HARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH

Quality of TB Care
McGill Summer Institute

Quality improvement in maternal and child health: Case studies from Tanzania

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COMMENT

Does quality improvement improve quality?

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ABSTRACT

Although quality improvement (QI) is frequently advocated as a way of addressing the problems with healthcare, evidence of its effectiveness has remained very mixed. The reasons for this are varied but the growing literature highlights particular challenges. Fidelity in the application of QI methods is often variable. QI work is often pursued through time-limited, small-scale projects, led by professionals who may lack the expertise, power or resources to instigate the changes required. There is insufficient attention to rigorous evaluation of improvement and to sharing the lessons of successes and failures. Too many QI interventions are seen as 'magic bullets' that will produce improvement in any situation, regardless of context. Too much improvement work is undertaken in isolation at a local level, failing to pool resources and develop collective solutions, and introducing new hazards in the process. This article considers these challenges and proposes four key ways in which QI might itself be improved.

KEYWORDS: evaluation, healthcare organisation, hospitals, patient safety, quality improvement, research design/methods

US studies suggest that nurses deal with an average of 8.4 work system failures per 8-hour shift, and they are continually interrupted.[5,6] The need for staff to learn and re-learn, associated with the variability in fundamental processes, is significant. Much professional time is consumed unproductively in learning anew how to undertake tasks as basic as ordering tests, knowing whether equipment has been cleaned, or how things are arranged in the resuscitation trolley in each setting. Personnel may also make errors as they move from place to place, either because they have not yet learned the new procedures or they apply previous learning to new but different contexts, sometimes with tragic outcomes.[7]

The problems with quality improvement

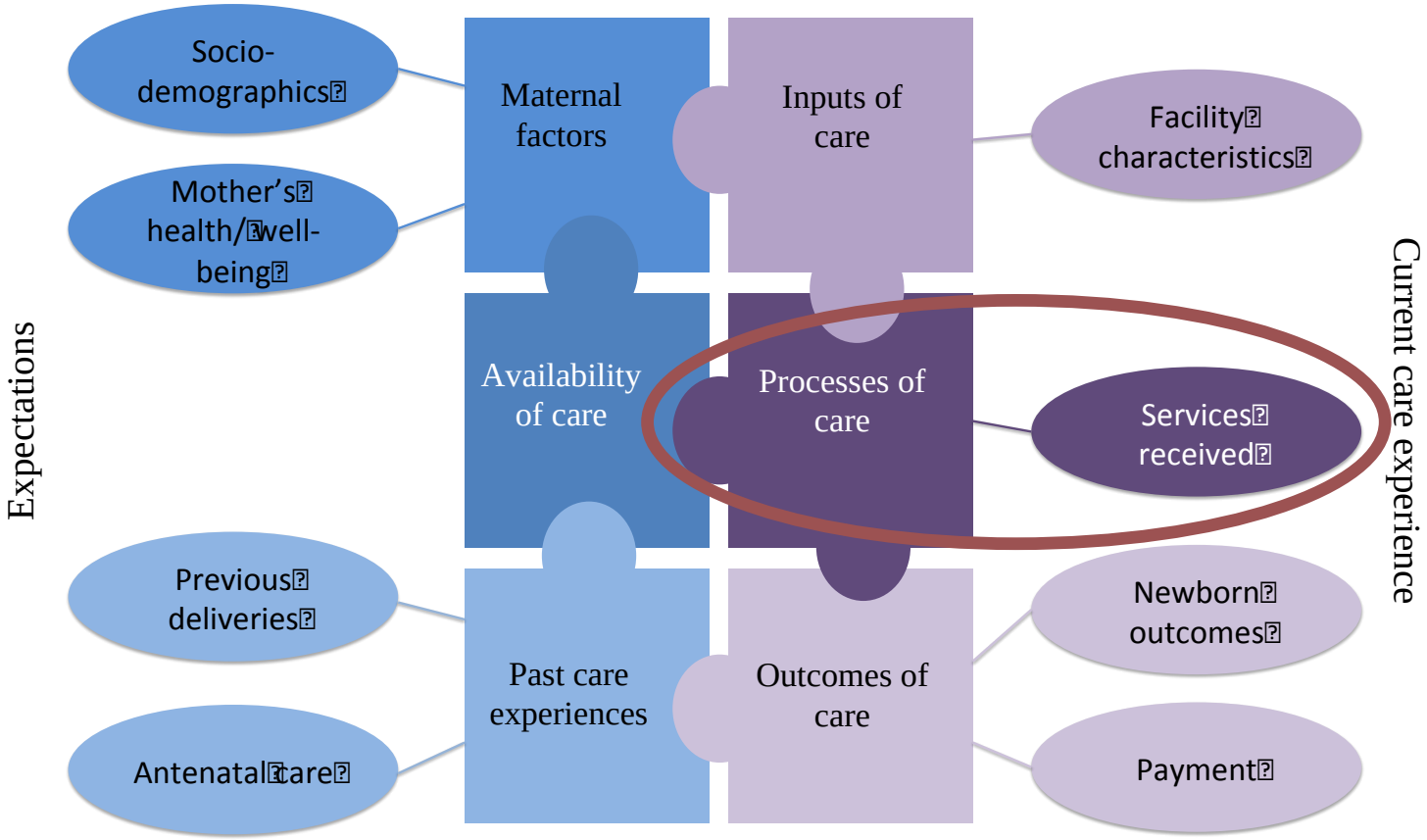
Healthcare has increasingly been encouraged to use quality improvement (QI) techniques to tackle these operational defects (clearly, healthcare faces many other challenges but they may require different approaches). Capacity to improve quality is clearly critical to healthcare organisations; every organisation

Maternal health care in Tanzania

- What do we know about quality?
- How does this motivate a QI program?
- MNH+ Intervention
- Does QI improve quality?

Women want, but do not get, quality

- Women can **identify** high quality care (Larson et al. 2014)



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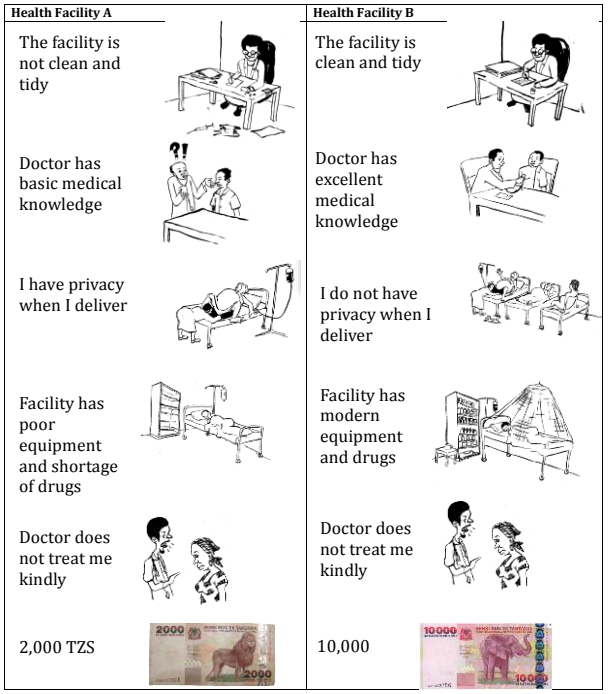
- Women **value** high quality care (Larson et al. 2016)



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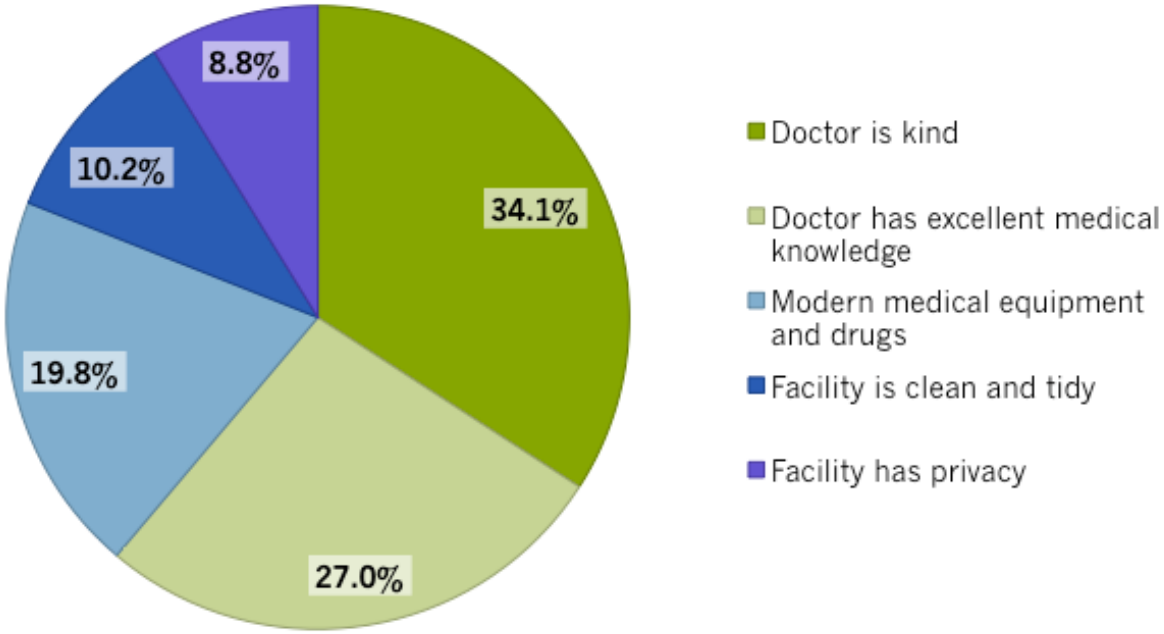
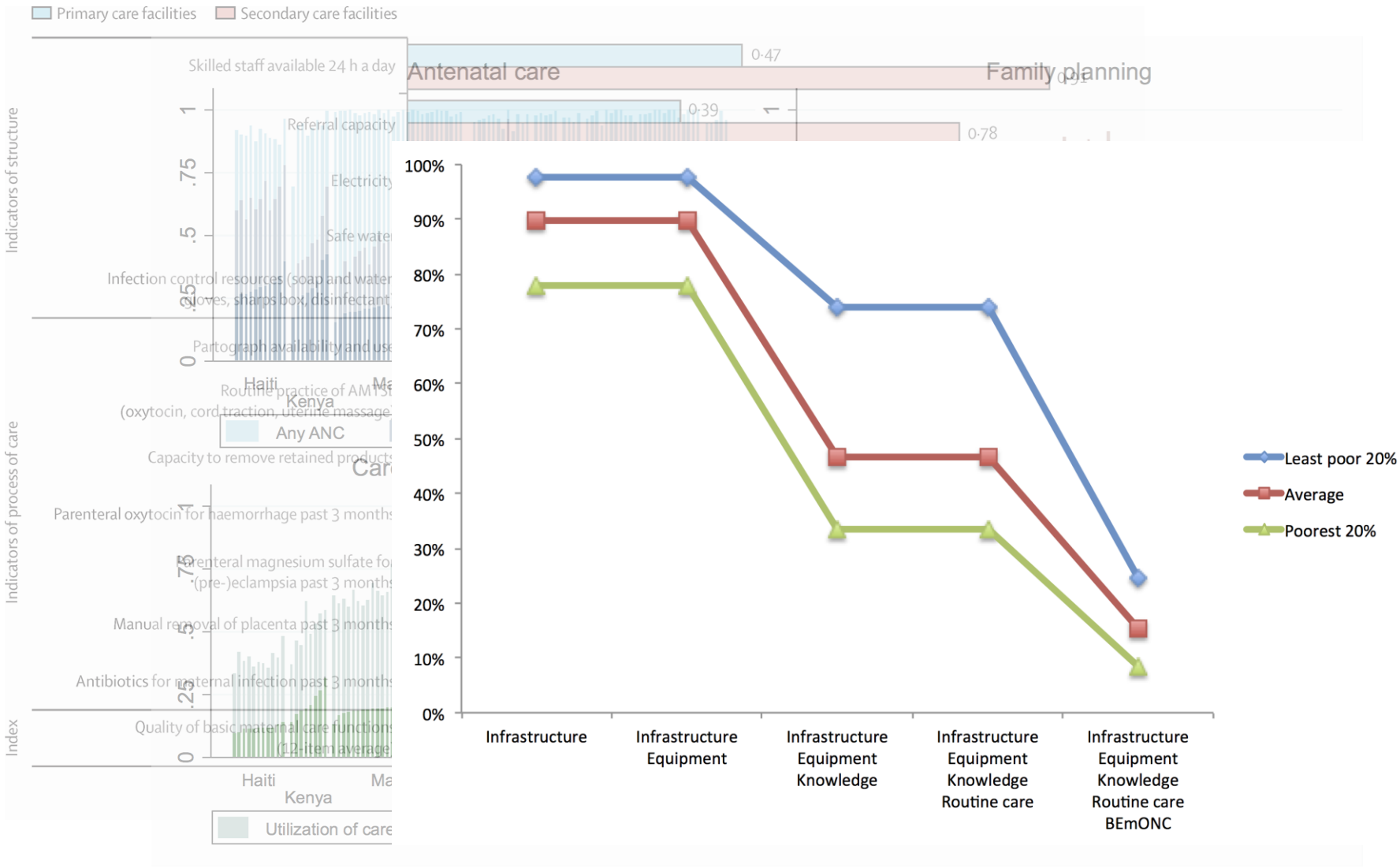


Women want, but do not get, quality

- Women can **identify** high quality care (Larson et al. 2014)
- Women **value** high quality care (Larson et al. 2016)
- When women access maternal healthcare, they are not guaranteed high quality care (Larson et al. 2016 & Leslie et al. 2017)

Women want, **but do not get**, quality



Sources: Kruk et al. Lancet Global Health, 2016; Leslie et al. BMJ Global Health, 2017; Larson et al. ISQua, 2016

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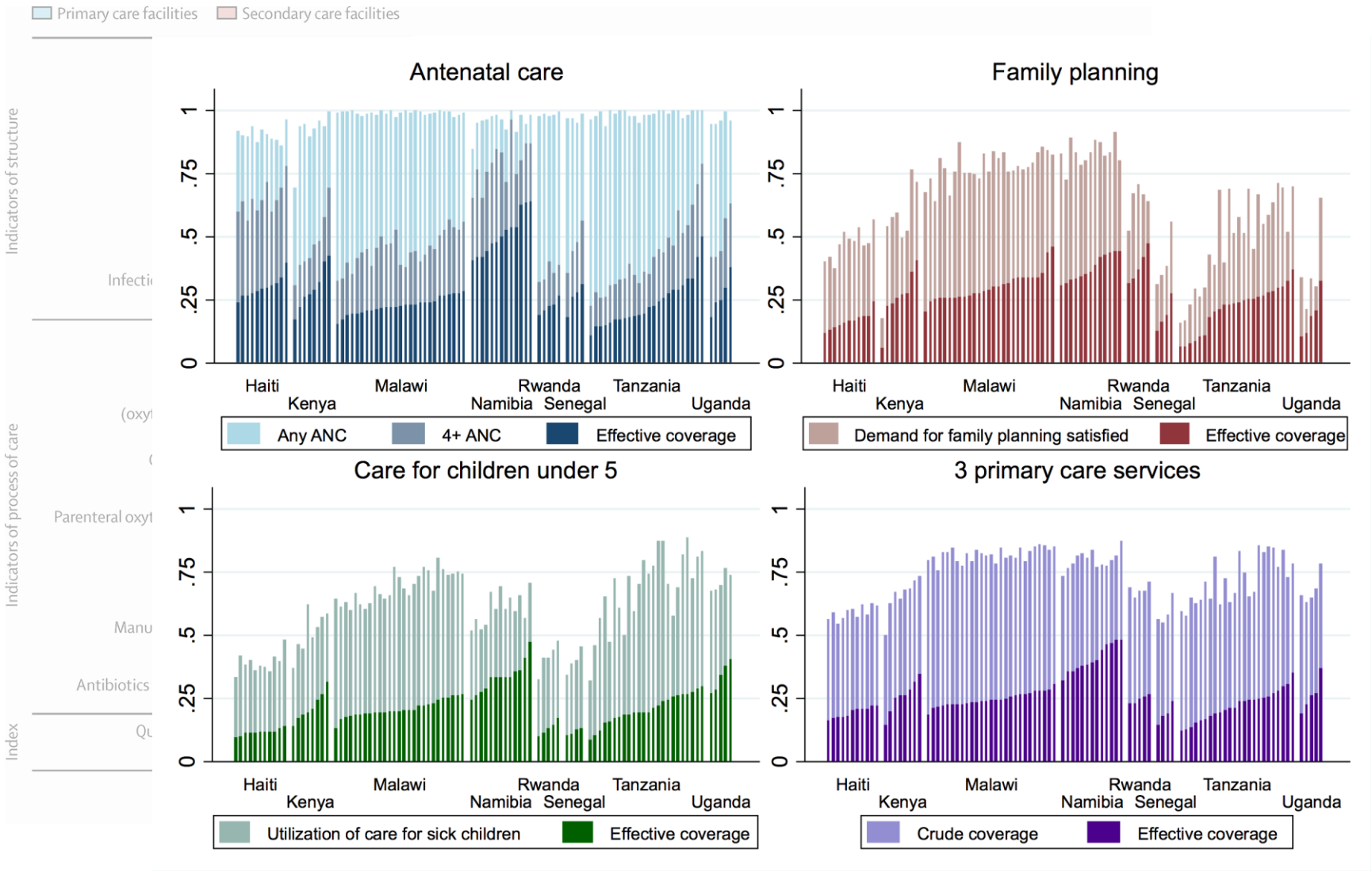

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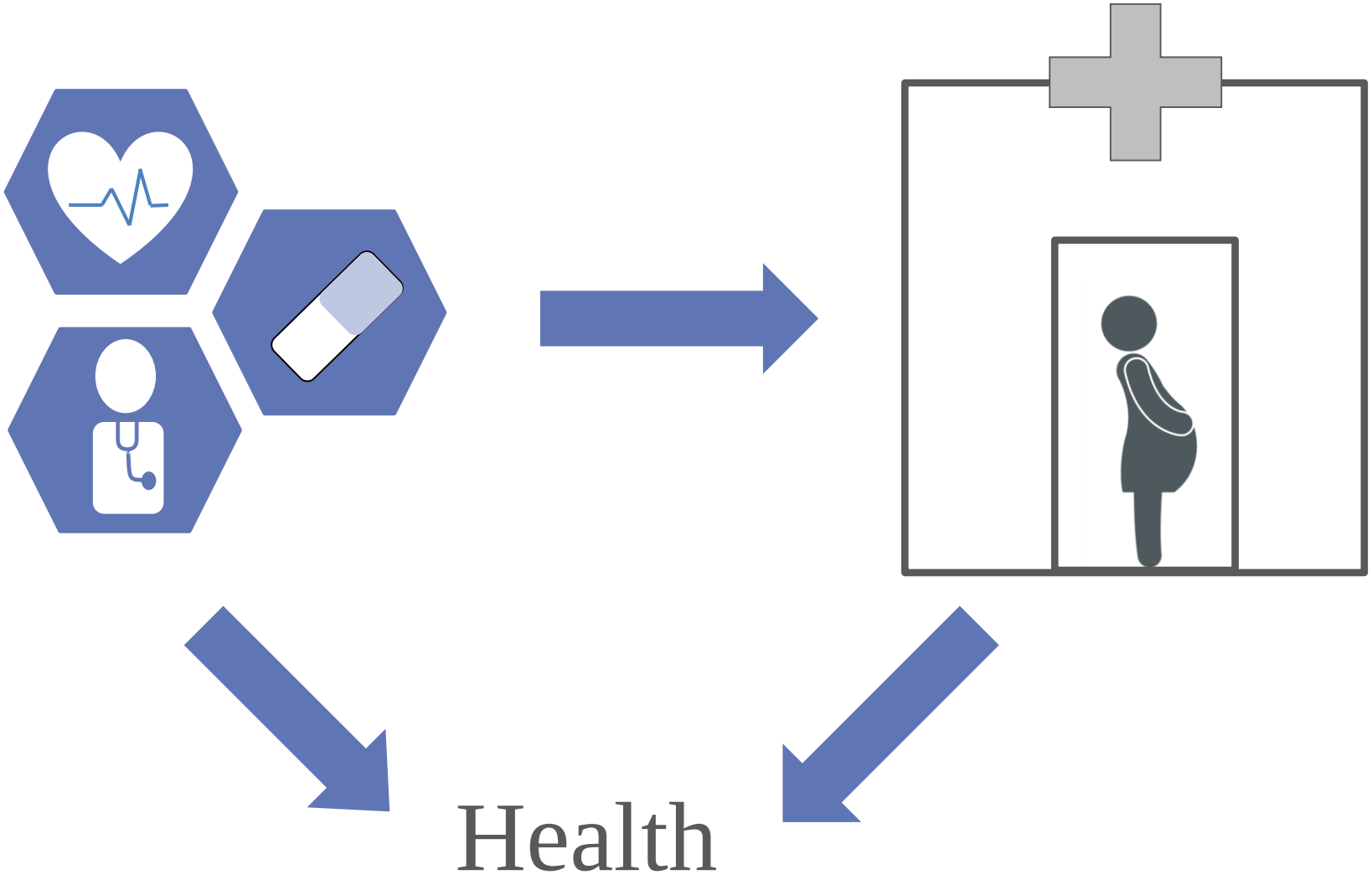
What does this mean?



How do we improve quality?

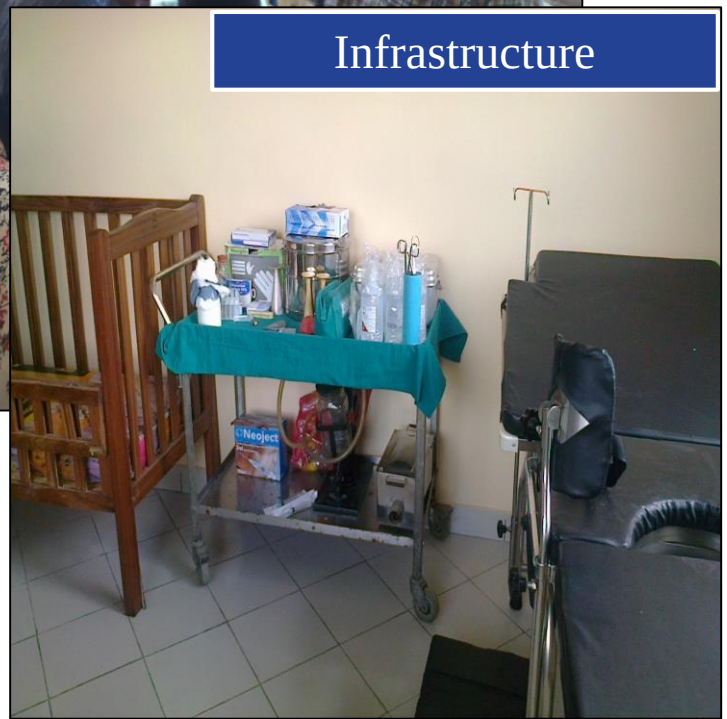
- Example of an effective program ‘effectively’ implemented: PEFPAR
  - $30 billion in US assistance to treat and prevent HIV in high-prevalence countries
  - In sub-Saharan Africa coverage with ART increased from 3% to 37% between 2004 and 2009
  - It took 50+ years to get facility delivery rates to 54% in SSA
- Strengthening MNH services and outreach using the HIV program strategy (MNH+) will improve quality and utilization of essential MNH and HIV services and in turn lead to better health outcomes for mothers and newborns.

Intervention

Training

Supportive supervision

Infrastructure



Peer outreach

Logic model

↑ Provider knowledge & competence

↑ Availability of essential equipment, supplies and drugs

↑ Awareness of quality investment & importance

↑ Provision of competent care

↑ Provision of respectful care (patient experience)

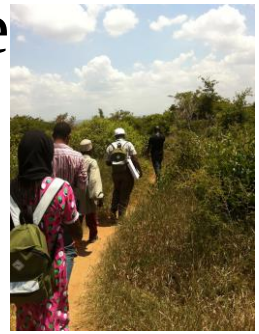
↑ Health outcomes

↑ Satisfaction with care

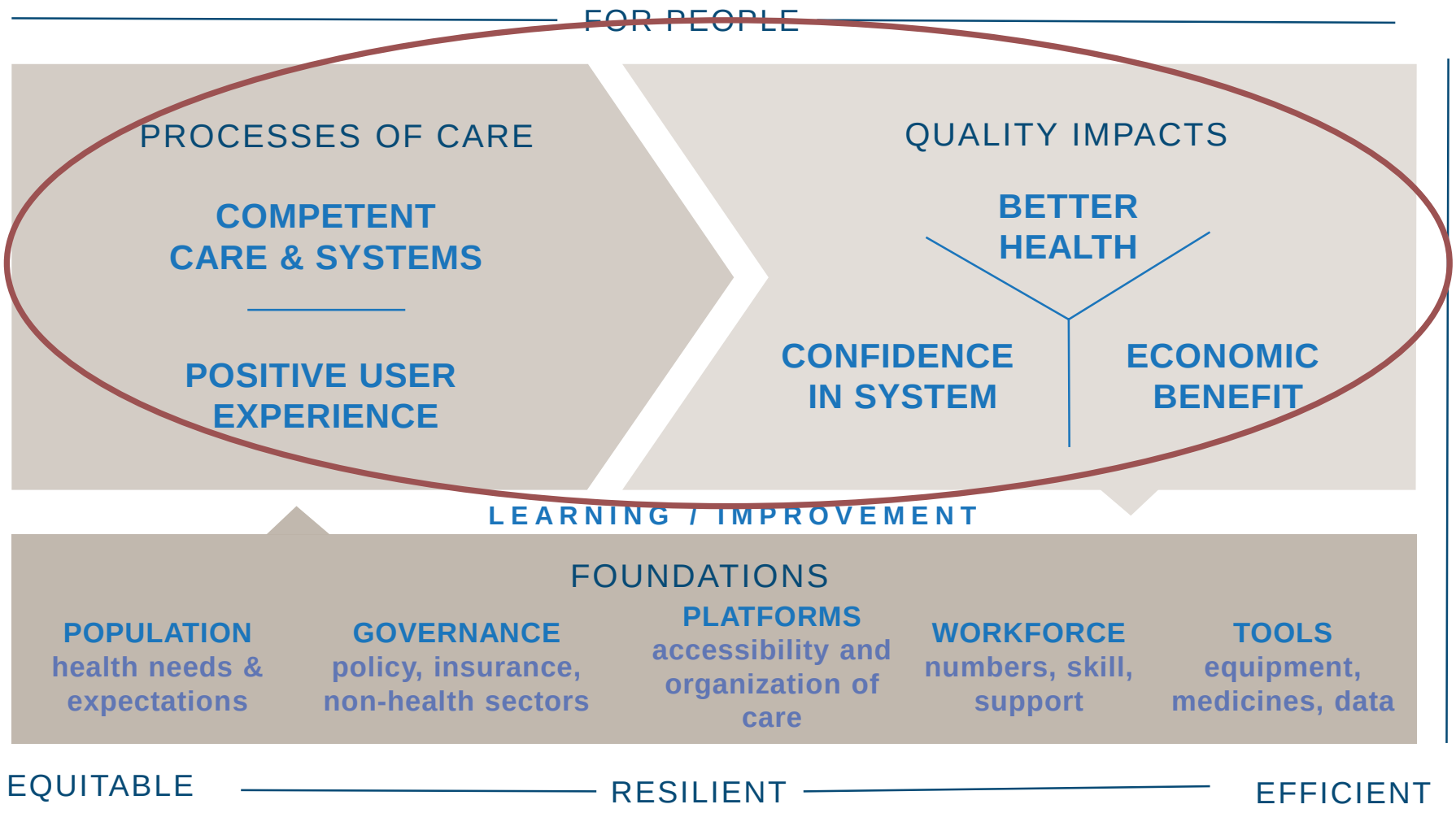
↑ Utilization of facilities for childbirth

Design/Measurement

- Does MNH+ improve quality?
- Cluster-randomized controlled study in 24 rural primary healthcare facilities
- Yearly measurement:
  - Healthcare providers
  - Health facilities
- Base/mid/end measurement:
  - Household surveys
- Difference-in-differe



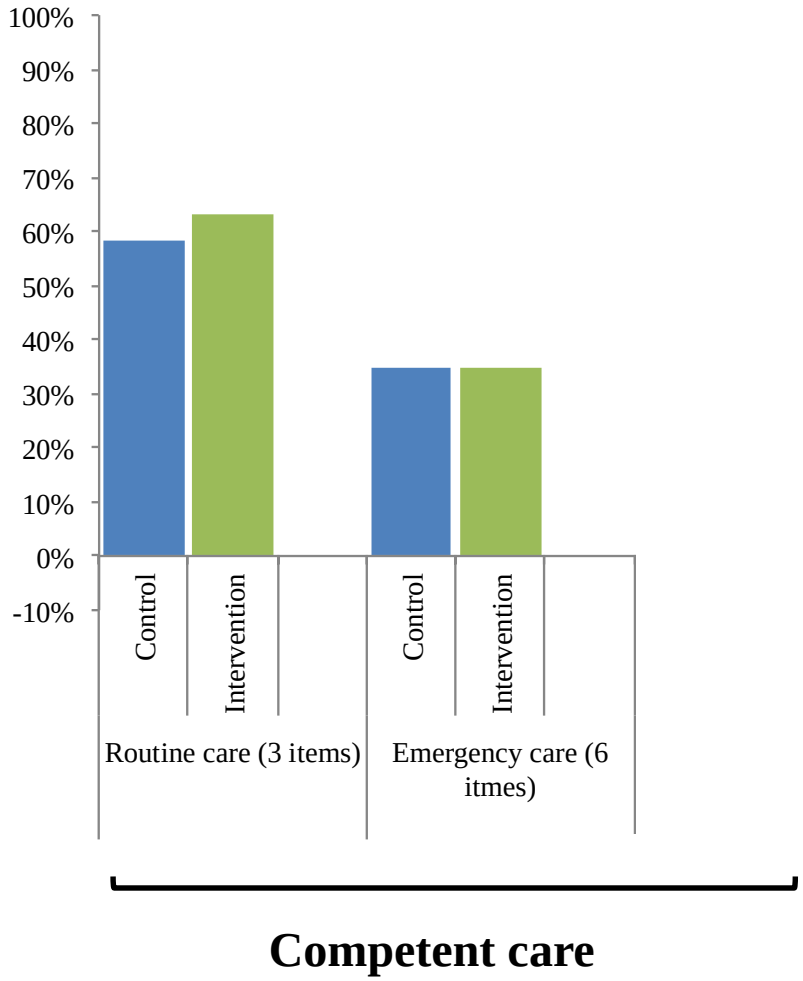
High Quality Health System Framework



HQSS

The Lancet Global Health Commission on **High Quality Health Systems** in the **SDG Era**

1. Baseline quality was low



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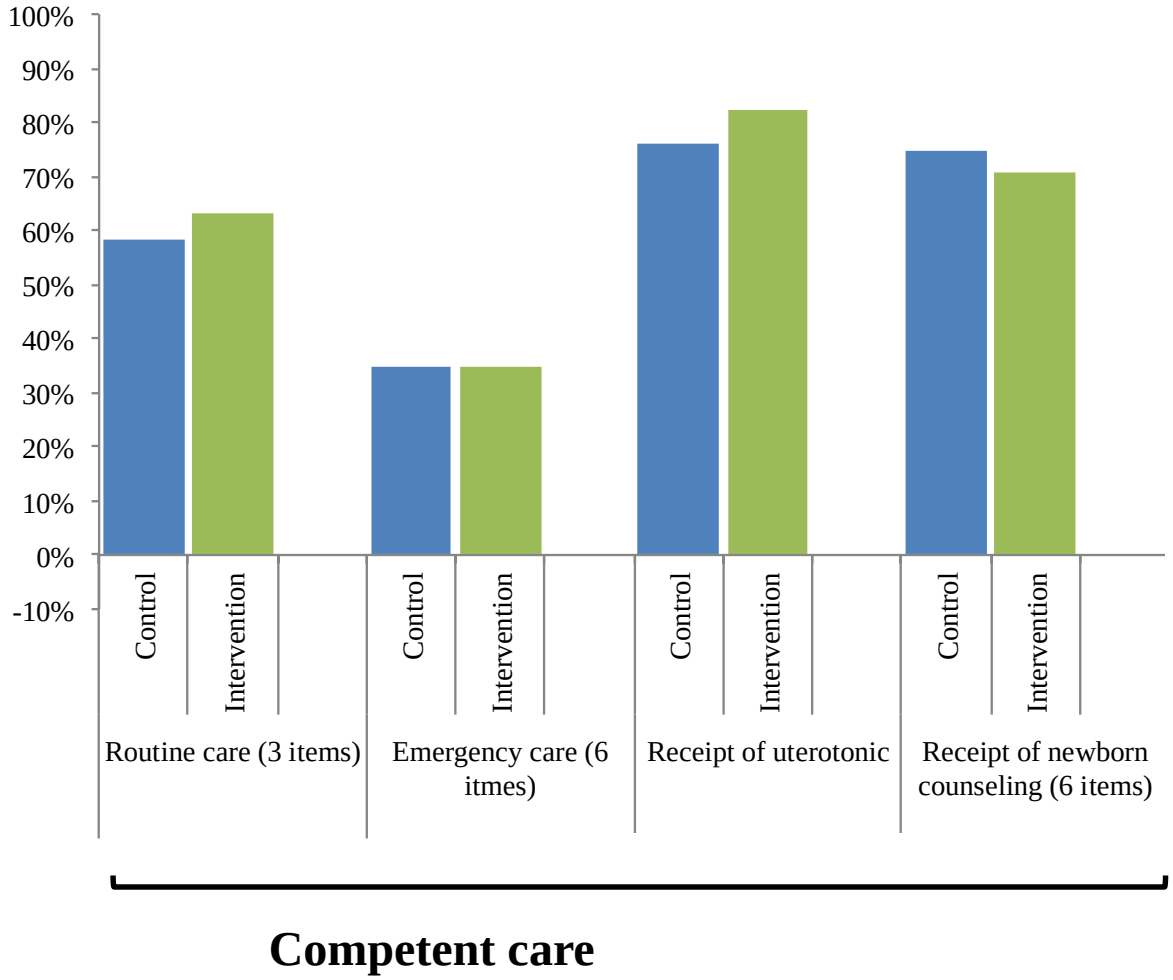

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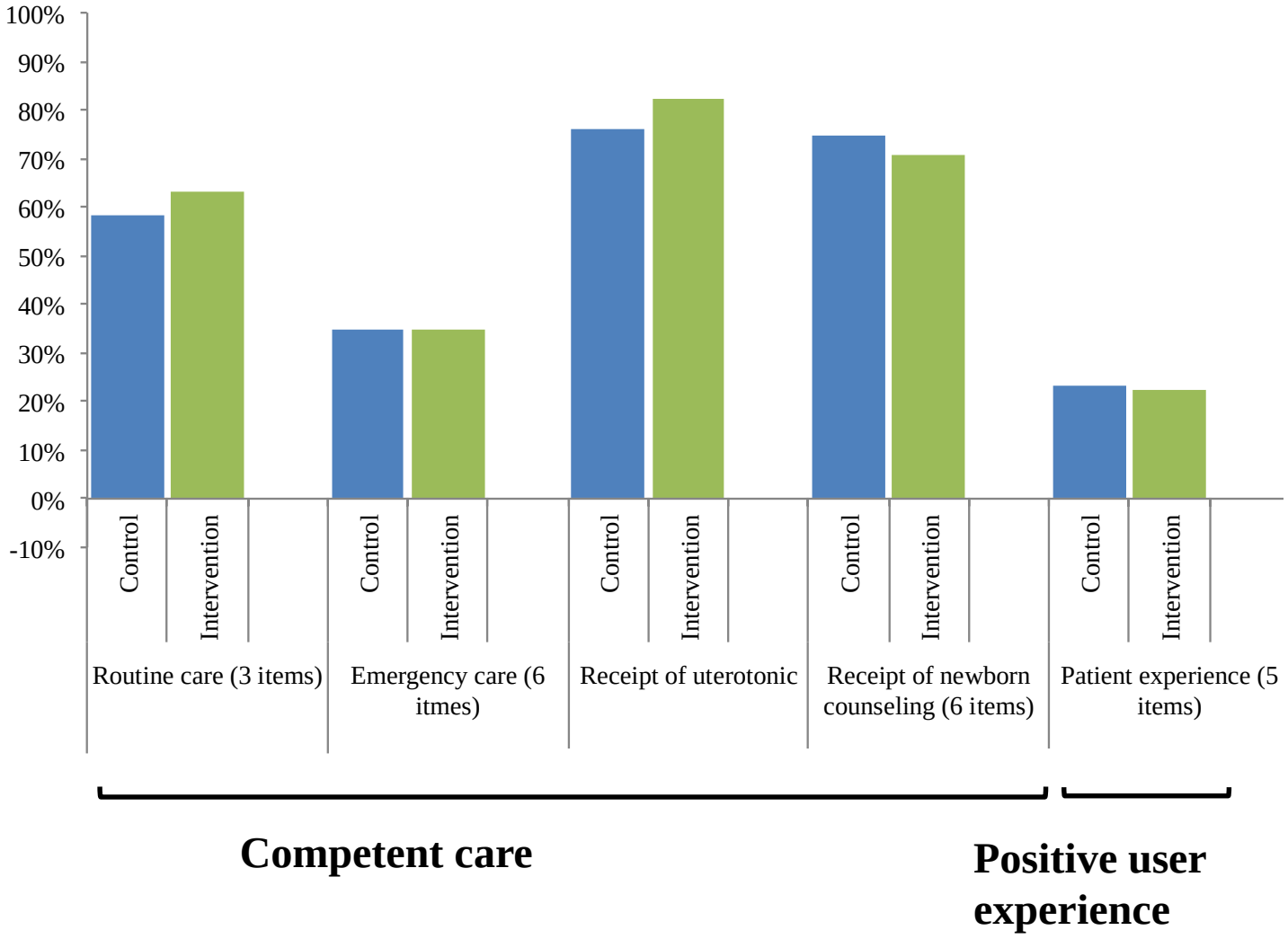

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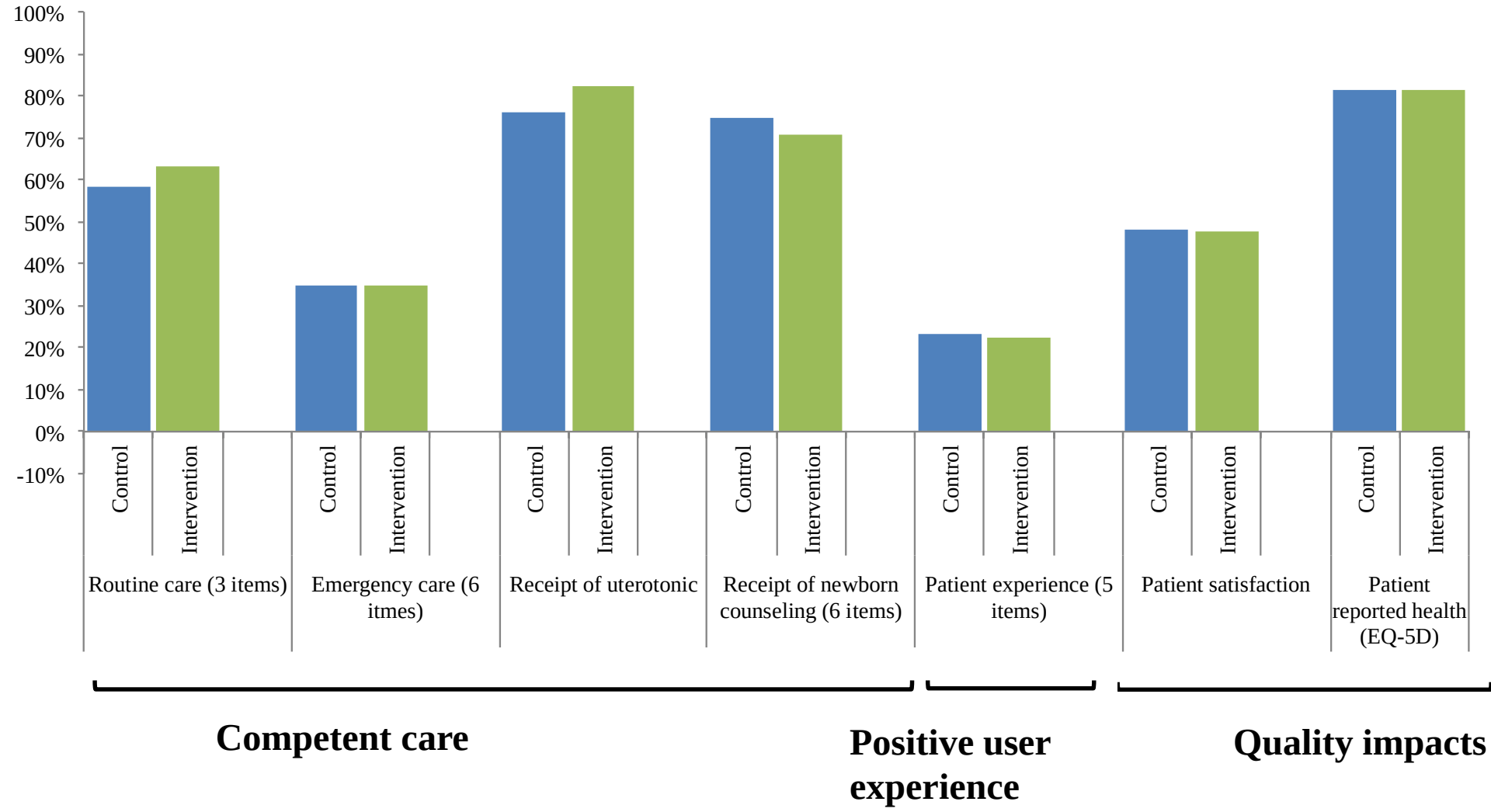
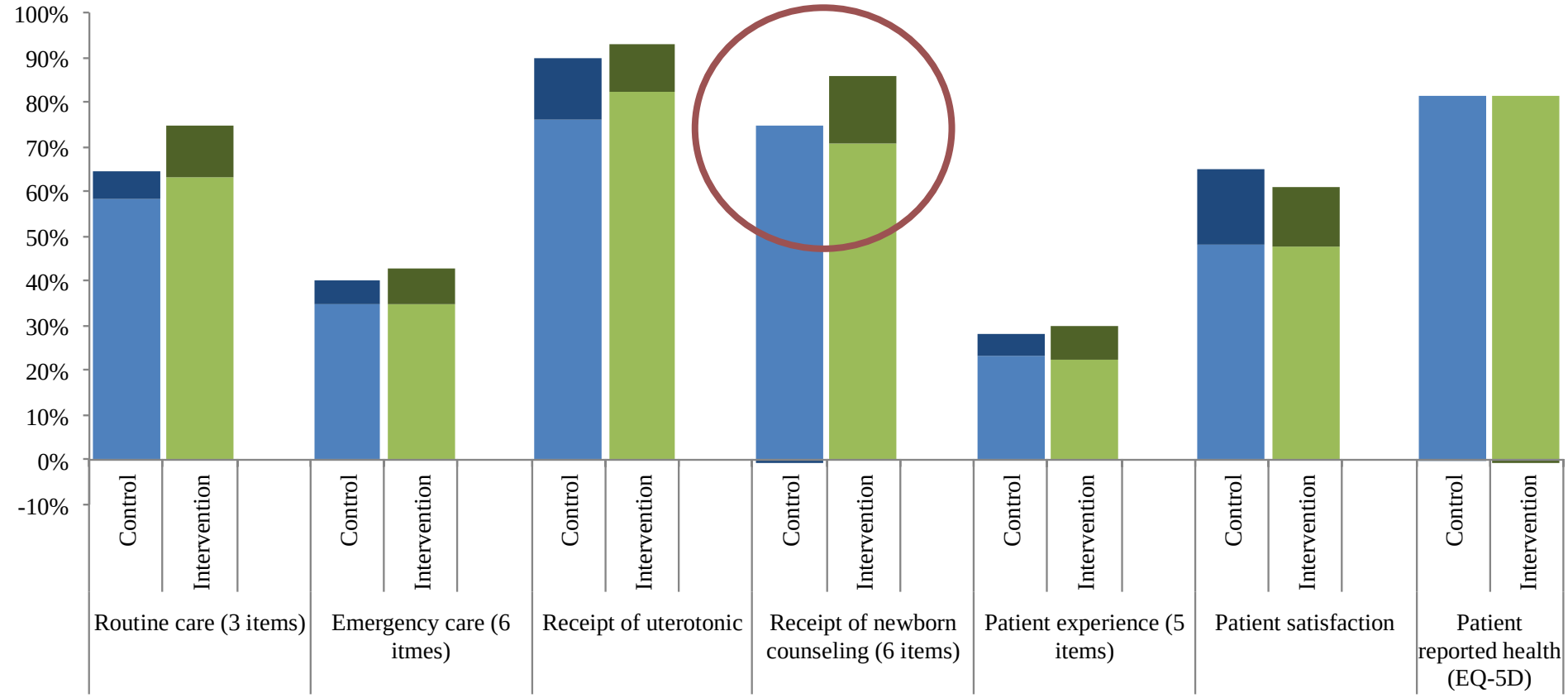
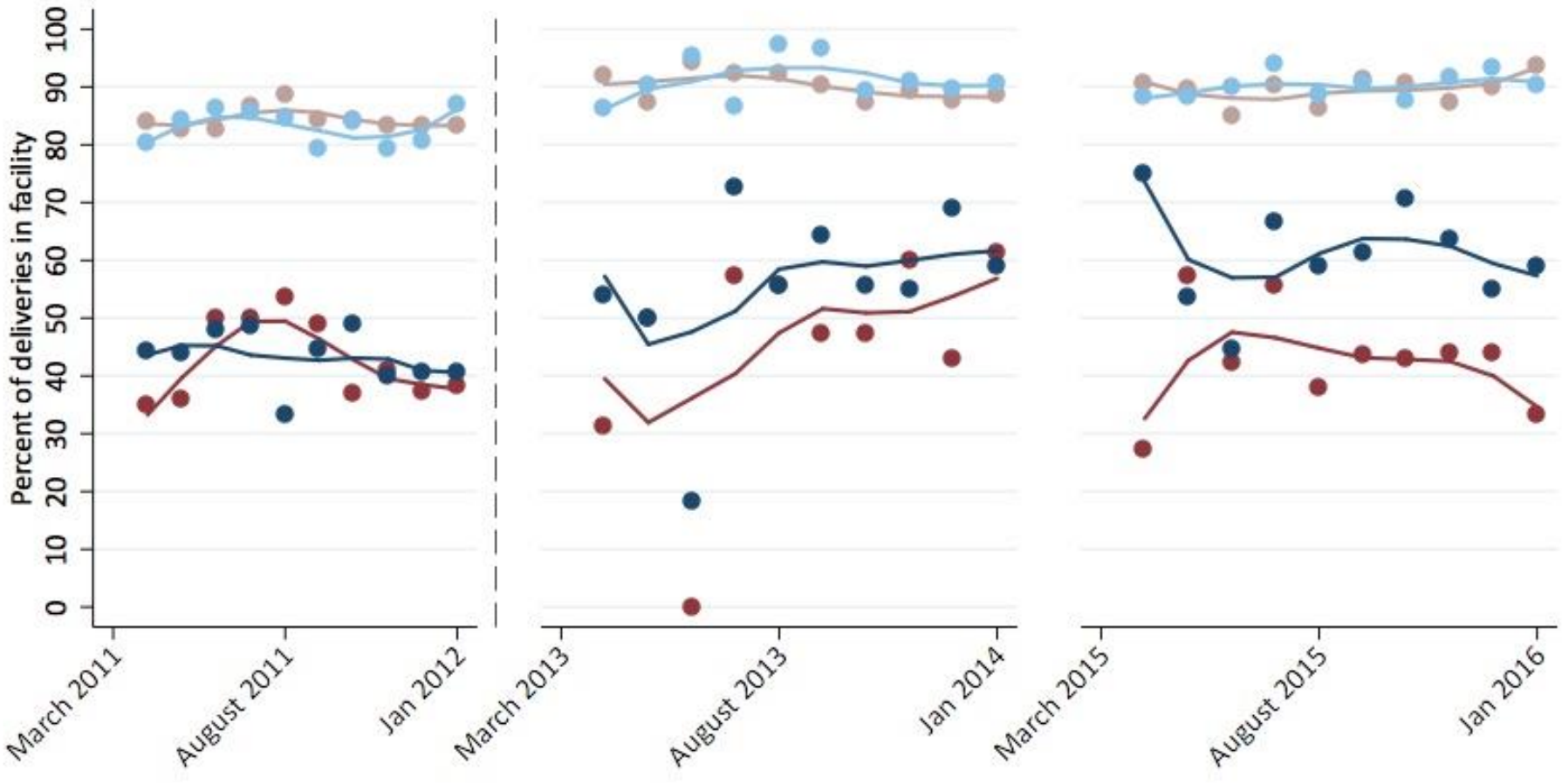


2. MNH+ did not improve quality



3. MNH+ did improve utilization



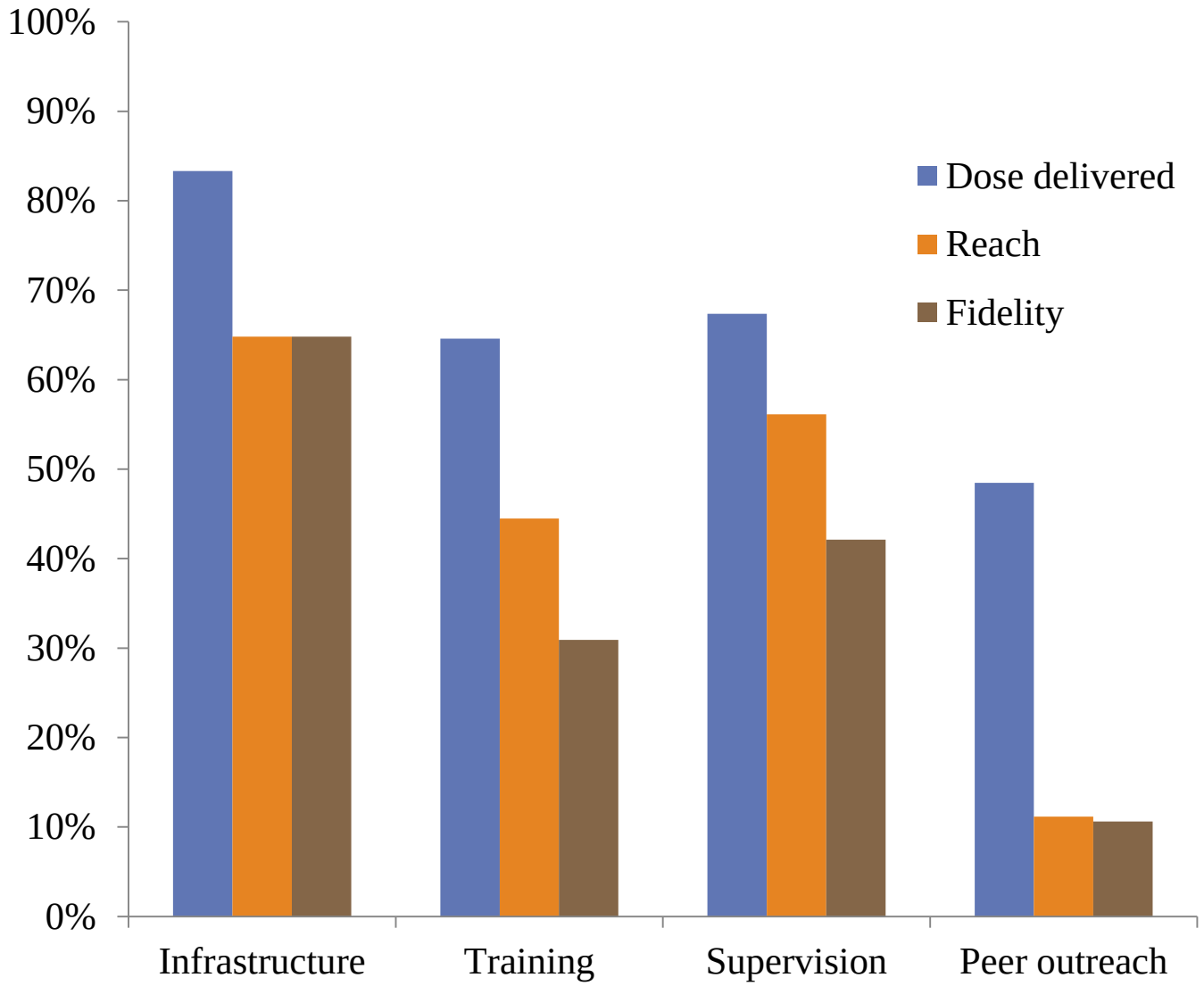
Programs can fail, because…

1. They were not implemented correctly

2. The theory was wrong

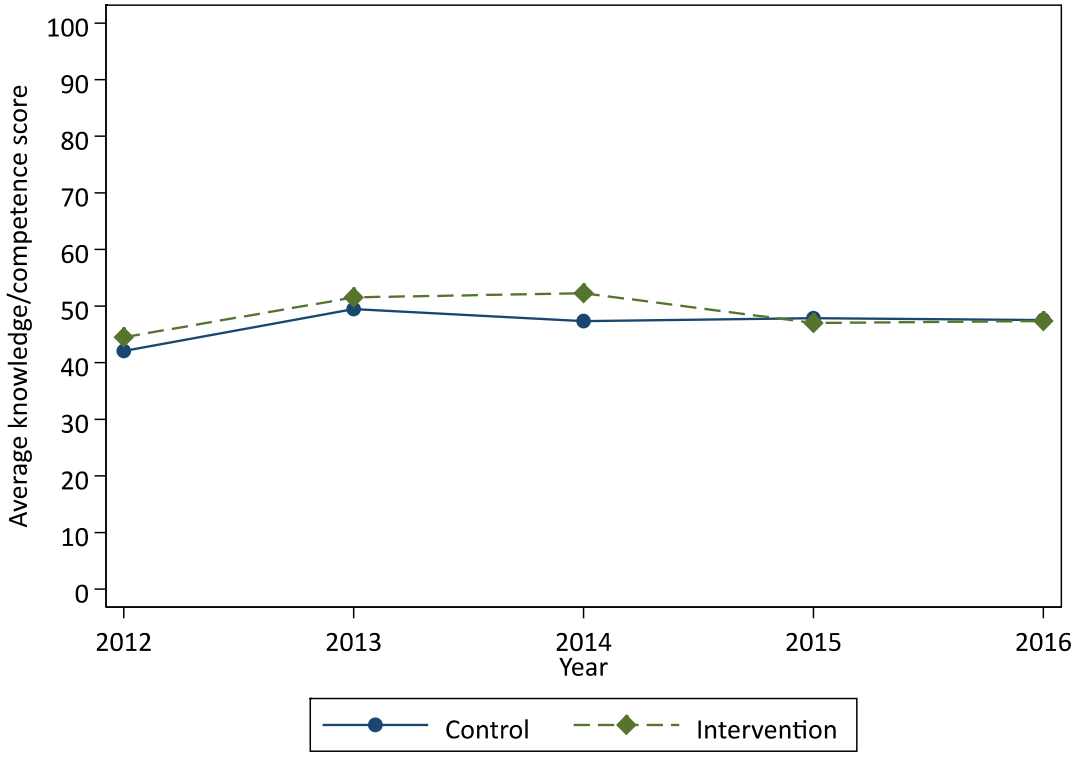
- In addition – we can see “failure” or “success” where it does not exist if our measurement is wrong

3. Implementation was low



4. Theory had flaws

- Quality of care results did not change for the “high implementation” group
- No improvement on some key intermediary outcomes



4. Theory has flaws

Source: Leslie HH, Gage A, Nsona H, Hirschhorn LR, Kruk ME. Training and supervision did not meaningfully improve quality of care for pregnant women or sick children in Sub-Saharan Africa. *Health Affairs.* 2016

4. Theory has flaws

↑ Pro
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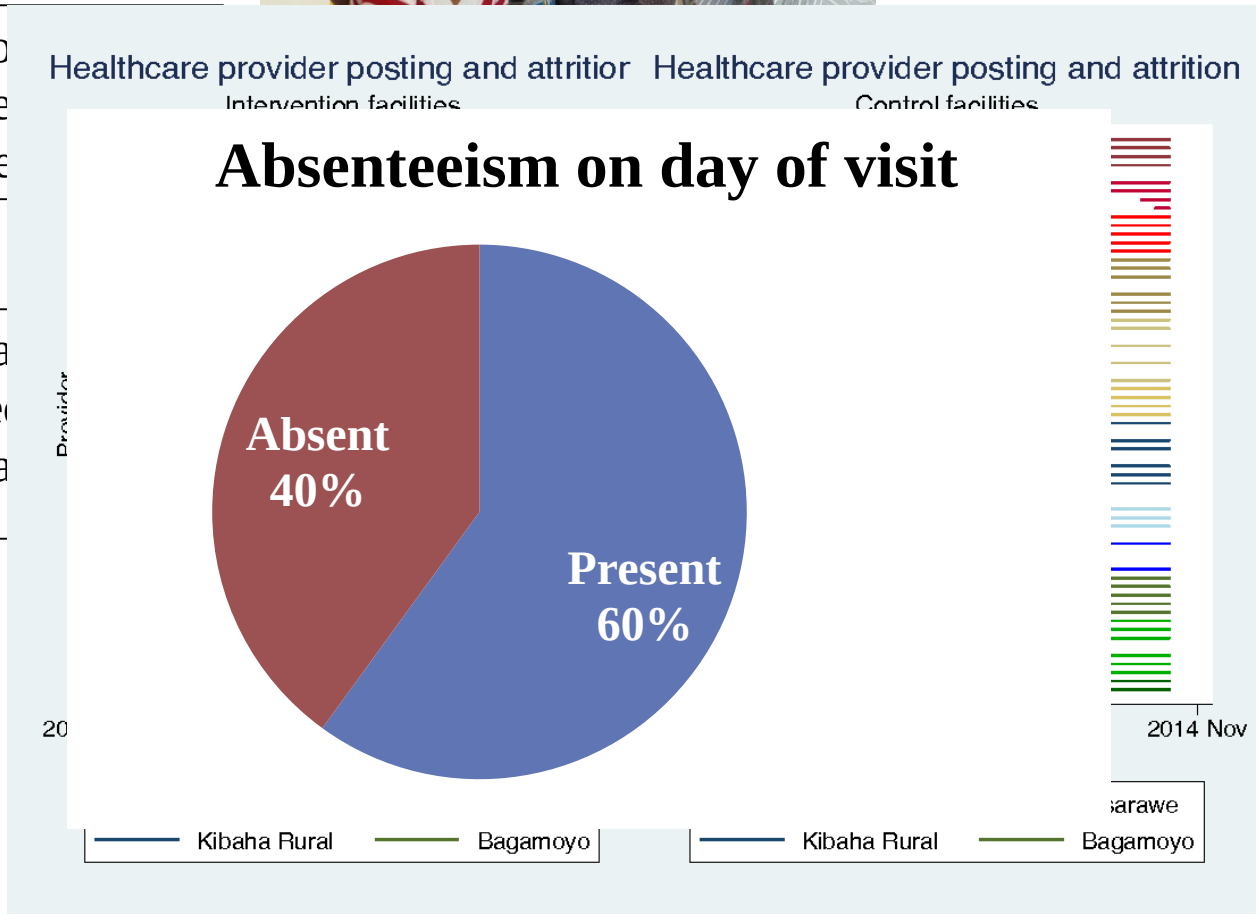
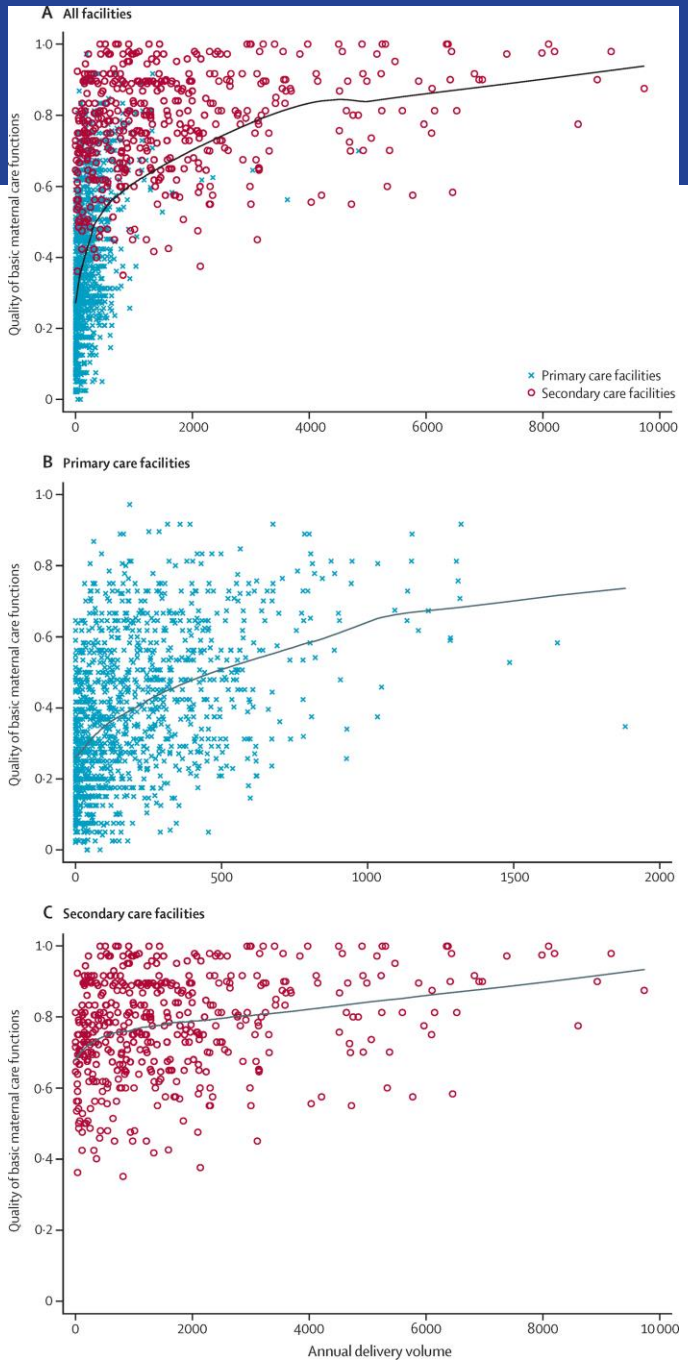
compe

↑ Availa
essential e
supplies a



4. Theory has flaws

- Can low volume facilities provide high-quality delivery care?



Source: Kruk et al. Lancet Global Health, 2016;

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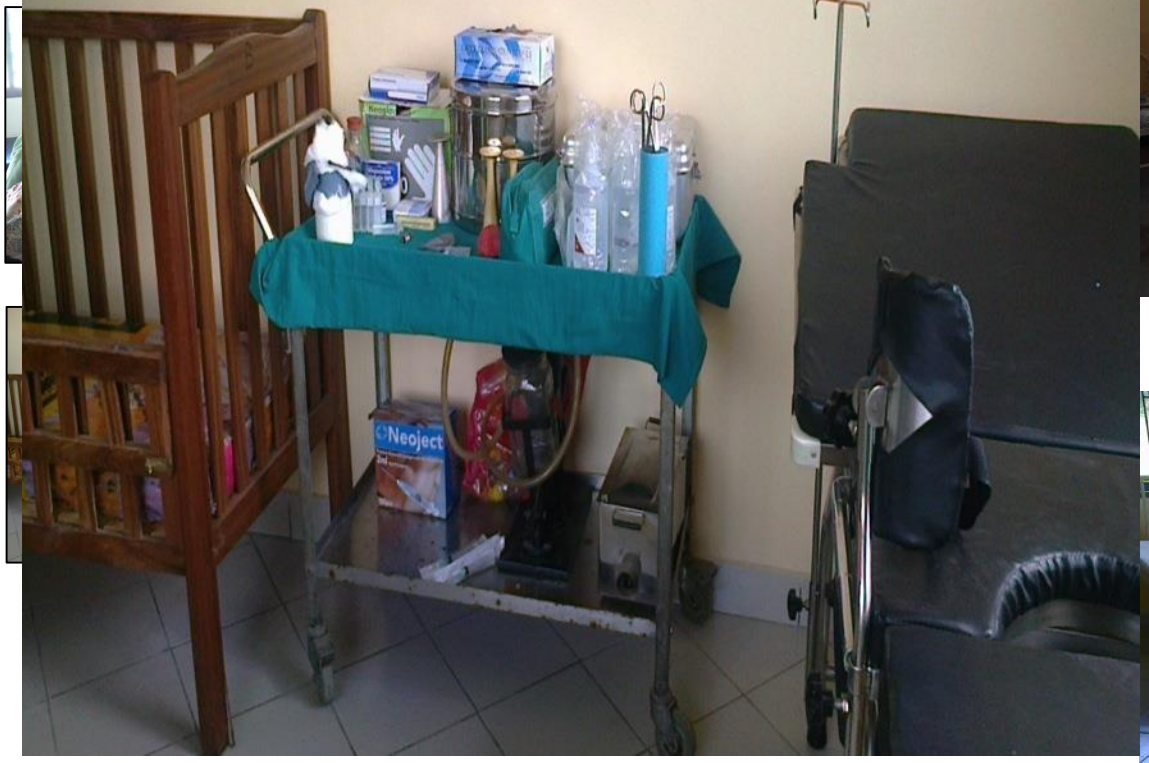
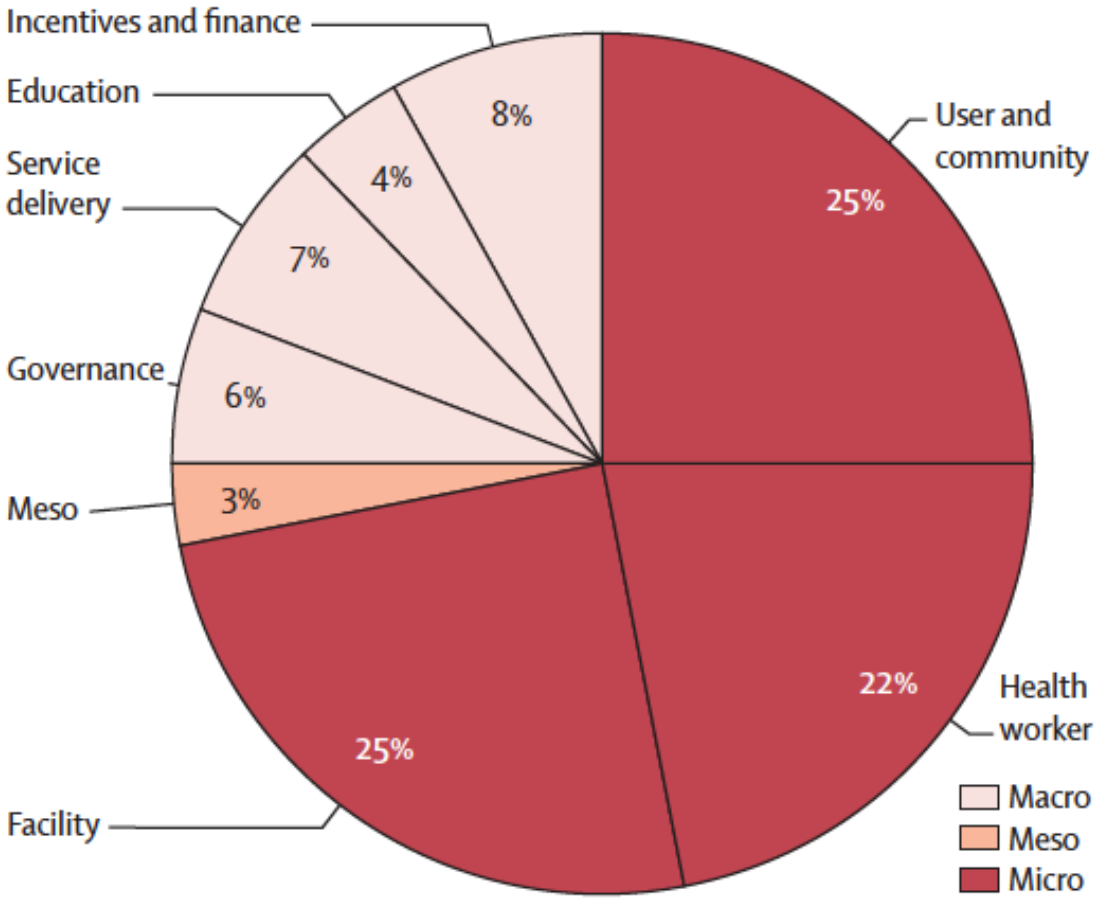


Roadmap

- My path to quality
- Quality of care in LMIC
- Case study: Maternal healthcare in Tanzania
- What does this mean for quality improvement?

What does this mean for quality improvement?

- Improving quality will require a system-wide approach
- Most improvement research is at the point of care

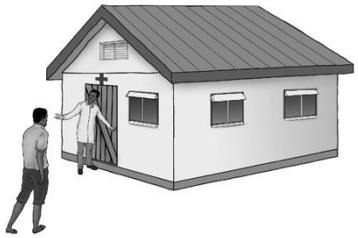


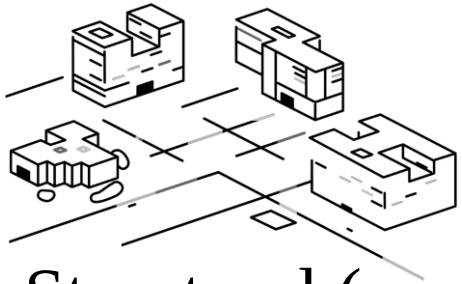
Types of interventions and levels targeted to improve quality of primary healthcare in LMICs according to the published literature from 2008–2017

HQSS The Lancet Global Health Commission on High Quality Health Systems in the SDG Era

What does this mean for quality improvement?

- Improving quality will require a system-wide approach
- We need to expand the solution space for improvement





Local (micro)

Structural (macro)

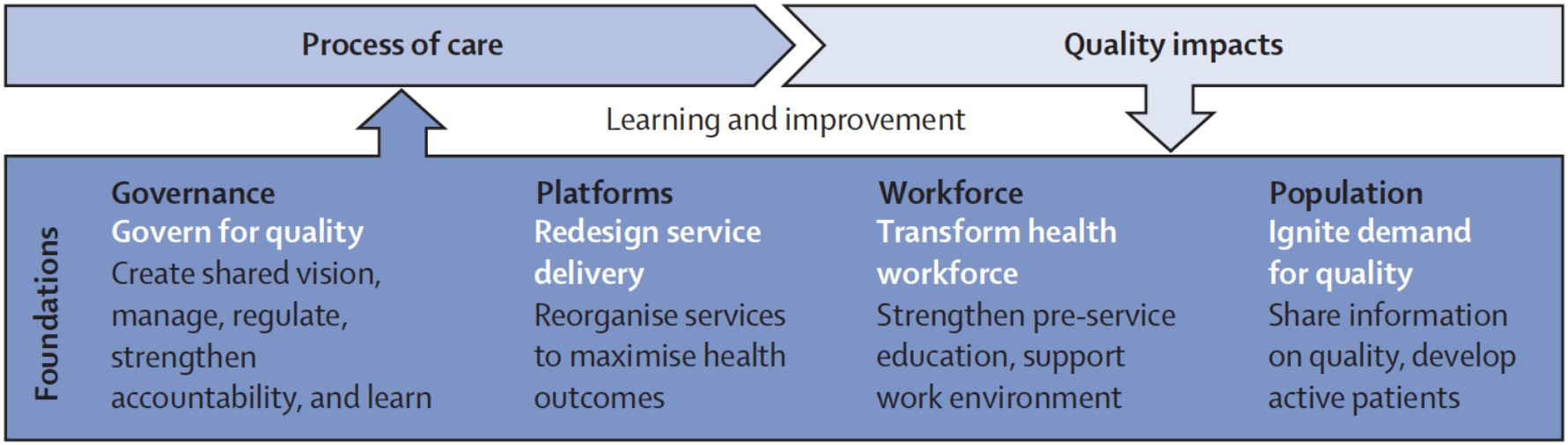
Facility level
Behavior change
Local scale

System level
Slower to implement
Large scale

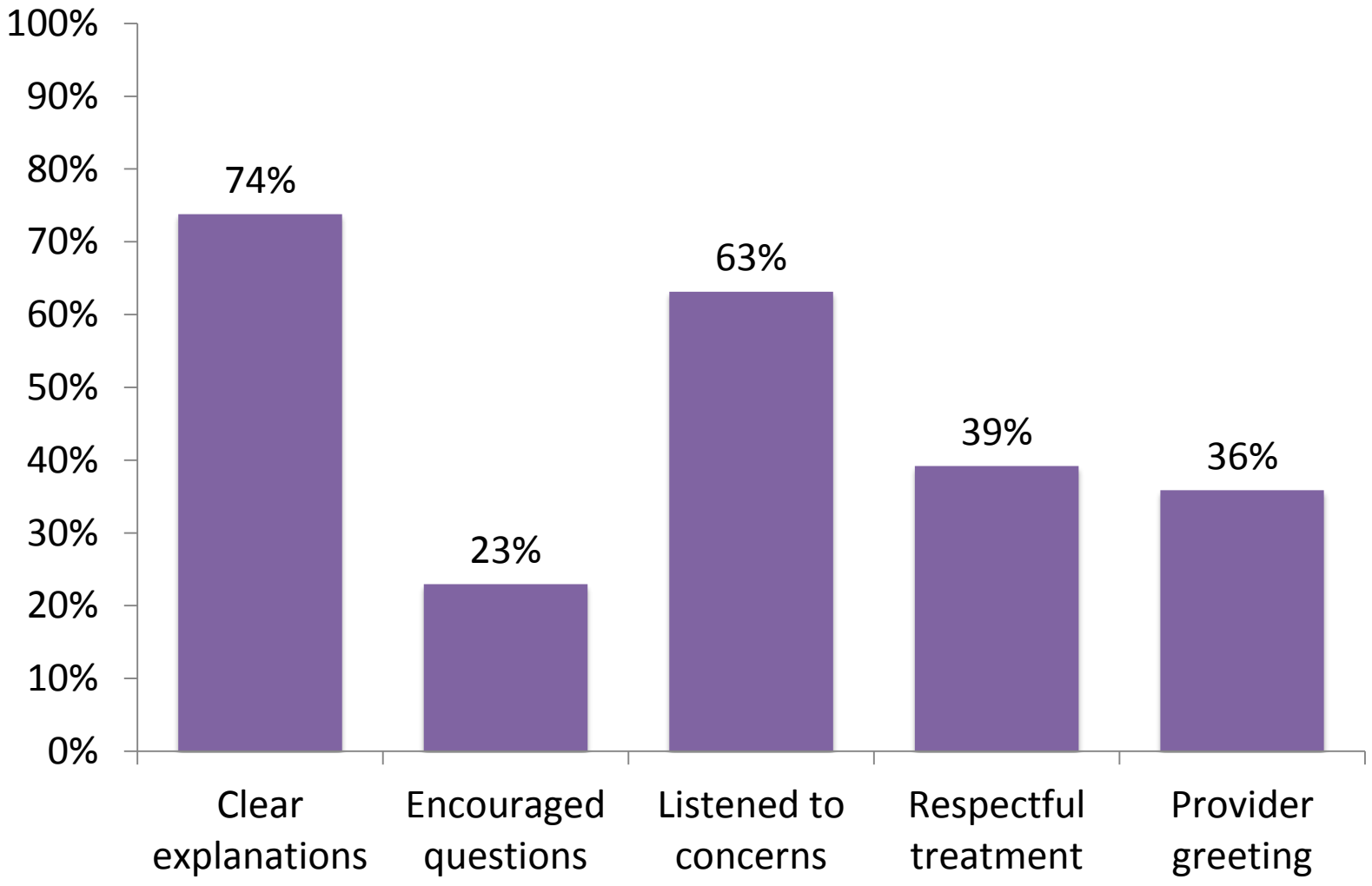
HQSS The Lancet Global Health Commission on High Quality Health Systems in the SDG Era

What does this mean for quality improvement?

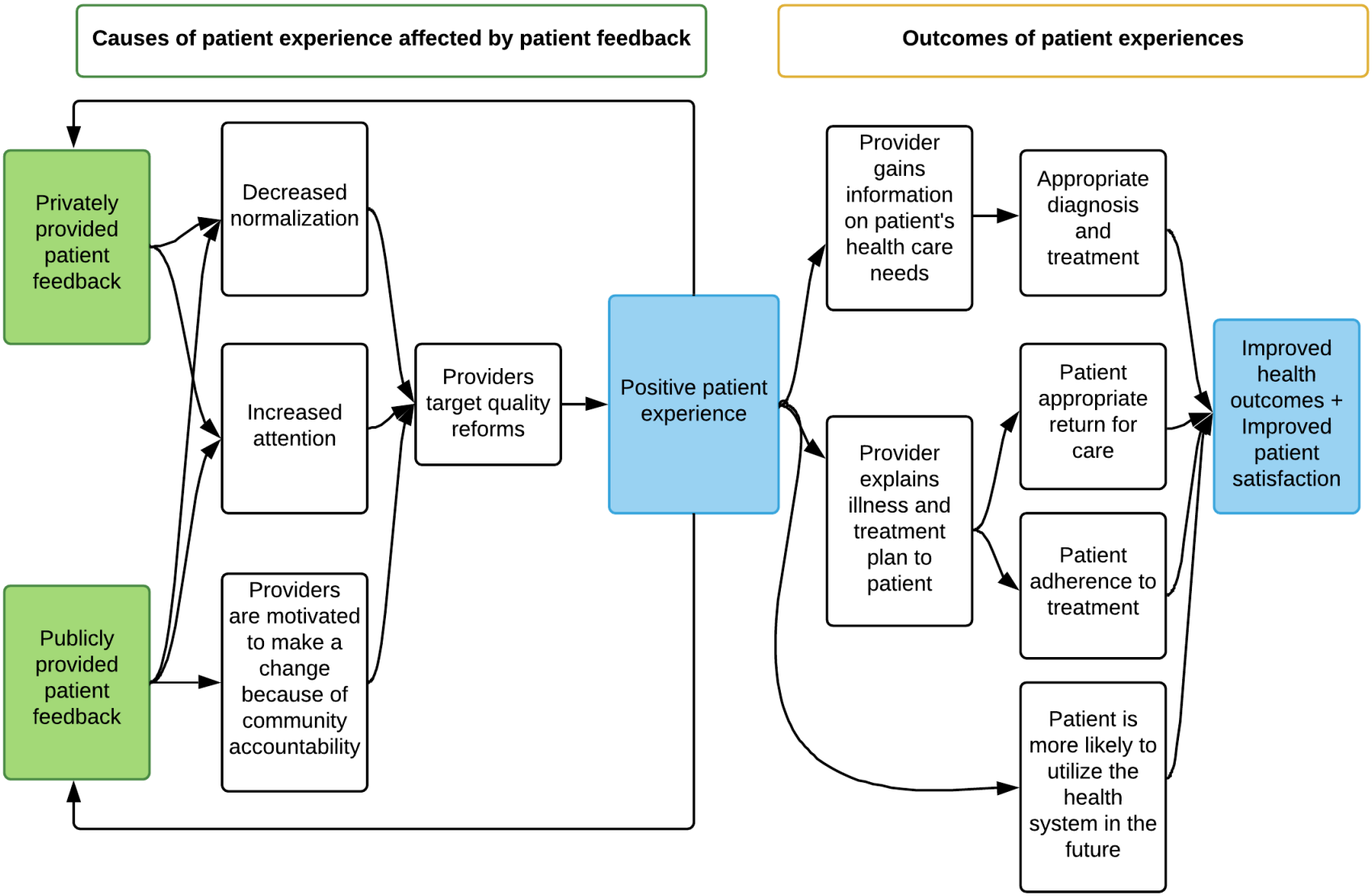
- Improving quality will require a system-wide approach
- Four universal actions



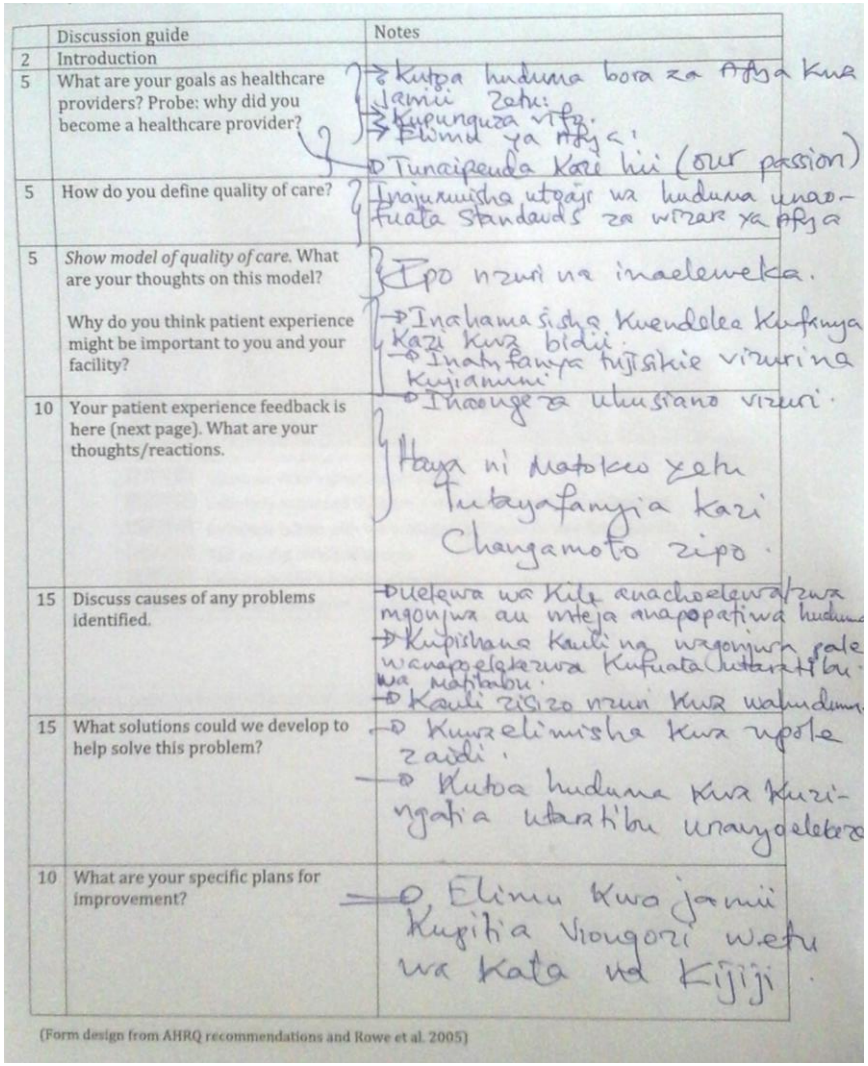
Igniting Demand for Quality: Patient Experience



Igniting Demand for Quality



Giving feedback



	Discussion guide	Notes
2	Introduction	
5	What are your goals as healthcare providers? Probe: why did you become a healthcare provider?	Kutoa huduma bora za Afya kwa jamii Zetu. Kupunguza vifo. Elimu ya Afya. Tunaipenda Kazi hii (our passion)
5	How do you define quality of care?	Inajumuisha utoaji wa huduma unaofuata Standards za utoaji za Afya
5	*Show model of quality of care.* What are your thoughts on this model? Why do you think patient experience might be important to you and your facility?	Ipo nzuri na inaeleweka. Inahamasisha kuendelea kufanya kazi kwa bidii. Inatufanya tujitathmini vizuri na kujiamini. Inaongeza utumiaji vizuri.
10	Your patient experience feedback is here (next page). What are your thoughts/reactions.	Haya ni matokeo yetu tutayafanyia kazi Changamoto zipo.
15	Discuss causes of any problems identified.	Uelewa wa Kiti unachoelewa/kwa mgonjwa au mteja anapopatiwa huduma. Kupishana kauli na wagonjwa pale wanapoelekezwa kufuata utaratibu wa matibabu. Kauli zisizo nzuri kwa wahudumu.
15	What solutions could we develop to help solve this problem?	Kuwaelimisha kwa upole zaidi. Kutoa huduma kwa kuzingatia utaratibu unaoelekeza
10	What are your specific plans for improvement?	Elimu kwa jamii Kupitia viongozi wetu wa kata na Kijiji.

(Form design from AHRQ recommendations and Rowe et al. 2005)

PRIVATE: Feedback provided on specific aspects of patient experience aggregated at facility level; delivered in small group discussion format with guide for improvement

PUBLIC: Private feedback as described above plus community posters advertising quality plus opportunity for a letter of achievement to facilities with most improvement or highest scores

Preliminary findings

- **Effective communication increased** after private feedback (0.62 out of 6 points, 95% CI: 0.29, 0.94), whereas there was no significant change in the public feedback arm (0.18, 95% CI: -0.14, 0.50)
- Neither private nor public feedback affected respectful care
- **Intent to return to the health facility increased by 10 percentage points after private feedback** (95% CI: 2, 18), but not after public feedback (5, 95% CI: -3, 12)
- **Public feedback** caused some indicators of patient experience to be **more salient** to providers, **but did not change how they valued** patient experience

What does this mean for igniting demand?

- **Public reporting negated any gain in effective communication** obtained by private feedback; may have resulted from changing expectations among parents
- **Private feedback may be more effective in improving patient experience**
- **Respectful care may need further intervention(s)** to alter provider behavior. May include: empowering communities to take actions to hold providers accountable; informing communities of their rights; and addressing health facility and health system factors through more intensive efforts (Berlan & Shiffman, 2012; Kujawski et al. 2017; Ratcliffe et al. 2016)

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Thank you

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