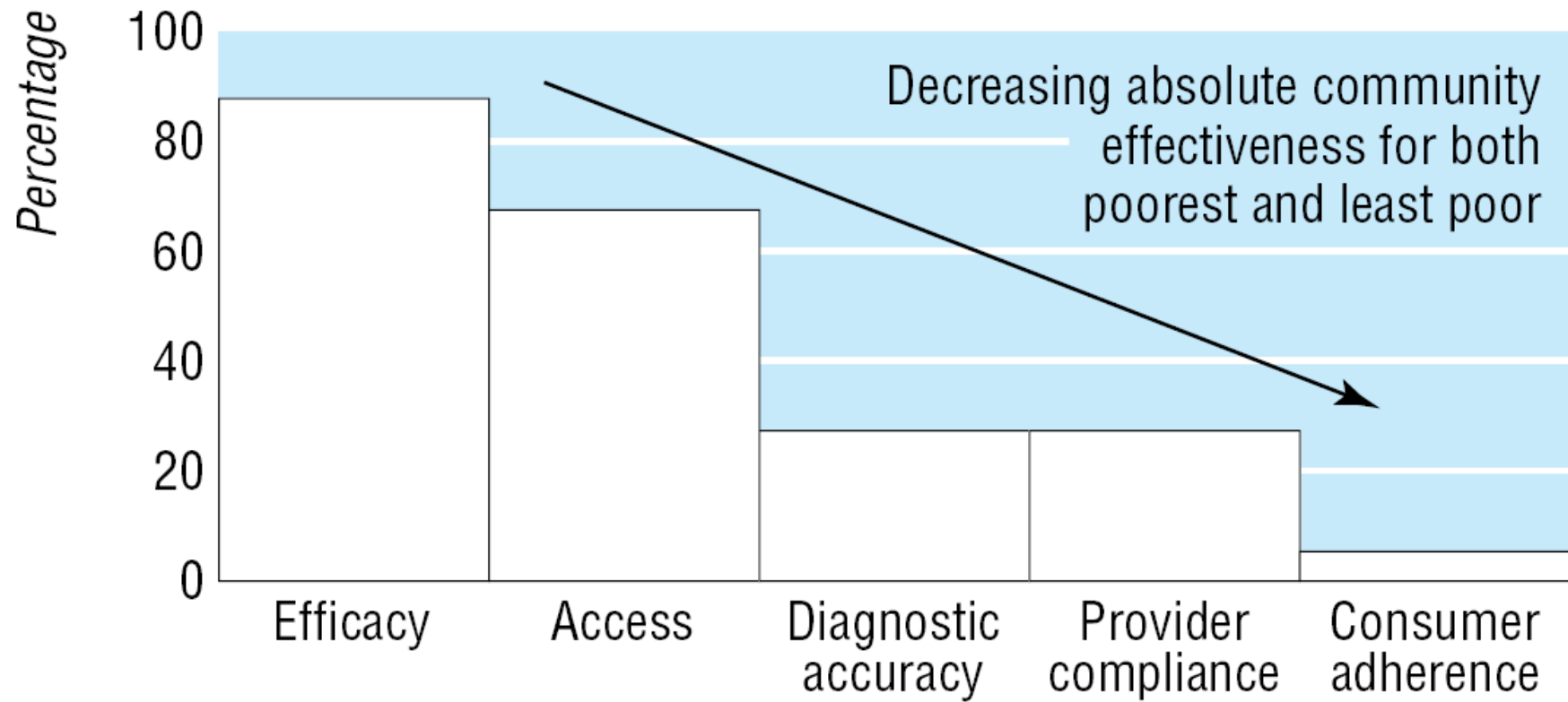


Figure 4 from Tugwell et al. (2008). "Applying clinical epidemiology methods to health equity: The equity effectiveness loop." *BMJ*. 332:358-61.

Increasing equity-effectiveness gap

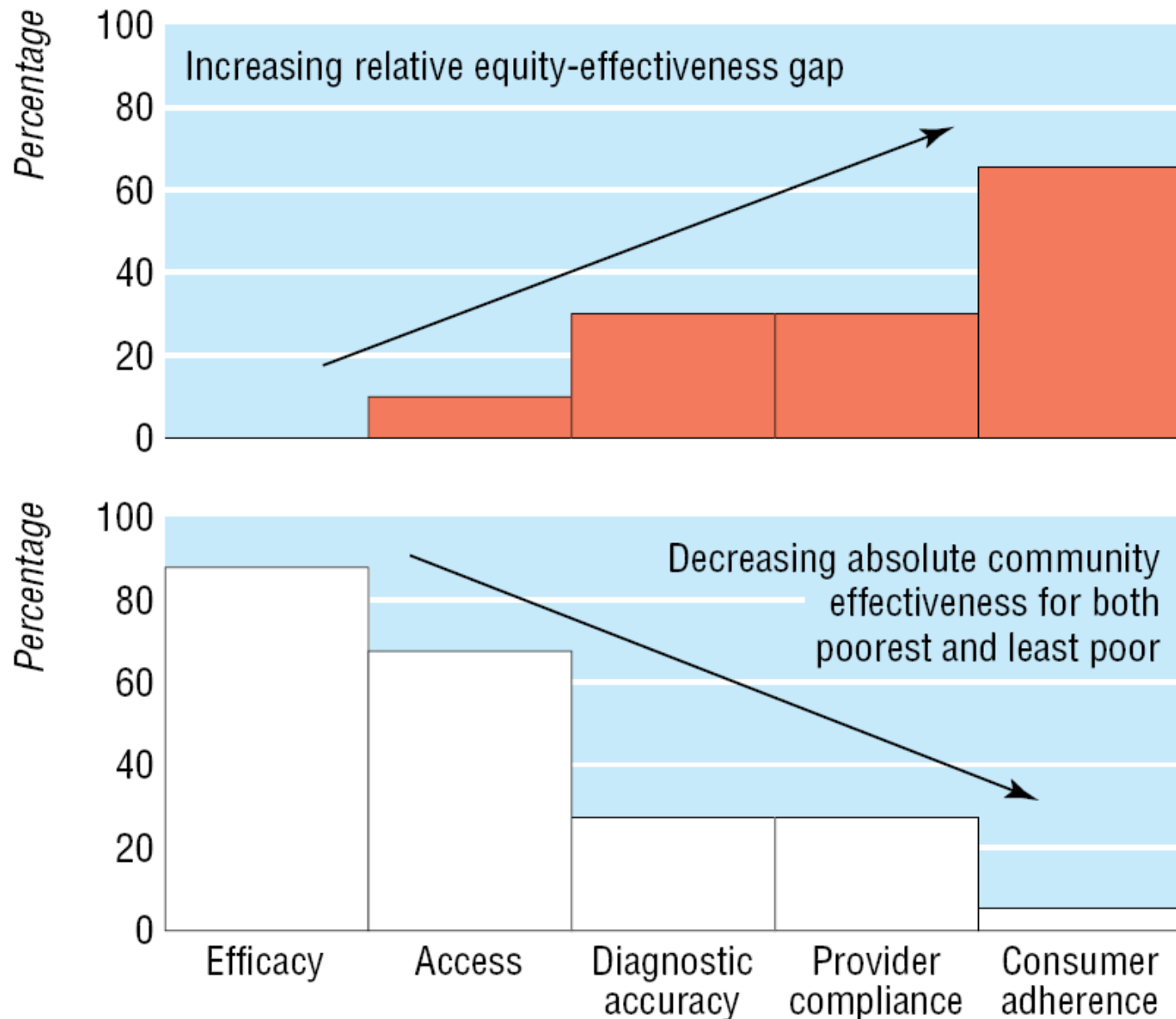


Figure 4 from Tugwell et al. (2008). "Applying clinical epidemiology methods to health equity: The equity effectiveness loop." *BMJ*. 332:358-61.

Basic premise

While optimal implementation strategy requires the identification of effective clinical interventions,
it cannot be derived from them.

It needs a different conceptual foundation.

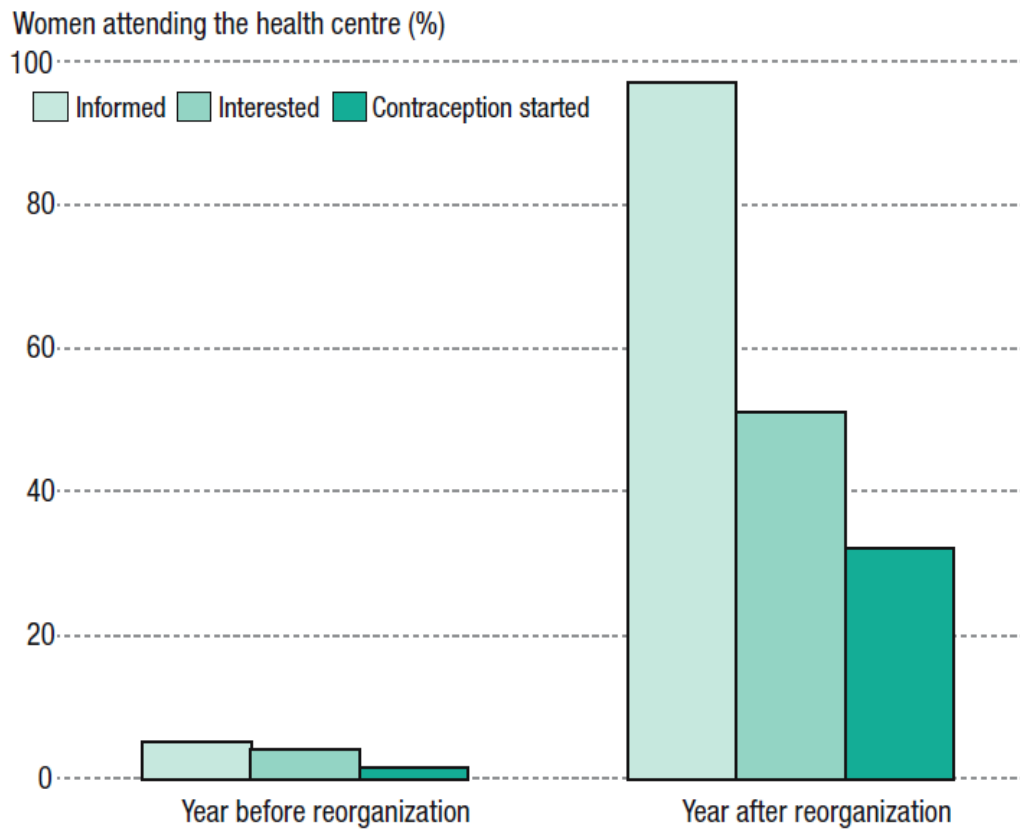
Interaction between Intervention effectiveness and Implementation effectiveness

		Effectiveness of <u>Implementation Practices</u>	
		<i>Effective</i>	<i>Ineffective</i>
<u>Effectiveness of Intervention Practices</u>	<i>Effective</i>	Good Implementation Outcomes Good Consumer Outcomes	Poor Implementation Outcomes Poor Consumer Outcomes
	<i>Ineffective</i>	Good Implementation Outcomes Poor Consumer Outcomes	Poor Implementation Outcomes Poor Consumer Outcomes

Interaction between Intervention effectiveness and Implementation effectiveness

		Effectiveness of <u>Implementation Practices</u>	
		<i>Effective</i>	<i>Ineffective</i>
<u>Effectiveness of Intervention Practices</u>	<i>Effective</i>	Good Implementation Outcomes Good Consumer Outcomes	Poor Implementation Outcomes Poor Consumer Outcomes
	<i>Ineffective</i>	Good Implementation Outcomes Poor Consumer Outcomes	Poor Implementation Outcomes Poor Consumer Outcomes

Figure 3.1 The effect on uptake of contraception of the reorganization of work schedules of rural health centres in Niger



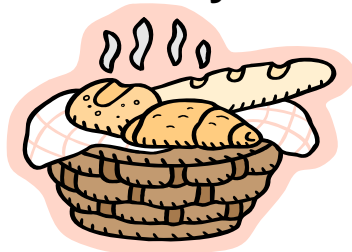
Source: 7

Source: The World Health Report 2008
Bossyns P, Miye M, Van Lerberghe W.
Supply-level measures to increase uptake of family planning services in Niger: the effectiveness of improving responsiveness.
Tropical Medicine and International Health, 2002, 7:383–390.

Simple (Puzzle)

Following a Recipe

- The recipe is essential
- Recipes are tested to assure replicability of later efforts
- No particular expertise; knowing how to cook increases success
- Recipe notes the quantity and nature of “parts” needed
- Recipes produce standard products
- Certainty of same results every time



Complicated (Problem)

A Rocket to the Moon

- Formulae are critical and necessary
- Sending one rocket increases assurance that next will be ok
- High level of expertise in many specialized fields + coordination
- Separate into parts and then coordinate
- Rockets similar in critical ways
- High degree of certainty of outcome



Complex (Mess)

Raising a Child

- Formulae have only a limited application
- Raising one child gives no assurance of success with the next
- Expertise can help but is not sufficient; relationships are key
- Can't separate parts from the whole
- Every child is unique
- Uncertainty of outcome remains



The Implementation Challenge

		Transaction Intensive	
		YES	NO
Highly Discretionary	YES	EmOC and SBA	Mass Media Campaigns
	NO	TT	Food Fortification

adapted from Pritchett and Woolcock (2004) "Solutions when *the* solution is the problem: Arraying the disarray in development." *World Development* 32(2):191-212.

Forward-mapping

- Starts at TOP with policymaker's intent
- Proceeds through increasingly specific steps to define what's expected of implementors at each level
- State what satisfactory outcome would be, measured in terms of original intent

Forward-mapping Assumption

- Policy makers control the organizational, political and technological processes that affect implementation.
- Considers only a narrow range of possible explanations for implementation failures

Backward-mapping

- Starts at BOTTOM with statement of the specific behavior at the lowest level of the implementation process that generates the need for a policy.
- From there, it backs up through the structure of the implementing agencies asking:
 - ▼ What is the ability of this unit to affect the behavior that is the target of the policy?
 - ▼ What resources does this unit require to have that effect?

Backward-mapping assumption

- Assumes that problem-solving ability of complex systems depends not on hierarchical control but on maximizing discretion at the point where the problem is most immediate.

Reference: Richard F. Elmore (1980). "Backward Mapping: Implementation Research and Policy Decisions," *Political Science Quarterly*. 94(4): 601-616.

Challenge of technical support for implementation

How do we support an implementation process that depends fundamentally on LOCAL knowledge and LOCAL actors?

Challenge of implementation science

How do we develop a research approach that:

- Informs the process appropriately
- Learns from the process as it is happening
- Informs scaling and replication