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Center for Effective Global Action

The Weakness of Bottom up Accountability: Experimental Evidence from the Ugandan Health Sector

8th Annual EASST Summit

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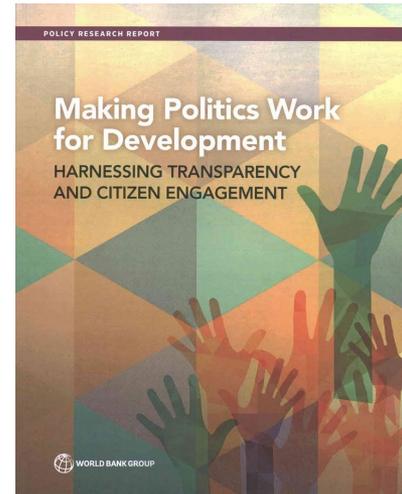
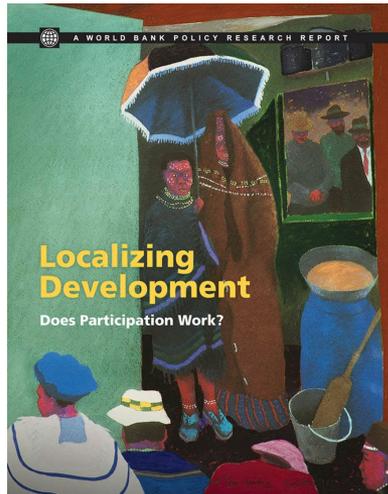
Motivation

- Poor service delivery is a major problem in developing countries, especially in primary health care
 - Rampant absenteeism
 - Poor adherence to clinical guidelines
 - Shortages of basic drugs
 - Underprovision of basic services (family planning, antenatal care)



Motivation (cont'd)

- Potentially promising approach: bottom-up monitoring of service providers by community members



- Key idea, rooted in P-A problem, is that providing citizens with information about service delivery shortfalls will allow them to monitor and apply pressure on underperforming service providers

Motivation (cont'd)

- Attractiveness of this strategy was validated by the landmark “Power to the People” health study (Björkman and Svensson, 2009)
- Huge reported treatment effects
 - Infant weights significantly higher
 - Under-5 mortality 33% lower
 - Immunization rates higher
 - Staff absenteeism and waiting times at clinics lower
- Very exciting results
 - Hundreds of millions of \$ spent on programming inspired by P2P

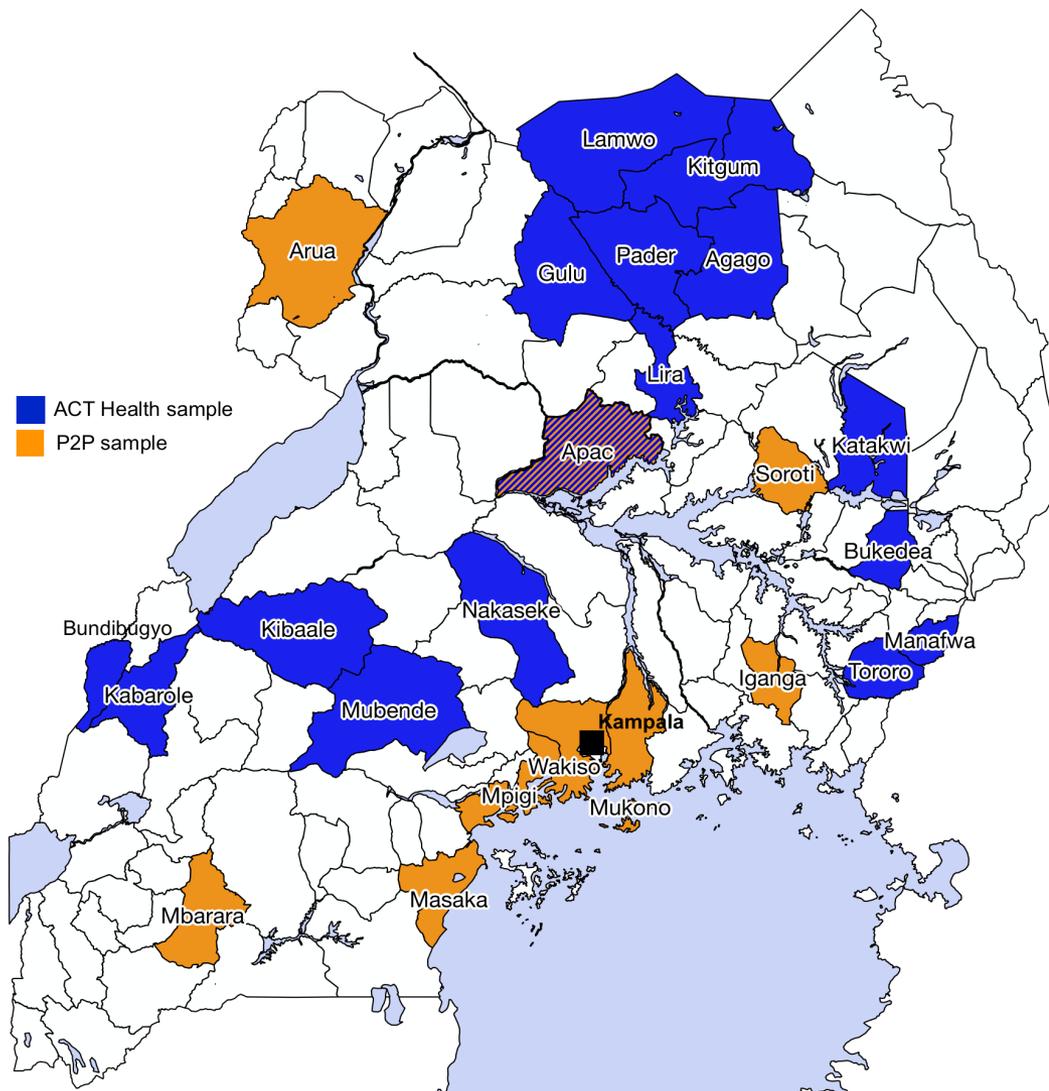
Motivation (cont'd)

- However, mixed findings in other work investigating the information/bottom-up monitoring approach
 - Negative: Olken (2007), Banerjee et al (2010), Keefer and Khemani (2014); Arkedis et al (2019)
 - Positive: Pandey et al (2009), Barr et al (2012), Pradhan et al (2009), Andrabi, Das and Khwaja (2017), Fiala and Premand (2017), Banerjee et al (2018)
- Also, recognition that P2P had limited power (N=50)
- Hence, strong interest in seeing whether P2P replicates
- Goals of our study (ACT Health)
 - Test whether we can reproduce P2P's findings
 - Learn more about the strengths, limitations, and operation of the causal pathway that P2P popularized

ACT Health

- Modeled on P2P
- Objective was to improve service delivery and health outcomes in rural Uganda
- Multifaceted intervention
 - Measured quality of services provided at rural health clinics and health status of community
 - Summarized this info in clinic/community-specific report cards
 - Disseminated report cards to community **and** to clinic staff
 - Worked with community and clinic staff to develop action plans in light of information
 - Held interface meetings between clinic staff and community; jointly developed a “social contract”
 - Followed-up with “booster” visits every 6 months

ACT Health



16 districts

376 Health Centers and associated catchment areas

3 waves of panel data collected in 14,609 hhlds (10 local languages; 279 staff)

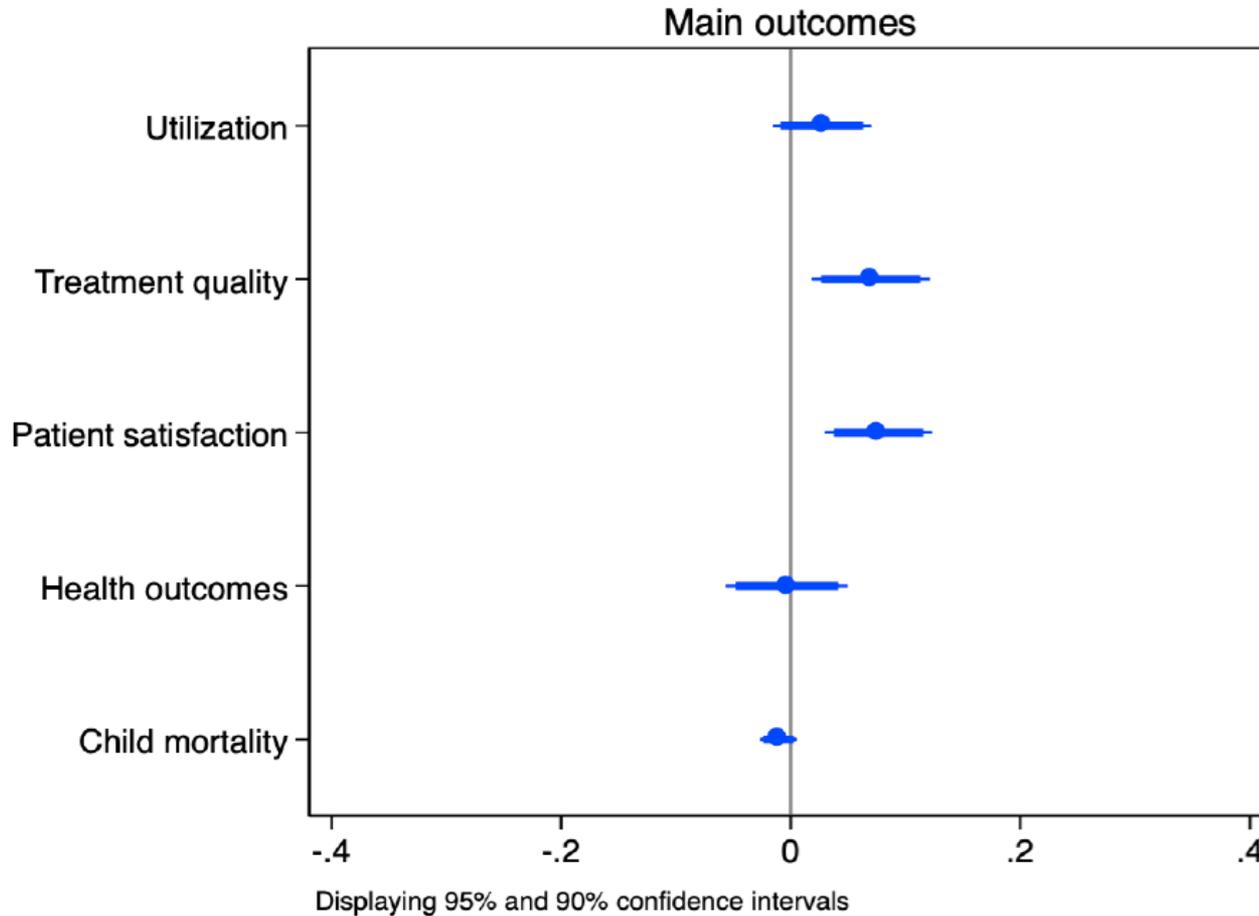
Main Outcomes

- Utilization
- Treatment Quality
- Patient Satisfaction
- Health Outcomes
- Child Mortality

Intermediate Outcomes

Community/HC characteristics

Effect of Full Treatment at Endline



[Index components](#)

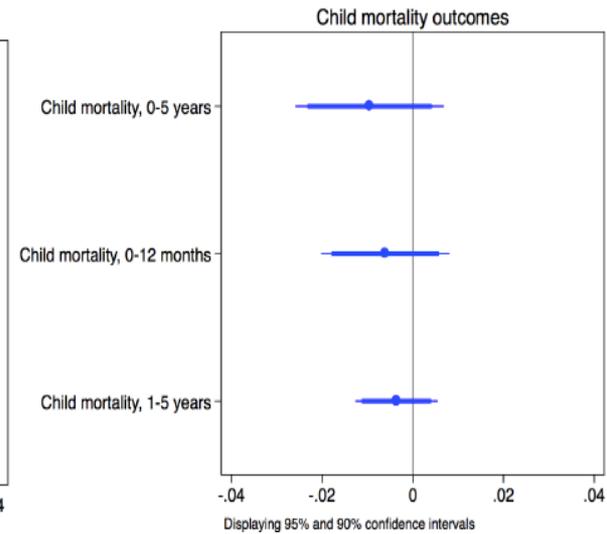
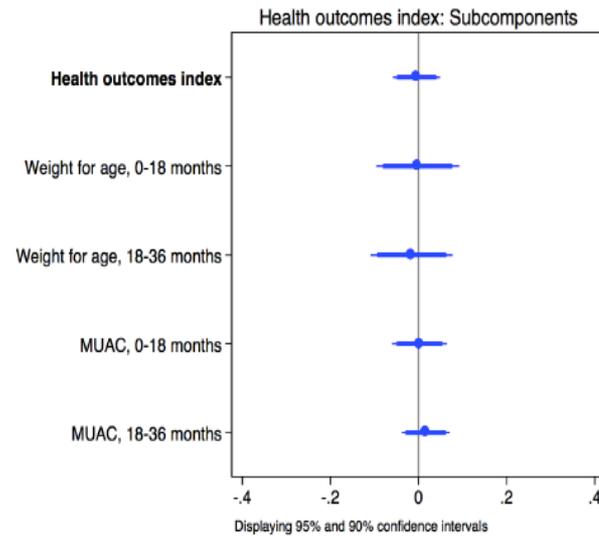
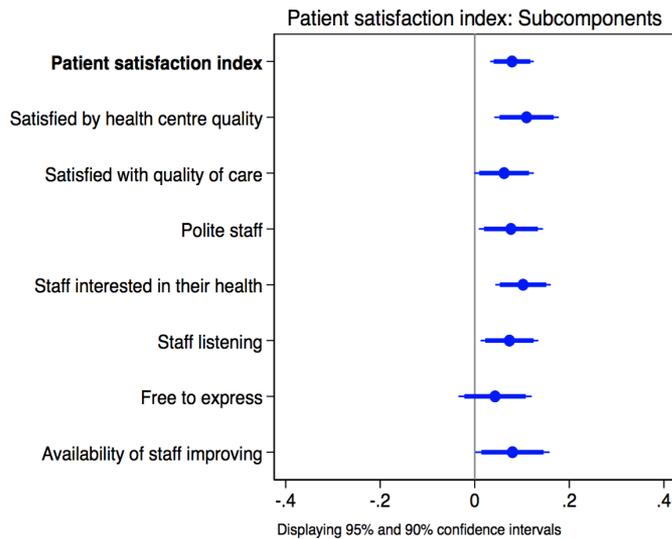
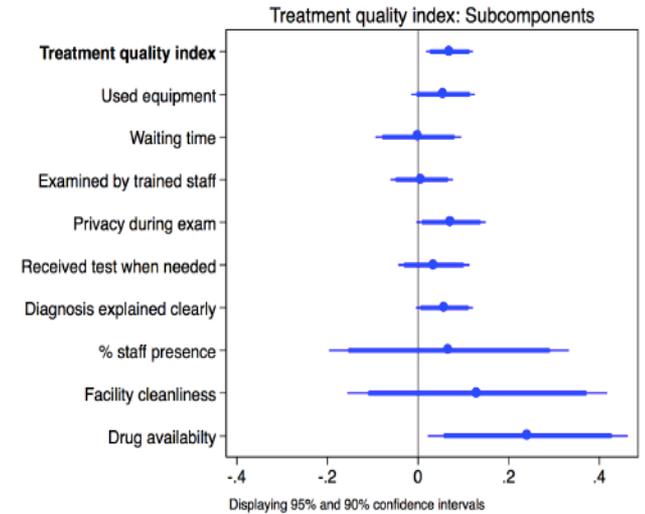
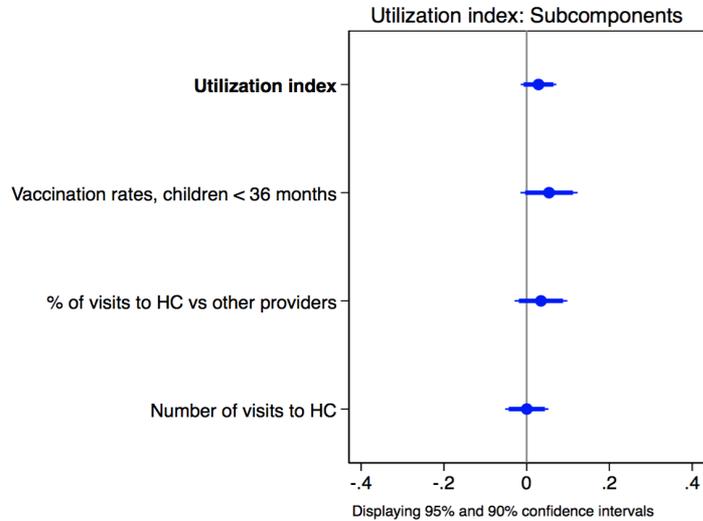
[Estimating equations](#)

[Attrition](#)

[Balance](#)

[Spillover](#)

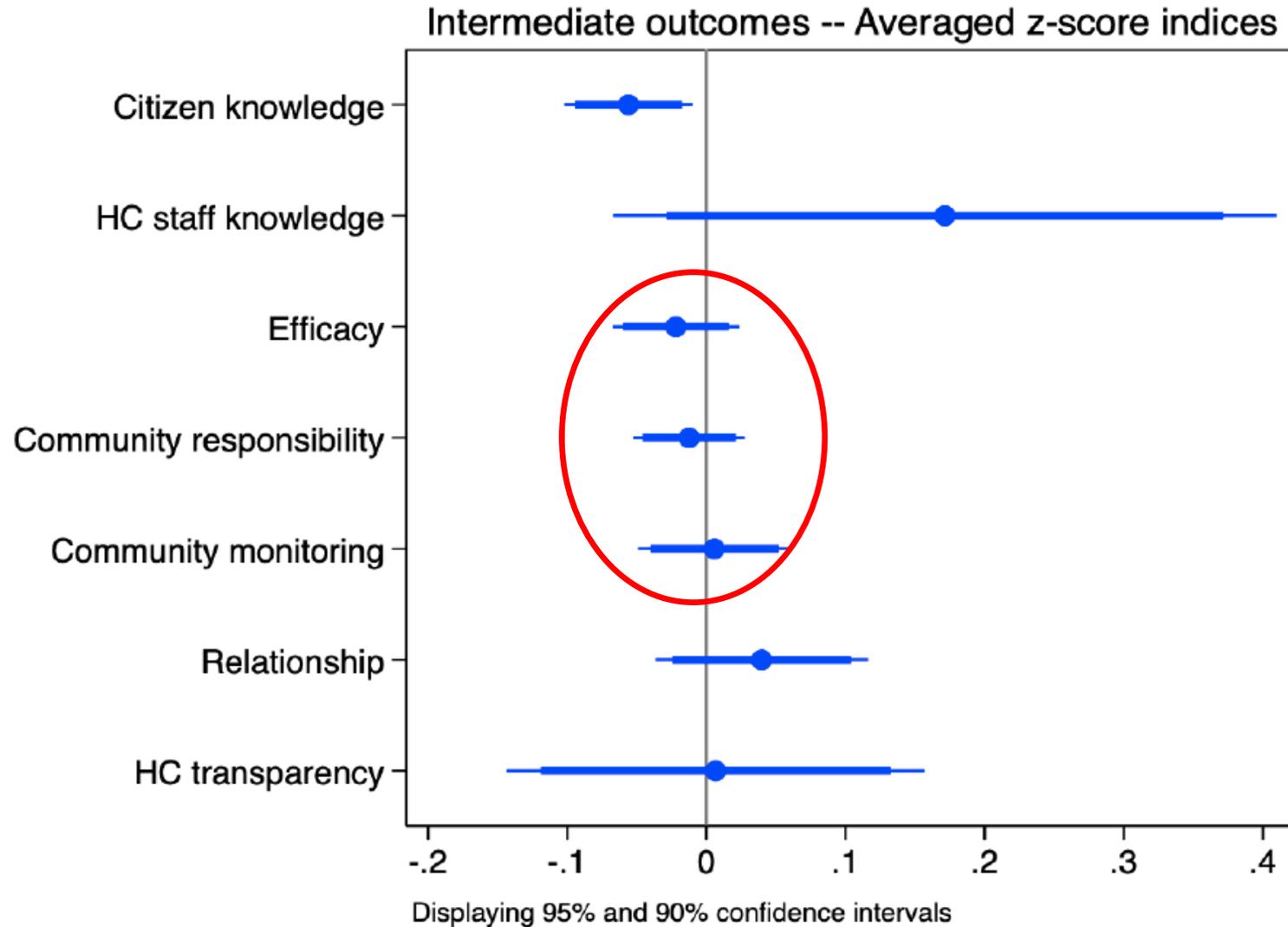
Treatment Effect on Main Indices and Components



Intermediate Outcomes

- We also looked at series of outcomes meant to capture the channels through which the intervention was hypothesized to operate
 - Citizen knowledge
 - HC staff knowledge
 - Efficacy
 - Community responsibility
 - Community monitoring
 - Relationship between health care workers and the community
 - Health center transparency

Effect of Full Treatment on Intermediate Outcomes



Why Community Monitoring May Not Work

- Bottom-up pressure is difficult to mobilize
 - CA problems
 - Low efficacy/sense of responsibility
 - Supportive formal institutions (e.g., local councils) too weak/corrupt
 - Health care may be less important than other deprivations
- Information provided in CRC does not address unobservability of health workers' behavior
 - Does underperformance come from low effort/corruption by health center staff or from circumstances outside their control: underfunding, staff shortages, delays in delivery of drugs/other supplies?
- Citizens lack power to sanction underperforming health workers

Top-Down Monitoring?

- But if bottom-up monitoring is weak, what about top-down monitoring by MOH or sub-county officials who *do* have ability to sanction?
- Suggestive evidence that adding top-down to bottom-up monitoring may work
 - District and sub-county officials were invited to attend community dialogues and interface meetings
 - Where they did, the effect of the intervention on treatment quality *doubled*

Accounting for the Differences Between ACT Health and P2P

- We investigate several hypotheses
 - Different samples: P2P was implemented only in HC3s, whereas ACT Health was implemented in HC3s and HC2s
 - Differences in program implementation
 - Different variable operationalizations/statistical tests
- We believe the most salient difference is the different baseline health outcomes in Uganda between 2004-05 and 2014-16
 - <5 mortality fell from 116 to 59 per 1,000 live births; other differences

Comparisons at Baseline: P2P vs ACT Health

	(1) P2P	(2) ACT Health Full sample	(3) ACT Health HC3 only
<i>A. Utilization</i>			
Number of outpatients in HC (HMIS)	634 (332)	197 (71)	251 (69)
Number of deliveries at HC (HMIS)	8.9 (9.2)	14.9 (12.5)	20.4 (14.5)
Number of visits to HC	3.2 (5.5)	14.0 (12.0)	14.3 (12.1)
Visits to HC vs. other providers (%)	0.290 (0.330)	0.375 (0.233)	0.381 (0.229)
Visits to traditional healers or self-treatment vs. other providers (%)	0.360 (0.341)	0.317 (0.210)	0.321 (0.209)
Vaccination rates children <36 months (%)	0.076 (0.264)	0.753 (0.380)	0.747 (0.385)
<i>B. Treatment quality</i>			
Used equipment (%)	0.475 (0.499)	0.680 (0.410)	0.715 (0.404)
Waiting time (minutes)	146 (104)	104 (84)	123 (91)
Staff presence (%) ◊	0.534 (0.265)	0.293 (0.203)	0.262 (0.166)
Drug availability (%) ◊	0.496 (0.208)	0.931 (0.128)	0.939 (0.102)
<i>C. Patient satisfaction</i>			
Polite staff (%)	0.924 (0.265)	0.899 (0.260)	0.893 (0.273)
Staff interested in health (%)	0.915 (0.279)	0.901 (0.257)	0.894 (0.271)
Free to express clearly (%)	0.951 (0.216)	0.831 (0.318)	0.814 (0.339)
<i>D. Health outcomes</i>			
Weight-for-age (kgs/months) ◊	0.789 (0.610)	1.317 (0.620)	1.315 (0.604)
U5MR (deaths per 1,000 live births) ◊	144.4 (94.4)	11.4 (38.1)	9.2 (31.5)

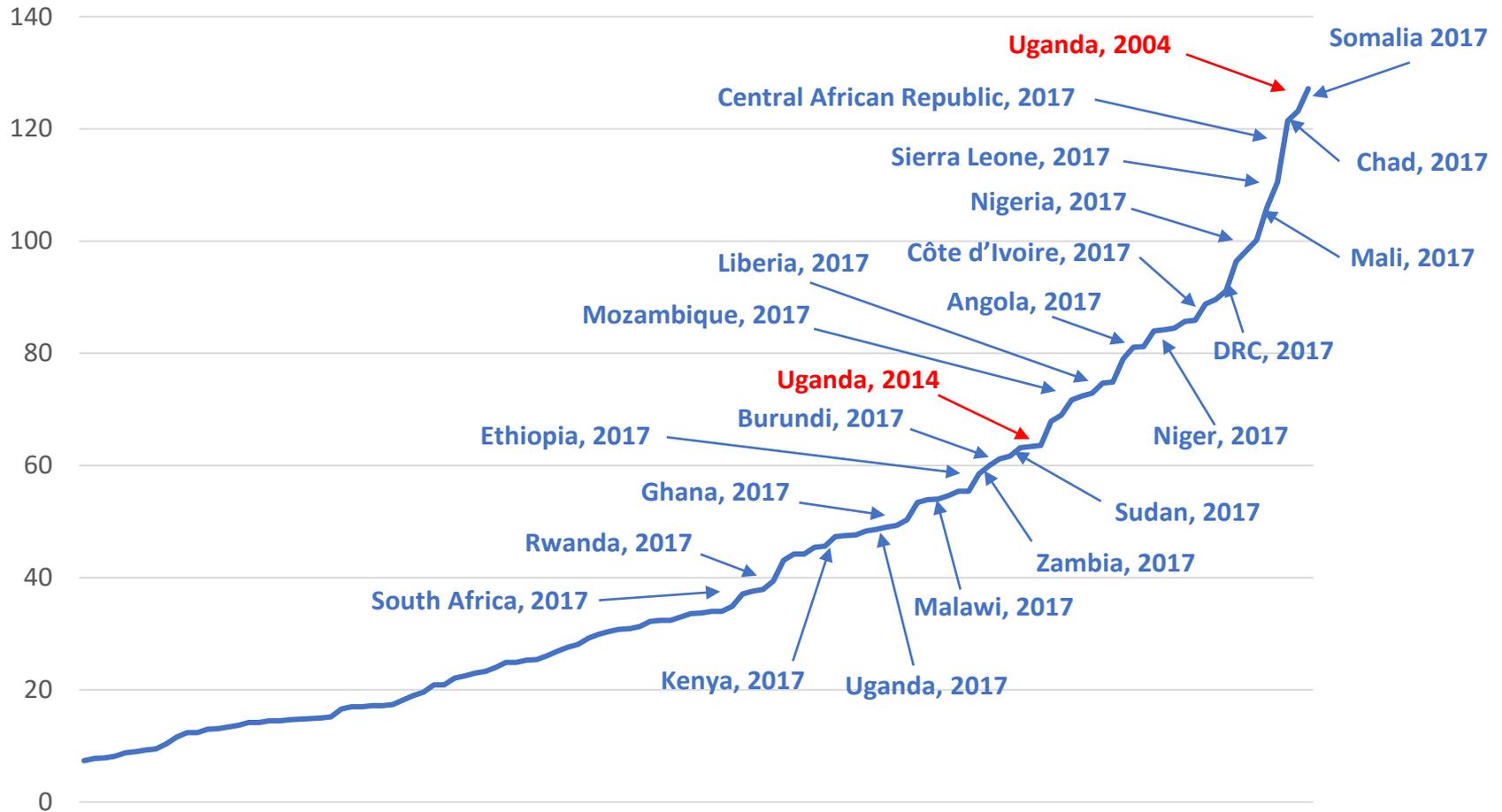
Accounting for the Differences Between ACT Health and P2P

	(1)		(2)	
	Main sample		HCs with baseline CMR within 1 SD of P2P's control levels	
	Coeff.	Obs.	Coeff.	Obs.
Utilization index	0.027 (0.022)	7,288	0.030 (0.032)	2,860
Treatment quality index	0.070*** (0.026)	7,288	0.020 (0.040)	2,860
Patient satisfaction index	0.077*** (0.024)	7,288	0.104*** (0.038)	2,860
Health outcomes index	-0.003 (0.027)	4,930	-0.047 (0.044)	1,953
Child mortality (child level)	1.059 (0.239)	10,118	0.210*** (0.086)	4,028
Child mortality (HC level)	-0.011 (0.008)	187	-0.023** (0.010)	73
Efficacy index	-0.022 (0.023)	7,288	0.021 (0.036)	2,860
Community responsibility index	-0.012 (0.020)	7,288	0.023 (0.031)	2,860
Community monitoring index	0.006 (0.028)	7,288	0.111** (0.050)	2,860

Notes. This summary table shows the coefficients on the treatment indicator for the five main outcome indices as well as the three intermediate outcome indices relating to community monitoring in two different samples. Column (1) shows results for the main sample (full treatment and control group), column (2) for health centers with a baseline under five mortality rate within one standard deviation of that in Björkman and Svensson (2009). Unless noted otherwise, the unit of observation is the household. For *child mortality (child level)*, we display hazard ratios estimated with a Cox proportional hazards model. A hazard ratio below (above) 1 implies that the treatment led to lower (higher) mortality rates. All models include district fixed effects as well as demeaned baseline covariates and their interaction with the treatment indicator. Robust standard errors are clustered at health center level. *** p<0.01; ** p<0.05; * p<0.10

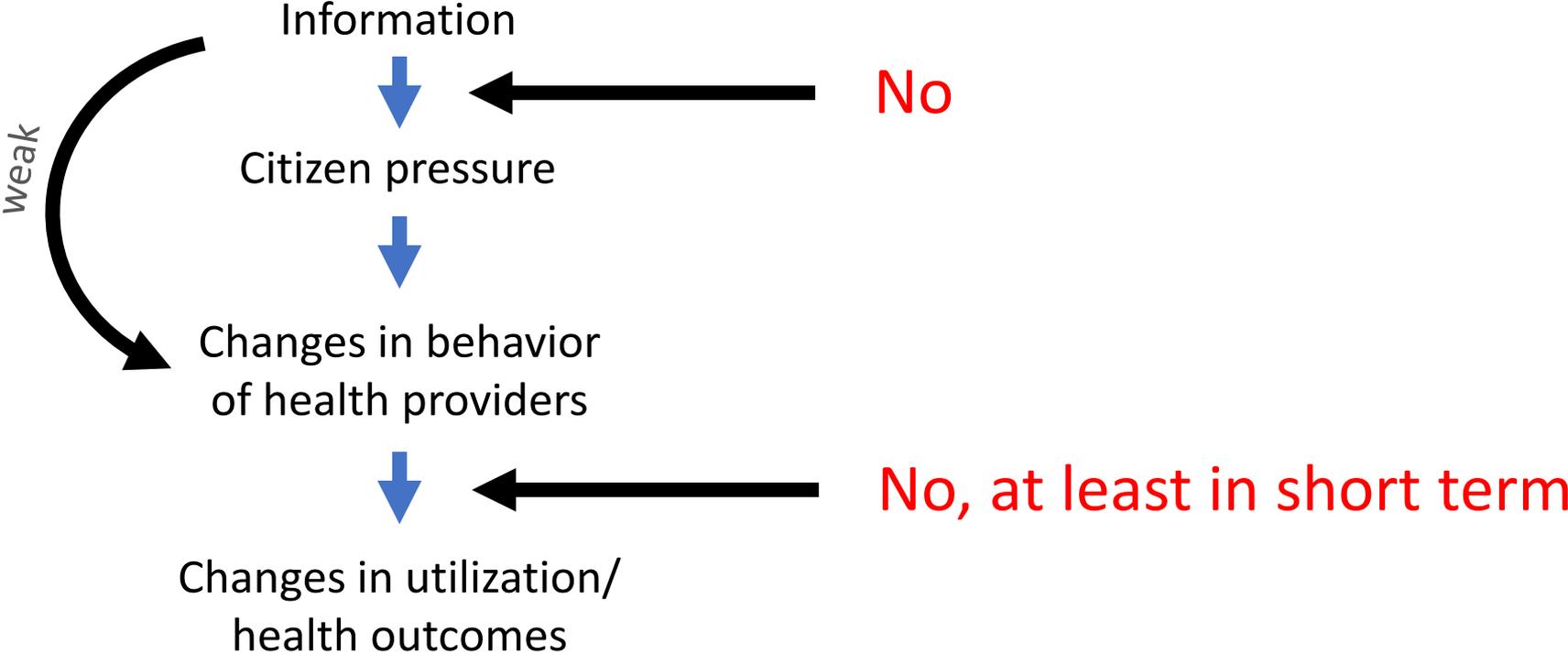
Under-5 Mortality Rates, 2017

African countries plotted from lowest to highest



Source: World Bank data

Conclusion



Conclusion (cont'd)

- Bottom line health outcomes are hard to move!
- Citizens' behavior is hard to change
 - “Harness citizen engagement” or giving “power to the people” sounds great, but it may not work
 - And it may not be the most powerful tool we have
- Interventions that may be highly effective at one level of service delivery may be less effective when conditions improve

Thank you



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