

# CHILDREN'S LIVES: INTERNATIONAL CONFERENCE ON CHILDREN AND THEIR FAMILIES USING THE MULTIPLE INDICATOR CLUSTER SURVEYS (MICS)

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## Effective Coverage for Child Curative Care Using MICS Data: A Case Study in the Democratic Republic of Congo.

Presenter : Roland Mady, MSc

Co-authors: Abdoulaye Maïga PhD, Agbessi Amouzou PhD

Affiliation: Johns Hopkins University



# Plan

- Background
- Methods
- Results
- Conclusion

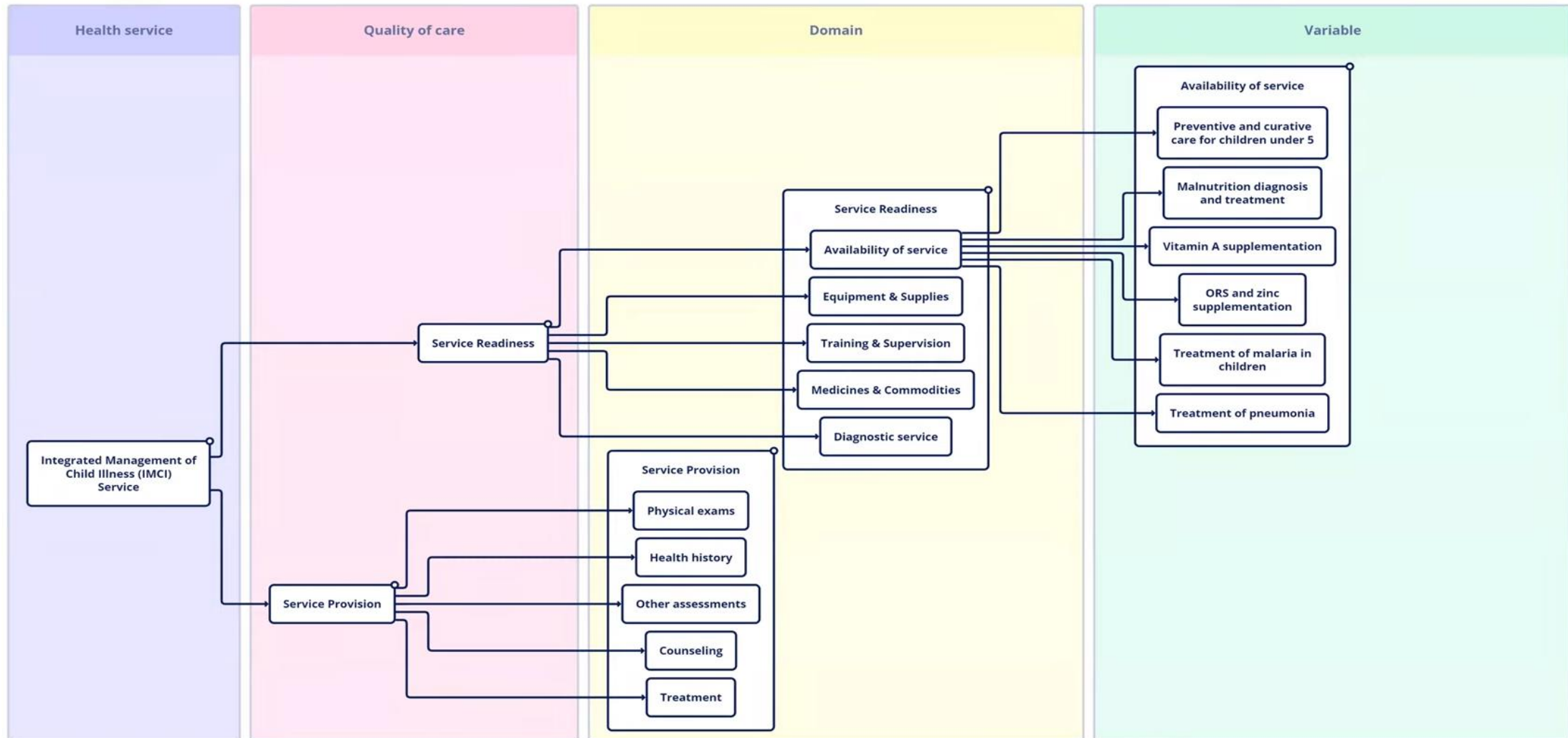
# Background

- The Democratic Republic of Congo (DRC) still experiences **high child mortality**
  - primarily due to **infectious diseases including malaria, diarrhea and acute respiratory infections.**
- The country is unlikely to achieve the Sustainable Development Goals (SDG), despite **recent improvements in coverage of health interventions.**
  - This situation highlights the **need for further assessment of the quality of care while analyzing health intervention coverage.**
- **Study objective:** Our study examines the capacity of health facilities to provide curative care services to sick children and evaluates whether they received healthcare according to quality standards.

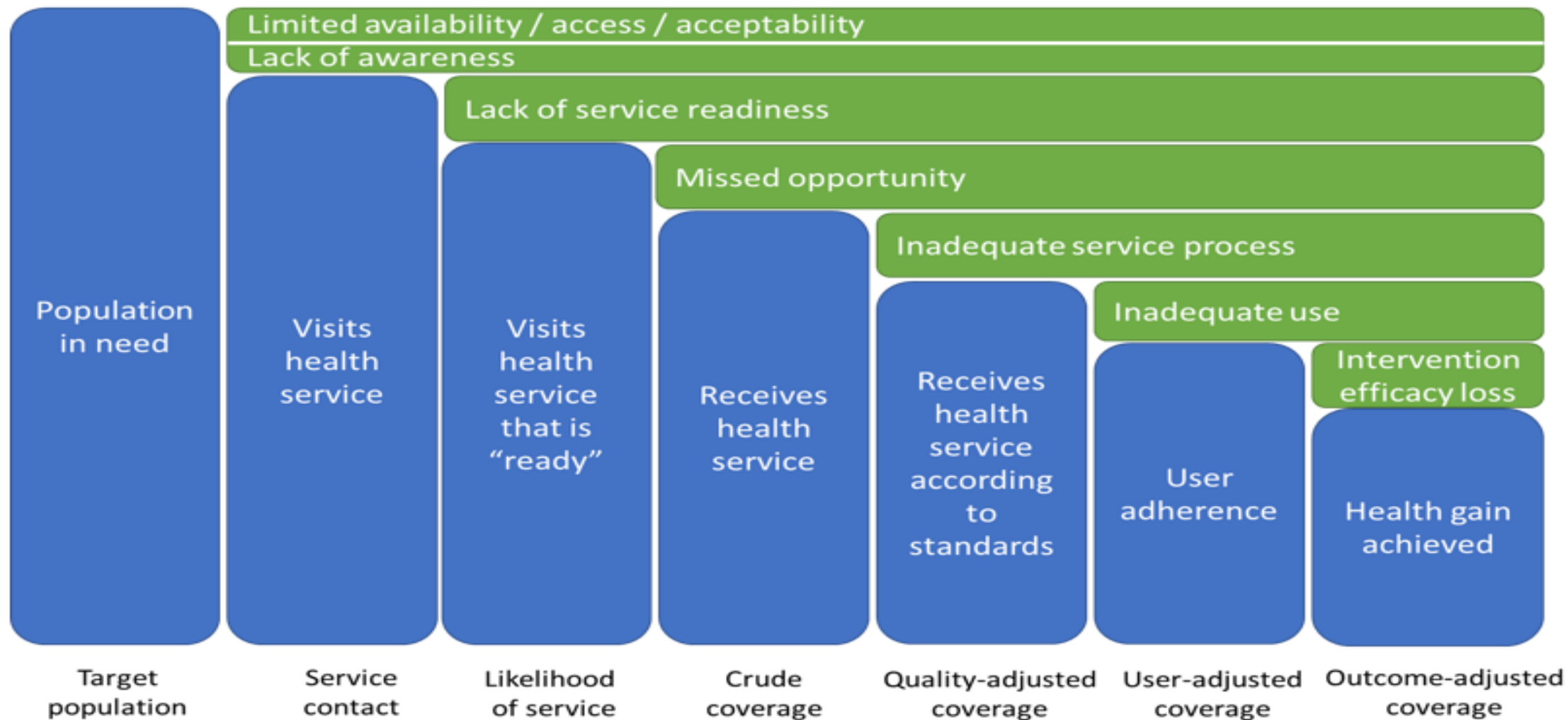
# Methods – Frameworks (1/4)

- World Health Organization's guidelines and recommendations related to IMCI
  - Improving case management skills of healthcare providers;
  - Improving health systems to provide quality care;
  - Improving family and community health practices for health, growth and development.
- WHO HHFA/SARA frameworks
- The Donabedian model to assess quality of care
  - structure, process, outcomes
- The Amouzou and al. effective coverage cascade

# Methods – Frameworks (2/4)



# Methods – Frameworks (3/4)



# Methods – Frameworks (4/4)

Cascade level	Indicators			
	Diarrhea	Fever/Malaria	ARI <sup>1</sup> /Pneumonia	IMCI
Population in need	Child had diarrhea	Child had fever/symptoms of Malaria	Child had ARI/symptoms of pneumonia	Child had diarrhea or fever/malaria or ARI/symptoms of pneumonia
Care-seeking (any)	Care-seeking from any sources			
Service contact	Care-seeking from a health facility or skilled provider			
Service readiness	Care-seeking from provider ready to manage illness in line with IMCI guidelines			
Crude coverage of intervention	ORS <sup>2</sup>	Malaria test	Service contact	ORS, malaria test, service contact for ARI
Quality-adjusted coverage	Intervention delivered according to standards			

<sup>1</sup> ARI: Acute respiratory infections

<sup>2</sup> ORS: Oral rehydration solution

# Methods – Data

## **DRC 2017-18 Multiple Indicator Cluster Survey (MICS - 6)**

- Sample size : 21,456 under-5 children
- Data collection : Kinshasa in December 2017 ; February-July 2018 for other regions.

## **DRC 2017-18 Service Provision Assessment (SPA)**

- Sample size: 1,380 health facilities
  - Public hospitals, public health centers
  - Private hospitals, private health centers

# Methods – Effective coverage (1/2)

*“Effective coverage is defined as the proportion of a population in need of a service that resulted in a positive health outcome from the service. The measurement of effective coverage aims to capture the potential health benefits of an intervention by integrating the dimension of quality of care.”*

*Think Thank Group on Effective Coverage put together by WHO and UNICEF*

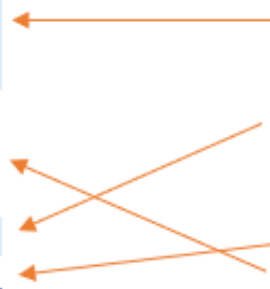
Linking of household data and facility data using the ecological linking by stratum :

- administrative region,
- type of facility and,
- the managing authority.

# Methods – Effective coverage (2/2)

DRC SPA 2017-18		
Region	Facility type	Managing
Kinshasa	Hôpital général de référence, Hôpital tertiaire, Hôpital	Public
Kinshasa	Hôpital général de référence, Hôpital tertiaire, Hôpital	Private
Kinshasa	Centre de santé	Public
Kinshasa	Centre de santé	Private

DRC MICS 2017-18		
Region	Place sought care	Managing
Kinshasa	Hôpital gouvernemental	Public
Kinshasa	Centre de santé gouvernemental	Public
Kinshasa	Medecin privé	Public
Kinshasa	Hôpital privé	Private
Kinshasa	Pharmacy	Other
Kinshasa	Parents/amis	Other
Kinshasa	Boutique/marché/rue	Other
Kinshasa	Praticien traditionnel	Other



# Results – Child illness

**Diarrhea** 14.1% [13.0 -15.3]

**Fever** 28.3% [26.7 – 30.0]

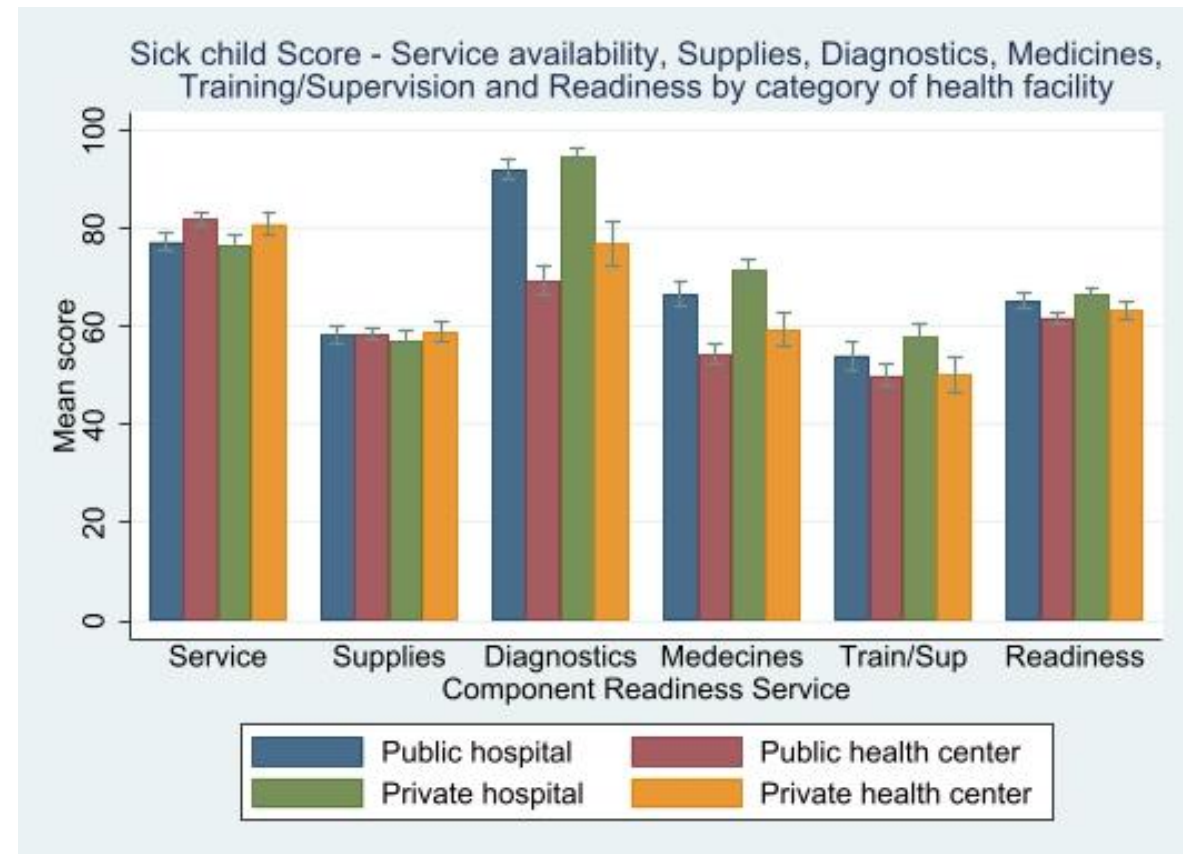
**Acute respiratory infections** 3.70% [3.0 – 4.5]



**3 to 4** children out of 10  
experienced **any IMCI**

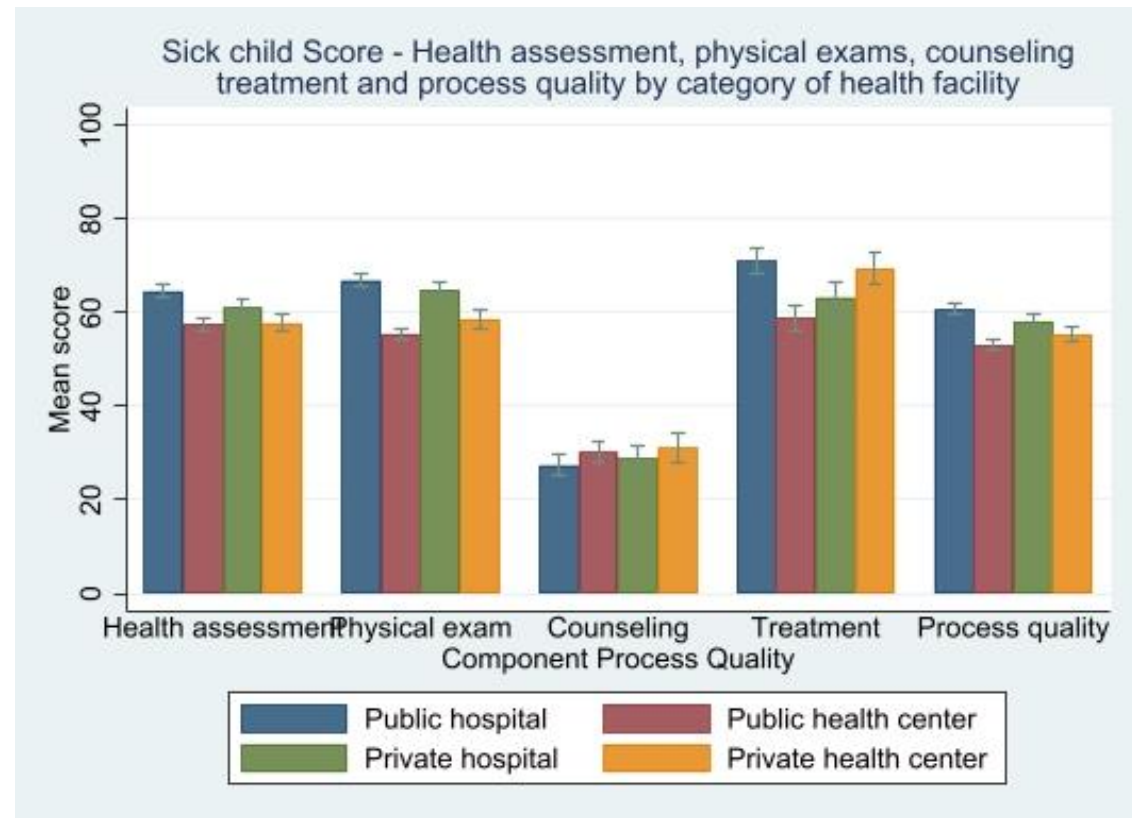
# Results – IMCI service readiness

- **Overall facility readiness score 64.0% [63.3 – 64.7]**
- **Scores vary according to the readiness components (higher in hospitals vs health centers)**
- **Lower scores in supplies and training/supervision**



# Results – IMCI process quality

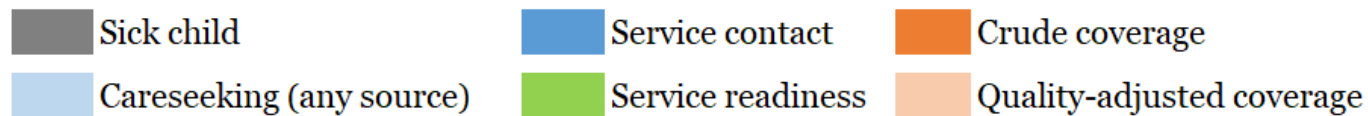
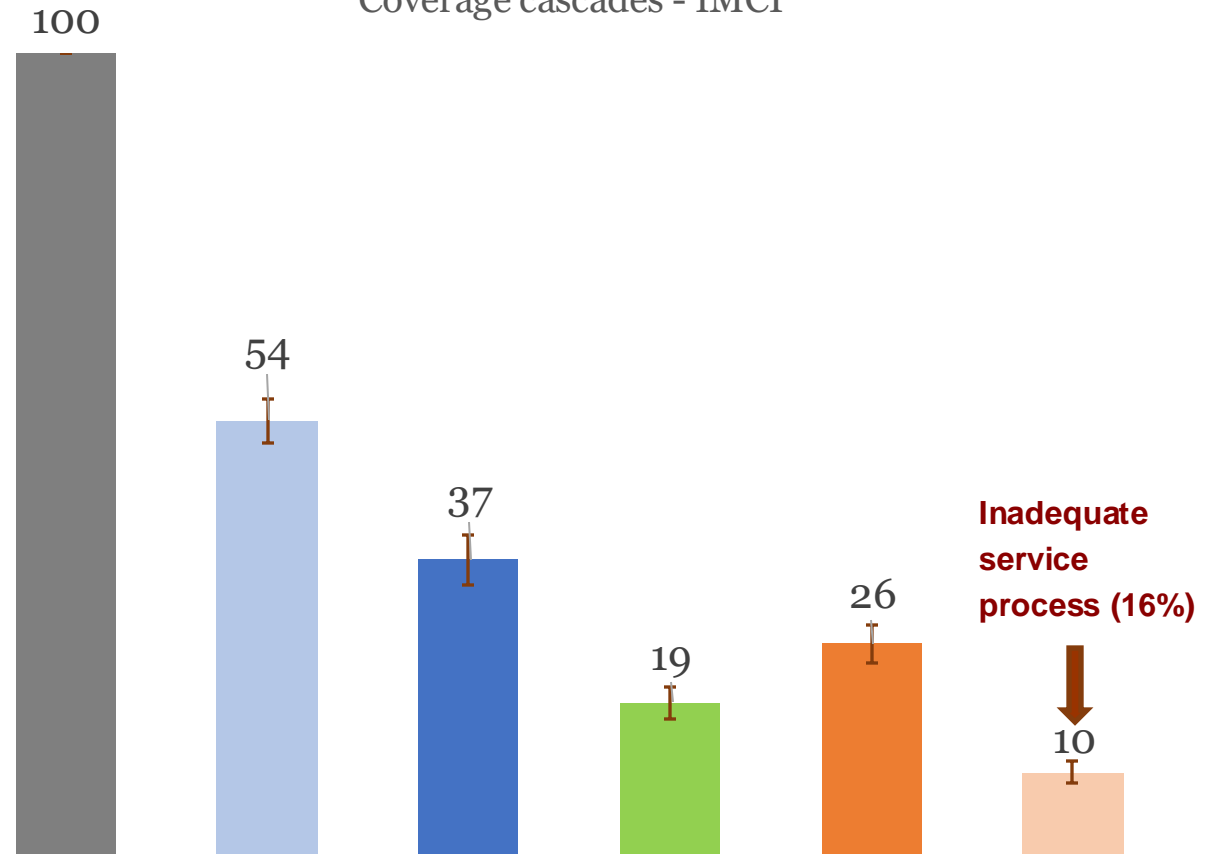
- **Overall facility process quality score 56.8% [56.2 – 57.4]**
- **Scores vary according to the process quality components**
- **(very low in counseling)**
- **Public and private hospitals contribute the most to higher scores.**

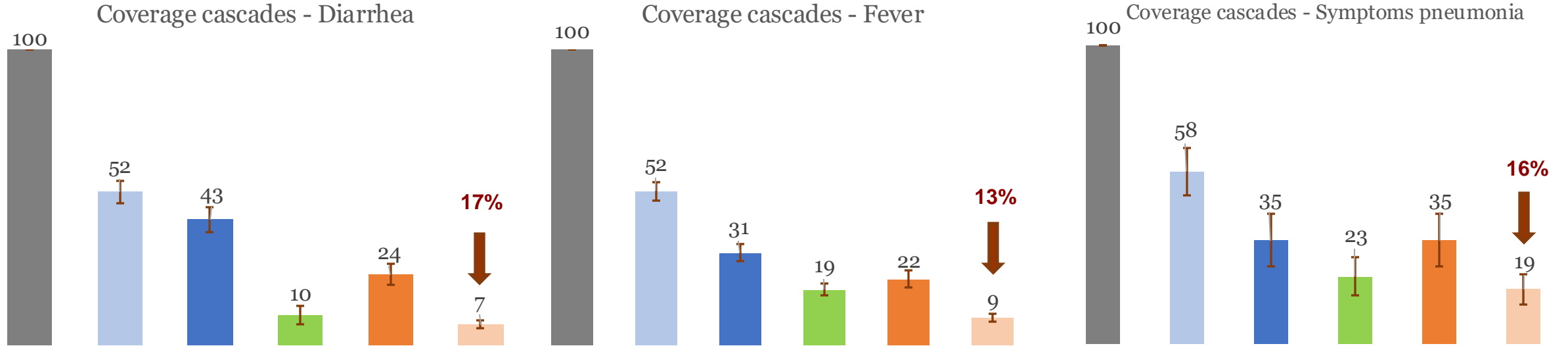


# Results on effective coverage

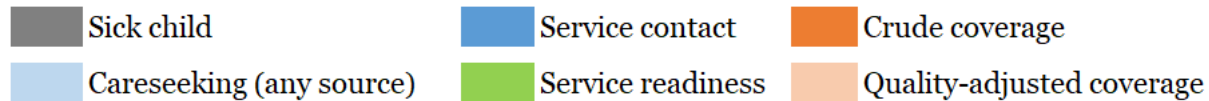
### Coverage cascades - IMCI

- Of the 35.7% experienced any IMCI
- **Care-seeking** from **any source 54%**
- Care-seeking from **health facilities and/or skilled providers 37%**
- Health facilities visited had low service **readiness score 19%**
- Sick children **treatment 26%**
- Treatment meeting **process quality 10%.**



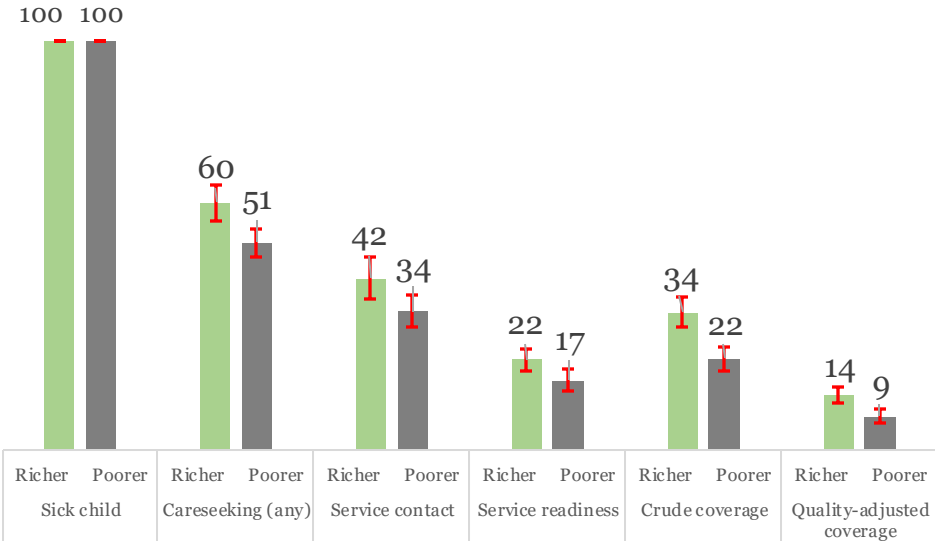


- **Care-seeking for 1 sick child out of 2** for each illness
- **Less than 50%** of care-seeking occurred in **health facilities and/or skilled provider**
- **Low facility readiness** for management of **diarrhea (10%), fever (19%) and pneumonia/ARI (23%)**
- **Higher inadequate process quality** respectively in diarrhea, pneumonia/ARI and fever

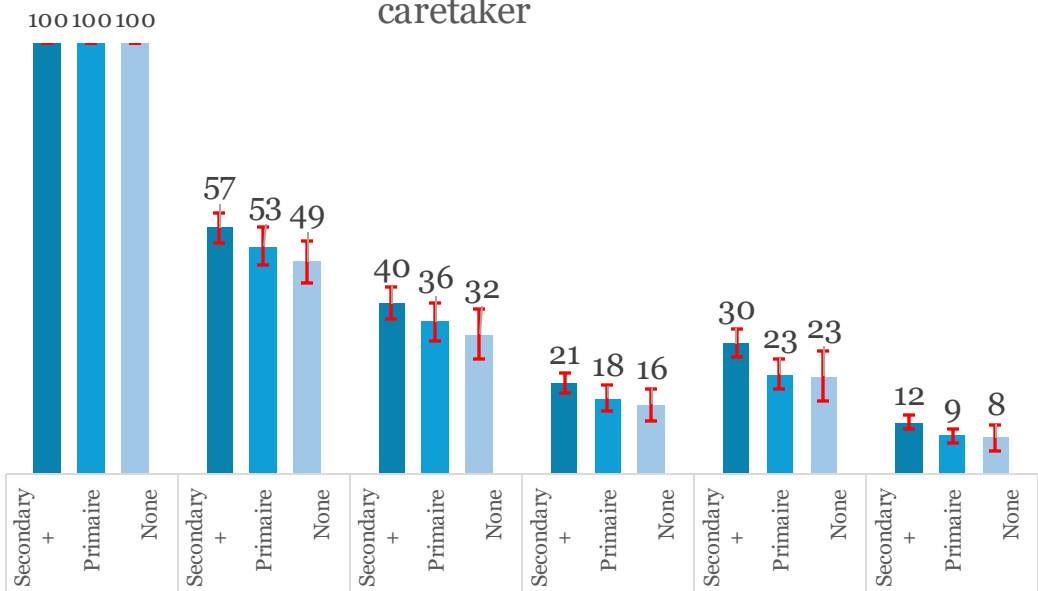


- Additional coverage cascade by age of the caretaker/mother, sex and age of the child.
- Most discriminant stratifiers: **wealth quintile, place of residence, education level of caretaker/mother.**

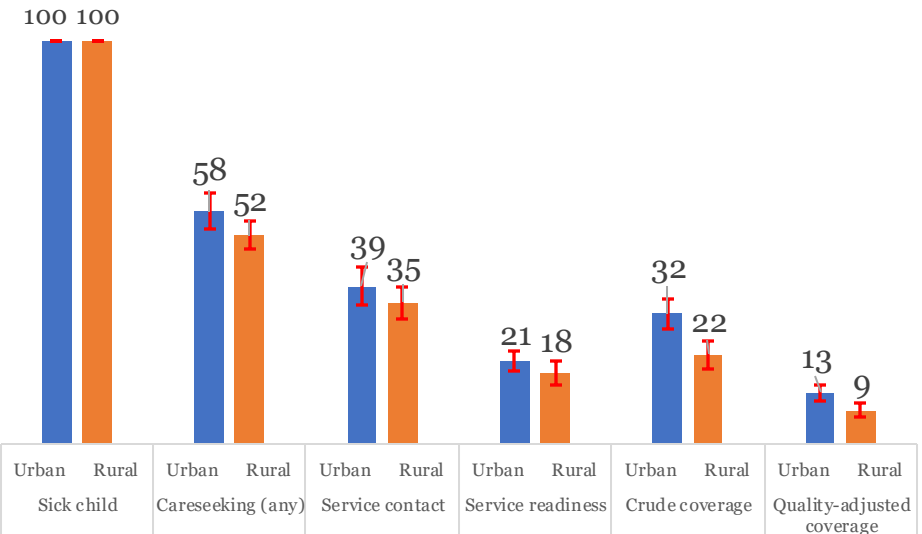
Coverage cascades IMCI by wealth quintile



Coverage cascades IMCI by education level of caretaker



Coverage cascades IMCI by place of residence



# Conclusion

- A substantial proportion of facilities have limited capacity to provide IMCI health services and care according to standards.
- Children living in rural areas, from poorer household and whom mothers/caretakers have low education level experience poorer curative service access and quality.
- To achieve universal coverage and meet SDGs for childhood health, improvements are required, especially for supply, counseling and providers' training.

# Acknowledgement

- ❖ Global Disease and Epidemiology Control Program (GDEC)
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# Thank you !

Corresponding author : Roland MADY

Email: [gmady1@jhu.edu](mailto:gmady1@jhu.edu)