

# First Things First:

## The unfinished agenda of public health in India

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NIPFP Conference on “New thinking on health policy”

4 November, 2016

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The unfinished barely started agenda of public  
health in India



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I only have two things to say about  
policy  
(Any policy. Ever.)

- Provide public goods before private goods.  
(Or: fix really bad market failures first.)
- Do things you can do before trying those you can't. (Or: take constraints on government capabilities seriously.)

# In health: a simple argument

- Some health policies address massive market failures and some don't
  - "Real" public health (a la 19<sup>th</sup> century Europe), particularly sanitation, address genuine public goods and goods with big externalities
  - Hospitals are a second - best way of dealing with health insurance markets that fail virtually everywhere at all times
  - Primary health care (??? - depends. needs local information)
- Some health policies are particularly important for the poor (infectious disease control again) and some aren't
- Some health policies are hard to implement, some are even harder
- Policy should be strategic and get the most welfare improvement possible (relative to what happens without a policy) given money AND implementation constraints

OK, OK maybe it isn't SO simple

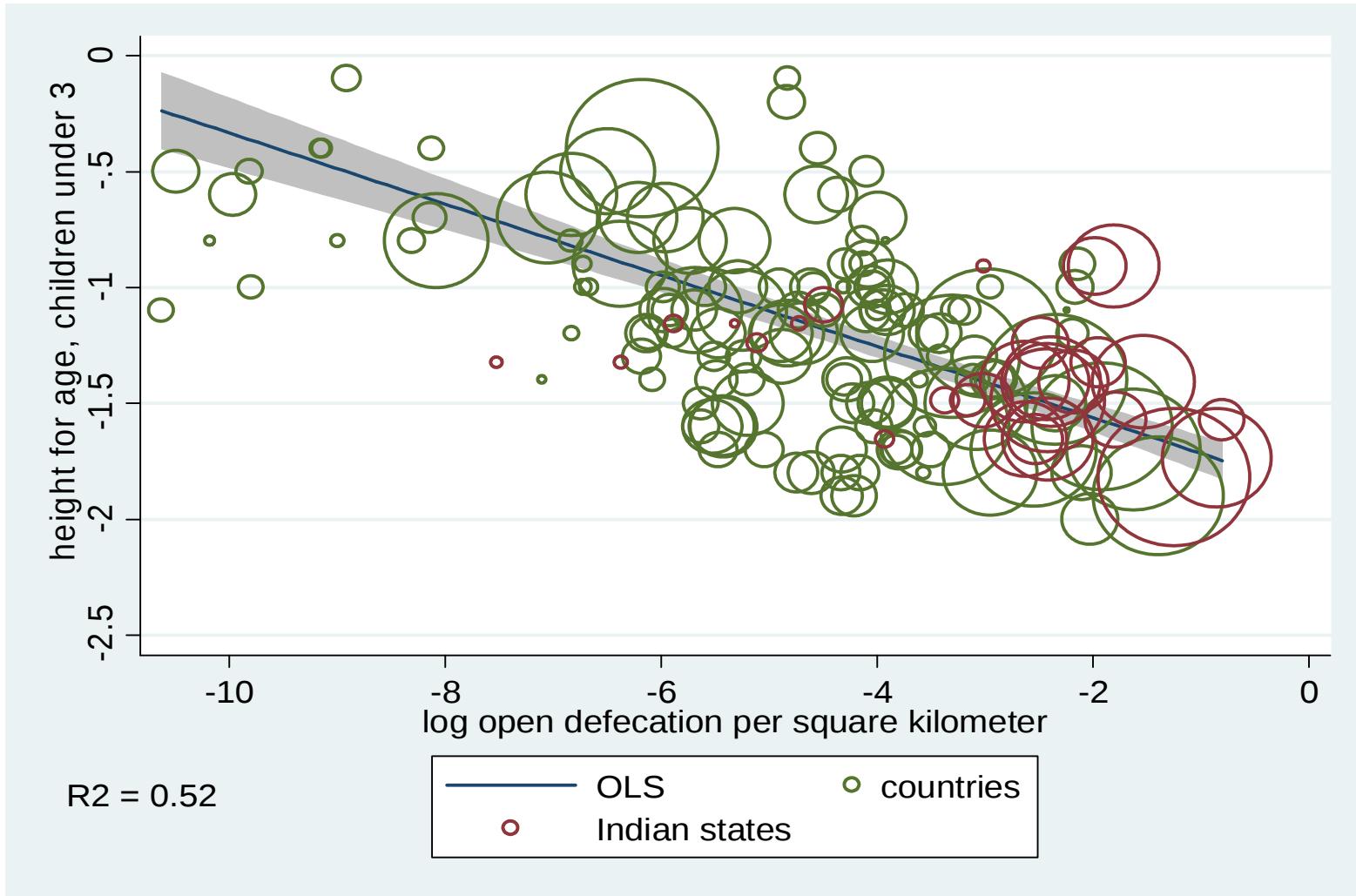
# Priorities with limited budgets

- How well do alternative health policies do in promoting health?
- Not easy to discover using available data (we'll come back to this)
- But lets just look at two kinds of policies head to head

# Four studies contrasting sanitation to publicly provided medical care

- Urban
  - Drainage, open defecation and health in Delhi slums
  - Quality of medical care in public primary health facilities in Delhi
- Rural
  - A randomized control trial of the Maharashtra Total Sanitation Campaign
  - Quality of medical care in rural Madhya Pradesh

# Context: Indian states in international comparison

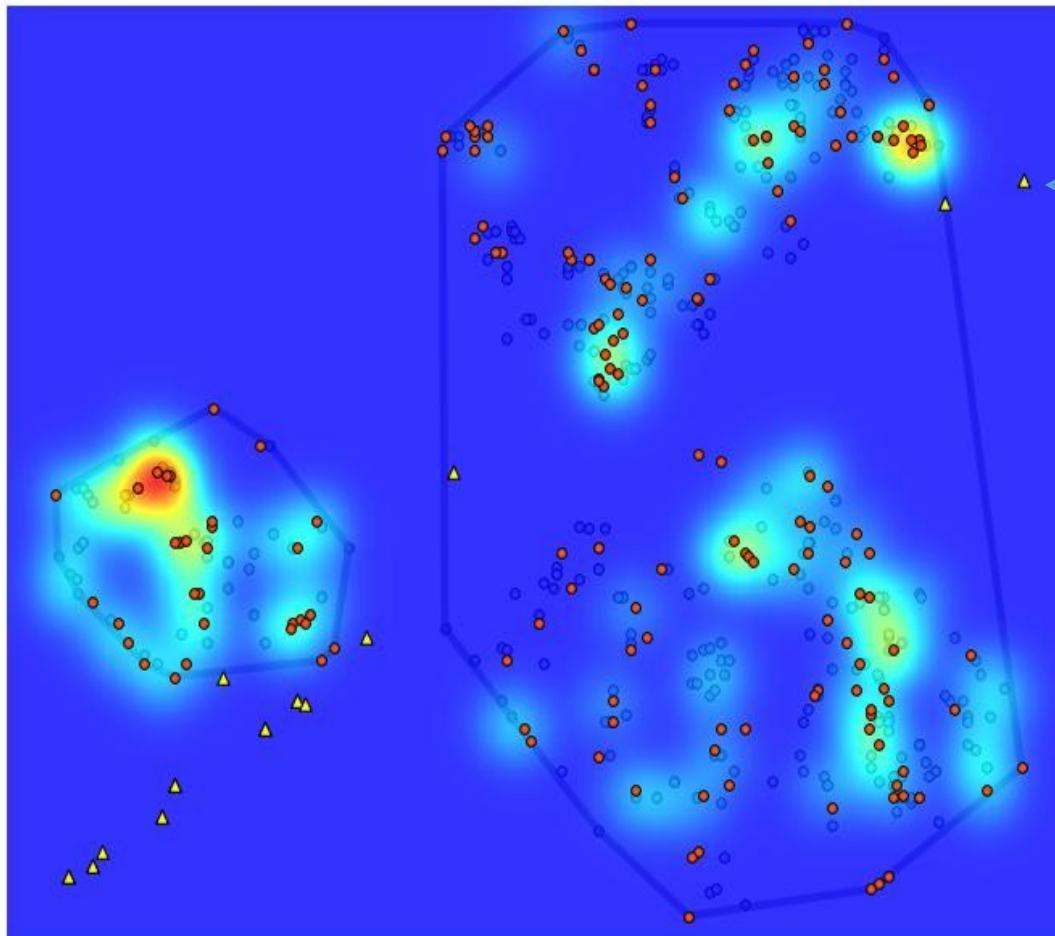


# Density of open defecation suggest we take a closer look at cities

- Study of four unrecognized slums in Delhi
- Project by committee
  - Collaboration of political scientists, an anthropologist and a couple of economists
  - Larger project was to find out how the residents got public services even though they weren't really entitled to them
- My part was much easier – what's hygiene got to do with health?

# Open defecation and cases of diarrhea, Noida 8

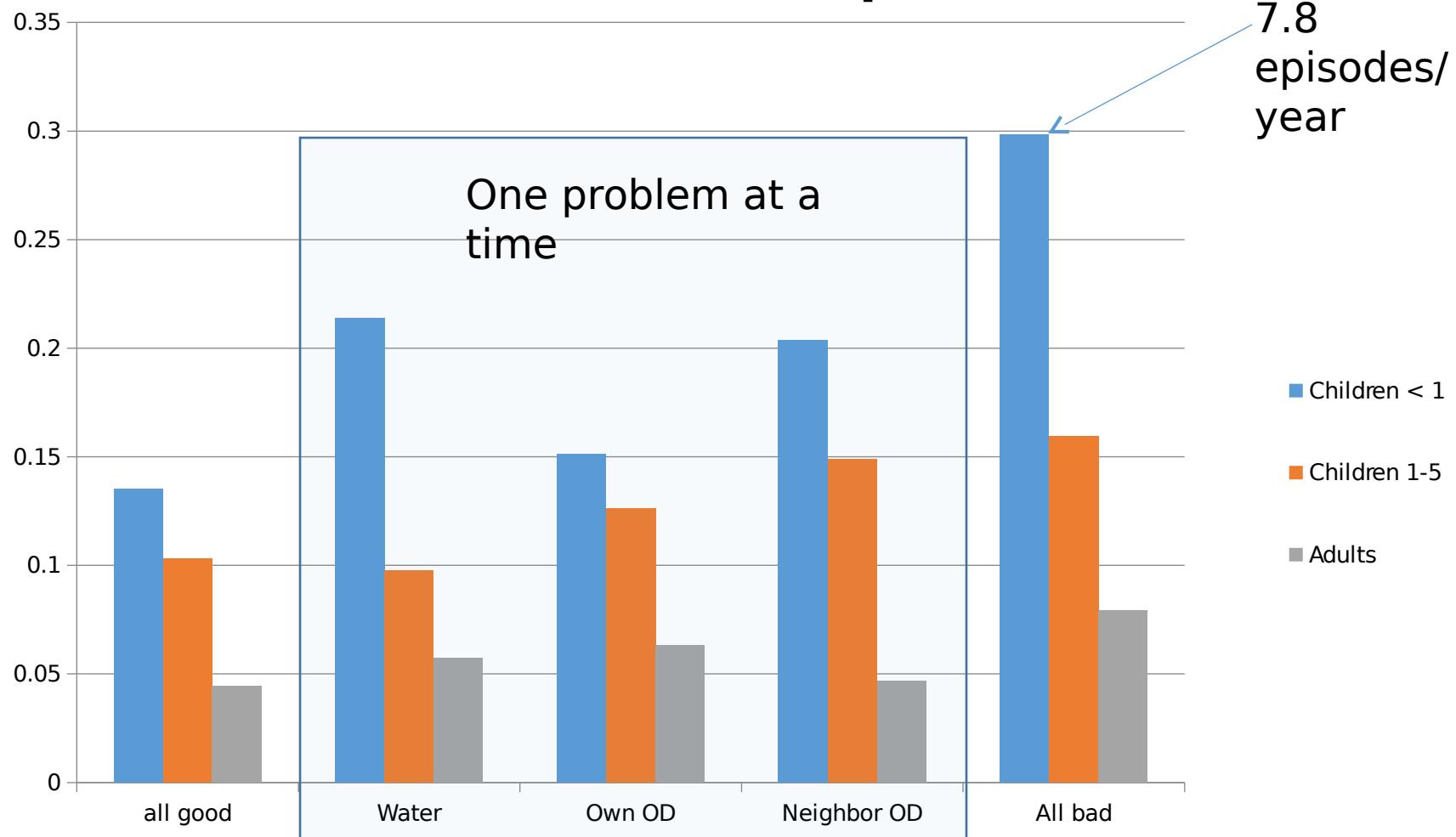
“Heat” map  
-  
background color is derived from weighted average of people who openly defecate  
Red dots are households with cases of diarrhea,  
Open dots are households



# Some descriptive statistics

	Punjabi Basti	Kathputli	Noida 5	Noida 8
N	2024	1297	354	2207
HH's - someone with diarrhea in past 2 weeks	13%	32	36	32
Individuals with diarrhea	2.7%	6.3	7.3	6.6
General caste	59%	16	17	37
SC/ST	24%	25	72	28
OBC	17%	59	11	35
"Wealth" (not%)	1.68	-0.65	-0.75	-0.84
(Others too complicated to show)	but never come up in any regression			anyway)
Water enters home sometime during year	7.10%	47.6	47.4	55.4
Someone in HH sometimes openly defecates (OD)	6.4%	85.6	48.4	13.4
# of Neighbors<2.5 meters away who OD (not				

# Results in pictures: Diarrhea in two week period



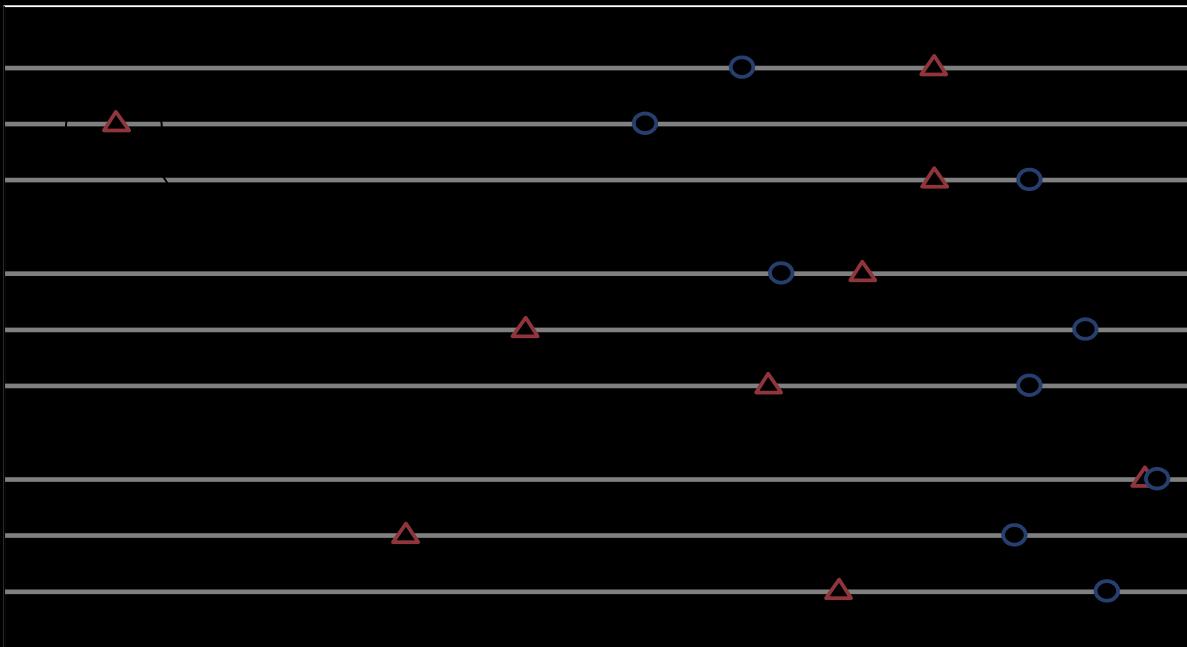
# Public money in Delhi

- Why might publicly provided health care not work?

## Quackery and crookery for the poor in Delhi

- no matter where they go

### Competence and Effort



○

△

Das and Hammer, 2007

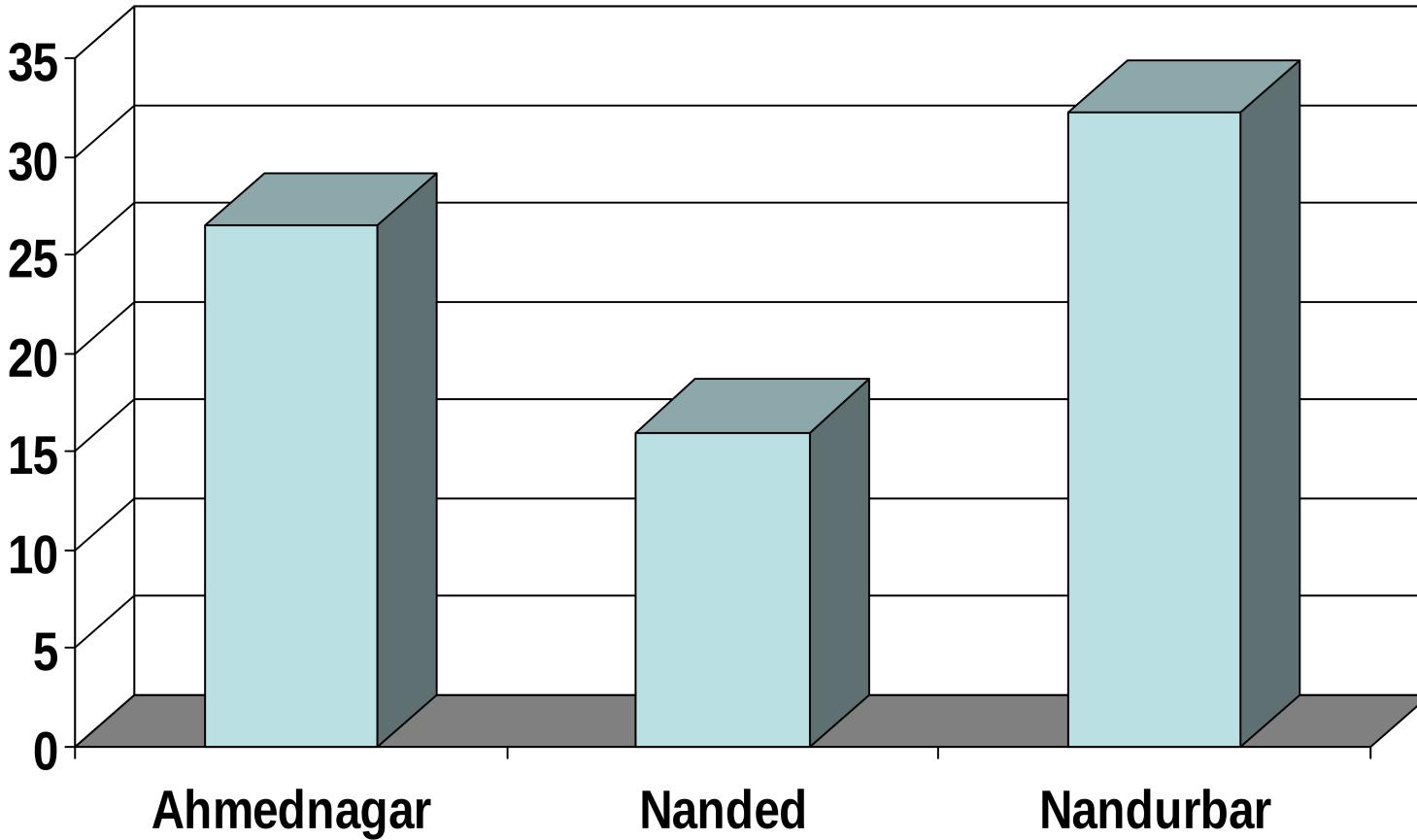
# What about rural areas?

- Surely sanitation isn't as important
- Surely there is no access to medical care and public medical care is necessary
- Surely someone should measure something before asserting these so confidently

# Studying the Total Sanitation Campaign in Maharashtra

- A collaboration between the World Bank and the government of Maharashtra to evaluate a sanitation intervention with an RCT
- What was supposed to happen?
  - Baseline February 2004
  - Intervention: a village-level education effort by the government - to change behavior, not just build latrines. India's Total Sanitation Campaign but a little more intense
  - Midline survey August 2004; final survey August 2005
  - Three districts: Ahmednagar, Nanded, Nanderbar
- What did happen?
  - Well, all the surveys were done
  - But only Ahmednagar got the intervention - couldn't get officials to do this in the tougher areas

# Why behavior change?: Latrine ownership ≠ usage



Percentage of people who defecate in open despite owning toilets in Maharashtra (2004)

# Effect on height comparing those that were supposed to be treated in all districts

height-for-age z score difference (treatment minus control)  
before      after

Hammer and Spears  
2016

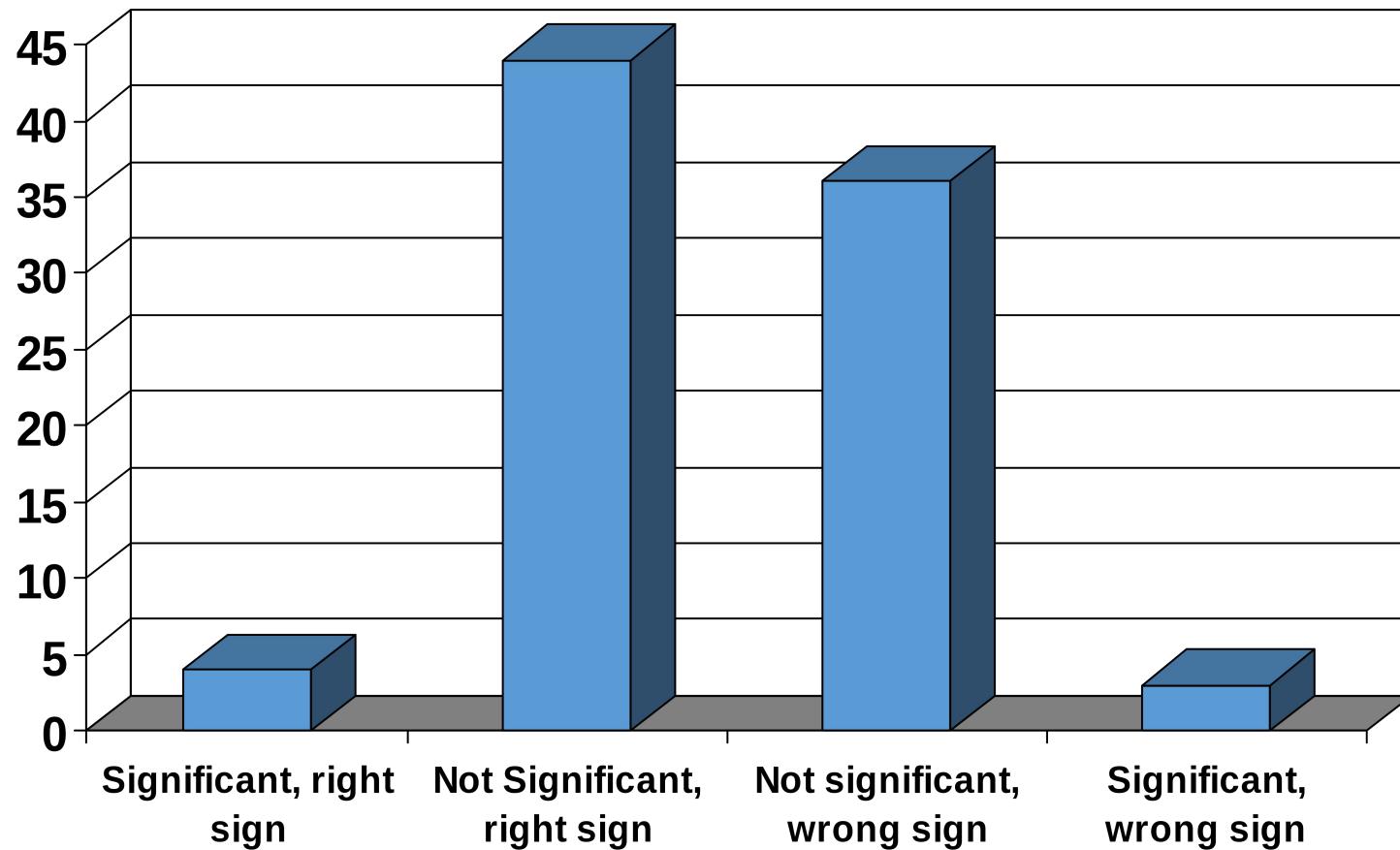
# So, this is promising

- It works ...
- ... but only where it works – where it gets implemented
- Limitations of getting staff to go, and to put in conscientious effort, in difficult areas
- Should not overestimate government's ability to implement this everywhere
- Swachh Bharat Abhiyan says it is about eliminating open defecation but is only measuring latrine construction – just like CRSP in mid '80's

# What about publicly provided primary health care?

- Doesn't seem to "work" at all

Distribution of t-tests of the variable “any public facility in village” on rural infant and child mortality. All states, various specifications, NFHS 1998 (propensity score matching\*)



Source: Chaudhury, Hammer and Pruthi (2005)

# What about publicly provided primary health care?

- Doesn't seem to "work" at all
- Why?
  - Vacancies
  - Absenteeism
  - Low capability of medical providers
  - Abysmal effort of medical providers
  - **Many** substitute providers of comparable quality care in private sector (even if they are quacks)

quality

# Whatever the problem is, it isn't "access"

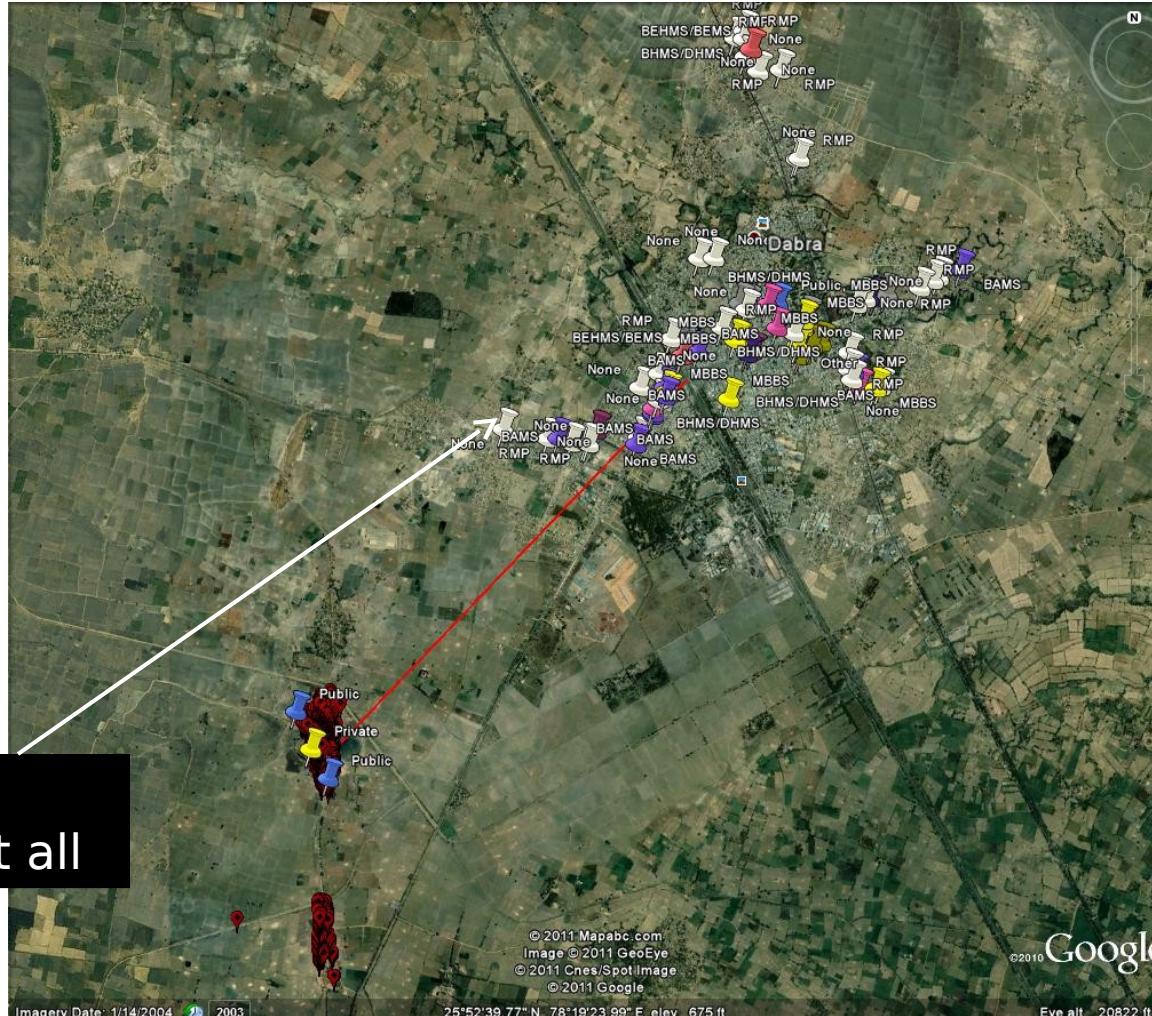
Public providers

Private MBBS

Homeopath s

Ayurvedic /  
Unani

No degree or  
qualification at all

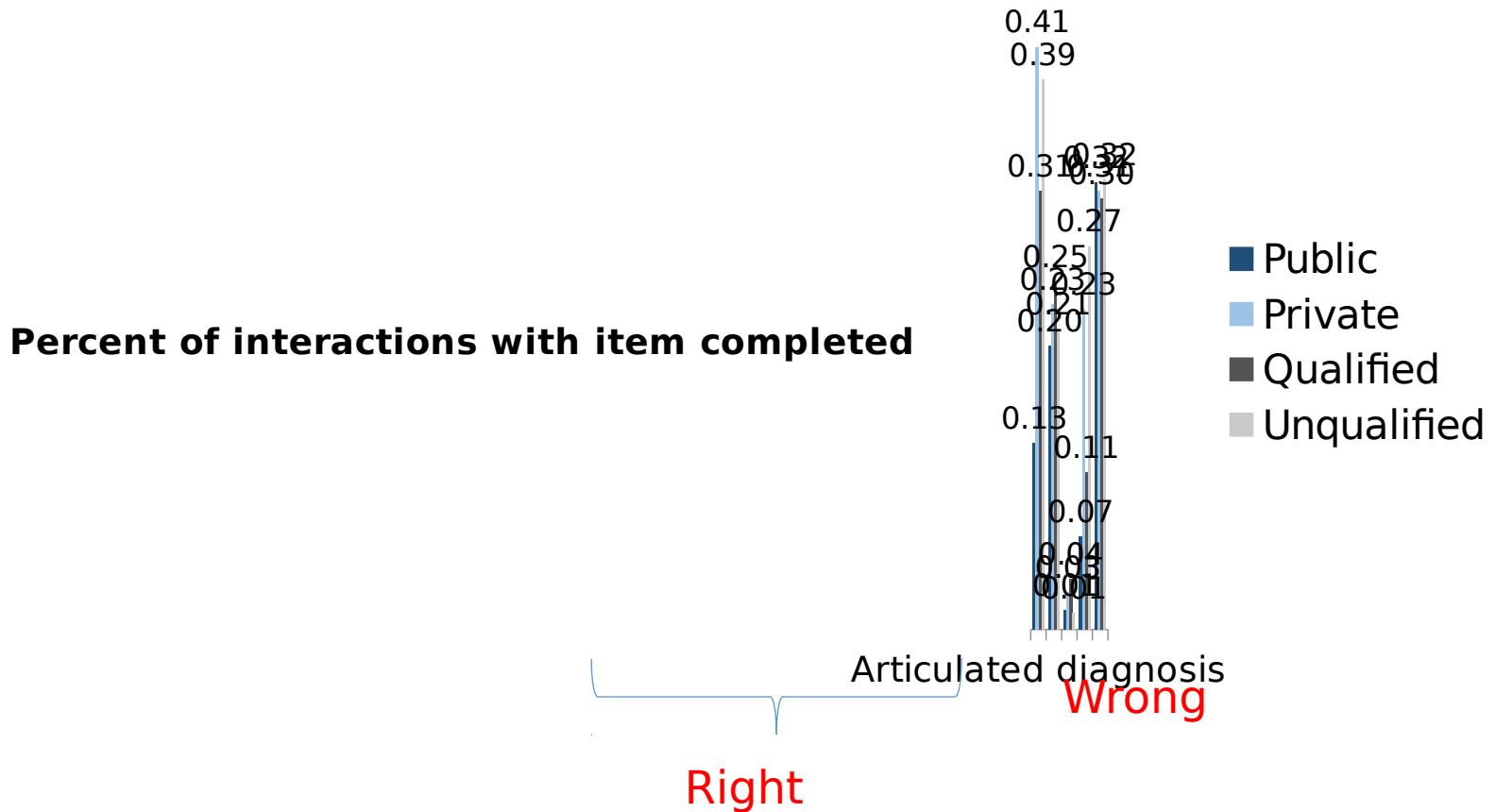


# “Aha!” You say.

- You just told us a lot of these people are quacks
- Surely there is a problem of “access” to high quality “real” doctors in the public sector
- OK, let’s measure that

# Diagnosis and treatment

## Asthma In Madhya Pradesh



Das et al,  
2013

# So, let's look at market AND government failures

- Real public health includes real public goods
  - Old-fashioned problems of the 19<sup>th</sup> century are still amongst us
  - It doesn't matter how bad government is at doing it, there is no choice. Also common sense (for cities) and some evidence that it might work (in rural areas).
- Primary care has we're-not-sure-which market failure
  - and the government has a really hard time providing it.
  - Directives from the WHO (or the HLEG) promoting primary health care for all should not be taken on faith. So far, it is all on faith. (Jeff: mention NRHM meeting)

# Weighing market and government failures

- Right comparison is with the way policy is actually implemented OR the way it can practically be improved (with explicit, concrete steps for correction)
- Wrong comparison is with policies as we wish they could be implemented

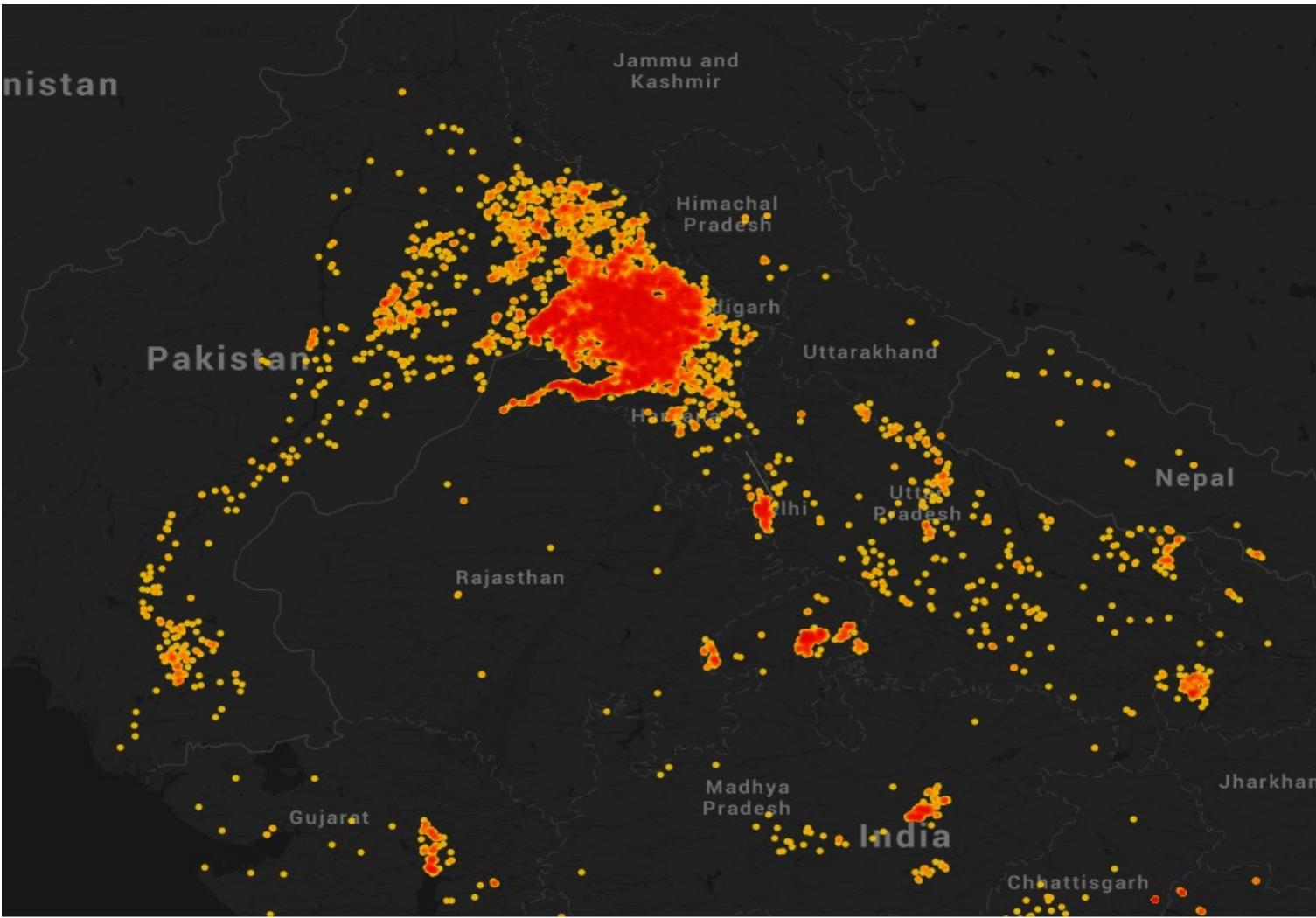
# And another thing

- Another genuine public good that is seriously underprovided is data open to the public on public policy inputs and outcomes

# Whining plea for better data

- Massive changes in rich world in type, sources and sizes of available data sets
- Organized in ways that are either easy to use or, at least, publicly available
- Much is being organized geographically – a continuously lengthening panel of routinely collected data

# Fires in November 2013



ps with [CartoDB](#)

# Can we start now to develop general use statistics?

- Think through important issues for data collection? (how much of the NFHS will actually be looked at?) And maybe ensure quality?
- Could we request researchers to format data so that it can be absorbed into a larger system?
- Could we request ministries to do the same?
- Maybe we can start learning about the world

Thank you