Measuring effective coverage and quality of care to improve the health of women, children, and adolescents in low and middle income countries

7th Global Symposium on Health Systems Research

1 November 2022

IMPROVE

Countdown to 2030
Women's Children's & Adolescent's Health

Welcome & Introduction

Session Overview

- Effective Coverage Methods
- Family Planning Linking Analysis
- Integrated Management of Childhood Illness Linking Analysis
- Questions & Answers
- Coffee break
- Small group session
- Small group share back
- Panel discussion
- Closing

NOTE FOR VIRTUAL PARTICIPANTS:
Please send your questions for speakers and panelists in the question feature on the PheedLoop App

Housekeeping

- Hybrid section, so use the microphone for those on zoom to hear you
- We want to hear from you so have reserved a Q&A after the series of presentations
- If on zoom, you may use the chat for questions
- On zoom, please mute your microphone

Countdown to 2030

Women's Children's & Adolescent's Health

MISSION

Provide evidence for advocacy, planning and accountability to enhance RMNCAH & nutrition: global, regional, country

Strengthen analytical capacity in countries

Focus: coverage, equity and drivers, and "let the data speak"

Countdown core institutions

University of Manitoba

Johns Hopkins Bloomberg School of Public Health

APHRC African Population and Health Research Center

London School of Hygiene & Tropical Medicine

University of Southampton

University of the Western Cape

Universidade Federal de Pelotas RS-Brasil

SickKids

Country public health institutions

Ministries of health (M&E)

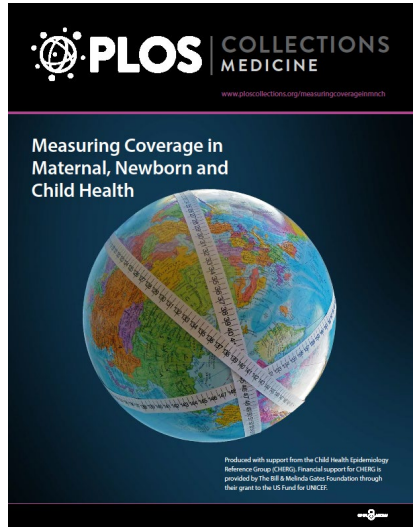
Other academic institutions

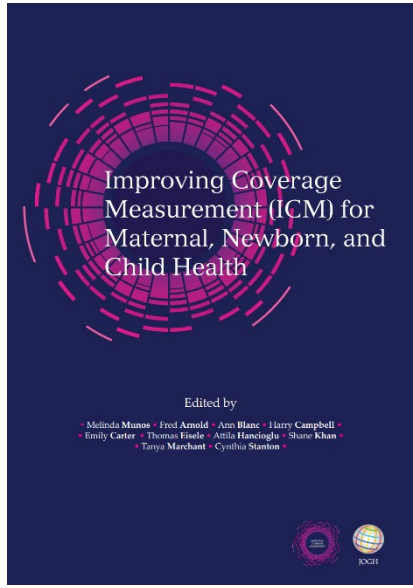
Global and regional Partners

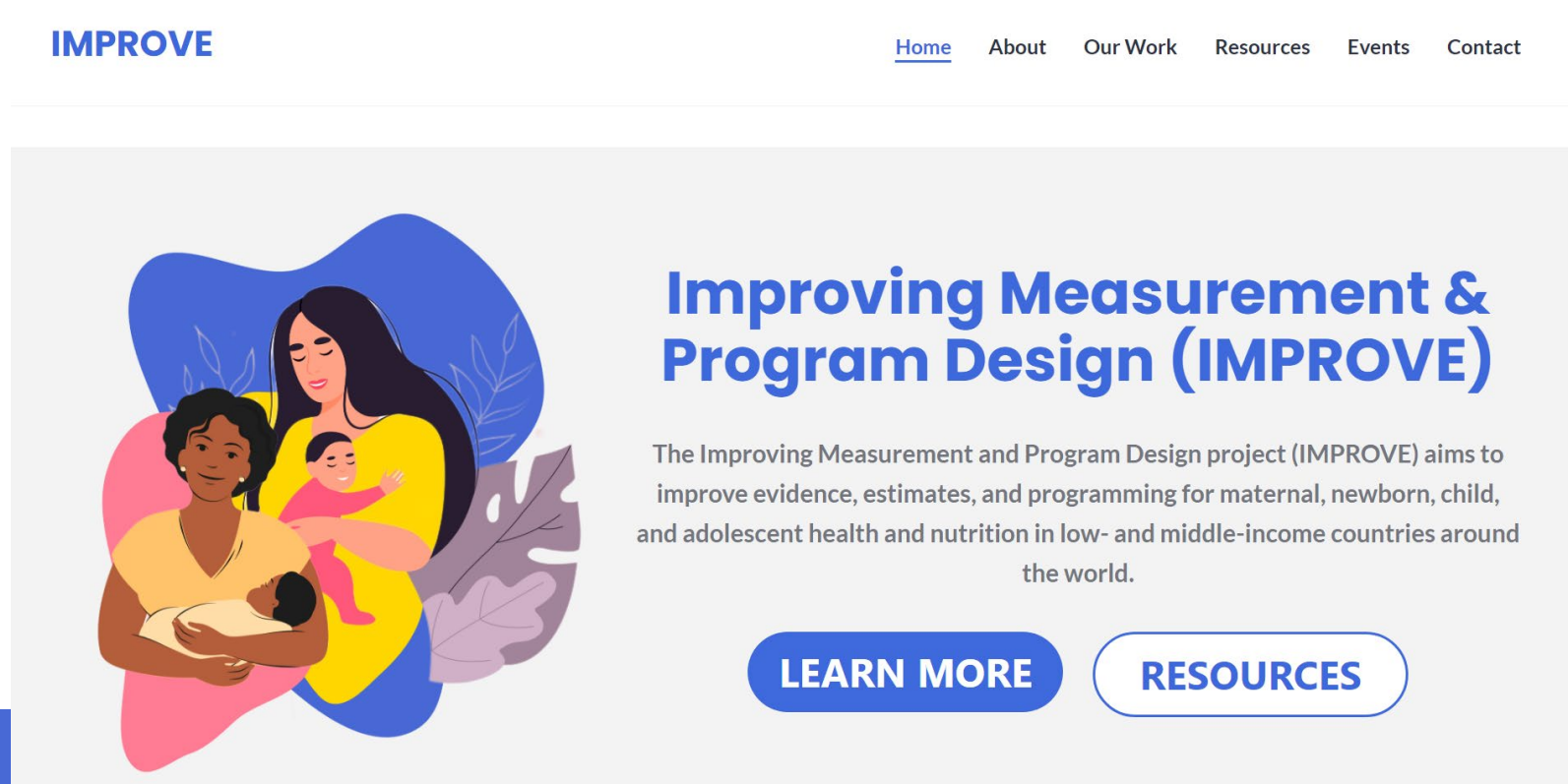
History of Improve

- Child Health Epidemiology Reference Group (CHERG MA 13)
- Improving Coverage Measurement (2013-2018)
- IMPROVE (2017-2022): Improving Measurement & Program Design

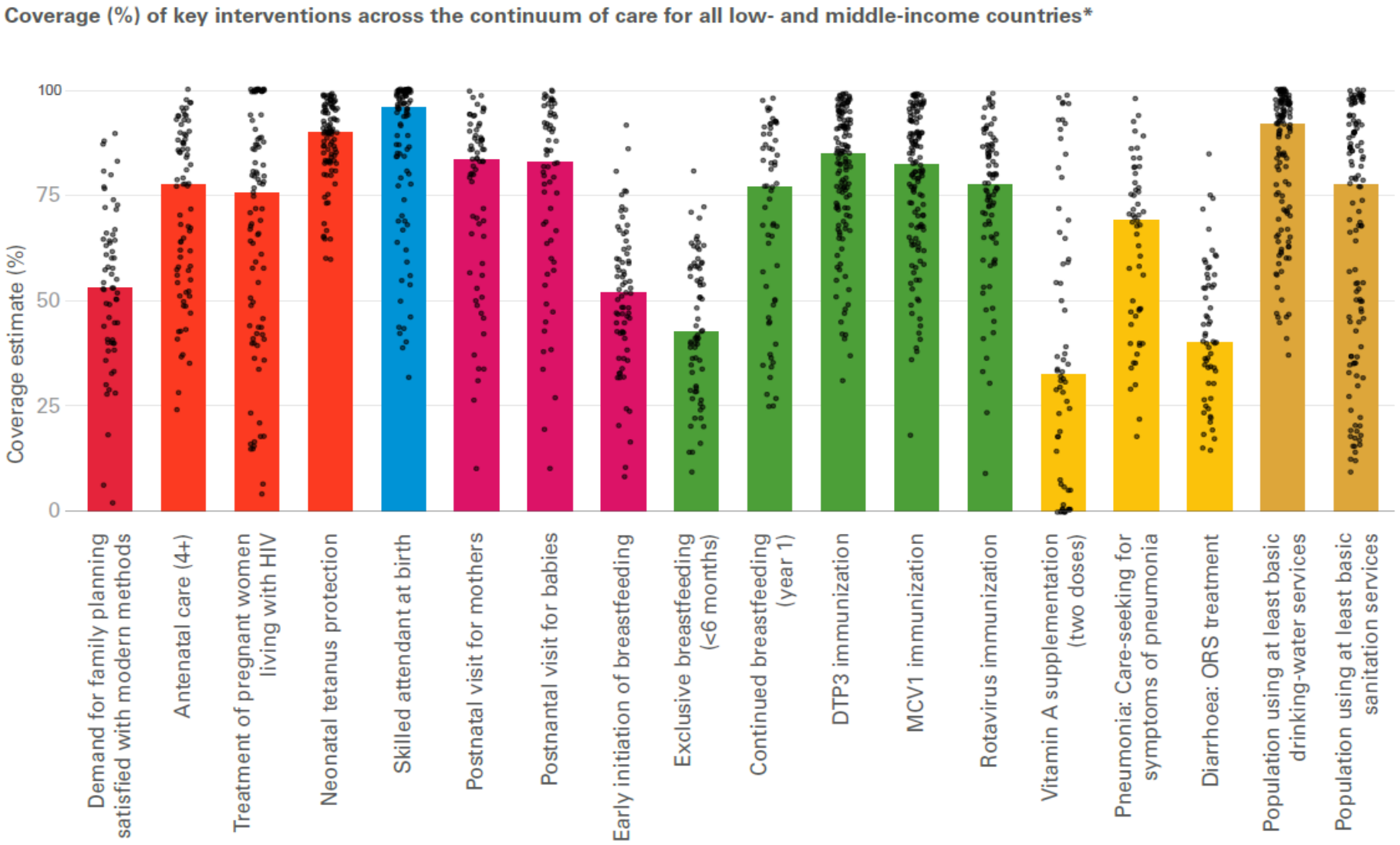
https://improvecoveragemeasurement.com/







Countdown monitors coverage of interventions across the Continuum of Care in LMICs

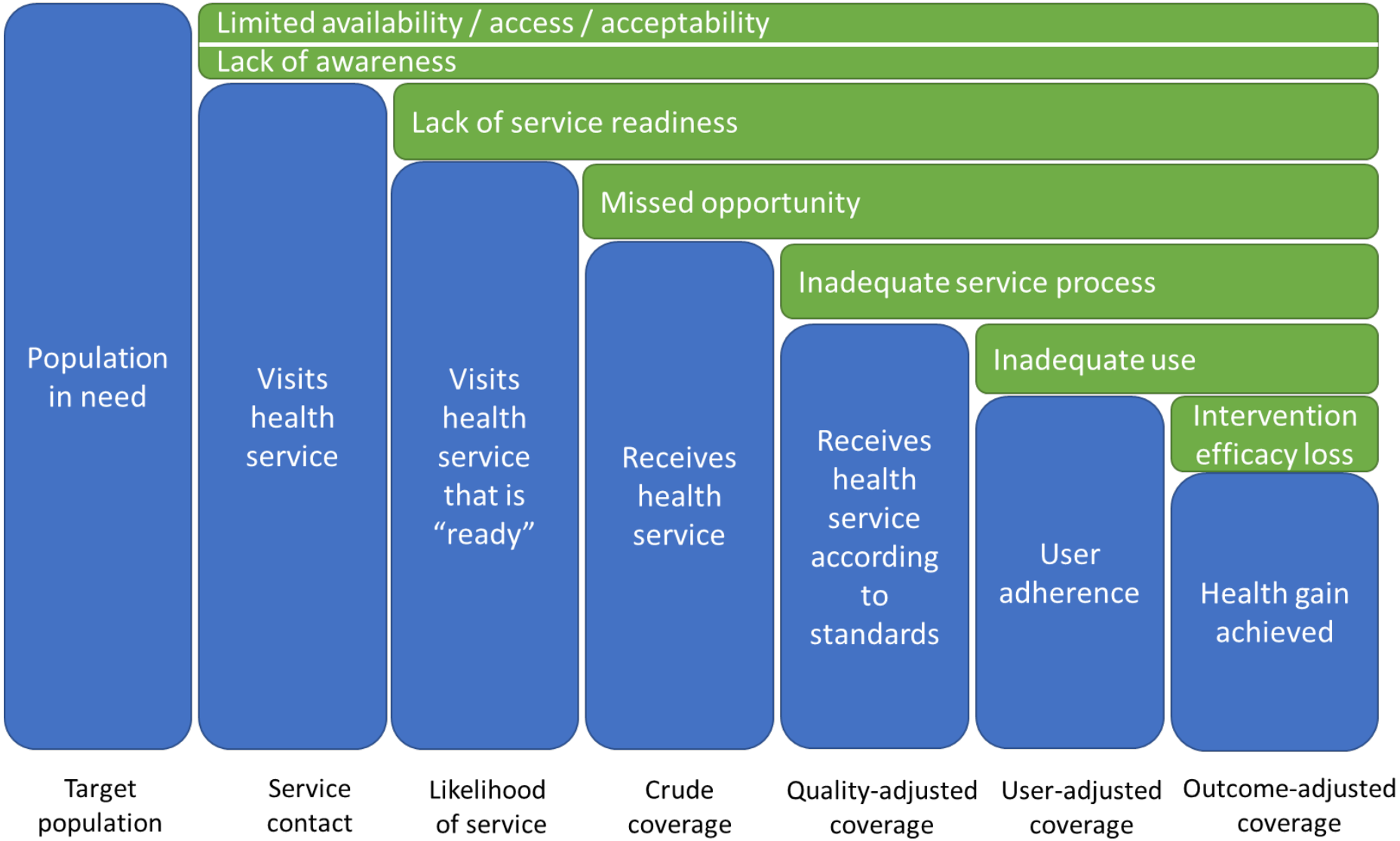


Many coverage measures don't account for the quality of interventions or program received and overestimate the expected health gain

Hence the need for Effective Coverage measures

Source: Every Woman Every Child. Progress report 2022

The coverage cascade helps understand the loss of coverage at each step



BMJ Global Health

Advances in the measurement of coverage for RMNCH and nutrition: from contact to effective coverage

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ABSTRACT

Current methods for measuring intervention coverage for reproductive, maternal, newborn, and child health and nutrition (RMNCH+N) do not adequately capture the quality of services delivered. Without information on the quality of care, it is difficult to assess whether services provided will result in expected health improvements. We propose a six-step coverage framework, starting from a target population to (1) service contact, (2) likelihood of services, (3) crude coverage, (4) quality-adjusted coverage, (5) user-adherence-adjusted coverage and (6) outcome-adjusted coverage. We support our framework with a comprehensive review of published literature on effective coverage for RMNCH+N interventions since 2000. We screened 8103 articles and selected 36 from which we summarised current methods for measuring effective coverage and computed the gaps between 'crude' coverage measures and quality-adjusted measures. Our review showed considerable variability in data sources, indicator definitions and analytical approaches for effective coverage measurement. Large gaps between crude coverage and quality-adjusted coverage levels were evident, ranging from an average of 10 to 38 percentage points across the RMNCH+N interventions assessed. We define effective coverage as the proportion of individuals experiencing health gains from a service among those who need the service, and distinguish this from other indicators along a coverage cascade that make quality adjustments. We propose a systematic approach for analysis along six steps in the cascade. Research to date shows substantial drops in effective delivery of care across these steps, but variation in methods limits comparability of the results. Advancement in coverage measurement will require standardisation of effective coverage terminology and improvements in data collection and methodological approaches.

Summary box

- Most reproductive, maternal, newborn, and child health and nutrition (RMNCH+N) intervention coverage indicators—the proportion of the population in need of an intervention that receives it—monitored for decades do not capture the quality of delivery of the interventions and therefore provide only weak links with actual health benefits received by the population in need.
- An increasing number of studies attempt to measure effective coverage indicators that also capture the quality of care and quantify the gaps between crude coverage and quality-adjusted measures.
- Our comprehensive review of the literature shows evidence of large coverage quality gaps in RMNCH+N, but the definitions, terminologies, analytical methodologies used vary widely, limiting the interpretability and comparability of the results.
- Building on previous frameworks and our review of current practices, we propose an organising framework to harmonise terminologies and methodological approaches for the measurement of a coverage cascade, and a definition of effective coverage as 'the proportion of individuals experiencing health gains from a service among those who need the service'.

INTRODUCTION

Monitoring intervention coverage, defined as the proportion of the population in need of a health intervention who receives it, is essential for tracking progress towards universal health coverage—an aim of Sustainable Development Goal 3. Although the coverage of many interventions along the continuum of care for women's, children's and adolescents' health has increased in the past decade, there is increasing evidence that national coverage indicators may overstate the health benefits of the programme because of poor quality of services.[1 2]

Advancement in coverage measurement requires a shift from tracking 'crude' or 'contact' coverage to effective coverage, accounting for the quality of services and their impact on people's health. Crude coverage indicators provide no indication about the quality of interventions, whereas

Speaker

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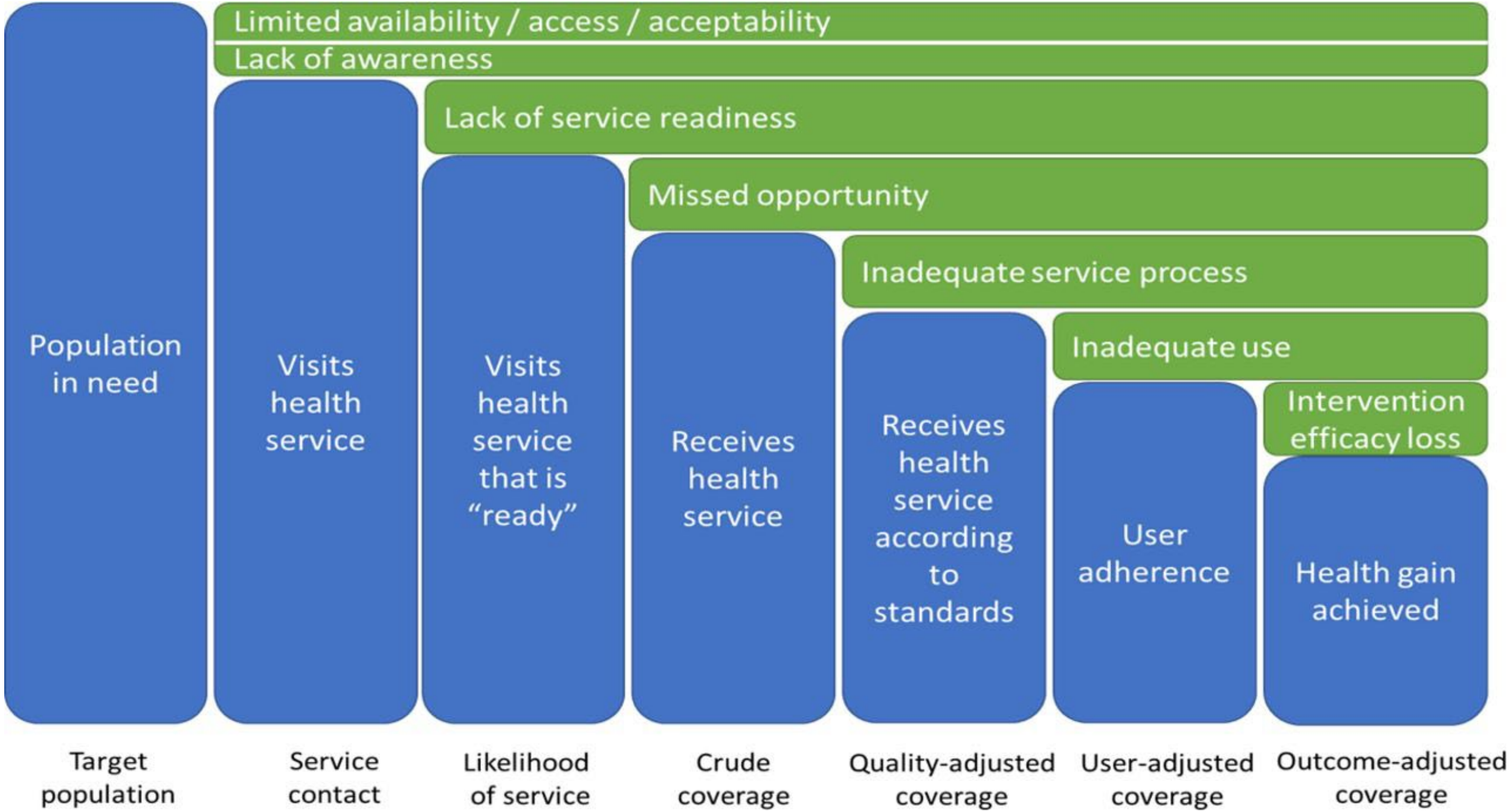
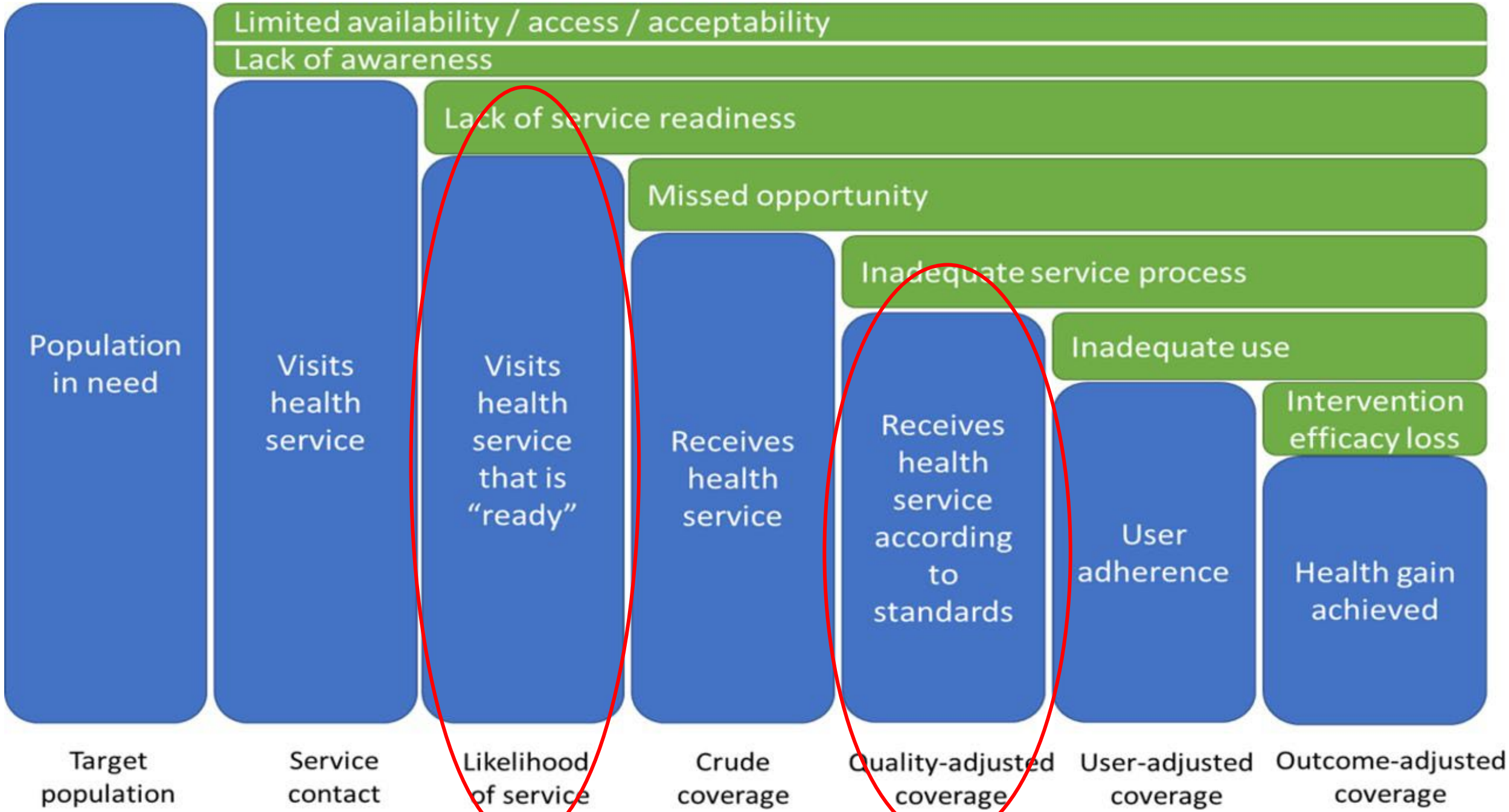
Introduction

- Intervention coverage measures are widely used for prioritization, planning, and evaluation at global, national, and sub-national levels.
- Household surveys are the primary source of data on intervention coverage.
- Service quality is not captured in a HH survey nor in traditional measures of intervention coverage.
- Effective coverage (quality-adjusted coverage) aims to incorporate quality into measures of coverage to better understand whether individuals are receiving services with sufficient quality to see a health gain.



Agbessi Amouzou et al. BMJ Glob Health 2019;4:e001297



Agbessi Amouzou et al. BMJ Glob Health 2019;4:e001297

Input- and quality-adjusted coverage take advantage of the strengths of household and facility data

- Household surveys
  - Provide reasonably valid, population-based estimates of whether care was sought, and the type of facility visited
  - Allow for equity analyses
- Facility data
  - Provide information on facility readiness, and in some cases service provision and experience of care

Input- and quality-adjusted coverage are typically estimated by "linking" household and health facility data.

Do et al. Linking Household and Facility Data for Better Coverage Measures in Reproductive, Maternal, Newborn, and Child Health Care: A Systematic Review. *J Global Health* 2016; 6(2).

Approaches to linking household and health facility data

Exact-match linking

Each care-seeking episode in a household survey is linked to information about the quality of care of the specific facility(ies) visited during that episode

Ecological linking

Each care-seeking episode in a household survey is linked to an average quality of care score of the facilities within certain administrative or geographical boundaries, or the quality score of the nearest facility(ies)

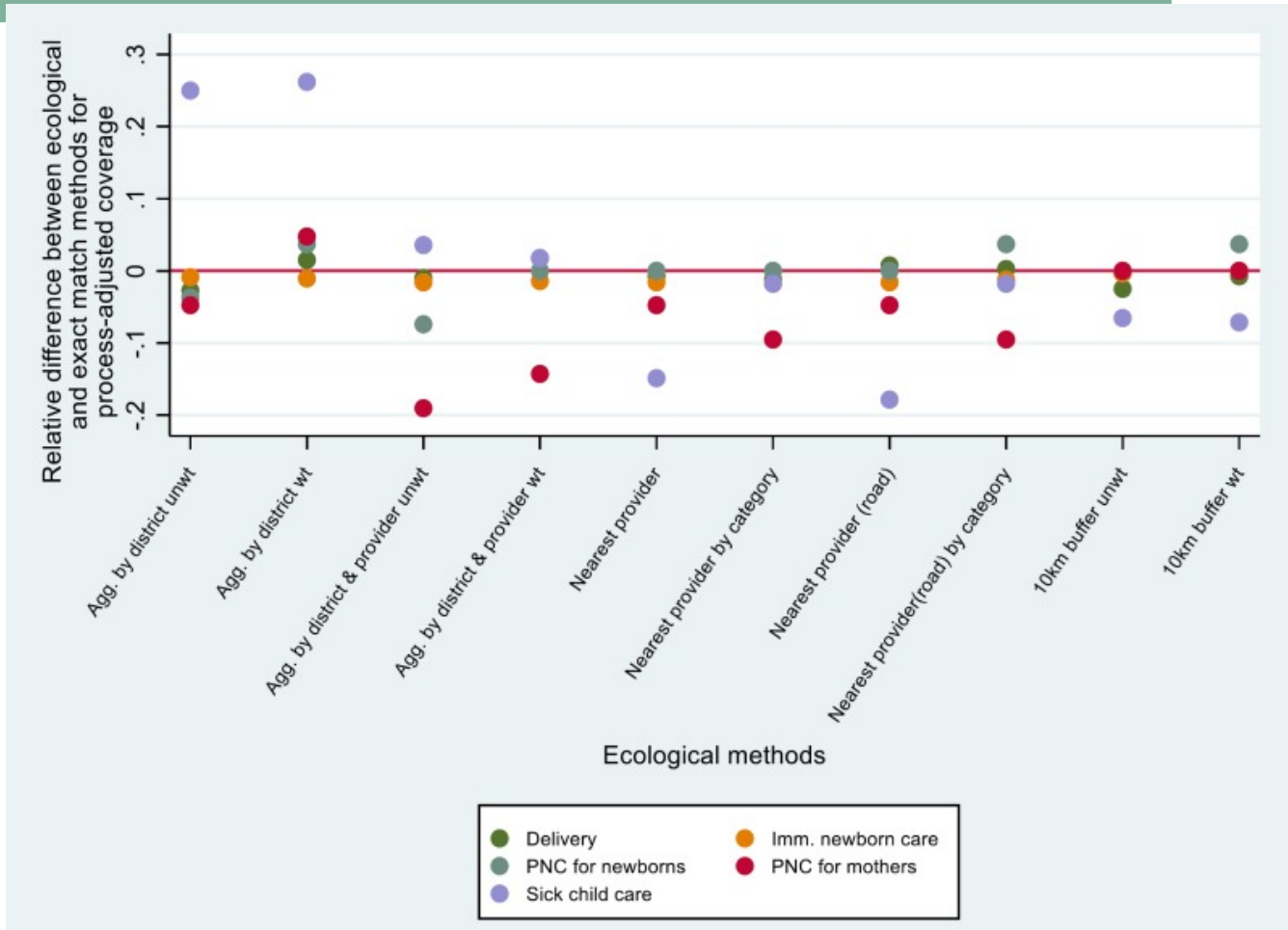
Do et al. Linking Household and Facility Data for Better Coverage Measures in Reproductive, Maternal, Newborn, and Child Health Care: A Systematic Review. *J Global Health* 2016; 6(2).

Methods questions

1. How to link household and health facility data to obtain valid estimates?
2. How should we define facility readiness and quality of service provision?

How to link household and health facility data

- 2 studies in Côte d'Ivoire and Zambia, plus the EQUIP study in Uganda compared different ecological linking methods to exact match linking
- Ecological linking can approximate exact match linking if we account for facility type
  - Caveats: Sampling, non-facility providers

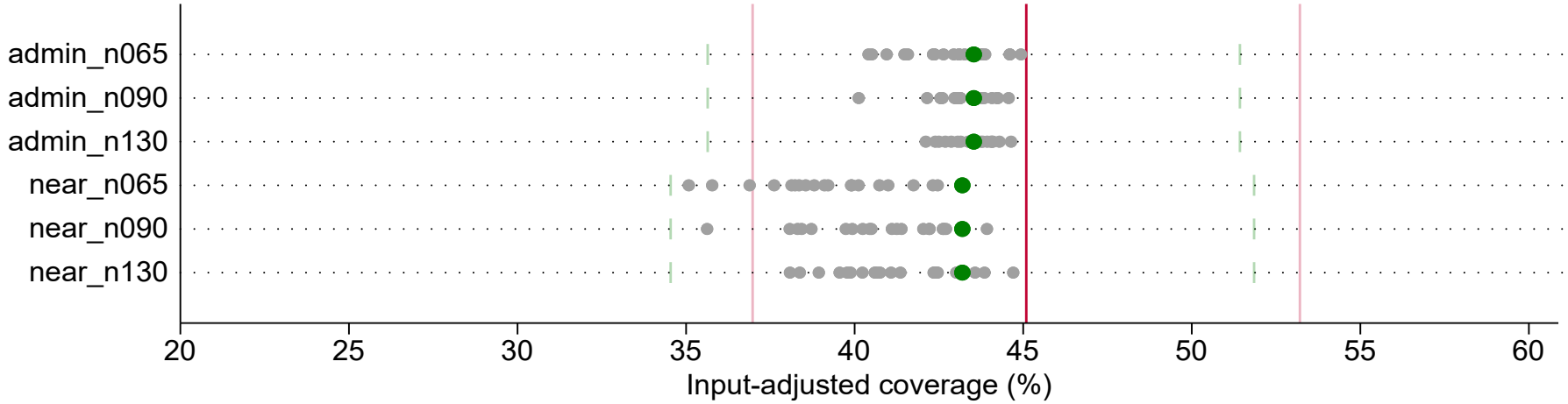


Munos et al. Linking household survey and health facility data for effective coverage measures: a comparison of ecological and individual linking methods using the Multiple Indicator Cluster Survey in Côte d'Ivoire. *J Glob Health* 2018; 8(2): 020803.

Carter et al. Evaluation of methods for linking household and health care provider data to estimate effective coverage of management of child illness: results of a pilot study in Southern Province, Zambia. *J Glob Health* 2018; 8(1): 010607.

Willey et al. Linking data sources for measurement of effective coverage in maternal, newborn and child health: what do we learn from individual vs ecological linking methods? *J Glob Health* 2018; 8(1): 010601

What is the effect of facility sampling (vs. census) on validity of quality-adjusted coverage?



- In Côte d'Ivoire, compared EC estimates using true source of care, ecological linking with facility census, and ecological linking with simulated samples of HFs.
- No significant difference between quality-adjusted estimates generated using a sample of facilities vs a census of facilities.
- However, when we simulated preferential care-seeking, quality-adjusted estimates based on a sample tended to under-estimate exact-match estimates and started falling outside the confidence bounds for the exact match estimates, particularly for nearest-provider linking methods.

Carter ED, Maiga A, Do M, Sika GL, Mosso R, Dosso A, Munos MK. The effect of sampling health facilities on estimates of effective coverage: a simulation study. *Int J Health Geogr.*

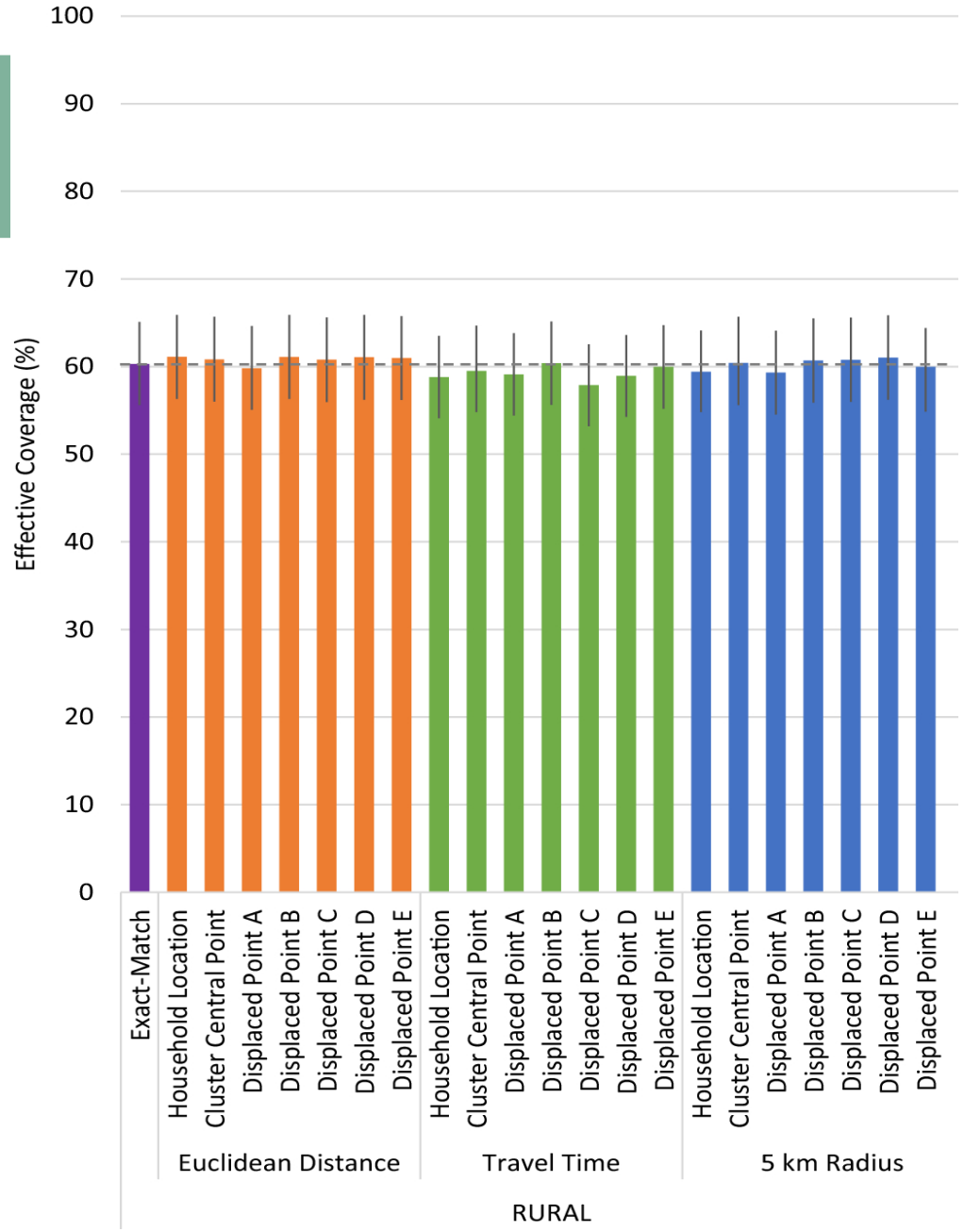
Non-facility providers

- Non-facility providers (e.g., CHWs) are typically not included in HFAs and may or may not be represented in HMIS, depending on the context.
- The impact of excluding non-facility providers depends on context.
- In Zambia, where CHWs represent an important source of care for sick children, conducting the linking analysis without accounting for care-seeking from CHWs under-estimated quality-adjusted coverage by 9 to 22 percentage points.
- In Côte d'Ivoire, where CHWs were not an important source of care, no effect from excluding CHWs.

Carter et al. Evaluation of methods for linking household and health care provider data to estimate effective coverage of management of child illness: results of a pilot study in Southern Province, Zambia. *J Glob Health* 2018; 8(1): 010607.
Munos et al. Linking household survey and health facility data for effective coverage measures: a comparison of ecological and individual linking methods using the Multiple Indicator Cluster Survey in Côte d'Ivoire. *J Glob Health* 2018; 8(2): 020803.

How accurate is geographical linking when true location of household is unknown?

- In Zambia, compared EC estimates generated by linking using geographic proximity from household location vs simulated cluster/EA location.
- Imprecise HH location and choice of linking method can bias estimates if high variability in quality or preferential care-seeking.



Carter ED, Munos MK. Impact of imprecise household location on effective coverage estimates generated through linking household and health provider data by geographic proximity: a simulation study. *Int J Health Geogr*. 2021;20(1):38.

Defining service readiness and quality

- Limited guidance on summary measures of readiness and quality.
- Needed a process to develop summary measures of readiness and quality from available data.
- Four step process for each service area:
    1. Identified globally recommended interventions.
    2. Extracted facility readiness and provision of care items from intervention-specific clinical and service implementation guidelines.
    3. Mapped the identified items from the guidance documents to available data in health facility surveys.
    4. Developed indices informed by QoC frameworks, clinical guidelines, and data availability.
- This process highlighted data gaps in particular service areas (nutrition, newborn) and domains (skilled, motivated staff).

King et al. Advancing nutrition measurement: Developing quantitative measures of nutrition service quality for pregnant women and children in low- and middle-income country health systems. *Matern Child Nutr*. 2022;18(1):e13279
Sheffel et al. Development of Summary Indices of Antenatal Care Service Quality in Haiti, Malawi, and Tanzania. *BMJ Open* 2019. 9:e032558

How do readiness and quality relate? (Is readiness a proxy for quality?)

- Readiness is easier to measure in an HFA, and more common than provision of care/service quality.
- We examined the association between readiness and quality within ANC and sick child care in 5 countries, adjusting for facility-, provider-, and patient- level factors.
- **Significant but limited association** between readiness and quality.
  - For every 10 percentage point increase in ANC readiness, 0.6 to 2.5 percentage point increase in quality.
  - For every 10 percentage point increase in sick child readiness, 0.7 to 1.2 percentage point increase in quality.
  - Readiness explains ~10% of variation in quality for sick child care.
  - For ANC, evidence of a minimum threshold of facility inputs required for health care workers to deliver high quality services.

Recommendations for linking household and facility data (1)

- Recommend using ecological linking by stratum
  - Performed consistently well, easy to implement consistently, and not affected by displacement of HH survey clusters.
  - Define strata based on facility type, managing authority, and administrative area (i.e., region / district)
    - E.g., a woman who reported receiving ANC from a public first level facility in Sylhet division (Bangladesh) would be linked to an average readiness score calculated across all public first-level facilities in Sylhet.
  - Use finest available strata in order to link care-seeking episodes to facilities that are similar to the one visited.
- Decisions about how to handle care-seeking from non-facility providers are context-specific and should be based on the utilization and service quality of these providers in your context.
- Where possible, weight quality scores by facility caseload.

Recommendations for linking household and facility data (2)

- Readiness and quality (service provision) are complex constructs not usually summarized in a single measure. Development of summary measures needs to account for this complexity.
- EC measures should specify whether they are readiness-adjusted or quality-adjusted.
- While readiness is important in itself, readiness alone cannot tell us whether service quality is likely to be high.
- Efforts are needed to address data gaps in service readiness and quality, particularly for service quality; nutrition and newborn health services; and in the human resources domain.

References

1. Carter ED, Maiga A, Do M, Sika GL, Mosso R, Dosso A, Munos MK. The effect of sampling health facilities on estimates of effective coverage: a simulation study. *Int J Health Geogr*
2. King SE, Sheffel A, Heidkamp R, Xu YY, Walton S, Munos MK. Advancing nutrition measurement: Developing quantitative measures of nutrition service quality for pregnant women and children in low- and middle-income country health systems. *Matern Child Nutr*. 2022;18(1):e13279.
3. Carter ED, Leslie HH, Marchant T, Amouzou A, Munos MK. Methodological considerations for linking household and healthcare provider data for estimating effective coverage: a systematic review. *BMJ Open*. 2021;11(8):e045704.
4. Carter ED, Munos MK. Impact of imprecise household location on effective coverage estimates generated through linking household and health provider data by geographic proximity: a simulation study. *Int J Health Geogr*. 2021;20(1):38.
5. Sheffel A, Zeger S, Heidkamp R, Munos M. Development of Summary Indices of Antenatal Care Service Quality in Haiti, Malawi, and Tanzania. *BMJ Open* 2019. 9:e032558.
6. Munos MK, Maiga A, Do M, Sika G, Carter E, Mosso R, Dosso A, Leyton A, Khan SM. Linking household survey and health facility data for effective coverage measures: a comparison of ecological and individual linking methods using the Multiple Indicator Cluster Survey in Côte d'Ivoire. *J Glob Health* 2018; 8(2): 020803.
7. Carter E, Ndhlovu M, Eisele T, Nkhama E, Katz J, Munos MK. Evaluation of methods for linking household and health care provider data to estimate effective coverage of management of child illness: results of a pilot study in Southern Province, Zambia. *J Glob Health* 2018; 8(1): 010607.
8. Willey B, Waiswa P, Kajjo D, Munos M, Akuze J, Allen E, Marchant T. Linking data sources for measurement of effective coverage in maternal, newborn and child health: what do we learn from individual vs ecological linking methods? *J Glob Health* 2018; 8(1): 010601.
9. Do M, Micah A, Brondi L, Campbell H, Marchant T, Eisele T, Munos MK. Linking Household and Facility Data for Better Coverage Measures in Reproductive, Maternal, Newborn, and Child Health Care: A Systematic Review. *J Global Health* 2016; 6(2).

Speakers

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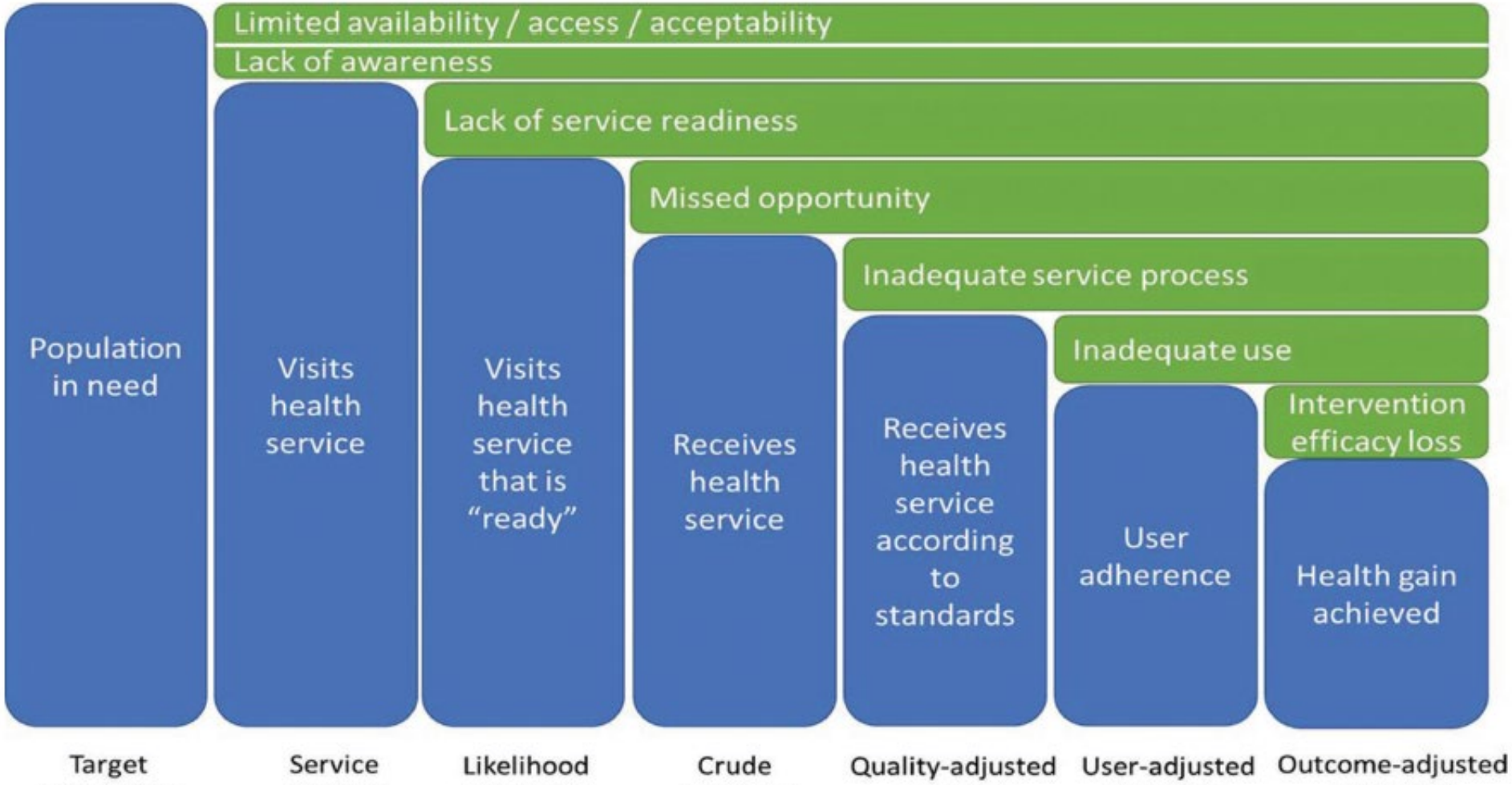
Effective coverage:
Contraceptive care in Kenya

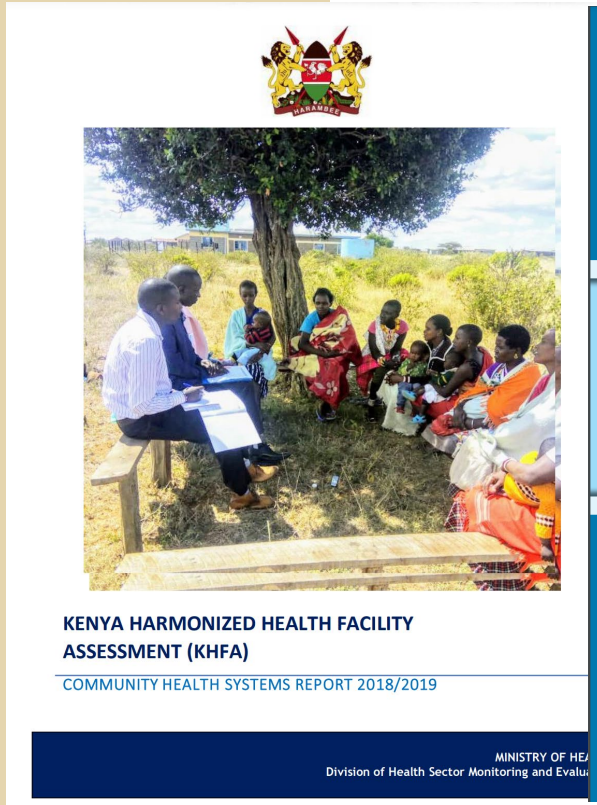
Coverage Cascade



Indicator type	Indicator for effective coverage of contraceptive services
Target population	**- Women with mistimed pregnancy/birth in the previous two years; OR - Wants to limit or delay childbirth for the next 2 or more years; OR - Currently using any contraceptive**
Service contact	**- Currently using a modern method OR; - Was met by health worker discussed FP in previous 12 months**
Likelihood of service	*Not relevant for use/contact crude indicators*
Crude coverage	**Currently using modern contraceptives obtained from any source (health facility, shops, private pharmacy, etc)**
Crude coverage, facility-based	**Currently using modern contraceptives obtained from facility**
Quality coverage	**Currently using contraceptives source from health facility equipped to provide contraceptive services and received contraceptives with complete counseling**
User adherence	*Contraceptive continuation: difficult to link in cross-sectional survey*
Outcome	*Same as above*

Kenya

- 2018 HFA and 2014 DHS
  - Process quality not available in 2018 HFA
- Using facility type, managing authority and geographic area as the unit of linking between DHS and HFA.
- Examine crude, **readiness** and quality adjusted coverage indicators.

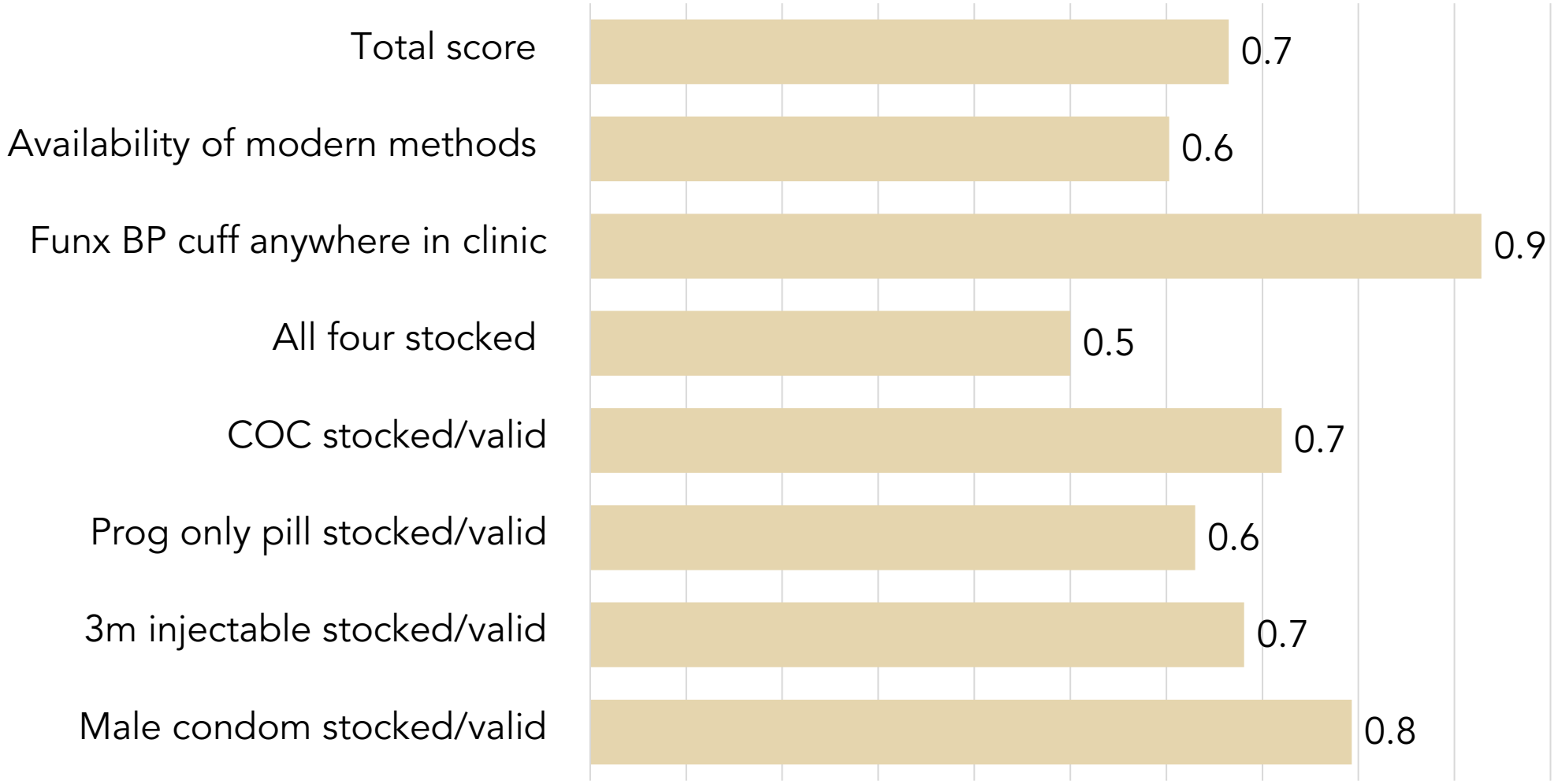


Service readiness information in the HFA 2018

Readiness score		
Availability	Modern contraceptive mix	Facility provides/refers for all modern methods: pills, injectables, implants, condoms, IUD, ECPs, sterilization and SDM.
Staff and guidelines	*Guidelines on FP*	*N/A*
	FP checklists or job aids	*N/A*
	Staff trained in FP	*N/A*
Equipment	BP cuff	BP cuff observed/functioning anywhere in facility
Medicine and Commodities	COC stocks	At least 1 valid dose observed available on the day of assessment
	Progestin OC	
	Injectable contraceptives	
	Condoms	

Based on SARA program specific tracer indicators for family planning

Service readiness component scores

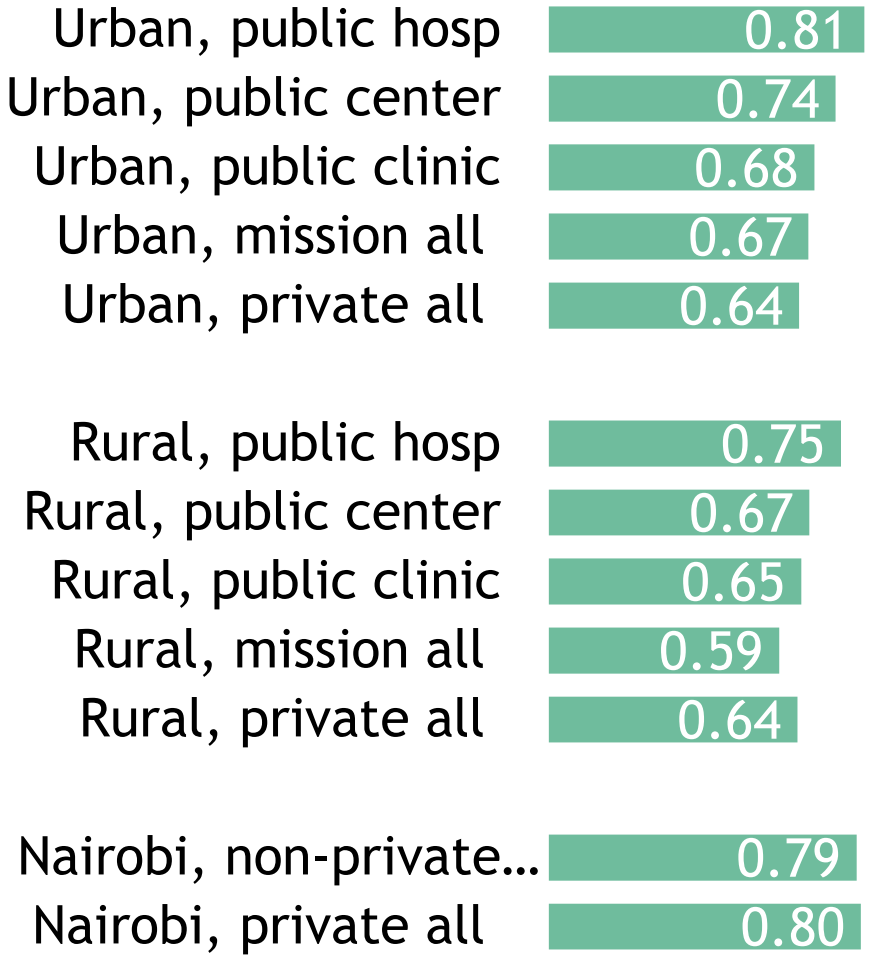


Linking DHS & HFA: facility type and managing authority

DHS 2014 – FP source	HFA 2018
Government hospital	Public hospital
Government health center	Public center
Government dispensary	Public clinic
Other public sector	Public clinic
Private hospital, clinic	Private clinic/hospital
Nursing/maternity home	Mission clinic
Faith based, church, mission hospital	Mission hospital
Family options/fhok clinic	Mission clinic
Mobile clinic	Public clinic
Community-based distributor	Public clinic
Community health worker	Public clinic
Shop, friend, Other private, pharmacist	Assume quality=0

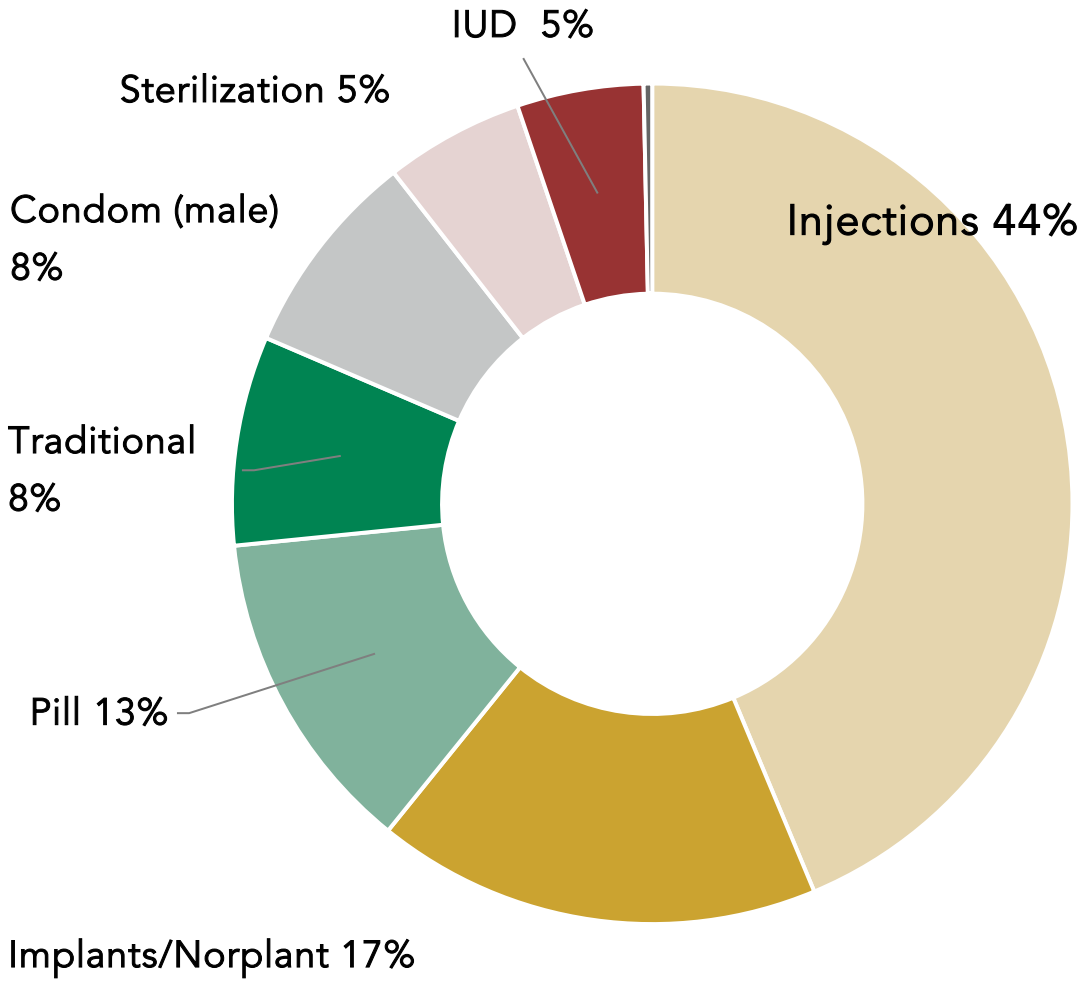
Defined linking units

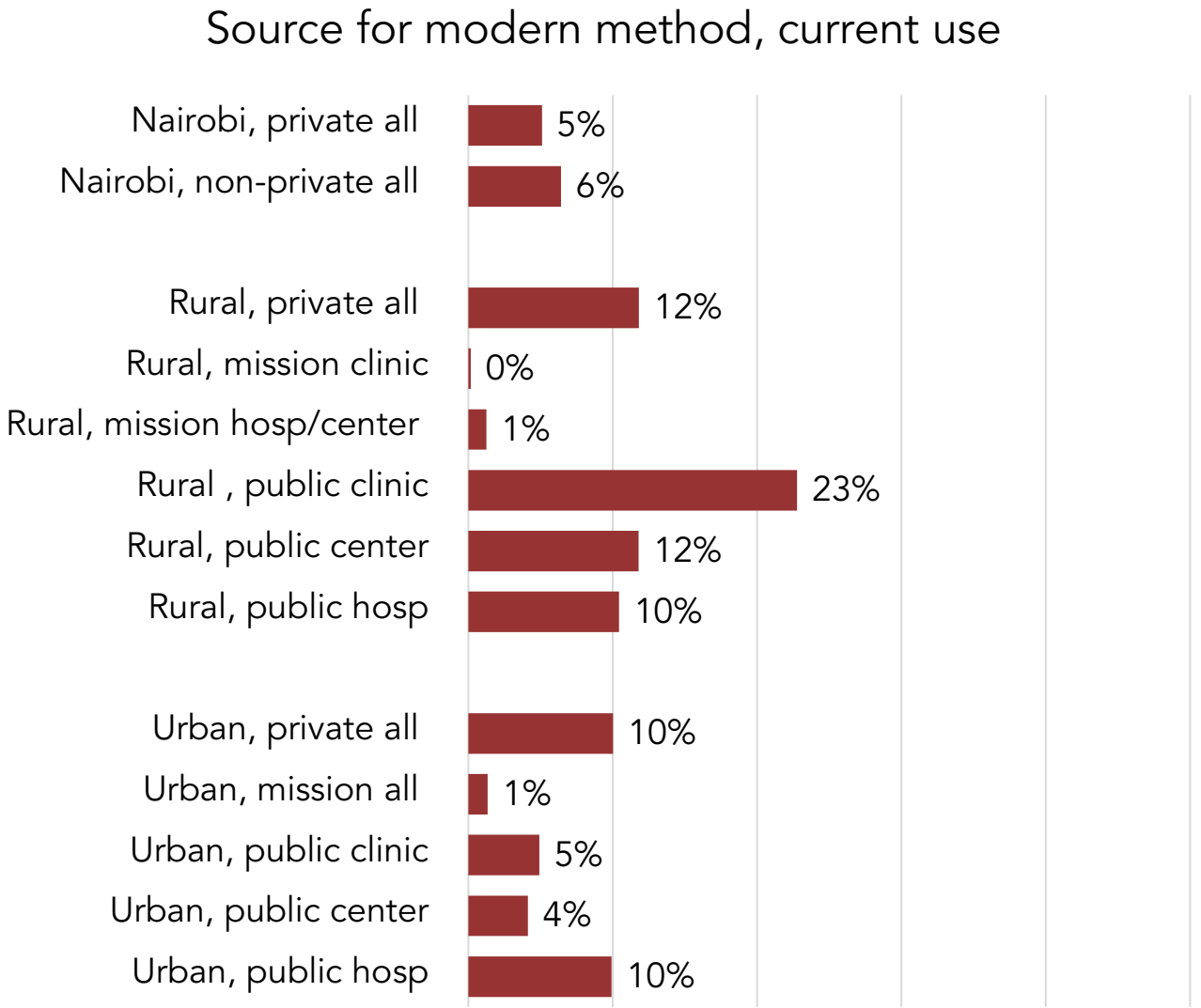
Readiness score by linking unit



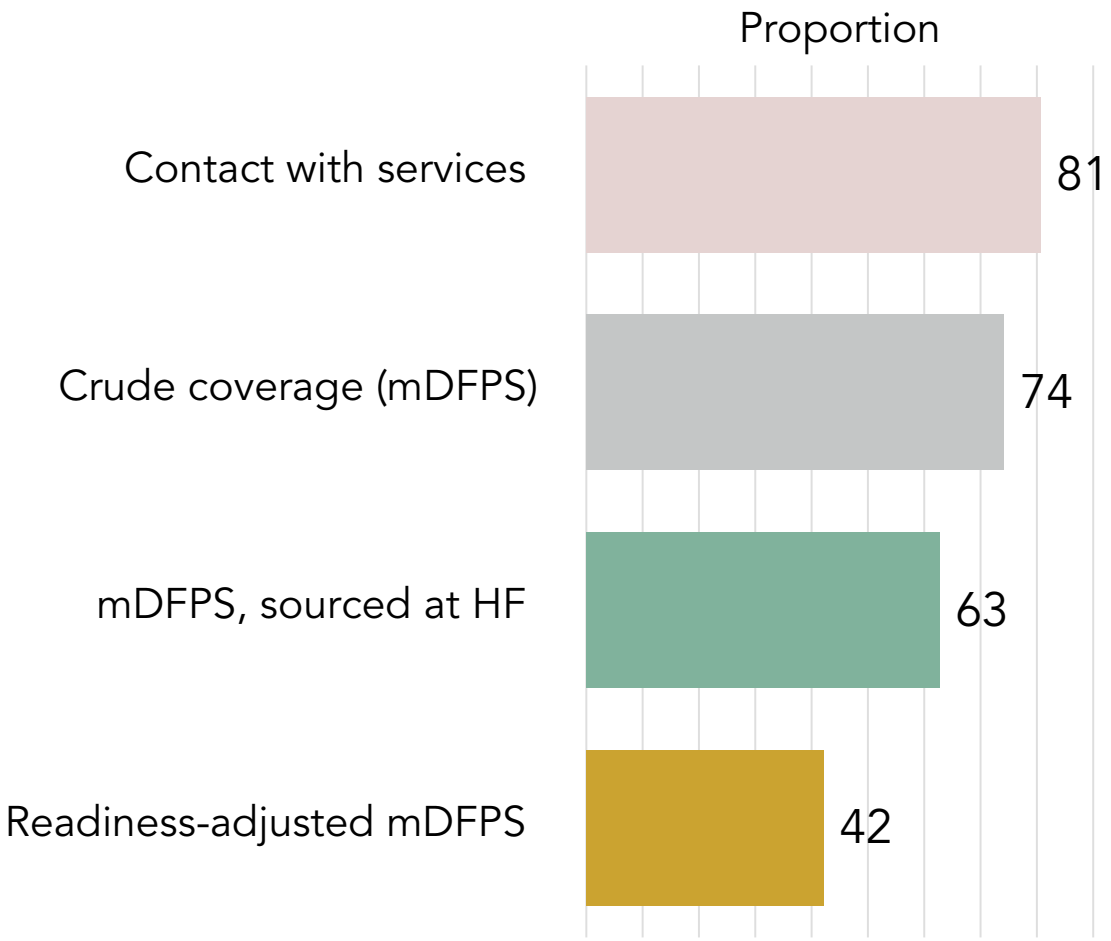
- Collapsed all private-for-profit facilities into one category to match DHS
- Collapsed units if less than 20 facilities per unit
  - All Nairobi non-private
  - Rural Mission hospital/center
  - Urban mission, all facilities

Contraceptive method use and source for modern method (K-DHS 2014)





Coverage cascade



Contact with services
- Currently using a modern method OR;
- Was met by a health worker at facility for other care or field worker who mentioned FP in previous 12 months

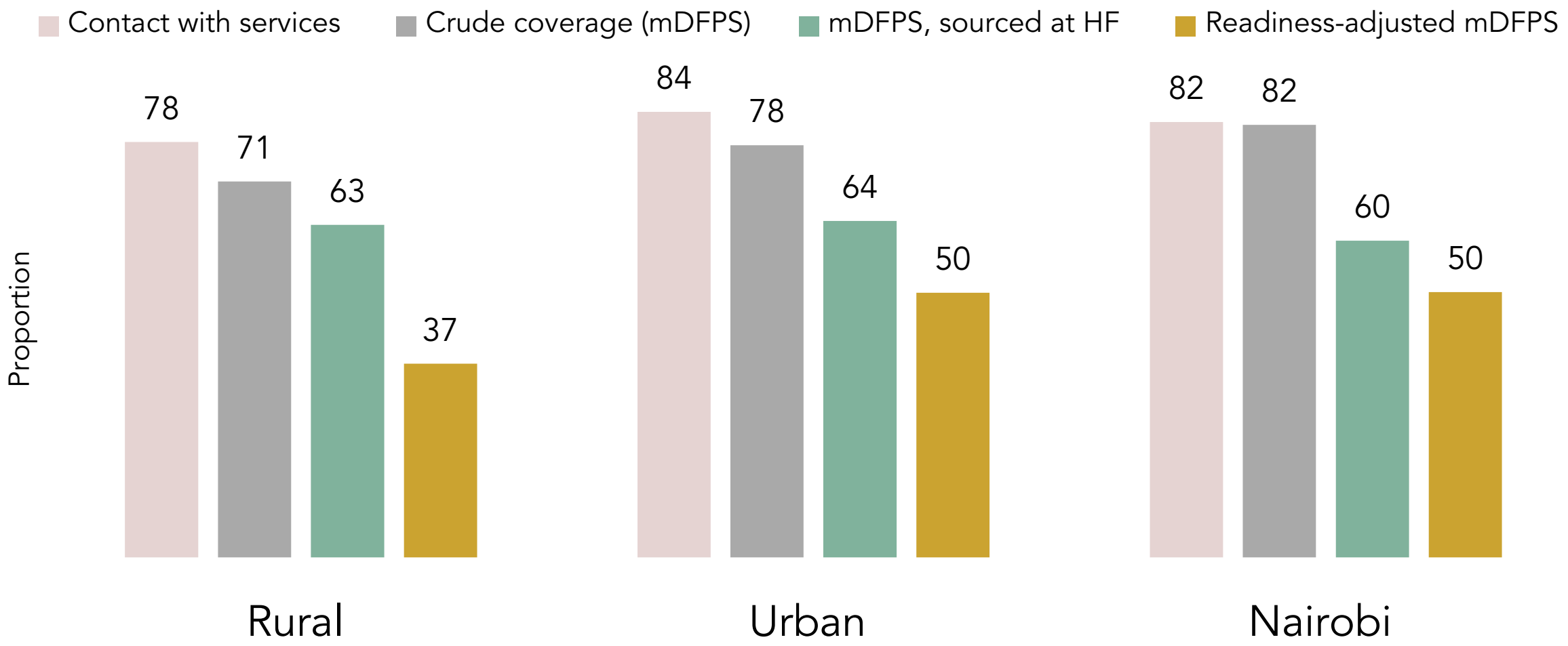
Crude coverage
- Demand for FP satisfied using a modern contraceptive, any source

Crude coverage, facility source
- Demand for FP satisfied using a modern contraceptive, sourced at a health facility (excludes private pharmacy, shops, etc).

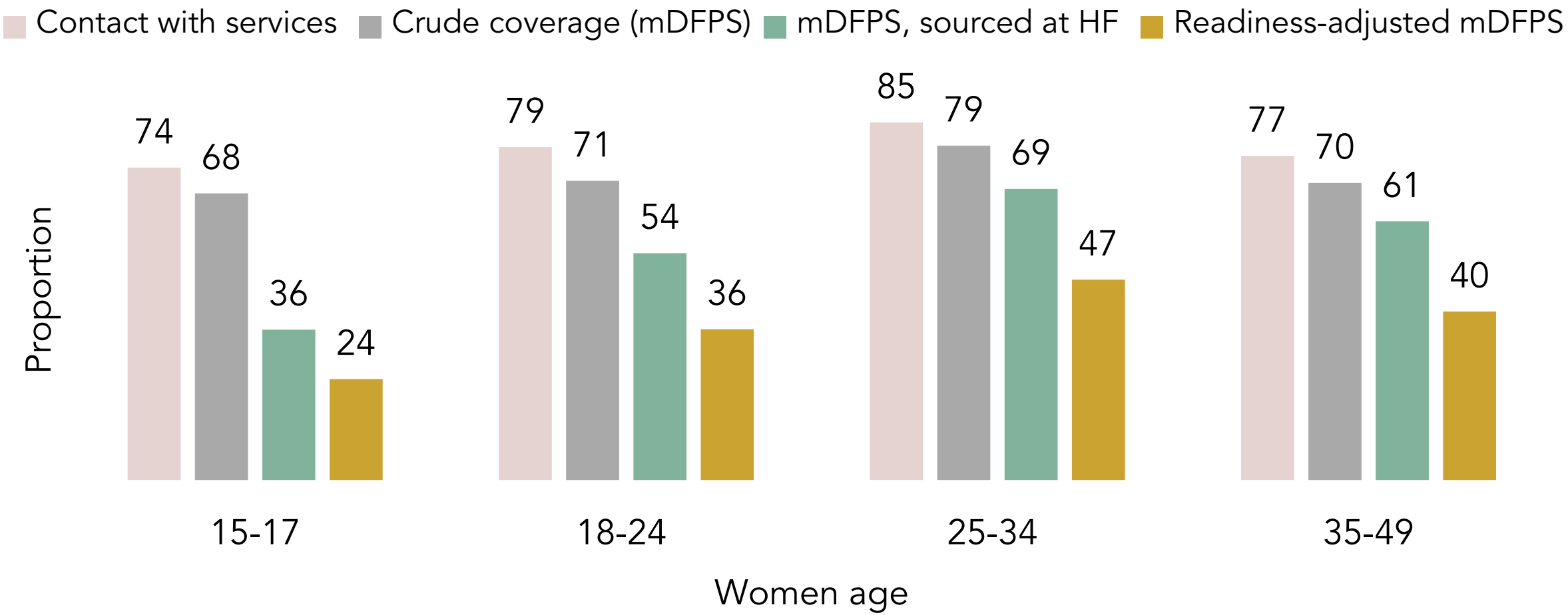
Quality-adjusted coverage:
- Currently using modern contraceptives obtained at health facility equipped to provide contraceptive services

Note: where process quality is available, we would continue with quality coverage

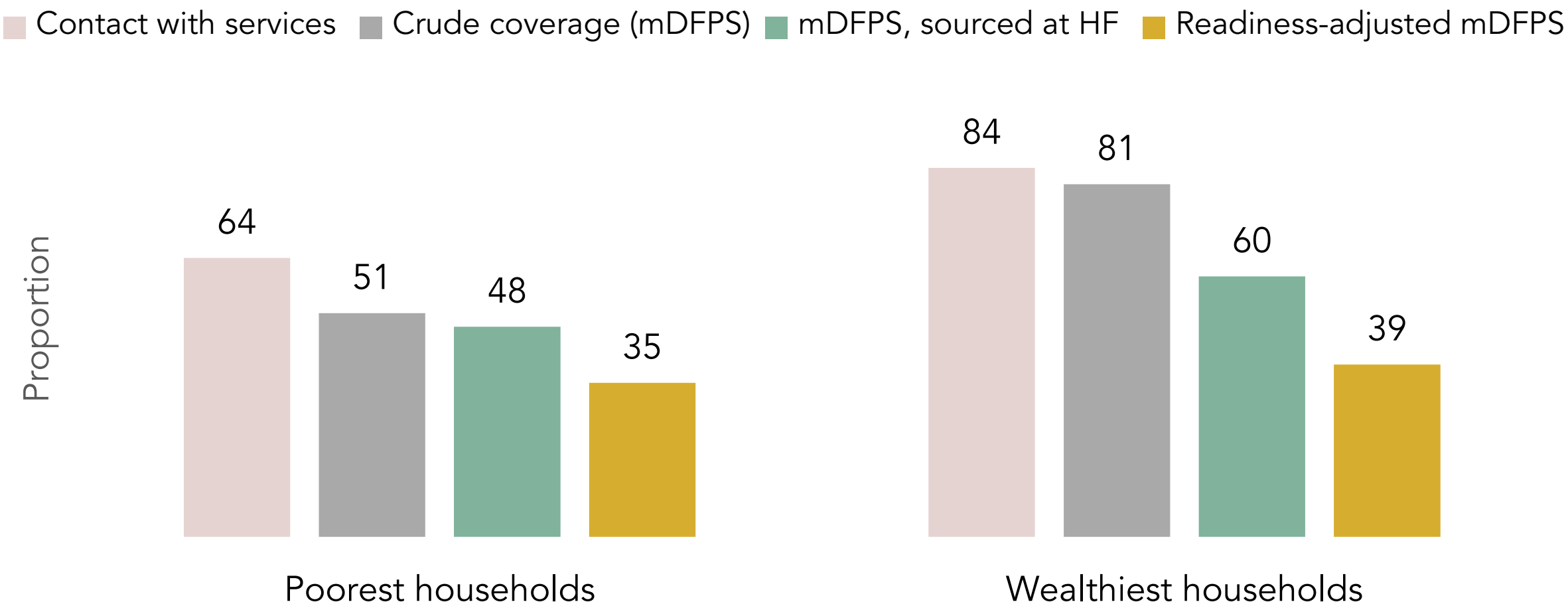
Cascade by geographic area



Cascade by women's age



Cascade by household wealth



Summary

- Differences in readiness scores by facility type, managing authority and geographic areas.
- Nationally, there were two coverage cascade declines

  74% -> 63%, indicating those women are accessing contraceptives through private pharmacies, shops or another informal sector source.

  63% - 42% indicating women are accessing health facilities with low readiness for contraceptive care. They are still able to access but these facilities have lower method availability and inconsistent stocks.
- Lower readiness in rural areas compared to urban and major metropolitan areas.
- Poorer readiness-adjusted quality for younger women and adolescents also are accessing contraceptives from the informal sector.
- Poorer women have less contact with services, lower demand satisfied, and lower sourcing from health facilities compared to women from the wealthiest households.

Reflections

- Coverage cascade model helpful to understand gaps in access, coverage and quality.
- Assumes facility readiness is linked with quality of services

  - Continual stocks is a proxy that facility is well-managed and organized

  - Better method availability enables women's agency in method choice.
- Can explore other readiness score formulas and determine link with quality of care.

Effective coverage of integrated management of childhood illness (IMCI): Readiness- and process quality-adjusted coverage

Tanzania case study

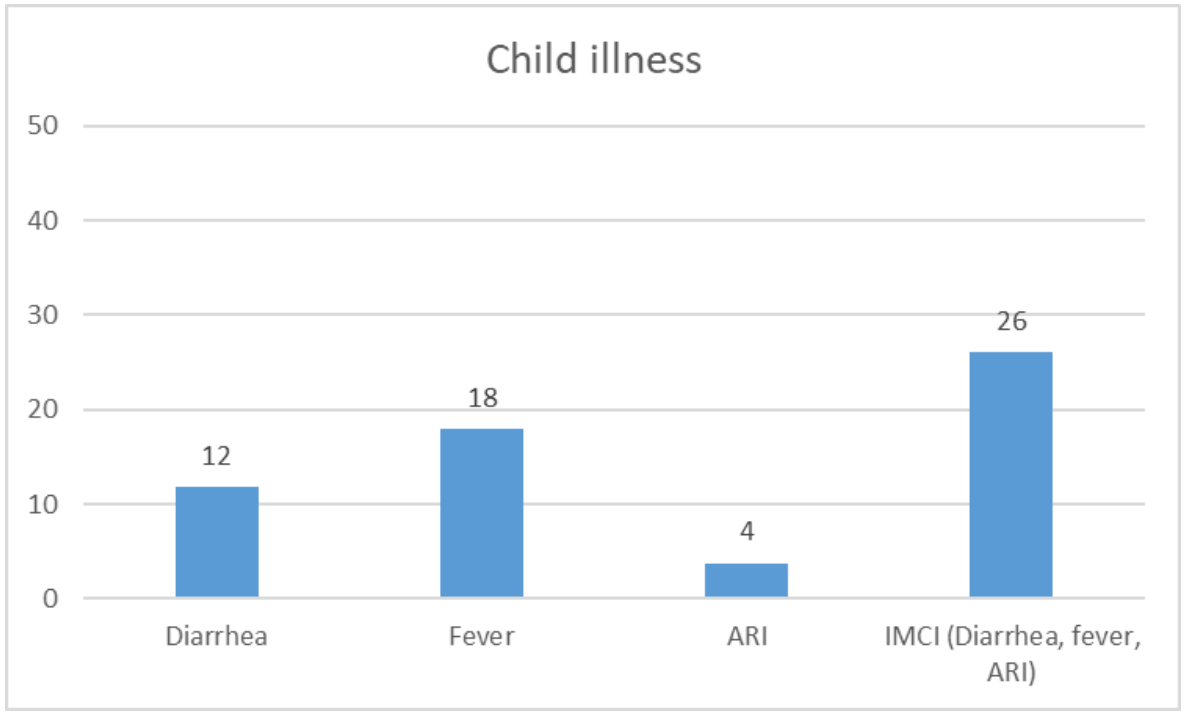
Objectives

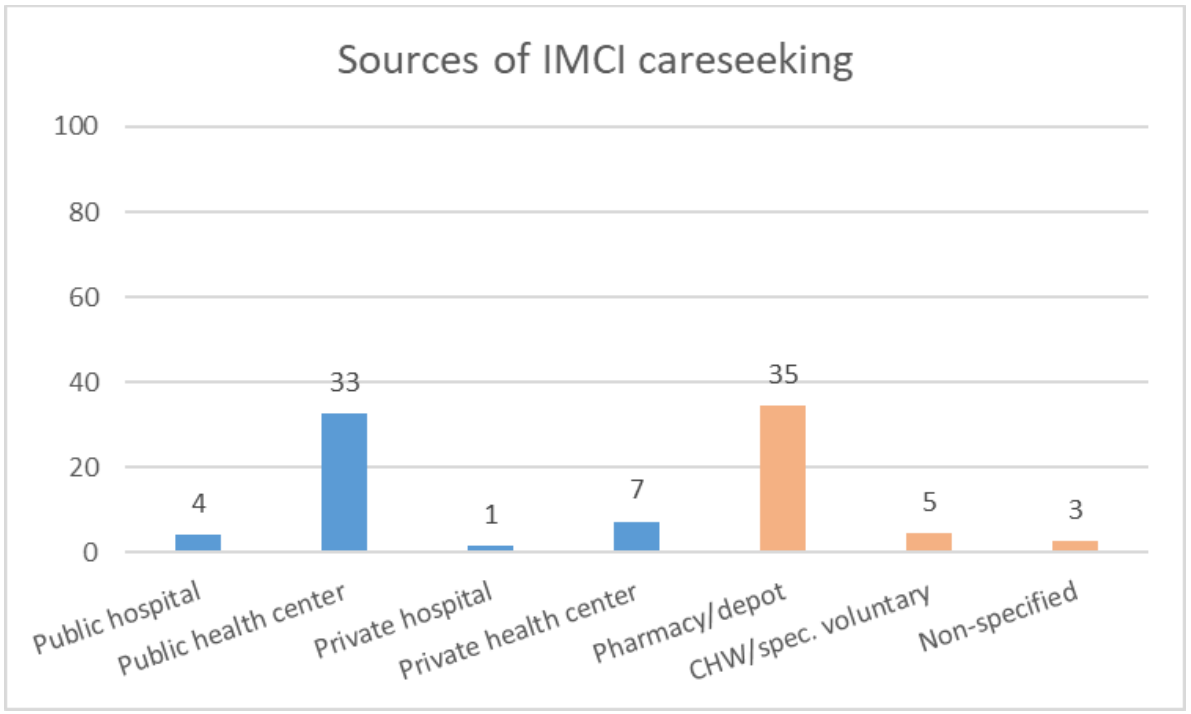
- To calculate health facility readiness in providing integrated management of childhood illnesses (IMCI) service
- To calculate the quality of IMCI intervention according to standard protocols
- To compute IMCI effective coverage cascades accounting for quality of care

Sick child coverage cascades indicators

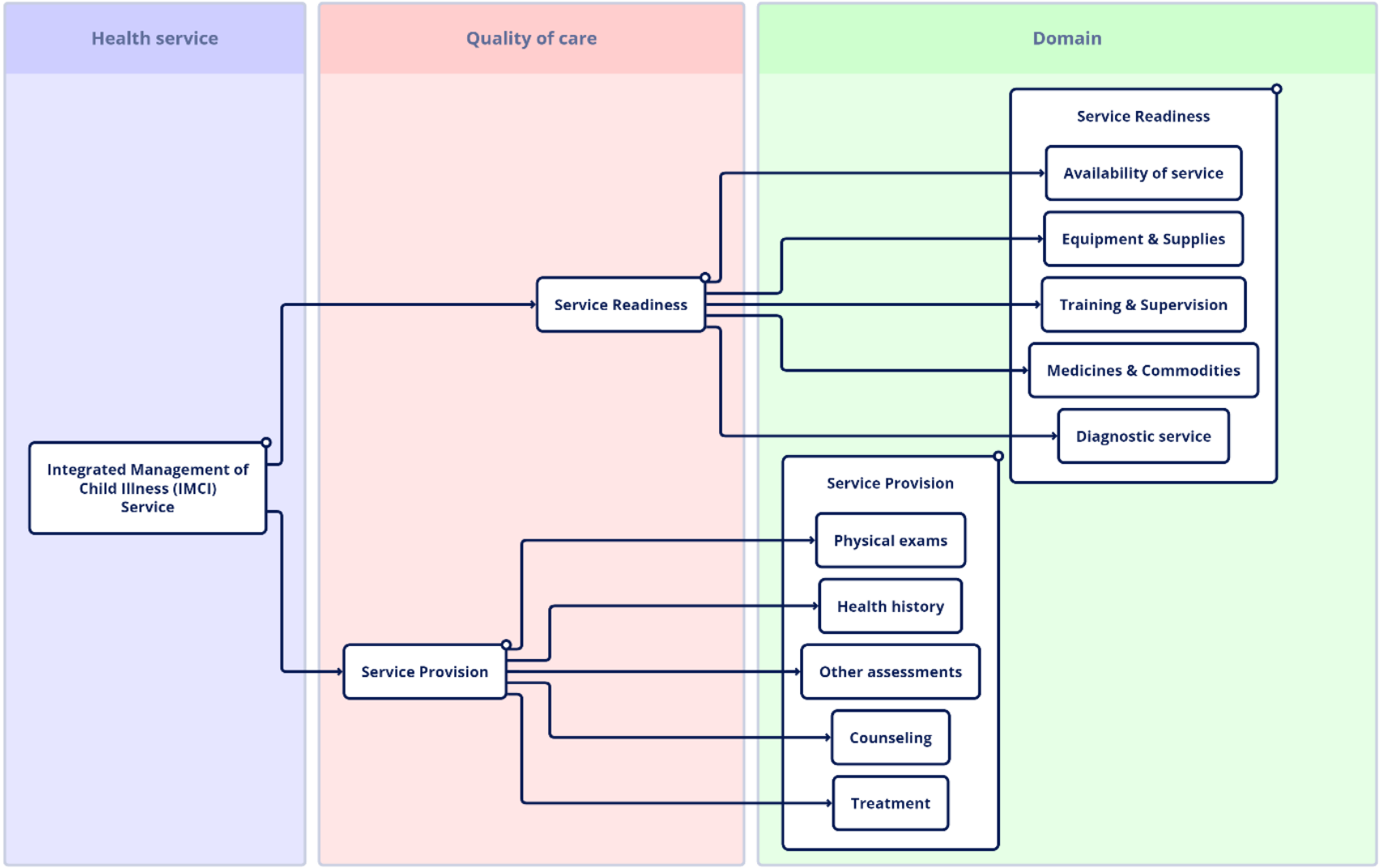
	Indicators			
Cascade level	**Diarrhea**	**Fever**	**Pneumonia**	**IMCI**
Population in need	Child had diarrhea	Child had fever	Child had symptoms of pneumonia	Child had diarrhea, fever or symptoms of pneumonia
Care-seeking (any)	Care sought from any sources			
Service contact (health facility or provider)	Care sought from a health facility or provider			
Likelihood of service readiness	Care sought from provider ready to manage illness in line with IMCI guidelines			
Crude coverage of intervention	ORS ORS+Zinc	Any ACT, antimalarial/ malaria test	Service contact	ORS, antimalarial, service contact ARI
Quality-adjusted coverage	Intervention delivered according to standards			

Child illness and care seeking

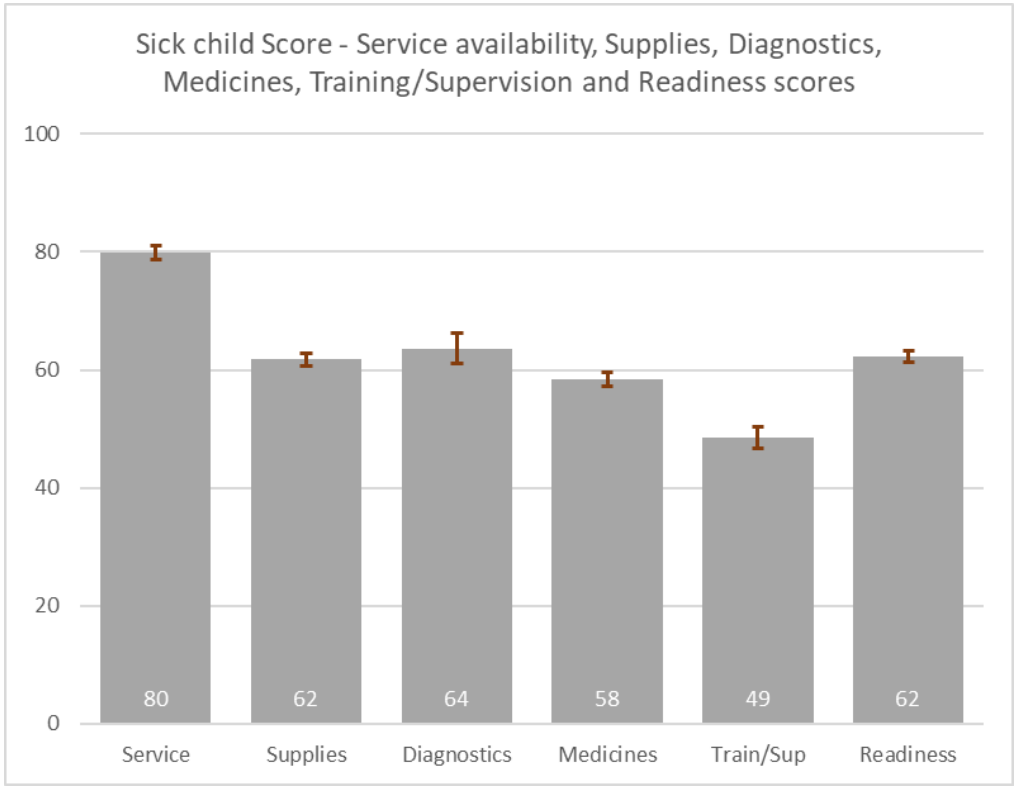


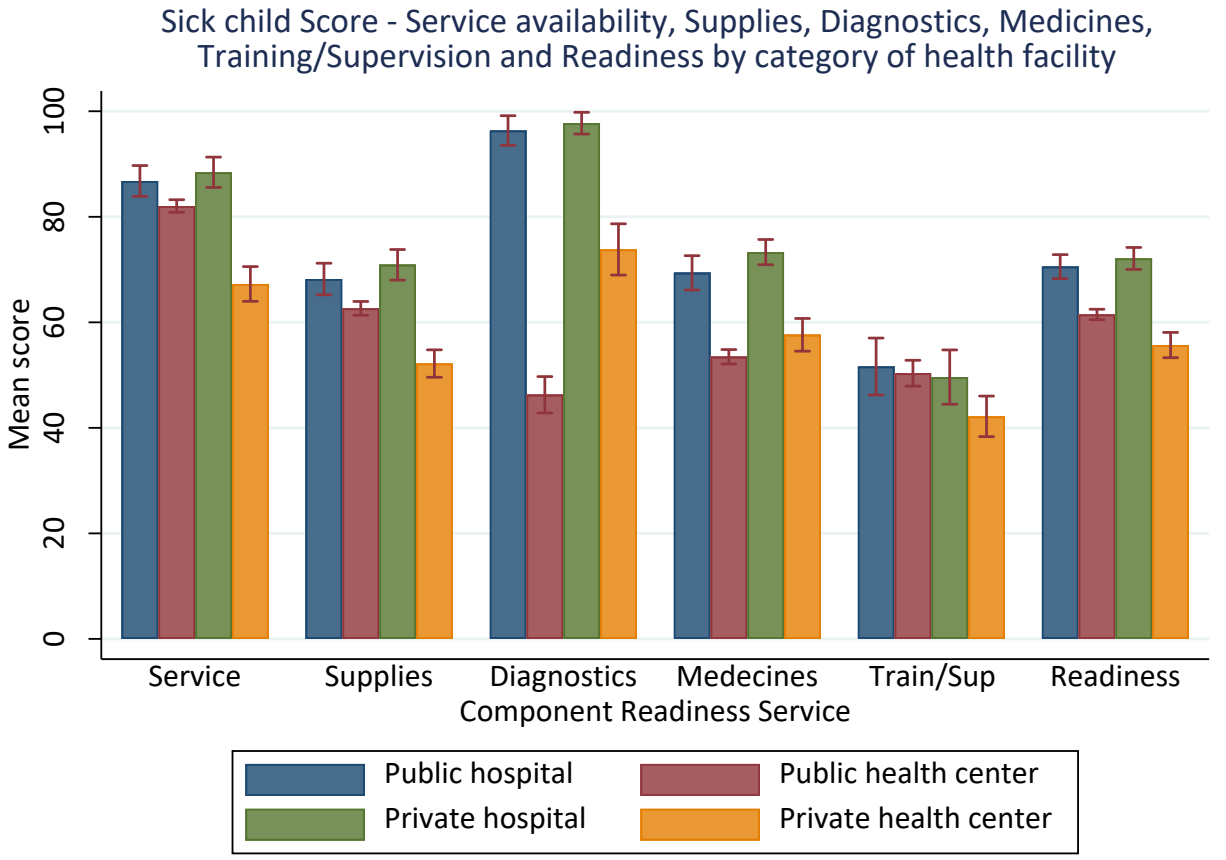


Sick child readiness and process quality domains

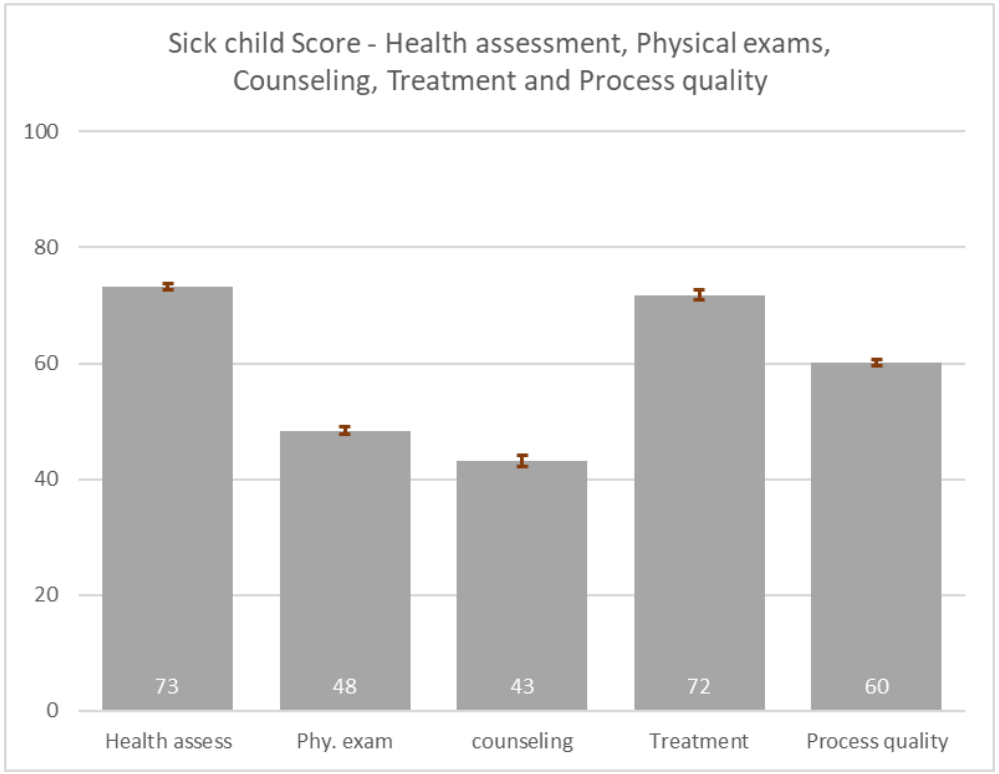


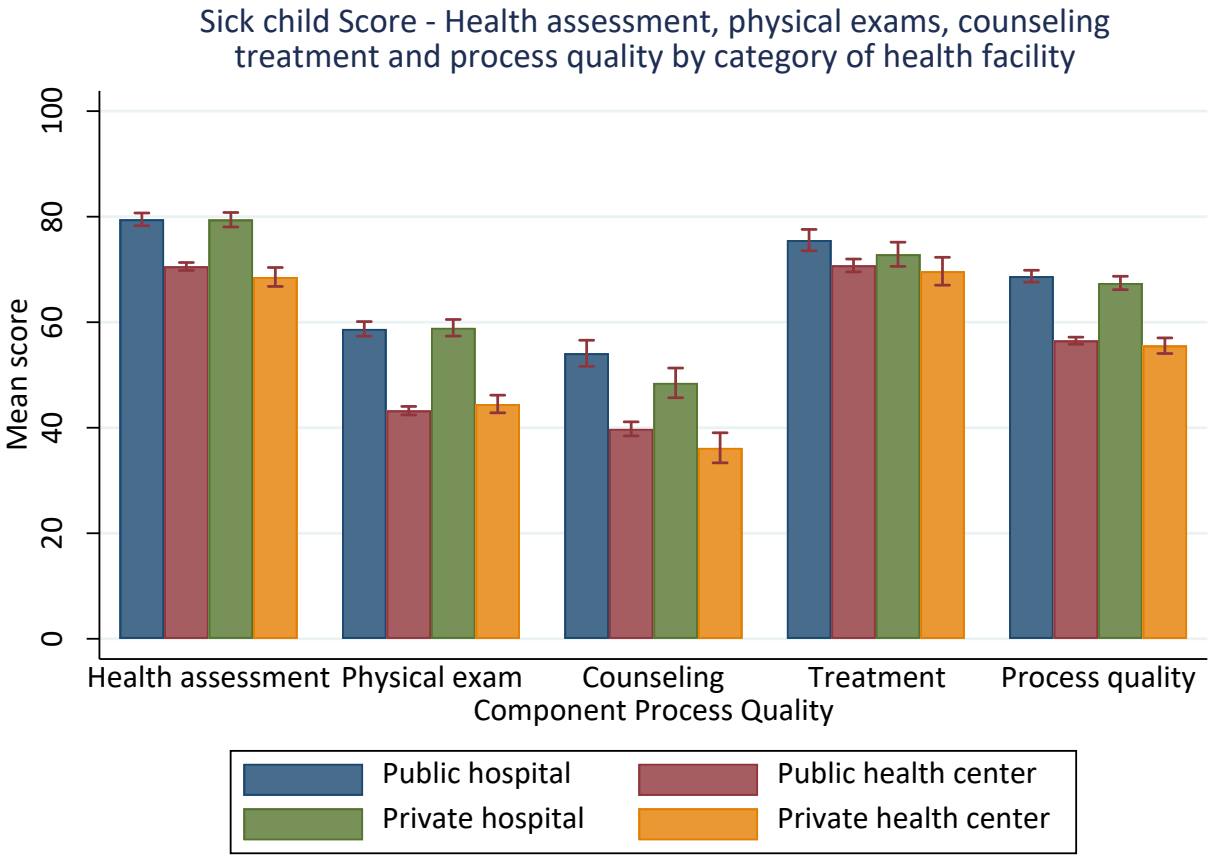
Sick child service readiness





Sick child service quality





Linking analysis

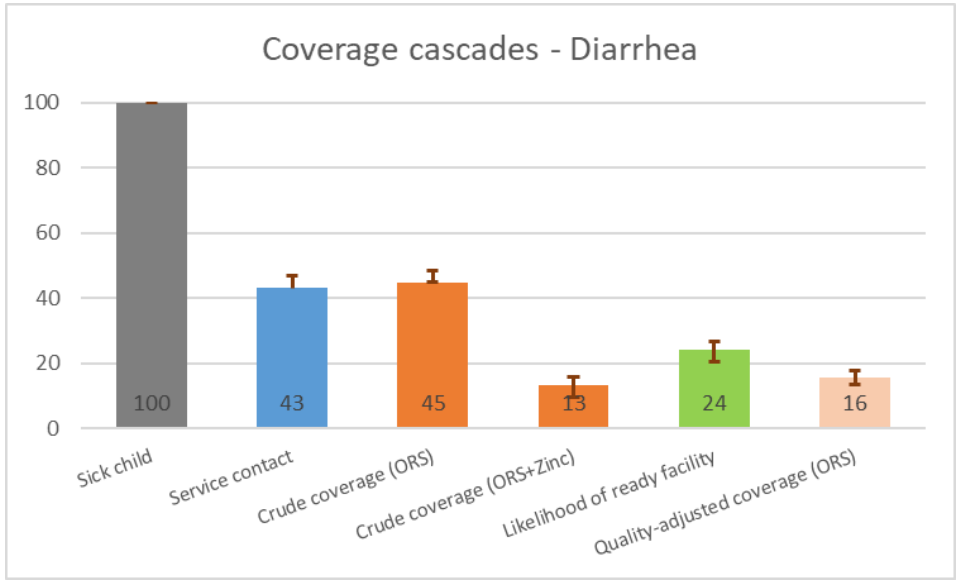
Type of linking

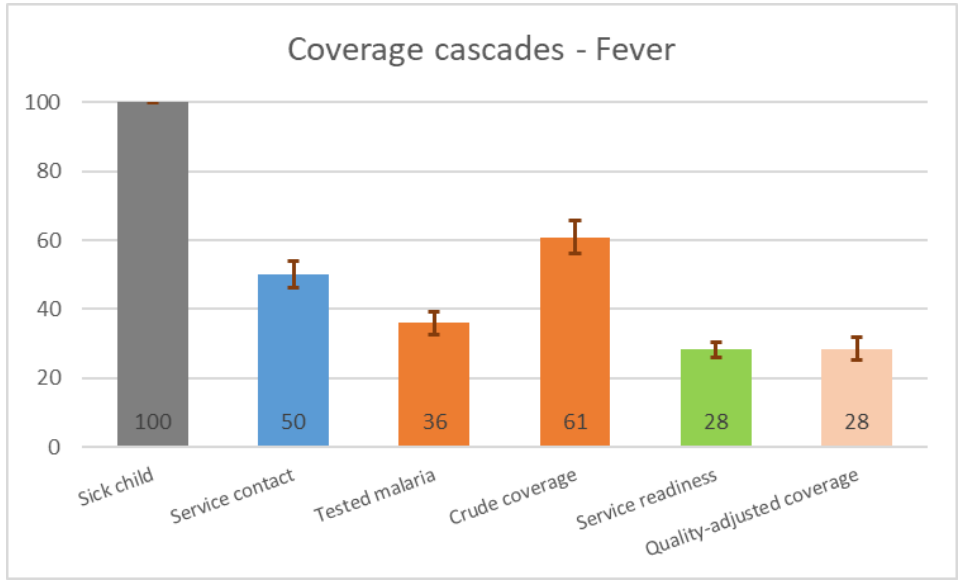
- Linking SPA - DHS
- Ecological linking by region, type of facility and managing authority

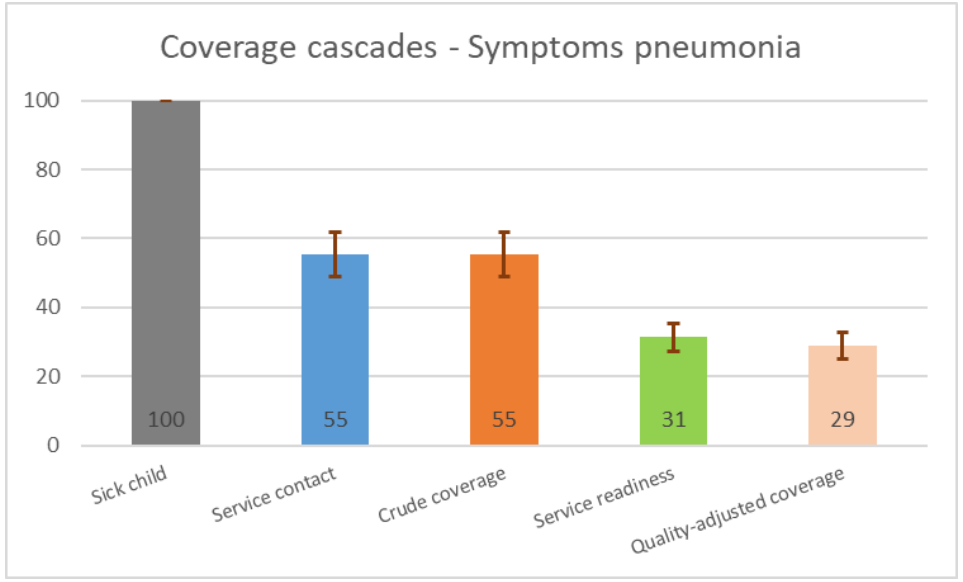
Effective coverage adjustment

- Readiness-adjusted
- Process quality adjusted

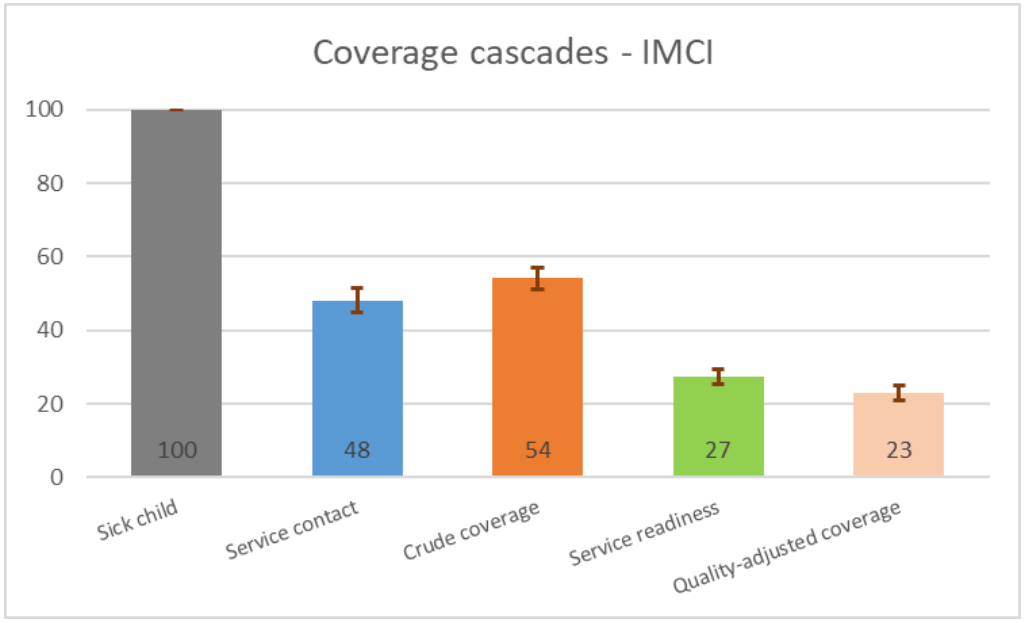
Sick child coverage cascades

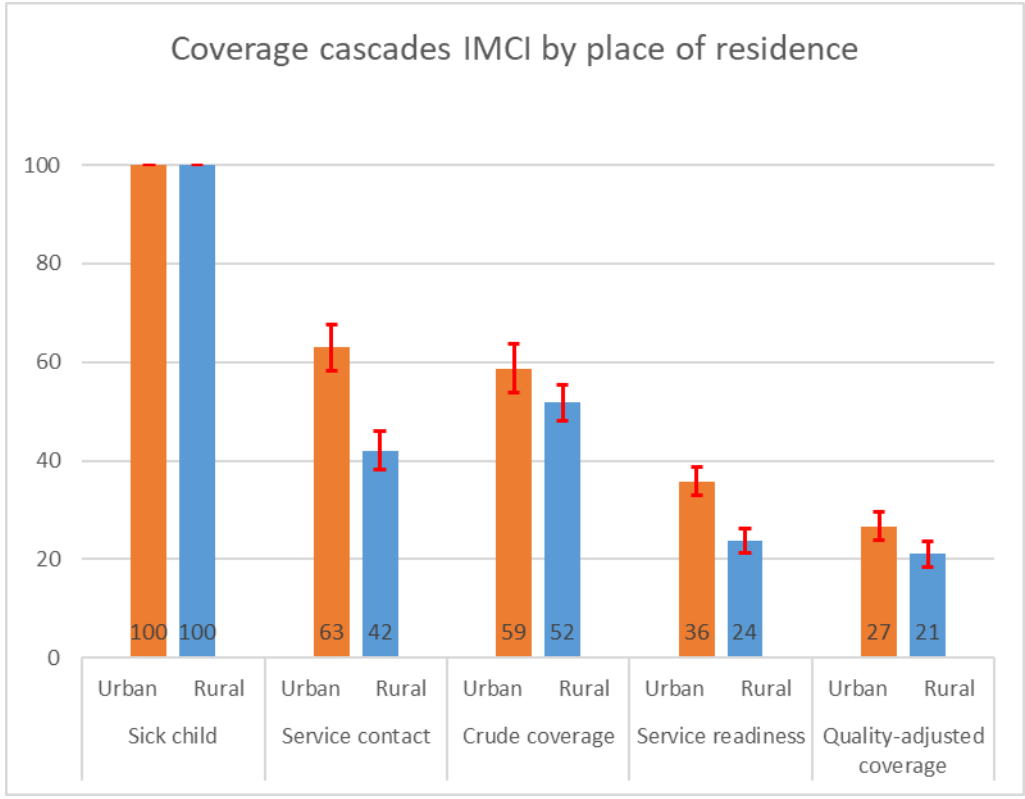






Sick child coverage cascades





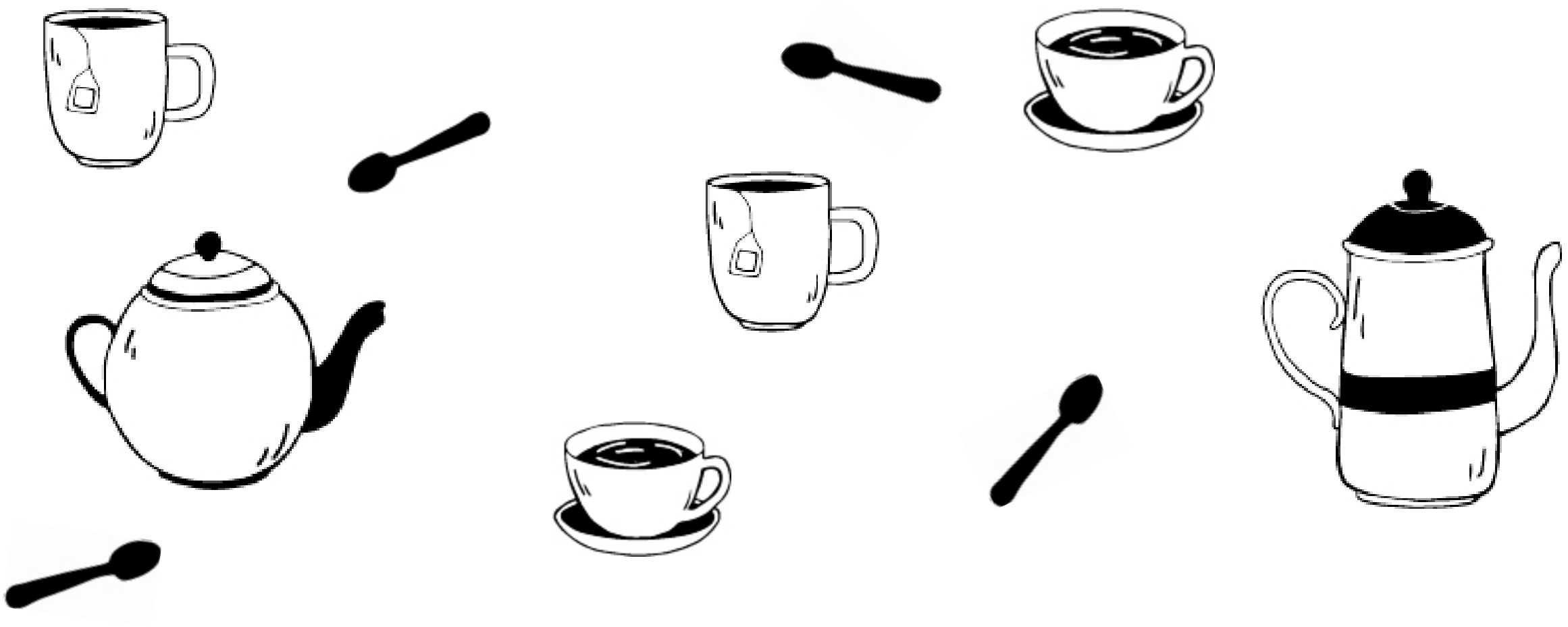
In conclusion

- Availability and inclusion of various readiness and quality components in the analysis.
- Limited readiness and process quality data elements (e.g., training, supervision, counseling).
- Limitation analyzing ARI and fever/malaria quality.
- Limited data on severity of illness for classification, admissions and referrals.
- Indicators defined according to IMCI guidelines.
- High proportion of non-facility care-seeking (e.g., pharmacy, Accredited Drug Dispensing Outlets/ADDO).
- Care-seeking from multiple sources for the same episode.
- Quality discrimination of lower-level facilities.
- Large gap between crude and adjusted coverage.
- No significant difference between readiness- and process quality-adjusted coverage (fever, ARI).

Questions & Answers

Virtual Participants: Please use the question feature on the PheedLoop App

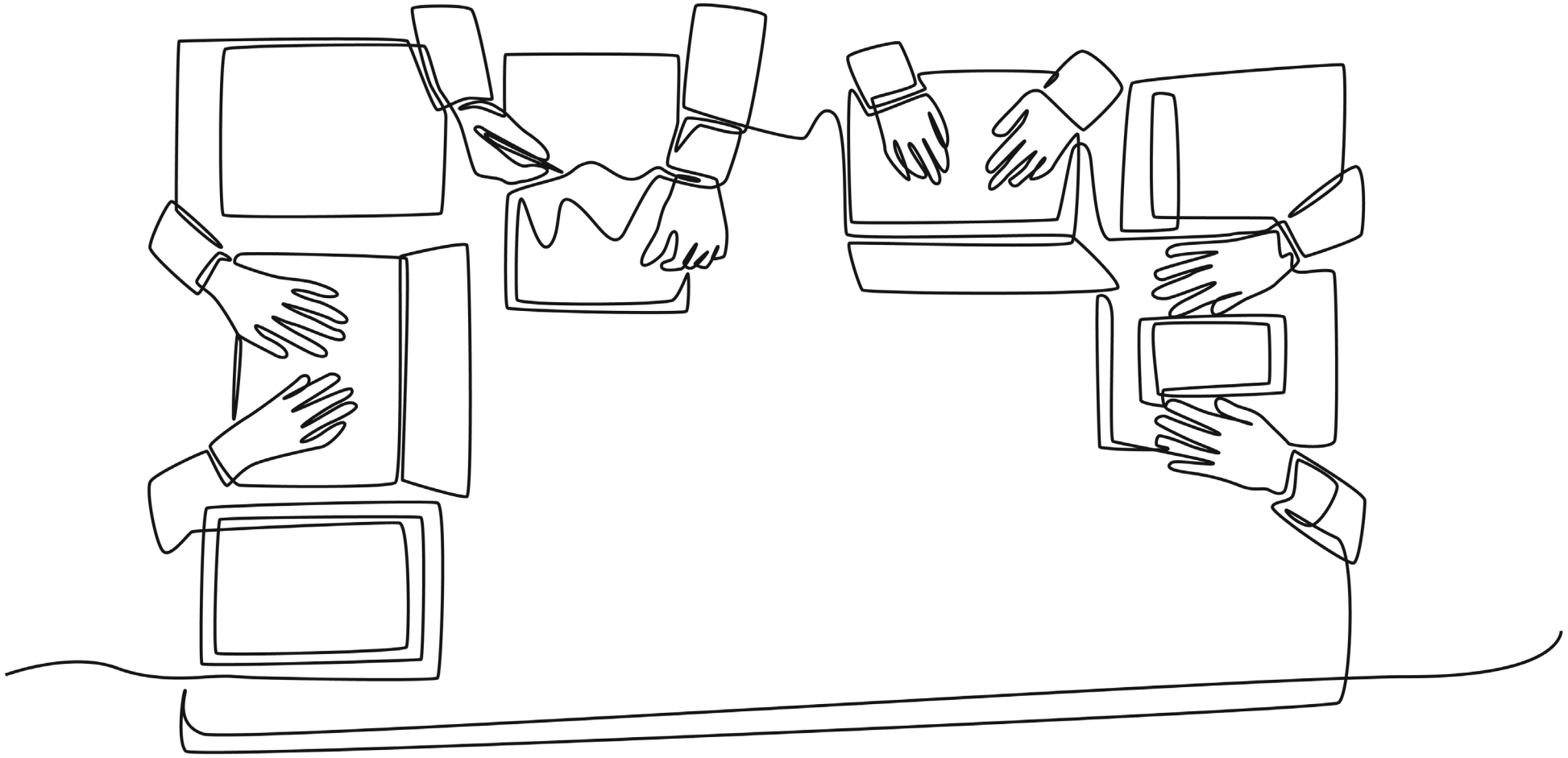
Break



Speaker

Ashley Sheffel
Johns Hopkins Bloomberg
School of Public Health

Small group sessions & share back



Instructions

In small groups, we are going to participate in a vignette to get us thinking about how effective coverage data may be used.

Set-up groups/Assign user roles (10min)

1. Form groups of 6-8 people
   - **In-person**: Circle up chairs with 6-8 people sitting near you. We will come around to help people find groups if needed.
   - **Virtual**: We will create break-out rooms with 6-8 randomly selected individuals.
2. Your group will be assigned a data user role. Please read your role aloud within your group to understand your assigned role and purpose as data users to help frame your thinking for this exercise.

Instructions

Review data (10min)

3. Your group will now receive “new analysis” which is effective coverage data. Please as a group, look at the data, interpret the data, discuss the data, etc.

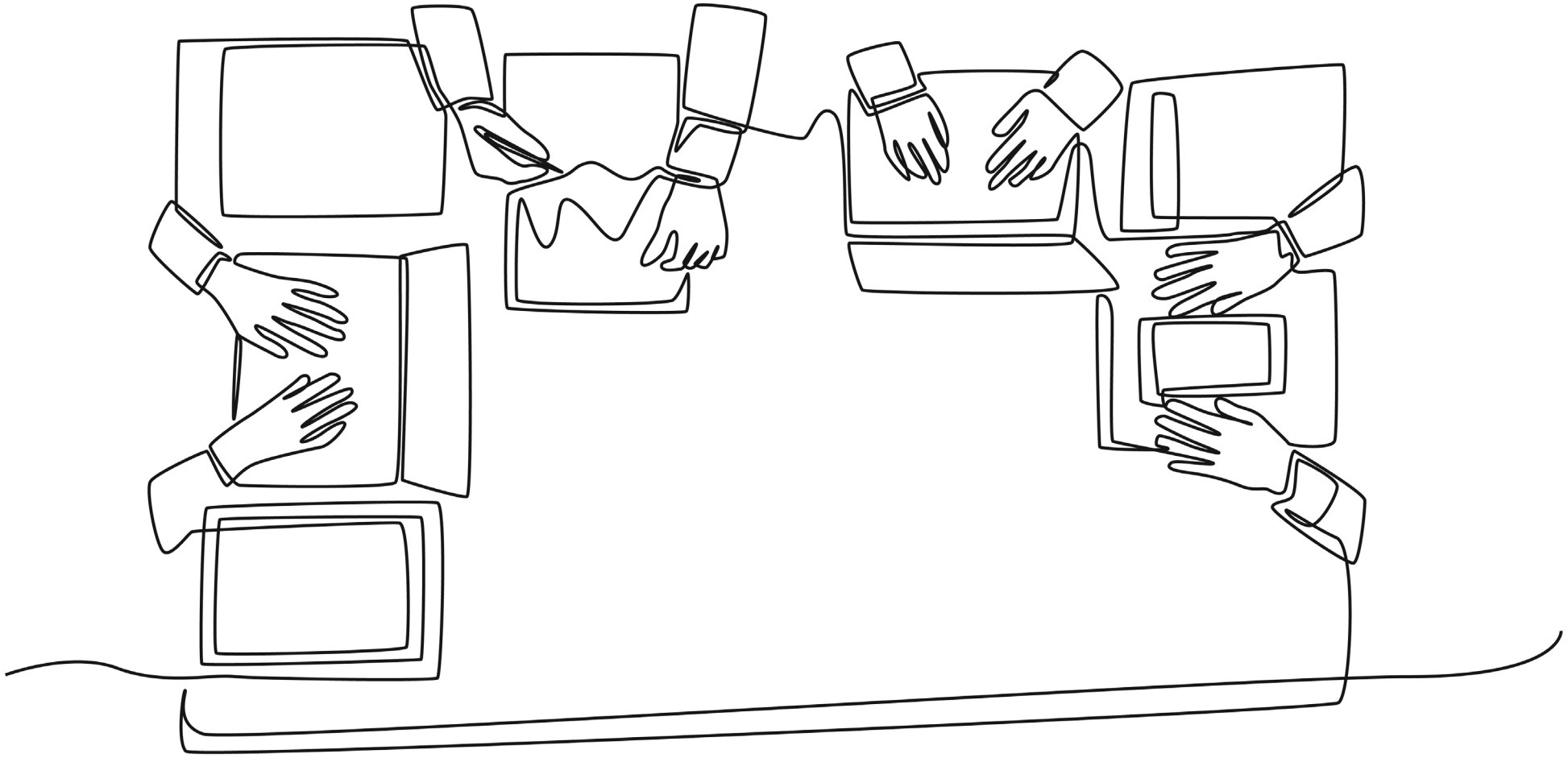
Discussion (20min)

4. Now that you have looked at the data, we are going to discuss the usefulness of the data for your specific needs as a data user.

Prepare to share (5min)

5. Take a few minutes to nominate someone willing to briefly share some of your groups’ thoughts during the plenary.

Moderated group share back



Panelists

Helen Kiarie
Ministry of Health, Kenya

Lara Vaz
pulation Reference Bureau (PRB)

Tanya Marchant
London School of Hygiene
and Tropical Medicine

Claire-Helene Mershon
ll & Melinda Gates Foundation

Moderator
Agbessi Amouzou
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School of Public Health

Panel Discussion

Thank You!

We are grateful to the Bill & Melinda Gates Foundation for funding Countdown to 2030 for Women's Children's and Adolescents' Health and the Improve project.

IMPROVE

Countdown to 2030
Women's Children's & Adolescent's Health