



Institute for  
Health Metrics  
and Evaluation

# Innovations in Data Collection for SM2015

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# Outline

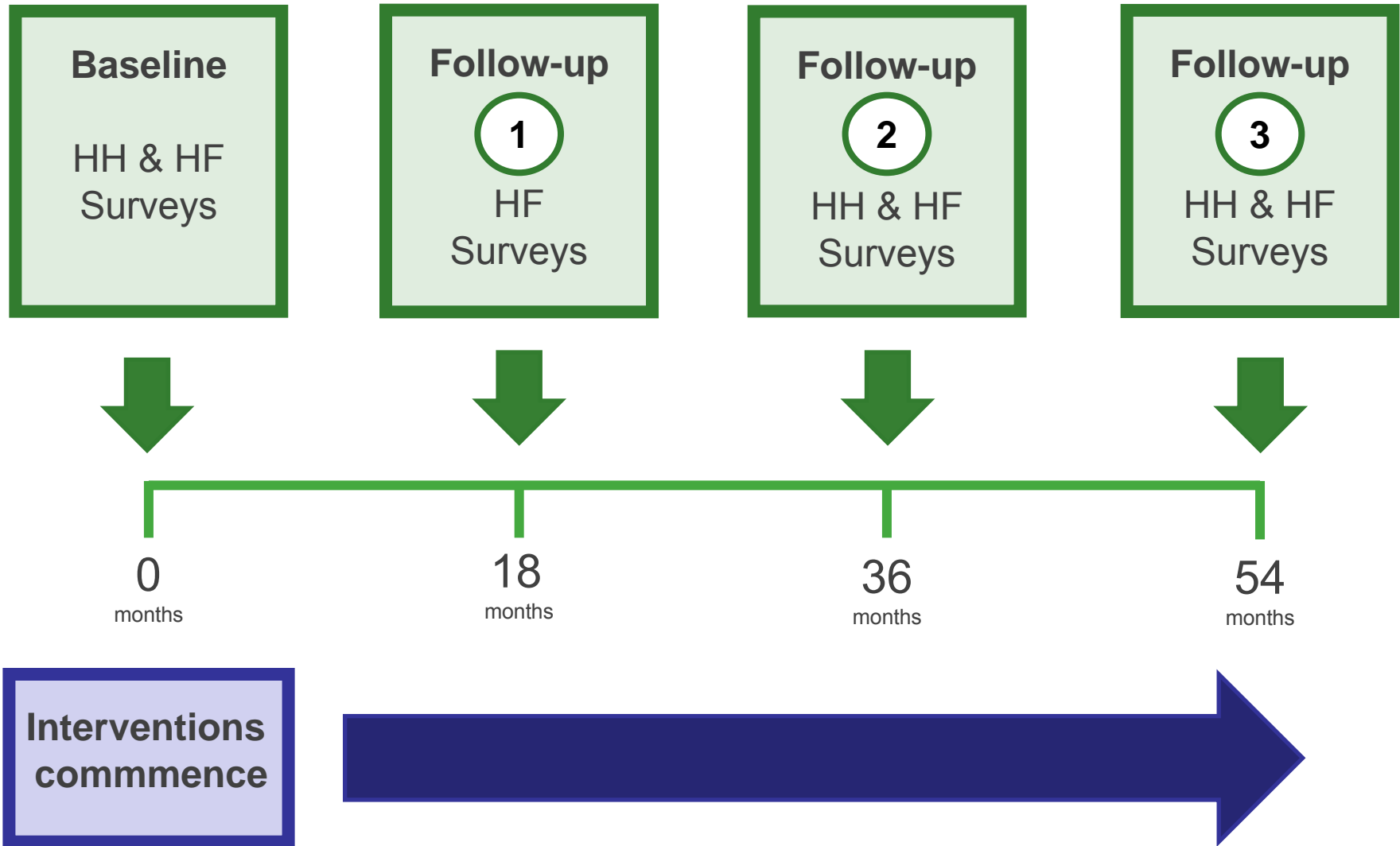
## Introduction

- Design and data collection
- Innovations in data collection
- Challenges
- Conclusion

# Indicators

- Indicators are defined for each country according to country-specific interventions
- 2 types of indicators:
  - Coverage indicators
  - Quality indicators
- Some indicators are used as criteria to make decisions about SM2015 disbursements going forward
  - IHME provided data to inform the decisions of the countries and IDB about targets

# Study design



# Salud Mesoamerica 2015 (SM2015)

- Evaluation includes:
  - Census
  - Household survey
  - Anthropometry, anemia tests, and dried blood spot samples
  - Health facility survey
  - Water quality test in Panama
  - Teen reproductive health survey in Costa Rica



# Evaluation Activities

- Facility survey:
  - Questionnaire administered to facility manager
  - Physical observation
    - Equipment and inputs
    - Review of registries to detect stock-outs
  - Medical record review
    - Record quota according to the characteristics of the unit
      - » Antenatal care
      - » Deliveries
      - » Maternal and neonatal complications
    - Selection of medical records from MoH records when possible

# Training





# Pilot

- Pilot the whole operation
- Analyze the process
- Revise the instruments and logistics





# Sample

	Households	Women	Children	Health facilities
Belize *		351	311	39
Costa Rica	41 schools			
El Salvador	3,625	4,730	3,328	60
Guatemala	4,414	5,829	5,211	93
Honduras	2,999	3,537	2,993	90
Mexico	5,410	6,945	6,262	90
Nicaragua	2,070	2,810	2,221	64
Panama	1,664	2,353	2,169	38

\*LQAS

# SM2015 evaluation innovations

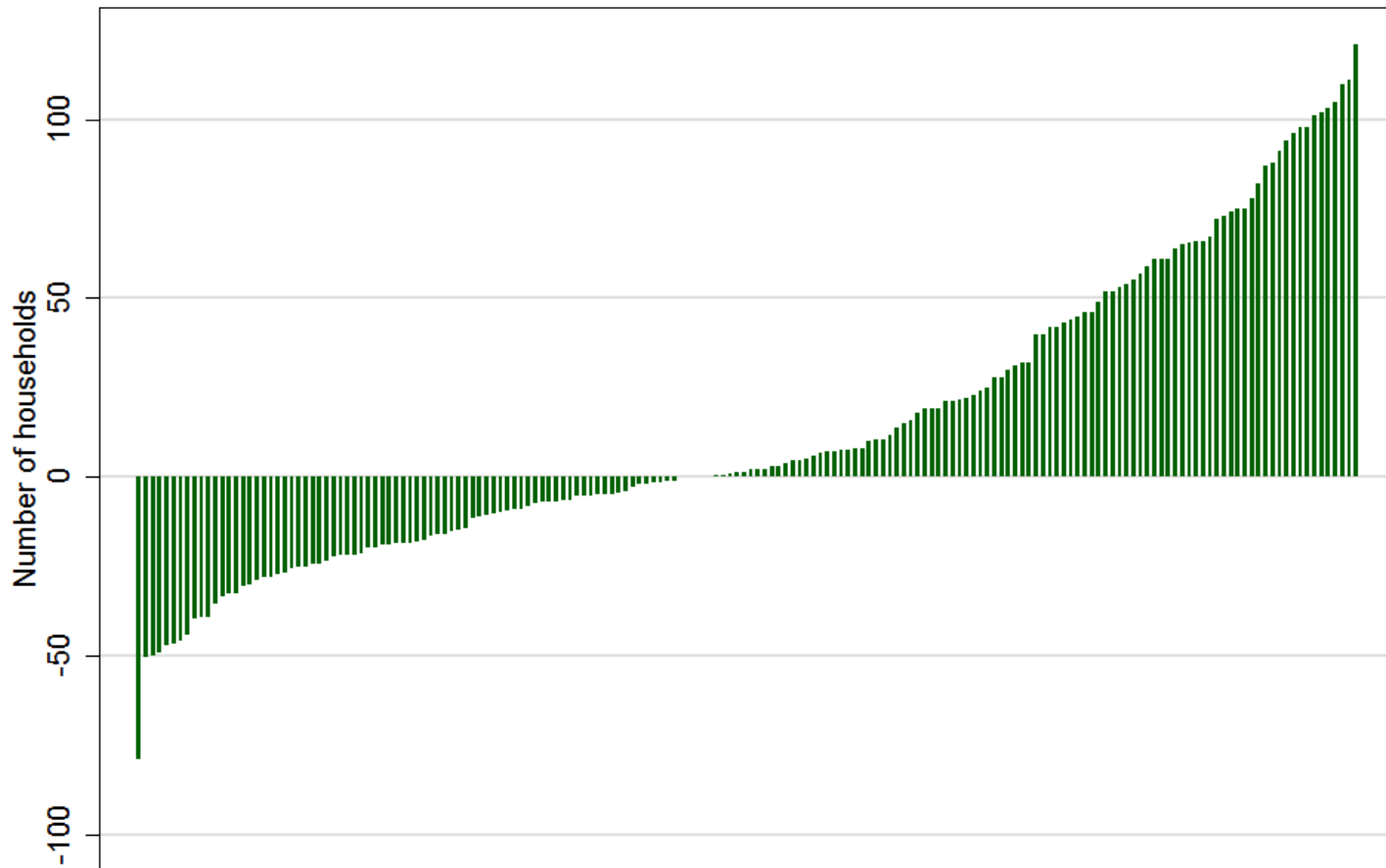


Medical record review and electronic data capture

- Large samples in high-risk populations
- Electronic data capture on Netbooks
- Rapid, automated quality check process with prompt feedback
- Identification of health facilities visited by households
- Detailed health facility observation and medical record review
- Dried blood spot analysis

# Denominator is Equally Important

Difference in Number of Households  
SM2015 Census - 2010 Census



# Linkage is Crucial (contraceptive coverage)

## Common indicator

- Modern contraceptive use among those in need
  - Interruptions in contraceptive use reflect suboptimal coverage

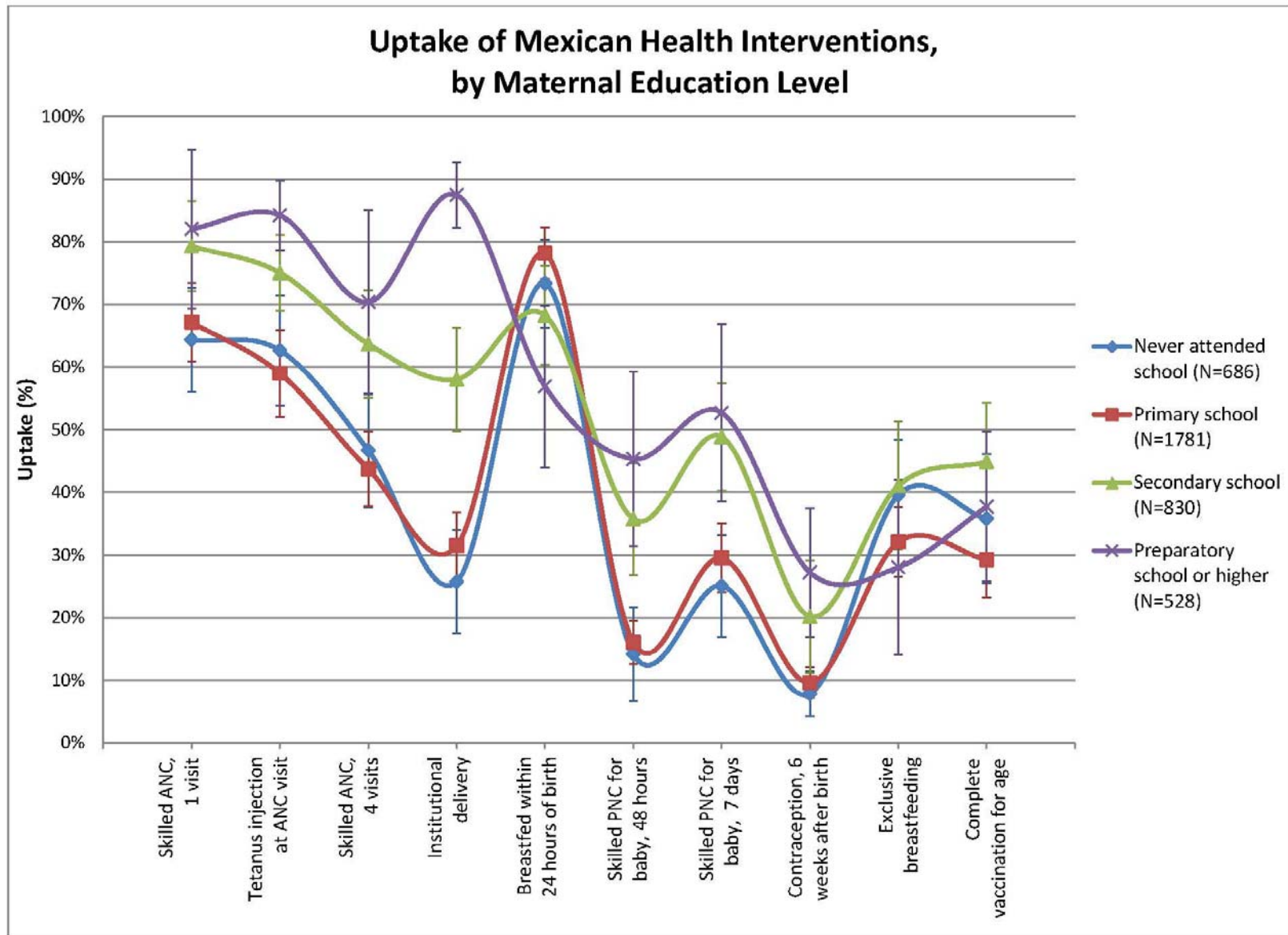
	Household		Health facility	
	% users	% interruptions	% with method in stock	% with stock-out in past 3 months
Male condom	10	15	93	14
Pill	3	4	87	35
Injectable	24	58	87	43
IUD	9	15	57	-
Implant	5	5	14	-
Emergency contraception	0	0	29	-

# Inconsistencies between household and health facility surveys

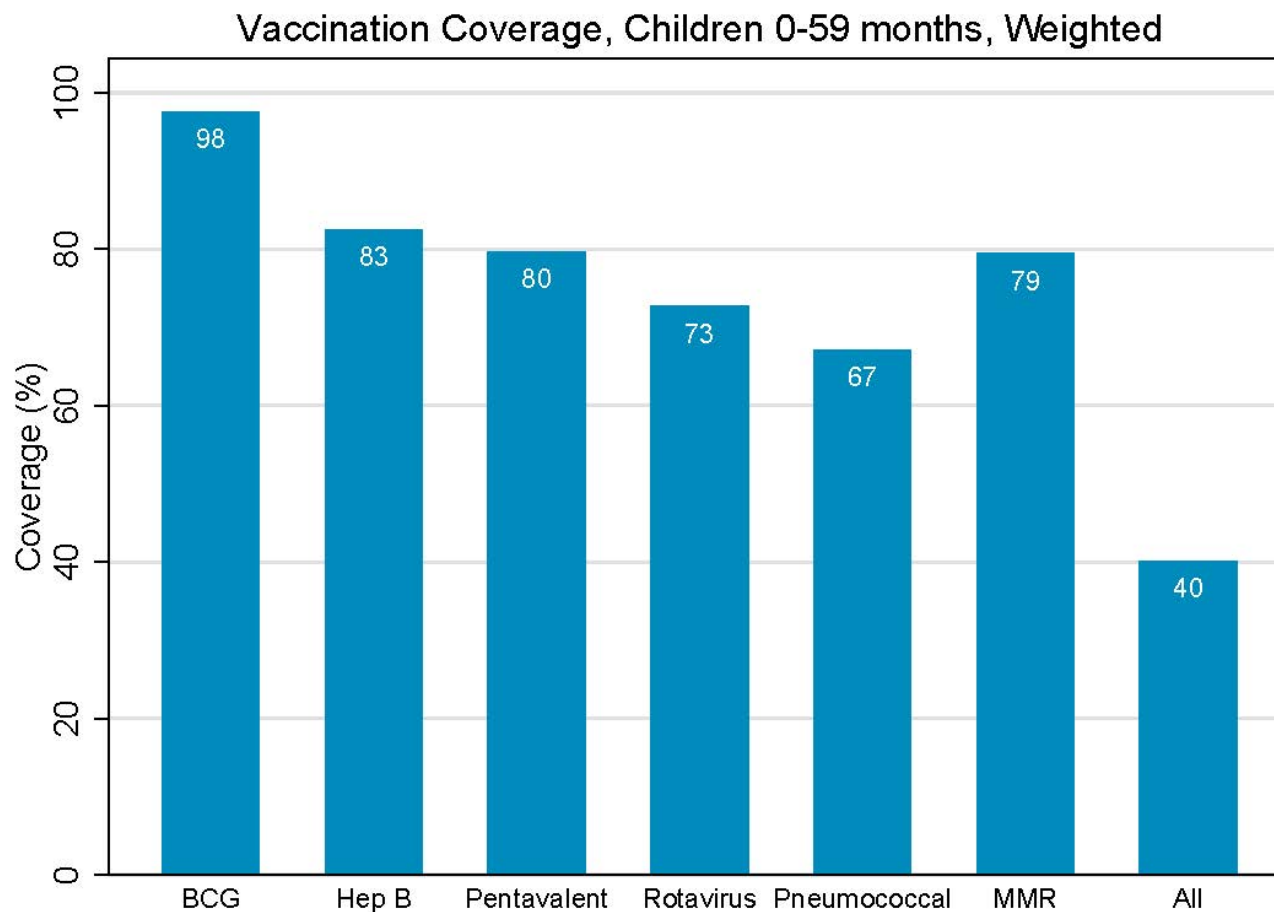
		Household (n=400 women) (%)	Health facility (n=412 records) (%)	Difference (% points)
<b>ANC in first trimester</b>		47	8	39 *
<b>Checks and tests during ANC</b>	Blood pressure	93	100	-7 *
	Fundal height	78	92	-14 *
	Syphilis test	12	45	-33 *
	Blood glucose	35	53	18 *

\* p < 0.05

# Chiapas: Continuum of Care



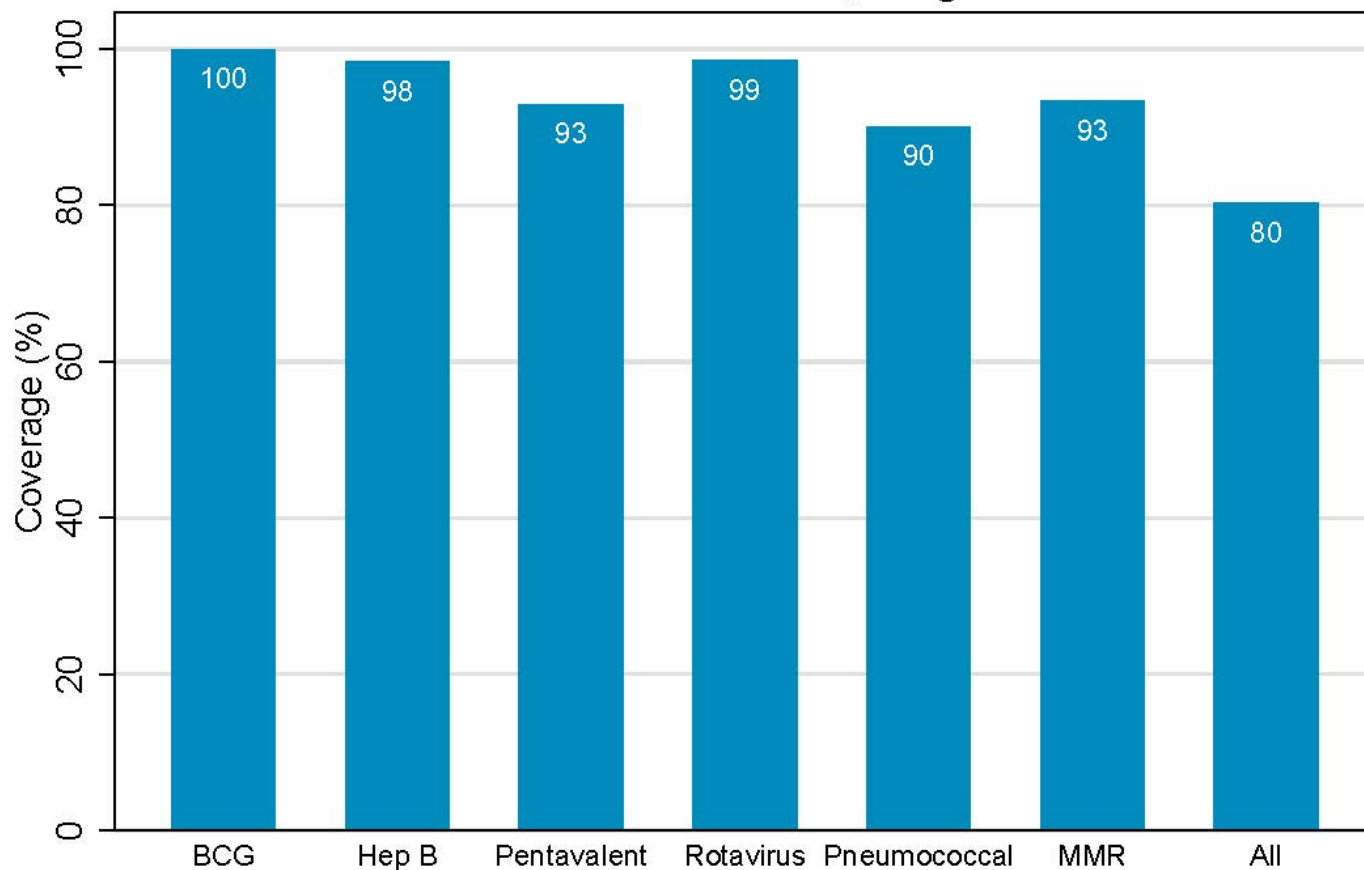
# Immunization: Chiapas





# Vaccination: Missed Opportunities

Missed Opportunities: Vaccination Coverage,  
Children 0-59 months, Weighted



# MMR coverage among children vaccinated at SM2015 facilities, by stock

Facility stock	MMR vaccination for age*
Facilities with <b>MMR vaccine <u>in stock</u></b> at time of survey	75.4% (67.5, 83.3%)
Facilities with <b>MMR vaccine <u>not in stock</u></b> at time of survey	53.8% (39.7, 68.0%)

\*Children ages 12-59 months with any vaccinations whose caregiver reported visiting a SM2015 health facility for vaccinations

# Measurement Challenges

- Household survey
  - Self-reporting and expectations
- Health facility survey
  - Are we measuring the quality of care or quality of record-keeping?
- Culture and contraception

# Conclusions

- Wide disparities in health profile
  - Wide variation in facilities' capacities and functioning
  - Management of facilities is a main driver
  - Lots of missed opportunities
  - Culture is crucial
- 
- SM2015 will improve health
  - Result-based financing is a good model

# Thank You

For more information:

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