

# Salud Mesoamérica Initiative: 36-month Follow-up Results

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# Outline

- **Introduction**
- First Operation Indicator Results
- Second Operation Indicator Results
- Conclusions and Future Activities

# IHME Team



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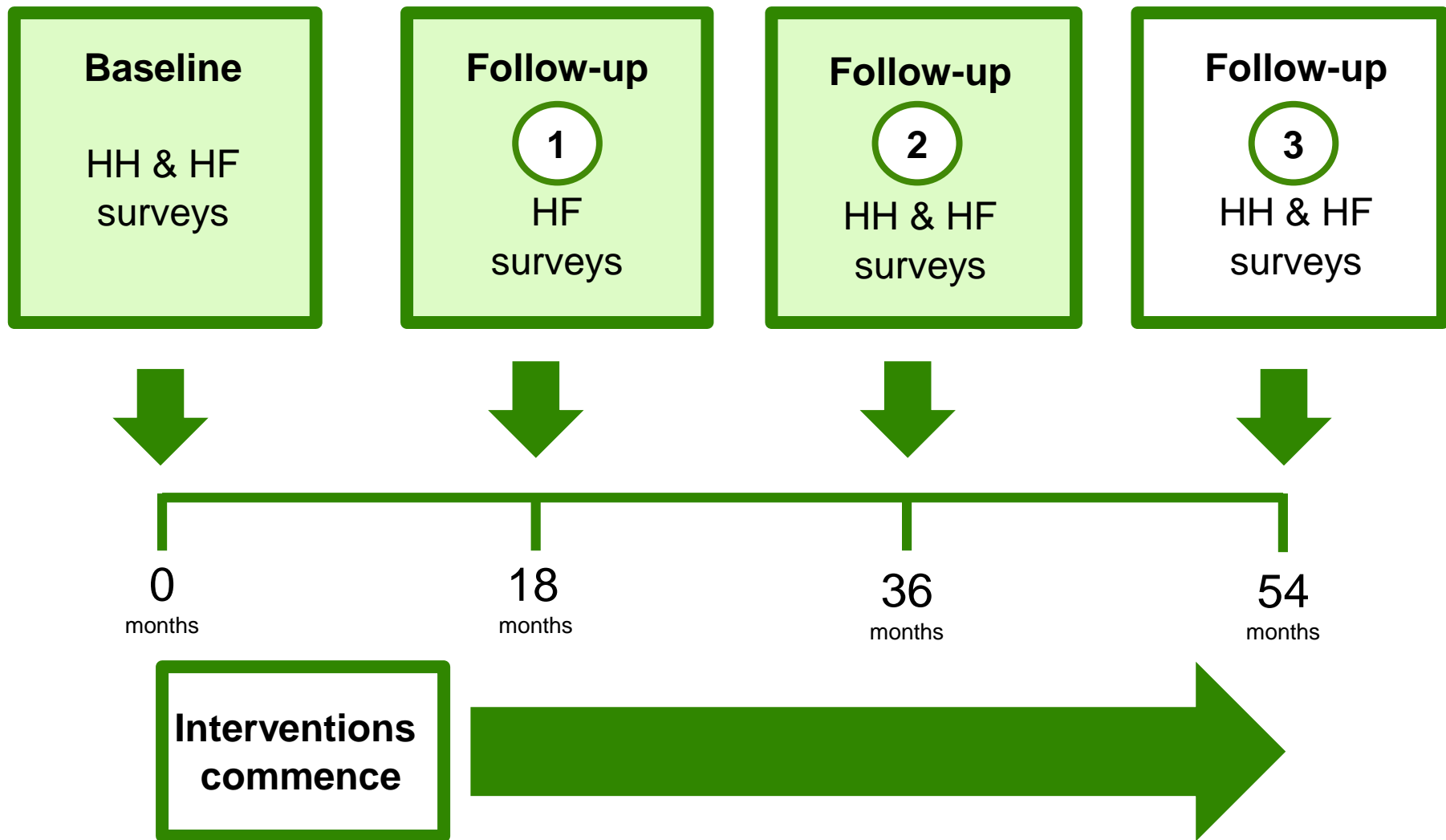


Rebecca Cogen  
Data Analyst

# IDB Team



# SMI evaluation design



# Household Survey

- Household characteristics
- Expenditure and health expenditure
- Health service utilization (women and children)
- Family planning, reproductive history
- Child health, breastfeeding, immunization
- Physical measurements
  - Weight, height, hemoglobin
- Dried blood spots (DBS) in Chiapas
- Water quality in Panama



Honduras, May 2017



# Health Facility Survey

- Questionnaire administered to facility manager
- Physical observation
  - Equipment and inputs
  - Pharmaceuticals
  - Review of registries to detect stock outs
  - Posters and health promotion materials
- Medical record review
  - Record quota according to characteristics of health unit
    - Antenatal and postnatal care
    - Deliveries
    - Maternal and neonatal complications
    - Child growth and development, deworming



Nicaragua, May 2017

# SMI Evaluation Innovations



Medical record review and electronic data capture

- Ability to link information
- Large samples in high-risk populations
- Census for denominator
- Electronic data capture on Netbooks
- Rapid, automated quality check process with prompt feedback
- Detailed health facility observation and medical record review
- Dried blood spot analysis (Chiapas)



# Rigorous Data Quality Control



Nicaragua fact finding, May 2017

- Field supervision
- Fact finding visits
- Advanced in-survey verification
- Continuous data verification in real time
  - GPS coordinates
  - Protocol compliance
  - Completeness
  - Uniqueness
  - Length of time to complete surveys
  - Checks by interviewer
  - Checks across multiple survey modules
  - Comparison of results to previous rounds

# Sample description – Households

	Baseline # HH		36-month # HH	
	Intervention	Comparison	Intervention	Comparison
Honduras	1,526	1,445	1,683	756
El Salvador	3,625	n/a	1,029	n/a
Nicaragua	1,300	771	1,853	774
Belize*	n/a	n/a	n/a	n/a
<b>Total</b>	<b>6,451</b>	<b>2,216</b>	<b>4,565</b>	<b>1,530</b>

\*Lot Quality Assurance Sampling instead of census and household survey

# Sample description – Women

	Baseline # Women		36-month # Women	
	Intervention	Comparison	Intervention	Comparison
Honduras	1,868	1,474	2,124	975
El Salvador	4,730	n/a	1,436	n/a
Nicaragua	1,720	1,103	2,324	1,047
Belize*	351	n/a	434	n/a
<b>Total</b>	<b>8,669</b>	<b>2,577</b>	<b>6,318</b>	<b>2,022</b>

\*Lot Quality Assurance Sampling instead of household survey

# Sample description – Children

	Baseline # Children		36-month # Children	
	Intervention	Comparison	Intervention	Comparison
Honduras	1,622	1,522	1,690	802
El Salvador	3,328	n/a	870	n/a
Nicaragua	1,407	818	1,818	735
Belize*	311	n/a	480	n/a
<b>Total</b>	<b>6,668</b>	<b>2,340</b>	<b>4,858</b>	<b>1,537</b>

\*Lot Quality Assurance Sampling instead of household survey

# Sample description – Health Facilities

	Baseline		18-month	36-month	
	Intervention	Comparison	Intervention	Intervention	Comparison
Honduras	59	31	60	60	30
El Salvador	65	n/a	60	60	n/a
Nicaragua	40	24	60	60	30
Belize	39	n/a	38	20	n/a
<b>Total</b>	<b>203</b>	<b>55</b>	<b>218</b>	<b>200</b>	<b>60</b>

# Outline

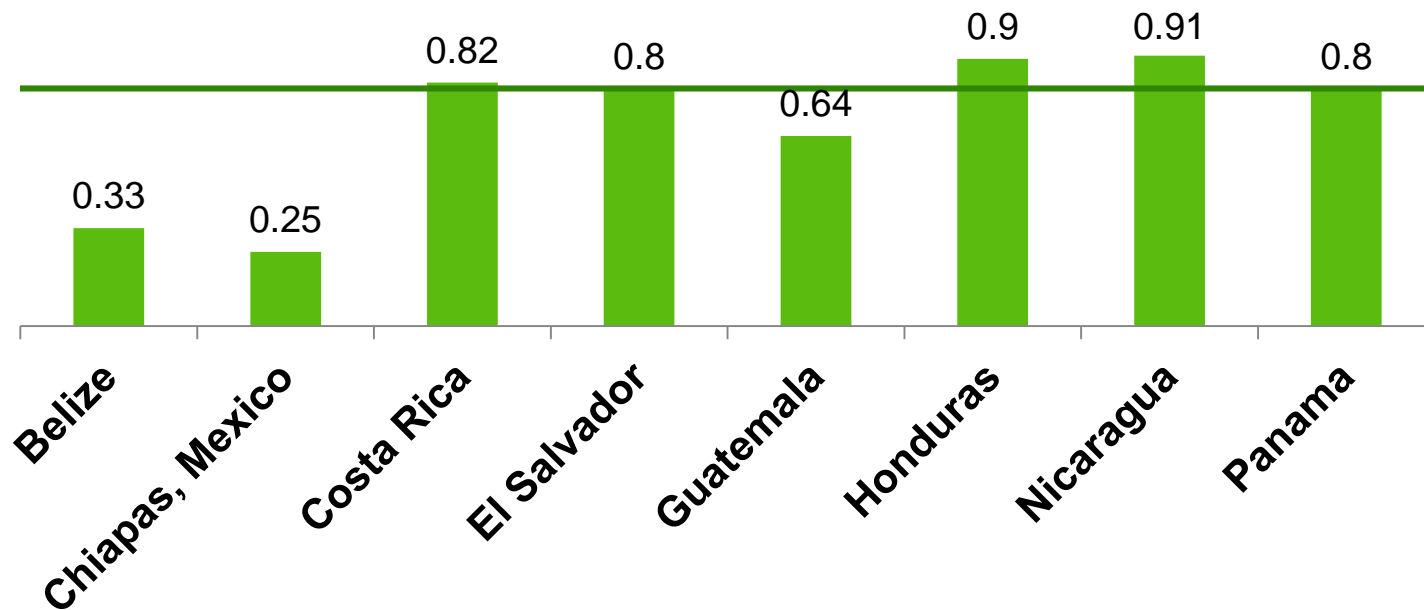
- Introduction
- **First Operation Indicator Results**
- Second Operation Indicator Results
- Other Results coming from SMI
- Conclusions and Future Activities



# SMI First Operation Results

- 5 countries met first round targets, 3 did not
- While performance targets not met in some countries, significant improvements still observed across the board

## Final Scores (average of supply-side indicators)



# Guatemala: Health facilities with availability of inputs and equipment necessary for basic child care

Indicator 7010: Health facilities with availability of inputs and equipment necessary for basic child care			
	Baseline (%)	18-Month (%)	24-Month (%)
<b>Indicator 7010</b>	<b>4.8</b>	<b>10.9</b>	<b>100</b>
Equipment	11.1	69.1	100
Standing balance/scale for children	69.8	100	100
Pediatric scale/salter scale	100	90	100
Height rod	58.7	100	100
Pediatric blood pressure apparatus	12.5	44.4	100
Stethoscope	29.8	98.2	100
Pediatric stethoscope	17.6	45	100
Oral/axillary thermometer	87.2	94.6	100
Vaccines	82.9	15.9	100
Pentavalent (DPT + HepB + Hib)	94.3	68.2	100
Polio/OPV	91.4	52.3	100
MMR	94.3	43.2	100
Rotavirus	91.4	52.3	100
Pneumococcal conjugate	91.4	31.8	100
BCG	97.1	45.5	100
Pharmacy inputs	47.6	72.7	100
Packets/envelopes of ORS	85.7	92.7	100
Ferrous sulfate drops/micronutrients	88.9	94.5	100
Zinc sulfate/zinc gluconate	68.3	83.6	100
Albendazole/mebendazole	63.5	94.5	100
Erythromycin/amoxicilin/ penicilin benzathine	100	100	100
Ringer's lactate/Hartmann's solution/ saline solution/dextrosa <sup>1</sup>	100	100	100

<sup>1</sup>Dextrosa used as an alternative at complete facilities only

# Belize: Health facilities with availability of equipment necessary for prenatal and postpartum care

	Baseline (%)	18-Month (%)
<b>Indicator 7020</b>	<b>2.9%</b>	<b>17.2%</b>
<b>Equipment</b>		
Scale with measuring rod	60.0	79.3
Gynecological exam table	60.0	100
CLAP obstetric tape	54.3	96.6
Gestogram	34.3	100
Lamp	48.6	96.6
Sphygmomanometer <sup>1</sup>	48.6	100
Stethoscope	57.1	100
Fetoscope	22.9	93.1
Thermometer	31.4	100
Reflex Hammer	8.6	65.5
Perinatal maternal medical history	60	96.6
Perinatal maternal card	60	96.6
Referral forms	34.3	96.6
Robes or sheets for patients	40	89.7
Set for IUD Insertion <sup>2</sup>	25	100
Equipment cart <sup>2</sup>	0	100

	Baseline (%)	18-Month (%)
<b>Indicator 7020</b>	<b>2.9%</b>	<b>17.2%</b>
<b>Pharmacy inputs</b>		
(Iron + Folic acid)/ Multivitamin	65.2	93.3
Nitrofurantoin	30.4	53.3
Cephalexin	43.5	53.3
Tetanus vaccine <sup>3</sup>	70	100
Ayre palettes/swabs	26.1	73.3
Pap smear slides	n/a	76.7
<b>Laboratory inputs</b>		
Rapid Syphilis test/dark field microscope/ equipment for enzyme immunoassay <sup>4</sup>	75	100
Rapid HIV/AIDS test/fluorescence microscope <sup>4</sup>	50	100
Urine protein strips/urinalysis equipment	100	100
Blood glucose strips/glucose meter	0	75
Hemocue/automated cell counter	50	100
Microcuvettes <sup>5</sup>	100	50
Pregnancy test kit <sup>5</sup>	100	100

<sup>1</sup>Missing data for 1 ambulatory facility

<sup>2</sup>Not required for ambulatory facilities

<sup>3</sup>Only facilities that stored vaccines reported on Tetanus availability at follow-up

<sup>4</sup>Rapid test not asked at baseline

<sup>5</sup>Only required in basic facilities

# Chiapas: Health facilities with availability of inputs and equipment necessary for basic child care

Indicator 7010: Health facilities with availability of inputs and equipment necessary for basic child care			
	Baseline (%)	18-Month (%)	PIPM (%)
<b>Indicator 7010</b>	<b>7.3</b>	<b>40.7</b>	<b>100</b>
Equipment	27.3	64.4	100
Pediatric scale/salter scale	70.9	81.7	100
Child scale/salter scale	52.7	98.3	100
Height rod	69.1	100	100
Pediatric stethoscope	38.9	50	100
Stethoscope	60	100	100
Pediatric blood pressure apparatus	22.2	50	100
Digital/mercury thermometer	97.3	95.6	100
Growth & development card/National vaccination card/National health card (0-9 years old)	97.3	100	100
Vaccines	26.9	29.6	100
Pentavalent (DPT + HepB + Hib)	73.1	59.3	100
MMR	80.8	88.9	100
Rotavirus	73.1	81.5	100
Pneumococcal conjugate	34.6	40.7	100
BCG	69.2	48.1	100
Pharmacy inputs	40.4	88.3	100
Oral rehydration salt/serum	75	100	100
Ferrous sulfate drops/micronutrients for children <sup>1</sup>	57.7	90	100
Albendazole/mebendazole	76.9	100	100
Antibiotics	76.6	98	100
Ringer's lactate/Hartmann's solution/saline solution	31.3	100	100

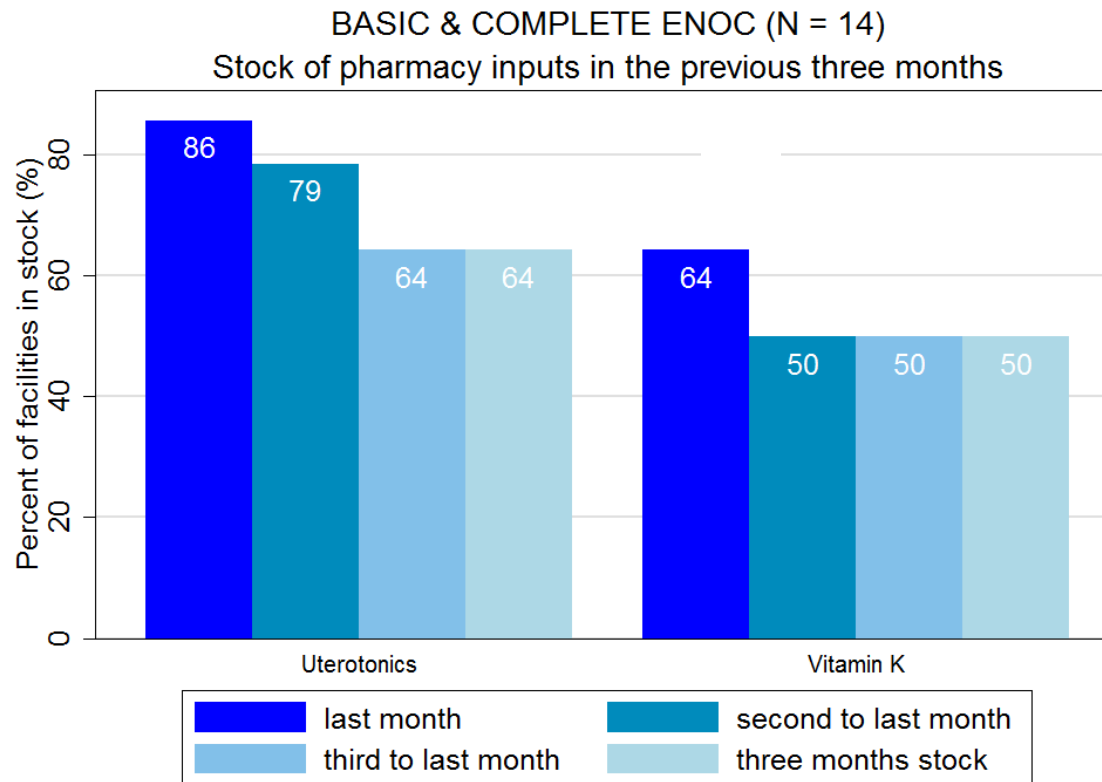
<sup>1</sup>Micronutrients only an alternative at basic and complete facilities

<sup>2</sup>Antibiotics = erythromycin/ampicillin/penicillin benzathine in ambulatory facilities with a doctor

Antibiotics = crystalline penicillin/ampicillin/amoxicillin in basic and complete facilities

# Chiapas: Stock of drugs in three months prior to day of survey

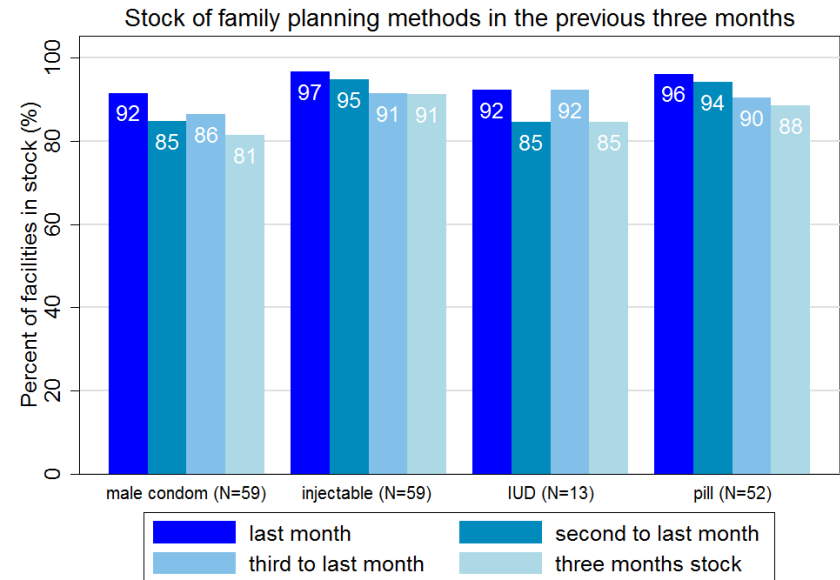
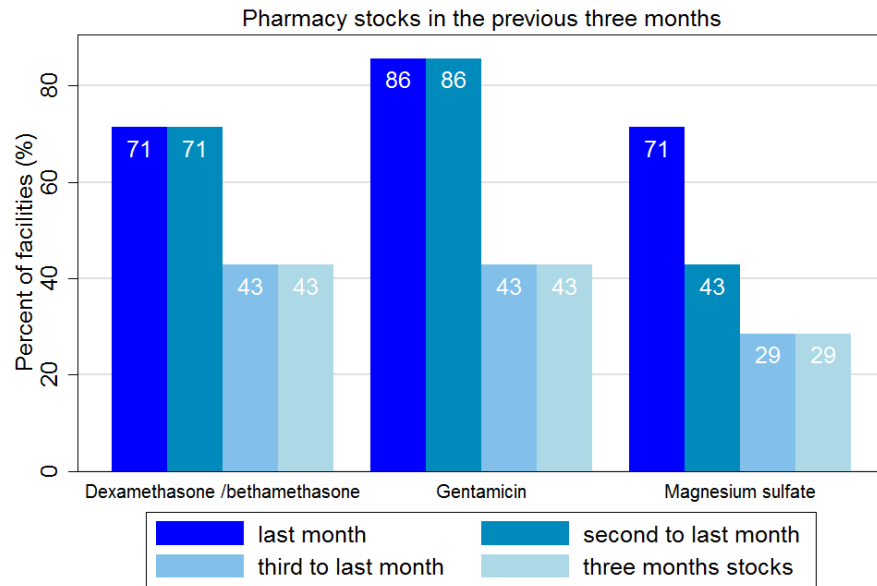
- Stock-outs were an issue during first operation evaluation, but became consistently better in the more recent months



**Note:** Uterotonics = Ergonovine maleate/Egometrine/Oxytocin

Institute for Health Metrics and Evaluation

# Chiapas: Stock in three months prior to day of survey

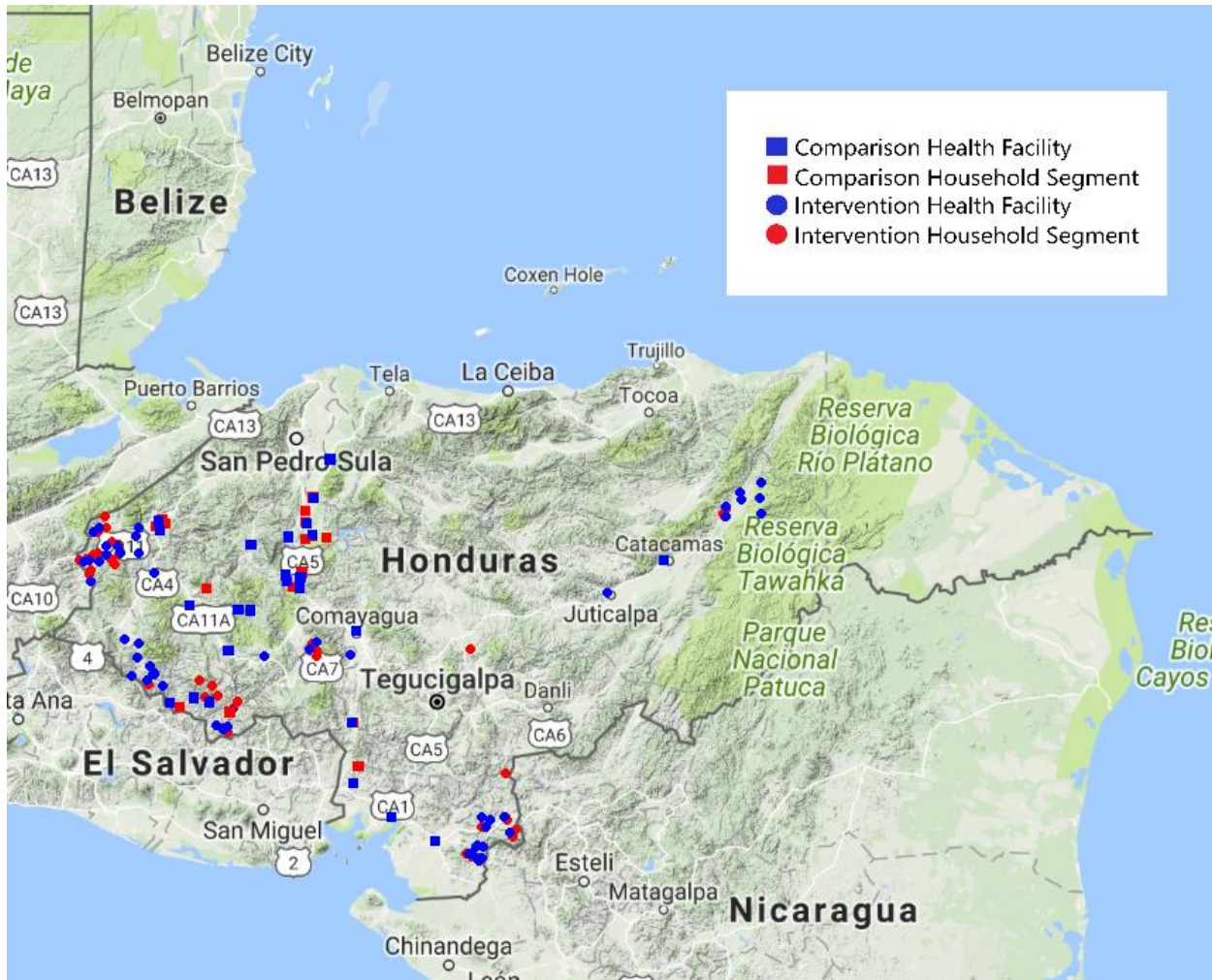




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# Honduras



# Honduras Performance Indicator Results

#	Indicator short decription	Data source	Intervention						Comparison				Target	Passing
			Baseline (2013) % CI		First Follow-up (2014) % CI		Second Follow-up (2017) % CI		Baseline (2013) % CI		Second Follow-up (2017) % CI			
3030	4 ANC with quality <sup>1</sup>	MRR	23.2%	(16 - 32)	66.1%	(60 - 72)	94.1%	(91 - 97)	43.1%	(30 - 57)	58.2%	(47 - 69)	33.7%	YES
3040	ANC within first trimester <sup>2</sup>	MRR	59.2%	(50 - 68)	63.6%	(57 - 70)	89.7%	(86 - 93)	60.3%	(47 - 73)	69.7%	(58 - 80)	63.1%	YES
4010	Institutional delivery	HH	68.6%	(61 - 76)	n/a		84.7%	(78 - 89)	69.4%	(63-75)	77.9%	(70-85)	76.6%	YES
4030	Postpartum checkup within 7 days	HH	47%	(40 - 54)	n/a		60.4%	(53 - 67)	51.7%	(46-58)	73.0%	(61-82)	57.0%	YES
4050	Immediate postpartum care for women <sup>3</sup>	MRR	67.5%	(60 - 75)	28.6%	(18 - 41)	91.2%	(85 - 95)	70%	(59 - 79)	76.8%	(70 - 83)	80%	YES
4065	Partograph filled according to the norm	MRR	n/a		91.3%	(84 - 96)	97.9%	(93 - 100)	n/a		99.1%	(95 - 100)	80%	YES
4070	Neonatal complications managed according to the norm <sup>4</sup>	MRR	10%	(4 - 20)	n/a		42.9%	(32 - 54)	7.8%	(3 - 16)	6.3%	(2 - 14)	36.9%	YES
4080	Obstetric complications managed according to the norm <sup>4</sup>	MRR	38.5%	(29 - 48)	n/a		62.7%	(55 - 70)	26.4%	(18 - 36)	49.6%	(41 - 58)	51%	YES
4140	Children 0-59 months with pneumonia follow-up within two days <sup>5</sup>	MRR	87%	(80 - 92)	61.5%	(53 - 70)	95.3%	(91 - 98)	92.2%	(83 - 97)	83.3%	(73 - 91)	79.8%	YES
5060	Children 0-59 months with diarrhea treatment according to the norm <sup>6</sup>	MRR	n/a		39%	(33 - 46)	95.3%	(92 - 98)	n/a		68.3%	(58 - 77)	50%	YES
5070	Micronutrient consumption	HH	0.1%	(0 - 1)	n/a		29.5%	(24 - 36)	0.0%	-	2.4%	(1-7)	15.1%	YES

1 The baseline only captured fetal heart rate, fetal movement, and uterine height at the first visit if at the appropriate gestational age. RPR was not captured at baseline as an alternative to VDRL lab test. The original baseline value was 23.7%. To ensure comparability across rounds, the baseline estimate was recalculated to 23.2%.

2 The original baseline value was 51.1%. To ensure comparability across rounds, the baseline estimate was recalculated to 59.2%.

3 Baseline & first follow-up did not capture heart rate as an alternative to pulse.

4 Data from medical records from the baseline timeframe of complications were recollected during the 36-month evaluation. Indicator values and definitions have been updated accordingly.

5 Original baseline value was 71.8%. This indicator was recalculated due to a change in the indicator definition to include any visit within 2 days rather than limited to only visits at exactly 2 days.

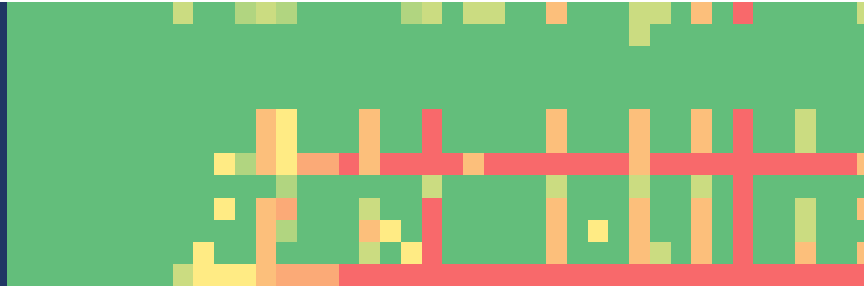
6 Zinc was not captured and thus the baseline cannot be calculated



# Honduras 3030: 4 ANC with Quality

## HND I3030 - BL

At least 4 ANC visits  
 Weight + blood pressure checked at first  
 Fundal height checked at first visit (if gestational age  $\geq 22$  weeks at visit)  
 Fetal movement + fetal heart rate checked at first visit (if gestational age  $>20$  weeks at visit)  
 Blood group lab test at least once  
 RH factor lab test at least once  
 Blood glucose lab test at least once  
 HIV lab test at least once  
 Hemoglobin lab test at least once  
 VDRL lab test at least once  
 Urinalysis lab test at least once  
 I3030



## HND I3030 - 18m

At least 4 ANC visits  
 Weight + blood pressure checked at all visits  
 Fundal height checked (if gestational age  $\geq 22$  weeks at visit)  
 Fetal movement + fetal heart rate checked (if gestational age  $>20$  weeks at visit)  
 Blood group lab test at least once  
 RH factor lab test at least once  
 Blood glucose lab test at least once  
 HIV lab test at least once  
 Hemoglobin lab test at least once  
 VDRL lab test at least once  
 Urinalysis lab test at least once  
 I3030



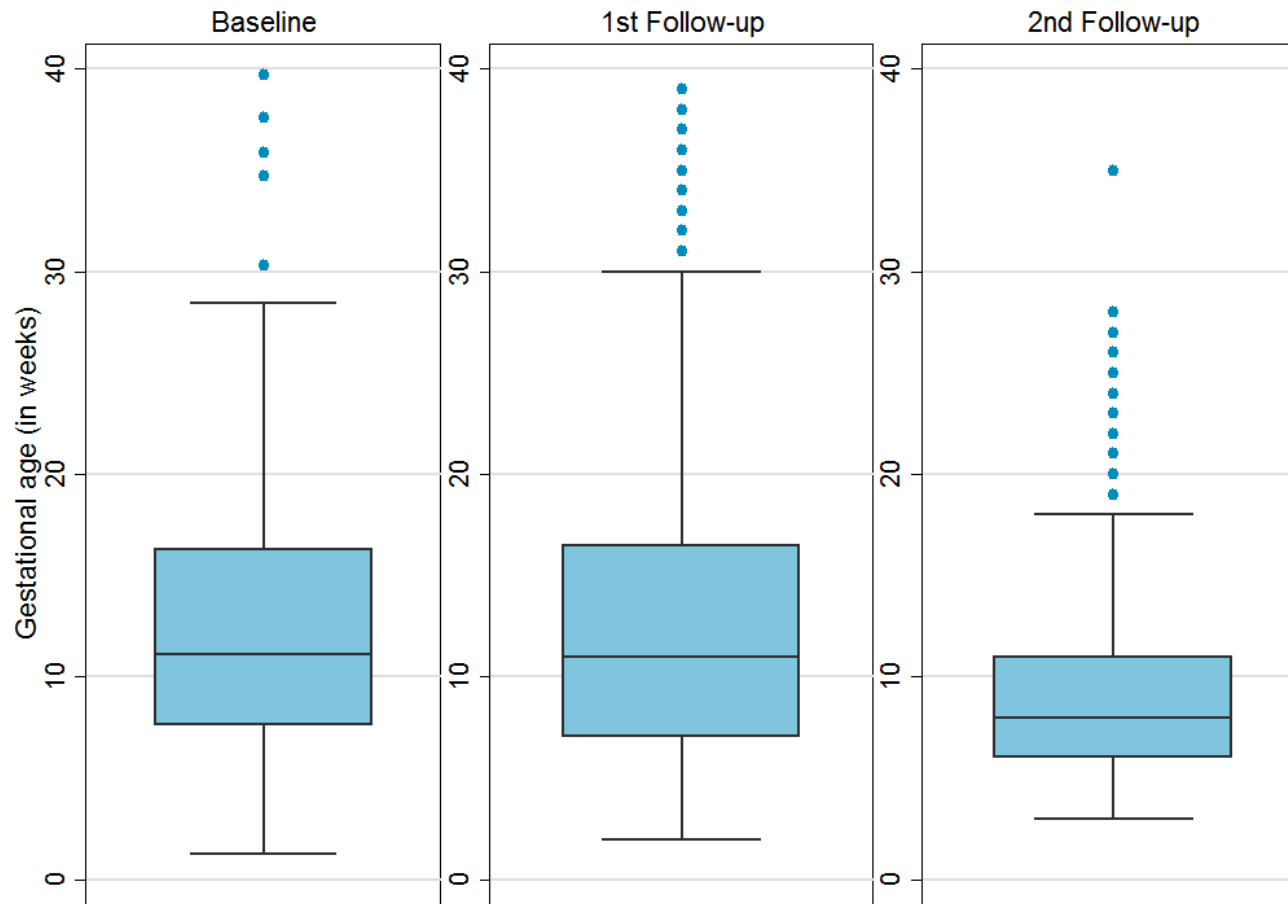
## HND I3030 - 36m

At least 4 ANC visits  
 Weight + blood pressure checked at all visits  
 Fundal height checked (if gestational age  $\geq 22$  weeks at visit)  
 Fetal movement + fetal heart rate checked (if gestational age  $>20$  weeks at visit)  
 Blood group lab test at least once  
 RH factor lab test at least once  
 Blood glucose lab test at least once  
 HIV lab test at least once  
 Hemoglobin lab test at least once  
 VDRL/RPR lab test at least once  
 Urinalysis lab test at least once  
 I3030



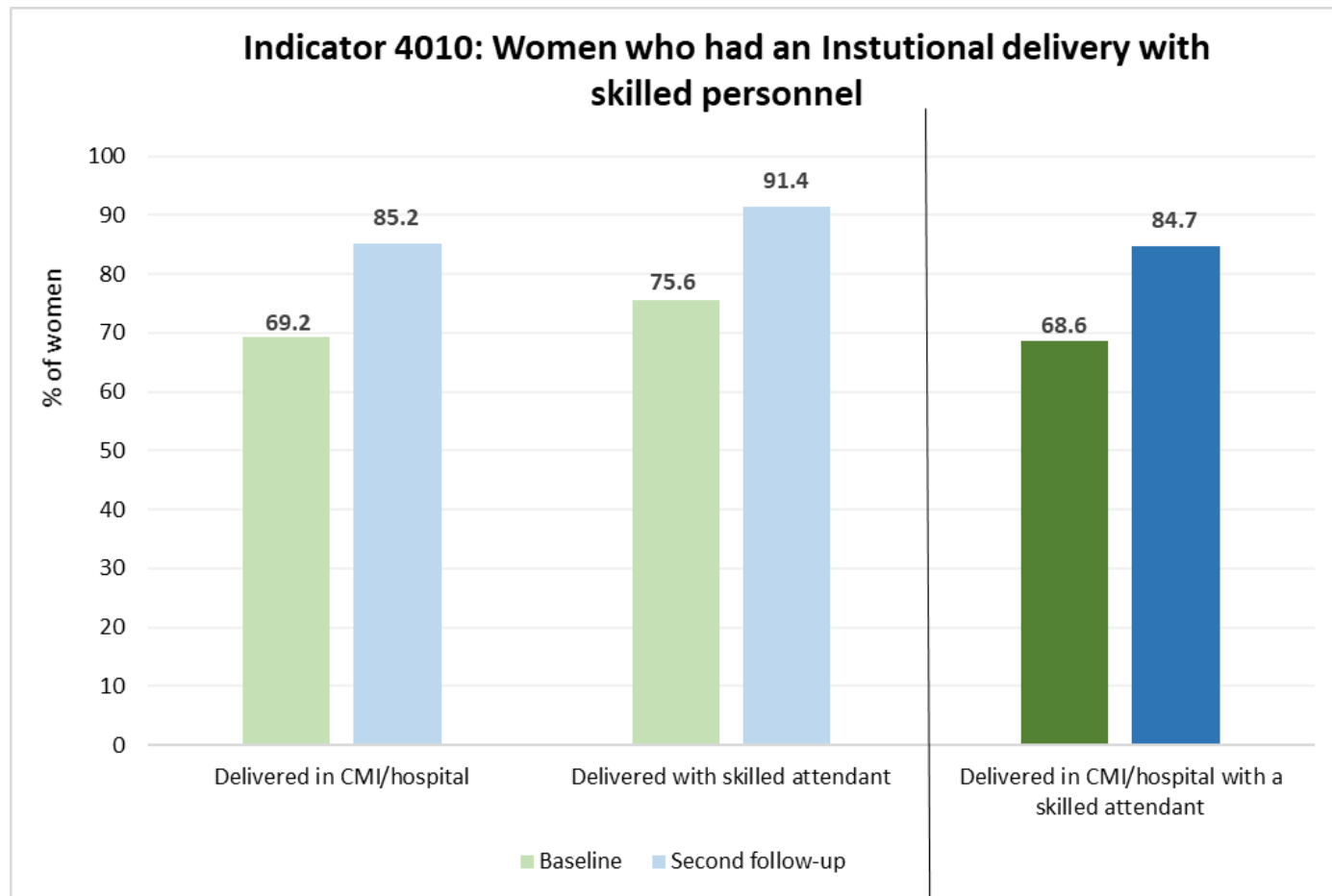
\*Intervention areas only

# Honduras 3040: ANC $\leq$ 12 weeks gestation



\*Intervention areas only

# Honduras 4010: Institutional delivery



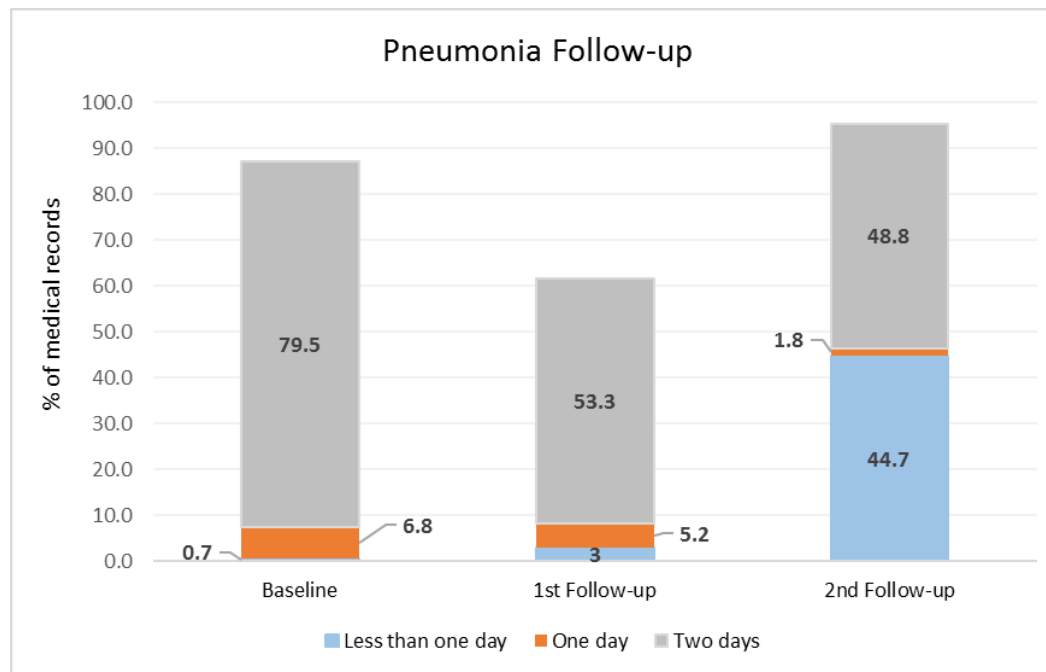
\*Intervention areas only



# Honduras 4140: Pneumonia follow-up visit

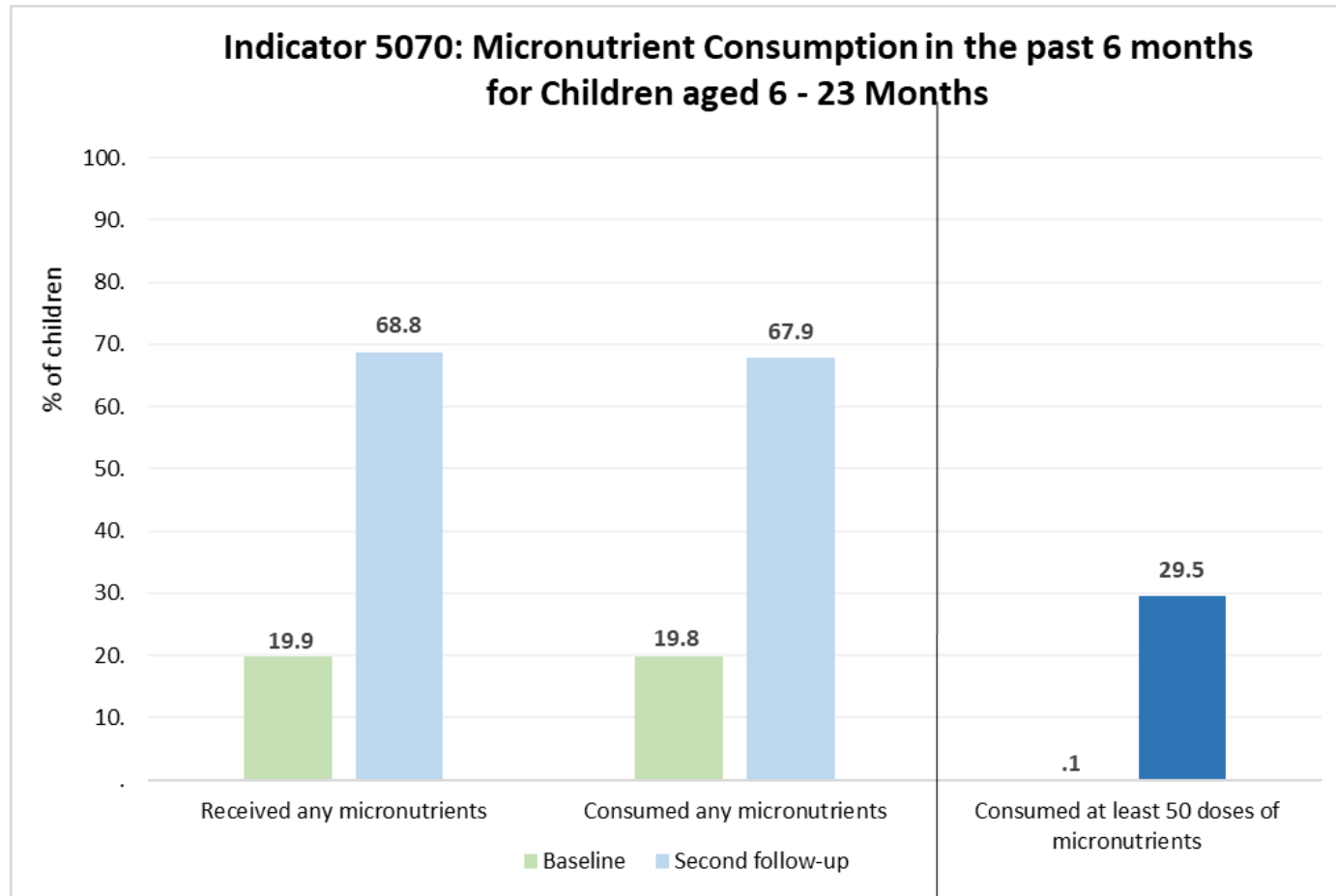
Denominator: Total number of pneumonia records sampled for children 0-59 months at ambulatory facilities, excluding cases of severe pneumonia.

Formula: Child follow-up appointment was  $\leq 2$  days after the date of diagnosis. If the date of diagnosis was on a Friday, the record passes is if the follow-up appointment was  $\leq 3$  days.

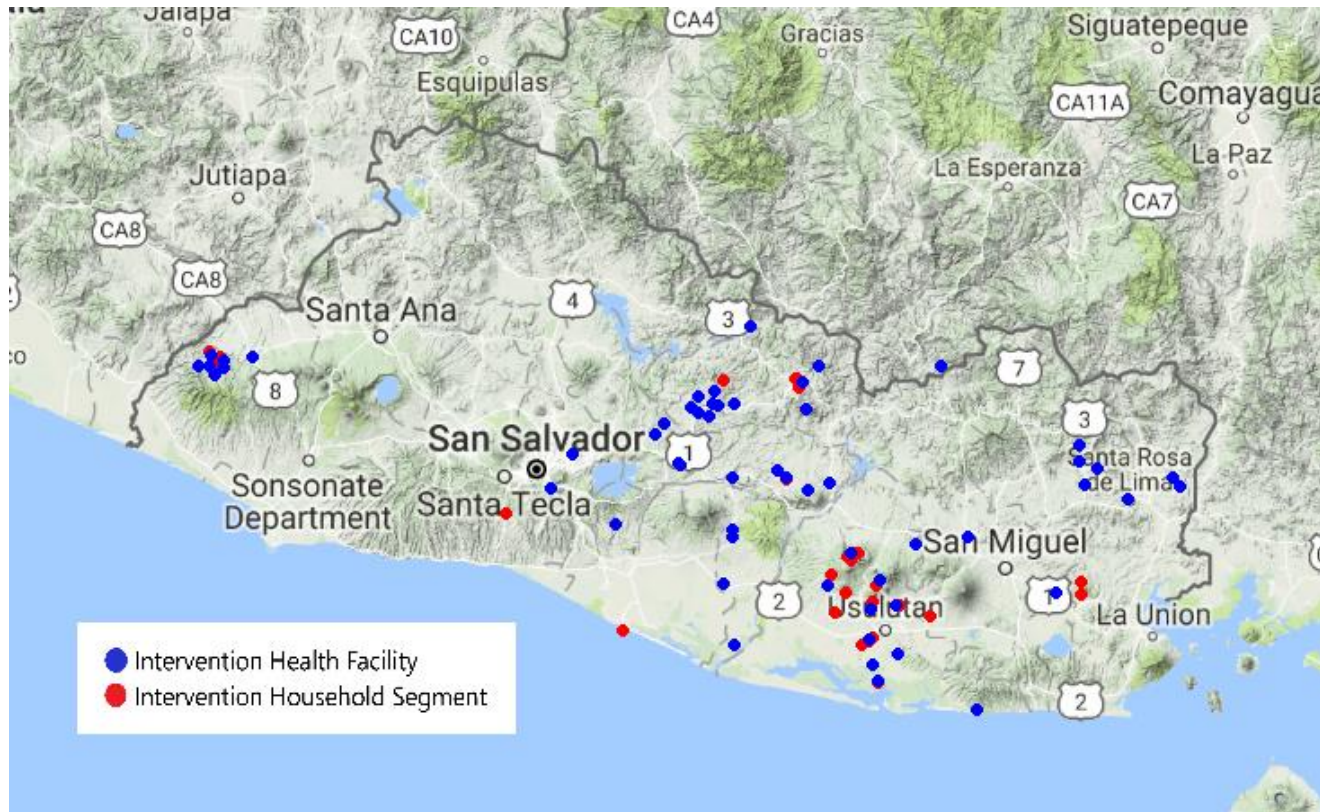


\*Intervention areas only

# Honduras 5070: Micronutrient consumption



# El Salvador



# El Salvador Performance Indicator Results

#	Indicator short decription	Intervention						Target	Passing
		Baseline (2011) <sup>1</sup>		First Follow-up (2014) <sup>2</sup>		Second Follow-up (2017)			
		%	CI	%	CI	%	CI		
1060	Children 6-23 mo with hemoglobin measurements < 110 g/L	47.0%	(44 - 50)	n/a		47.3%	(36 - 59)	36.5%	YES
2010	Current use of modern Family Planning Method	53.9%	(51 - 57)	n/a		75.0%	(70-79)	60.5%	YES
3030	4 ANC with Quality <sup>3</sup>	n/a		51.4%	(44 - 59)	63.9%	(58 - 70)	62.5%	YES
3041	ANC within first trimester <sup>4</sup>	n/a		58.7%	(51 - 66)	74.6%	(69 - 79)	74.9%	YES
4010	Most recent birth in last 2 years in-facility and attended by SBA	85.7%	(82 - 88)	n/a		98.3%	(96 - 99)	94.2%	YES
4031	Postpartum checkup one week after delivery <sup>5</sup>	81.2%	(78 - 84)	n/a		62.6%	(53 - 71)	91.6%	NO
5025	Children 12-23 months vaccinated for MMR according to vaccination card	65.5%	(61 - 70)	n/a		91.1%	(83 - 95)	73.6%	YES
5030	Children 12-59 mo who received 2 deworming doses in past year	36.2%	(33 - 39)	n/a		40.5%	(35 - 46)	56.4%	NO
5060	Mothers who gave their children ORS and zinc during last episode of diarrhea	4.5%	(3 - 7)	n/a		33.7%	(21 - 49)	24.4%	YES
8380	Completed birth plan at an Ecos facility <sup>6</sup>	n/a		n/a		86.3%	(82 - 90)	70%	YES

1 Baseline weights have been recomputed in accordance with updated methodology.

2 Medical records were not reviewed during baseline data collection. Medical record review results from the first follow-up measurements serve as a baseline for El Salvador

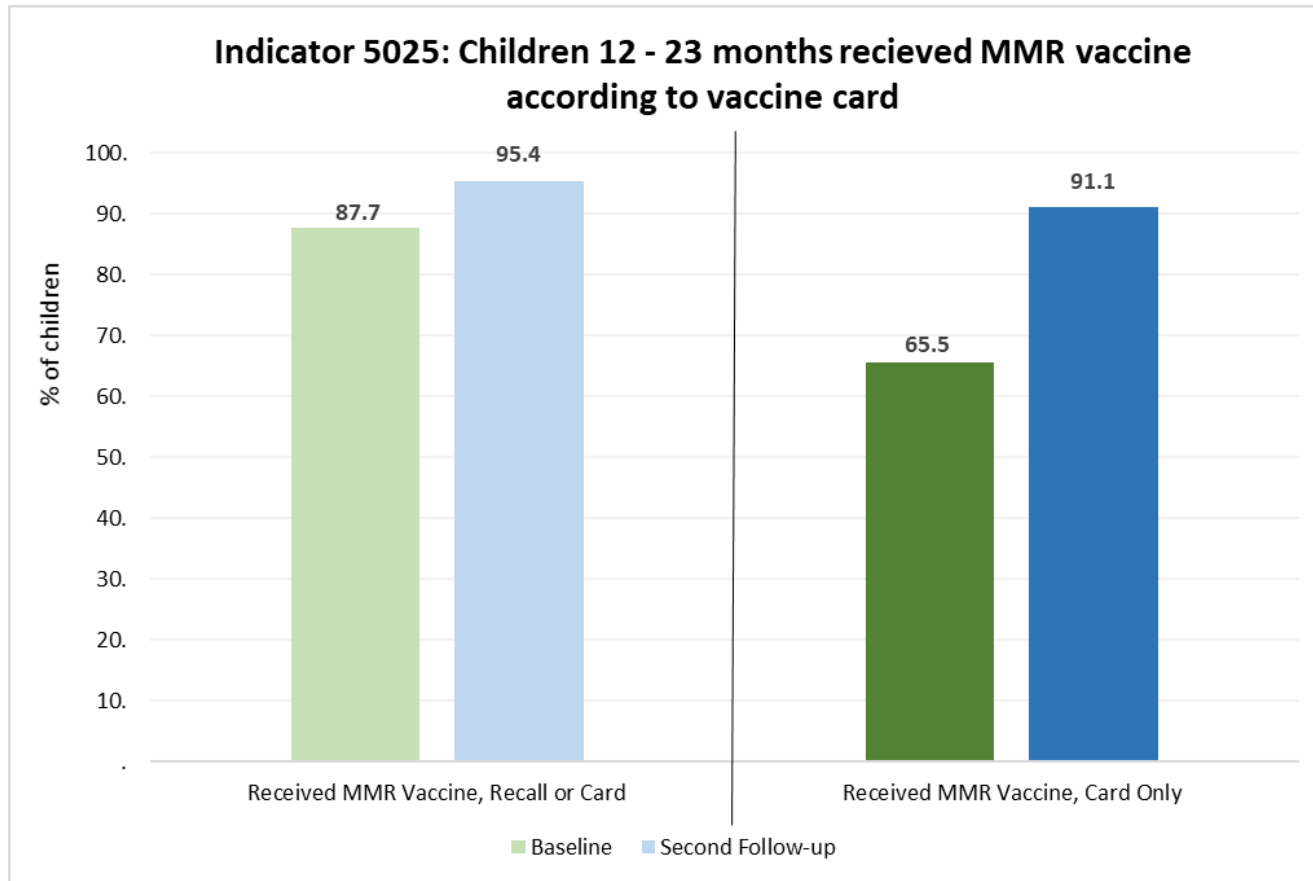
3 Referral to another facility for ANC care was not captured in the record at the first follow-up

4 Reported gestational age was used at the second follow-up, while calculated gestational age was used at the first follow-up

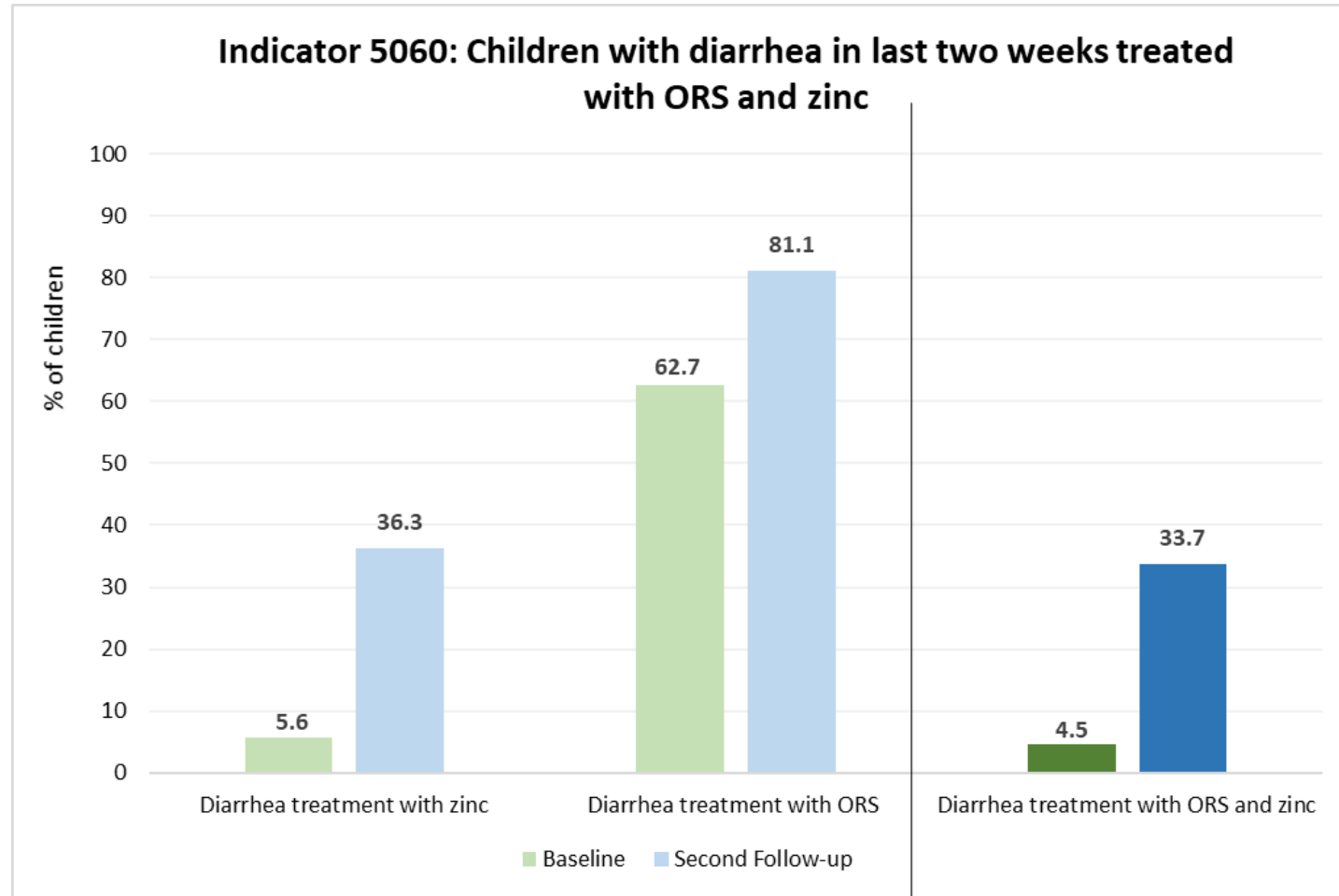
5 At baseline, women were asked only whether they had a postpartum checkup one week after delivery; at the second follow-up, women were asked additional questions and also passed this indicator if they indicated they had a postpartum checkup within 8 days of discharge from a health facility post-delivery.

6 Indicator was only measured at second follow-up

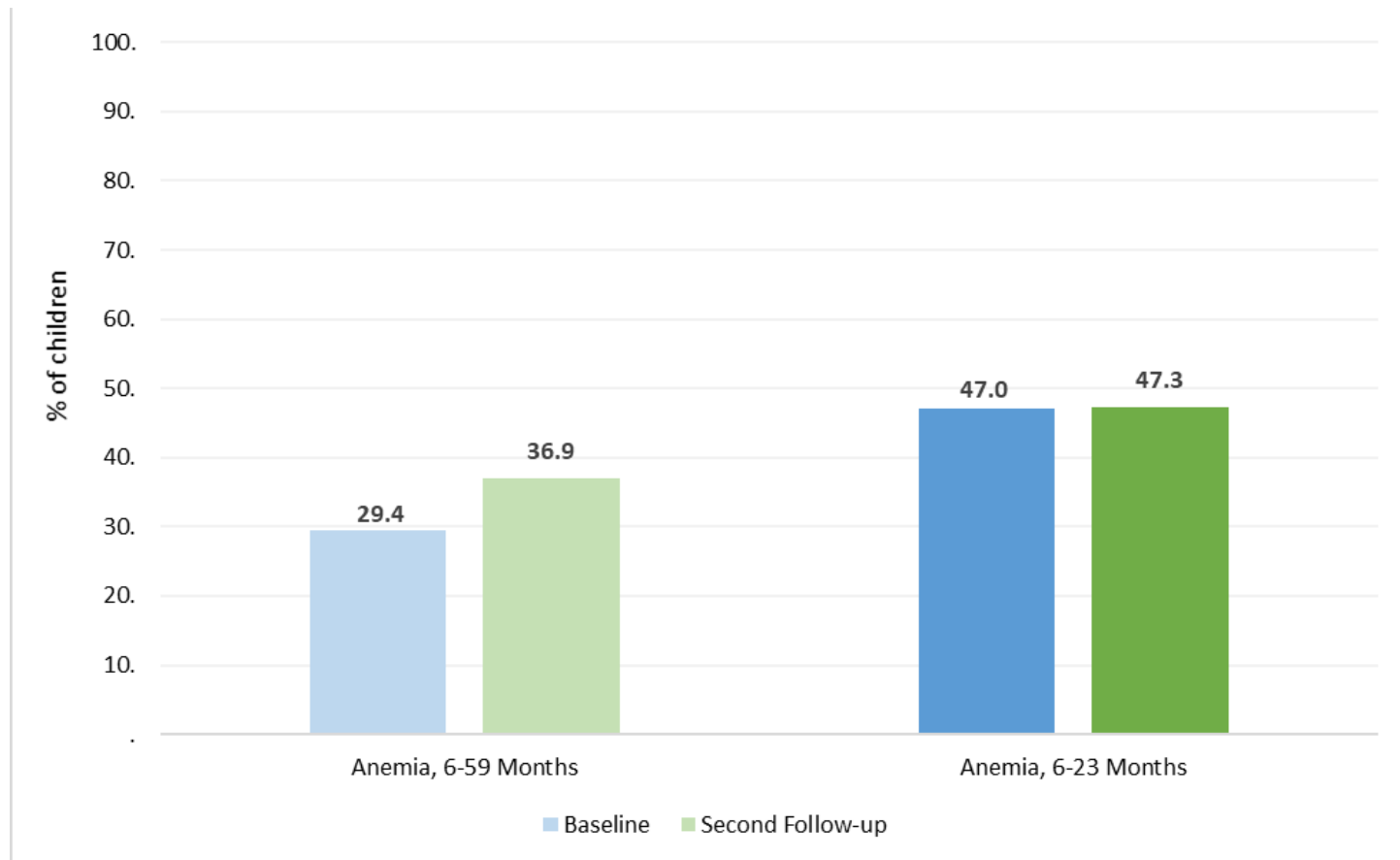
# El Salvador 5025: MMR Vaccine



# El Salvador 5060: Diarrhea treatment



# El Salvador 1060: Anemia



# El Salvador 3030: 4 ANC with Quality

## SLV I3030 - 18-MONTH (2014)

At least 4 ANC visits

Weight + blood pressure checked at all visits up to 4

Fundal height checked at first visit (if gestational age  $\geq 14$  weeks at visit)

Fetal movement + fetal heart rate checked at first visit (if gestational age  $>20$  weeks)

Blood group lab test at least once

RH factor lab test at least once

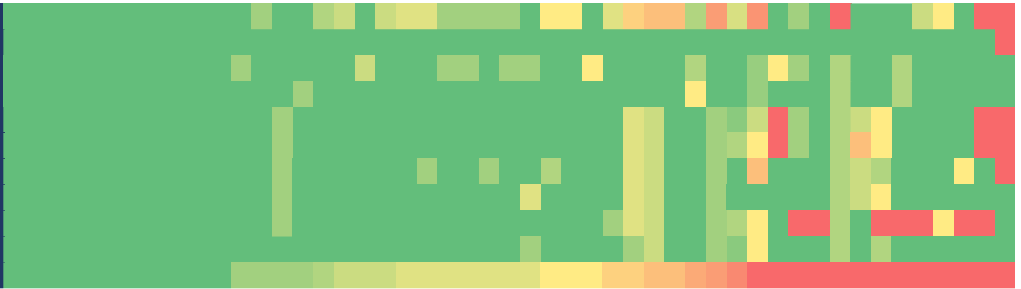
Blood glucose lab test at least once

HIV lab test at least once

Hemoglobin lab test at least once

Urinalysis lab test at least once

I3030



## SLV I3030 - 36-MONTH (2017)

At least 4 ANC visits

Weight + blood pressure checked at all visits up to 4

Fundal height checked (if gestational age  $\geq 14$  weeks at visit)

Fetal movement + fetal heart rate checked (if gestational age  $>20$  weeks at visit)

Blood group lab test at least once

RH factor lab test at least once

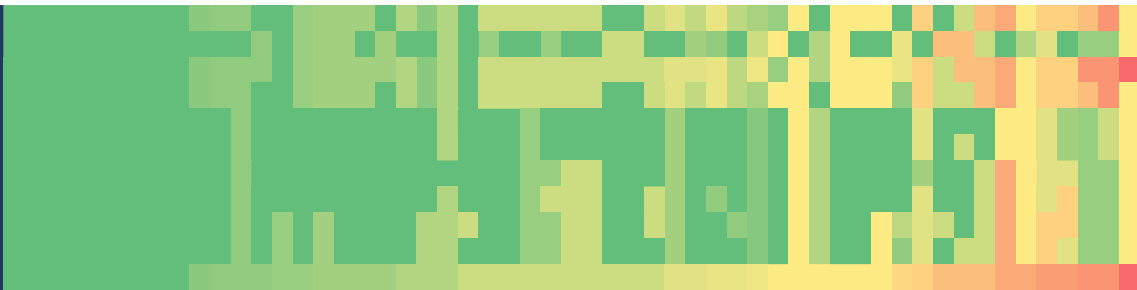
Blood glucose lab test at least once

HIV lab test at least once

Hemoglobin lab test at least once

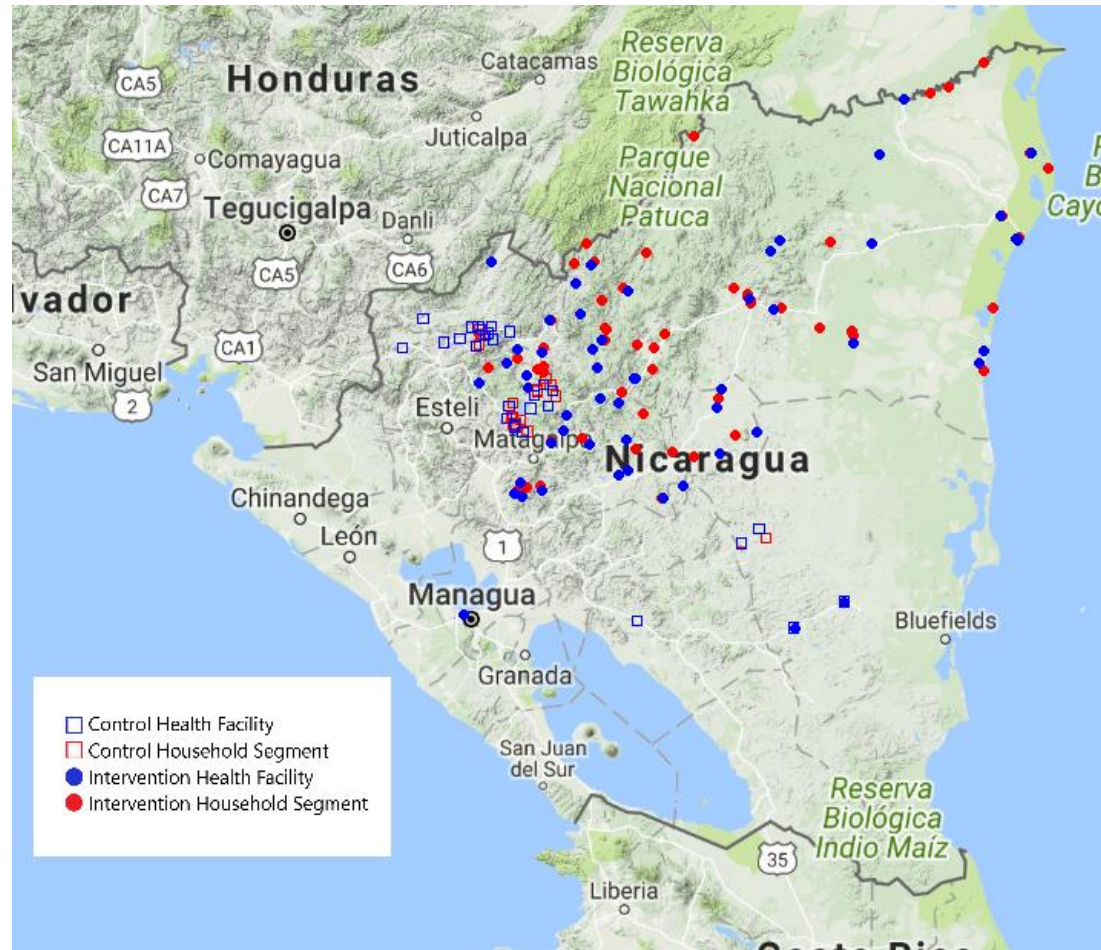
Urinalysis lab test at least once

I3030





# Nicaragua



# Nicaragua Performance Indicator Results

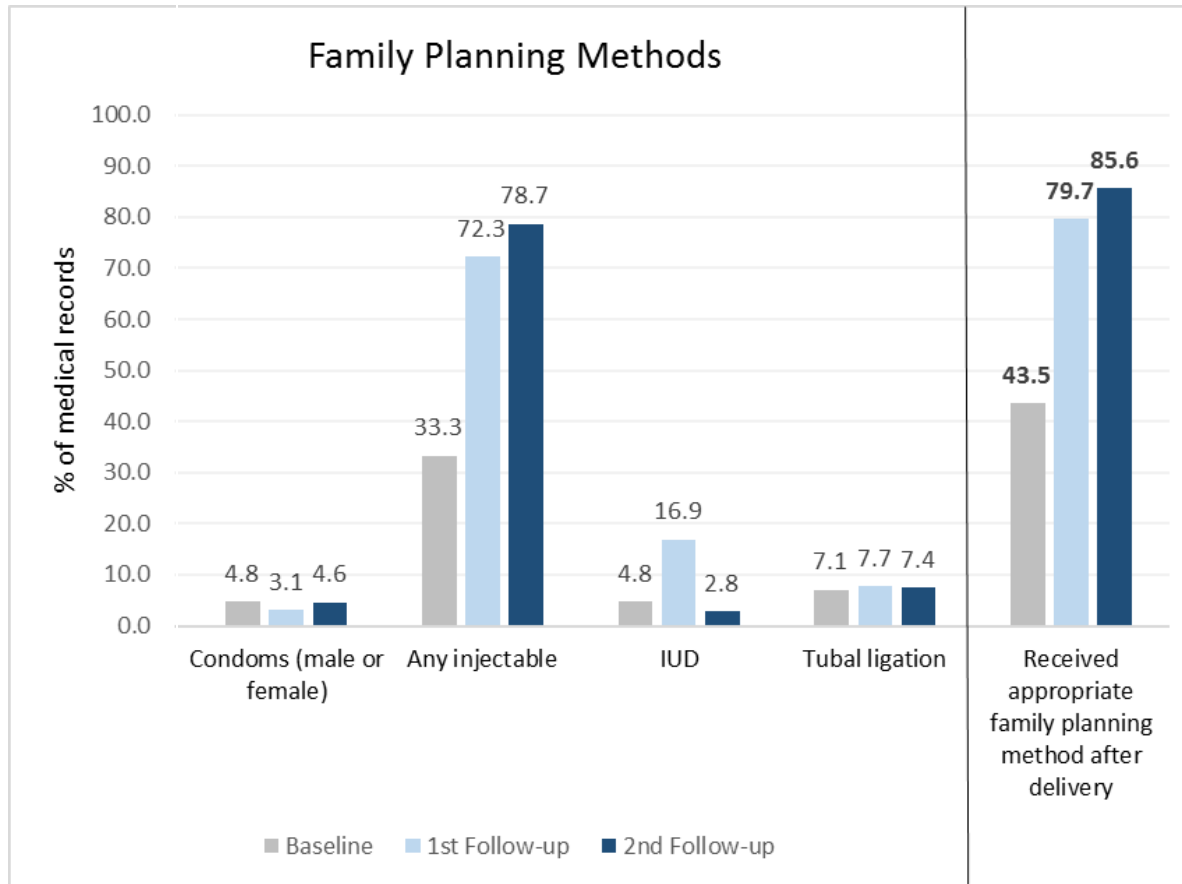
#	Indicator short decription	Intervention						Comparison				Target	Passing
		Baseline (2013) % CI		First Follow-up (2014) % CI		Second Follow-up (2017) % CI		Baseline (2013) % CI		Second Follow-up (2017) % CI			
3040	ANC within first trimester <sup>1</sup>	39.6%	(30.3 - 49.6)	29.9%	(25.3 - 34.9)	51.7%	(46.6 - 56.7)	38.4%	(27 - 50)	55.6%	(48 - 63)	45.3%	YES
4030	Postpartum checkup within 10 days <sup>2</sup>	60.1%	(54.3 - 65.7)	n/a		82.6%	(77.7 - 86.7)	74.1%	(68-80)	89.4%	(82-94)	69.1%	YES
4070	Neonatal complications managed according to the norm <sup>3</sup>	40%	(33.0 - 47.3)	n/a		46.3%	(40.4 - 52.3)	37.8%	(28 - 49)	28.9%	(21 - 38)	10.0%	YES
4080	Obstetric complications managed according to the norm <sup>3</sup>	38.3%	(31.4 - 45.5)	n/a		44.9%	(39.1 - 50.7)	23.3%	(14 - 35)	26.0%	(19 - 35)	15%	YES
4103	Immediate postpartum care for neonates <sup>4</sup>	7.2%	(2.4 - 16.1)	67.9%	(60.7 - 74.6)	43.7%	(37.8 - 49.8)	0%	(0 - 26)	30.8%	(23 -40)	22%	YES
5025	Children 12-23 months who received MMR Vaccine	70.9%	(62.9 - 77.8)	n/a		73.8%	(67.8 - 79.1)	82.5%	(76-88)	78.3%	(72-83)	78.9%	YES
5030	Children 18-59 months who received deworming treatments	34.1%	(31.3 - 37.1)	n/a		33.8%	(30.0 - 37.9)	36.9%	(33-41)	38.3%	(33-44)	42.1%	NO
SA	Social agreements <sup>5</sup>	n/a		n/a		77.5%	(61.5 - 89.2)	n/a		n/a		80%	YES
FP	Contraception post-delivery <sup>6</sup>	43.5%	(28.9 - 58.9)	79.7%	(69.2 - 88.0)	85.6%	(77.9 - 91.4)	33.3%	(1 - 91)	90.2%	(80 - 96)	57.0%	YES
FPI	Women that receive FP information	39.2%	(34.2 - 44.4)	n/a		34.2%	(29.5 - 39.1)	39.7%	(32 - 48)	31.2%	(25-38)	49.1%	NO

1The baseline value was previously reported at 37.3%. To ensure comparability across rounds, the baseline estimate was recalculated to 39.6%.

2The second follow-up survey included an additional question that asked if women were checked before discharge after delivering in facility. If a women was checked before discharge, she was considered to have passed this indicator. Due to the addition of this question, the baseline and follow-up values are not strictly comparable.

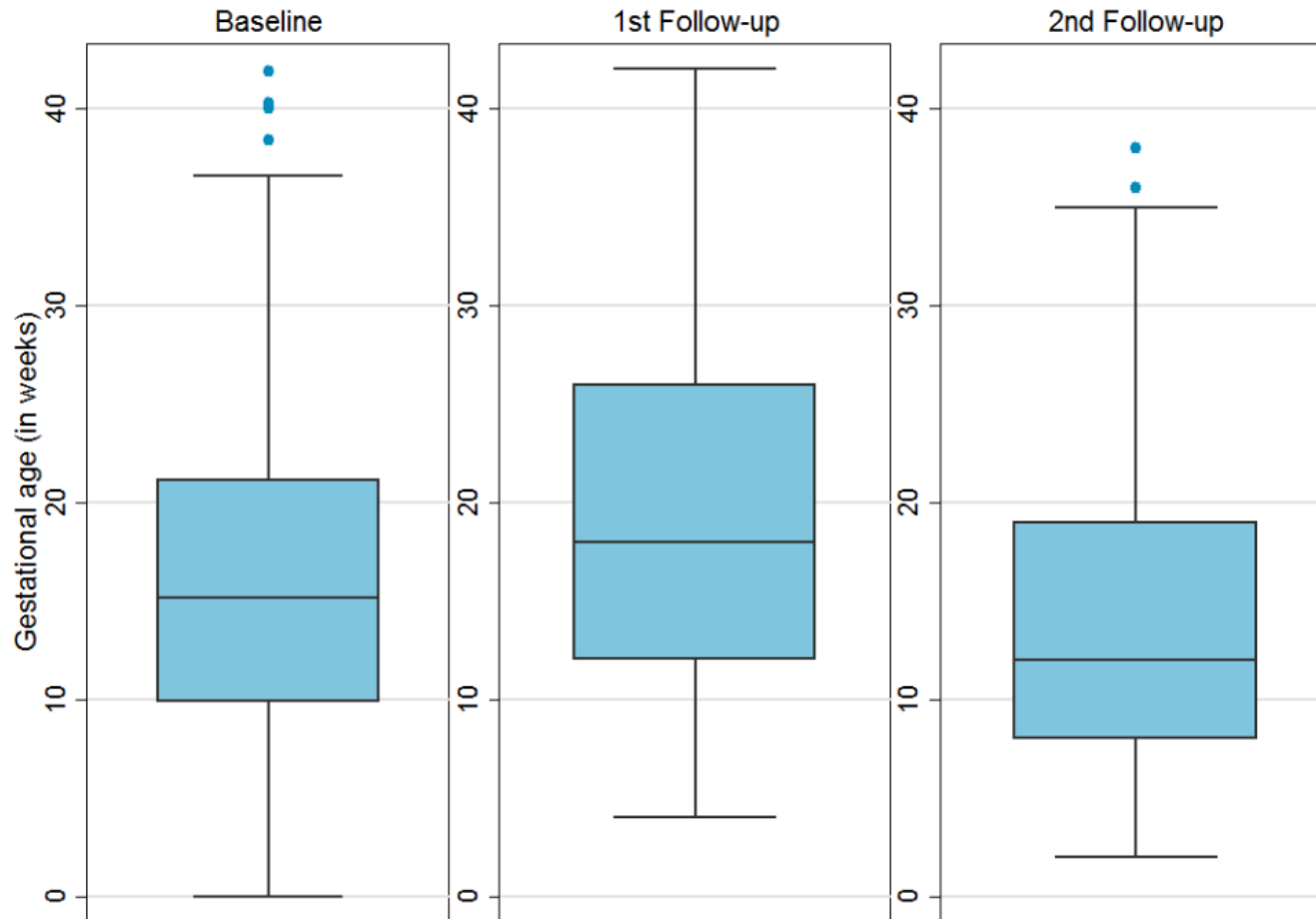
3 Data from medical records from the baseline timeframe of complications were recollected during the 36-month evaluation. Indicator values and definitions have been updated accordingly.

# Nicaragua FP: Contraception post-delivery



\*Intervention areas only

# Nicaragua 3040: ANC $\leq$ 12 weeks gestation



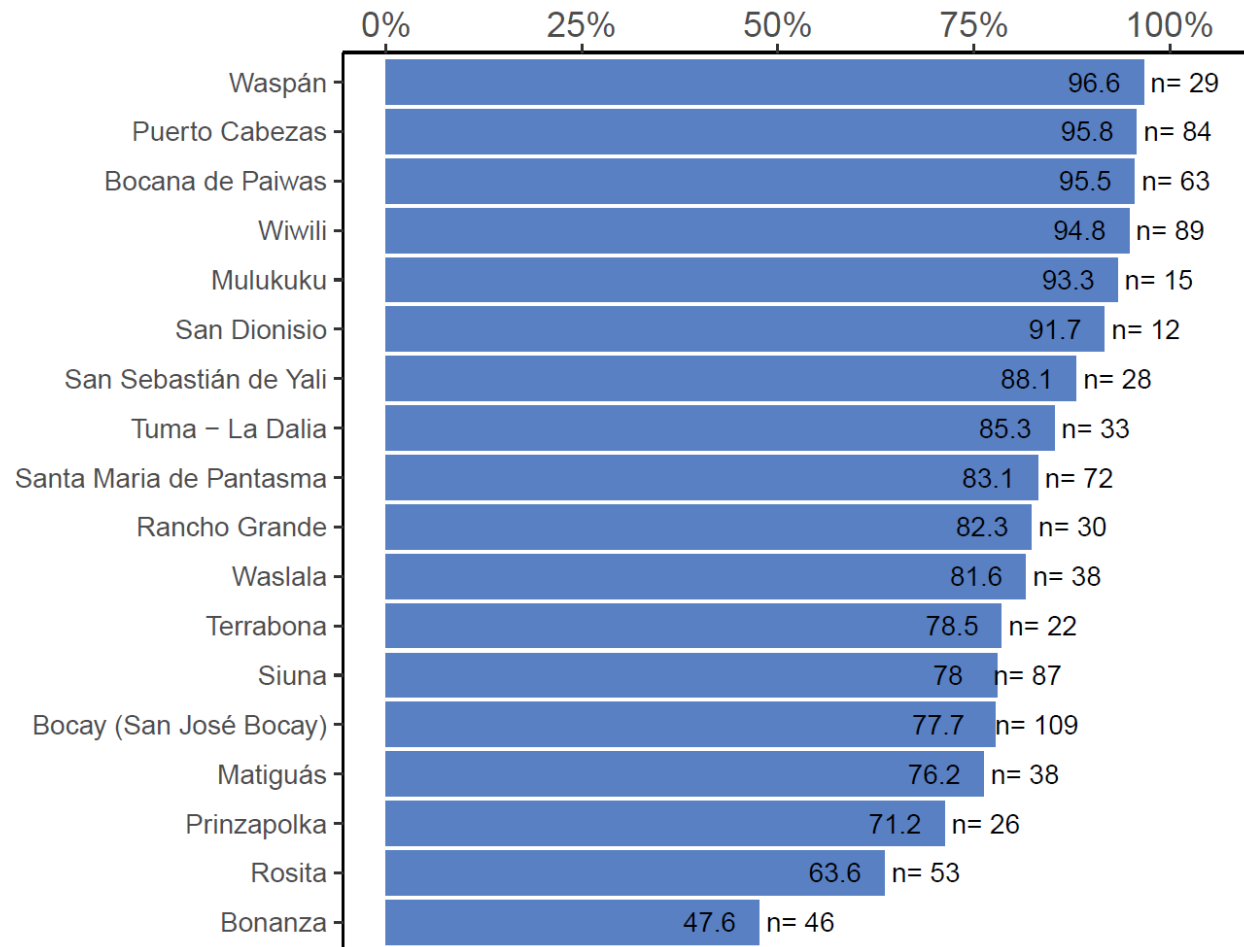
\*Intervention areas only

# Nicaragua 4103: Immediate PPC for neonates

	Baseline		1st Follow-up		2nd Follow-up	
	N	%	N	%	N	%
Vitamin K	69	95.7	184	98.9	279	92.5
Application of prophylaxis with oxytetracycline ophthalmic/chloramphenicol	69	91.3	184	98.9	279	92.1
Curing the umbilical cord with water and chlorhexidine	69	55.1	184	96.2	279	68.8
Evaluation for the presence of malformations	69	92.8	184	93.5	279	88.9
BCG vaccine	69	75.4	184	90.2	279	88.2
APGAR score (at 1 or 5 minutes)	69	100	184	100	279	94.3
Respiratory rate	69	26.1	184	78.3	279	58.8
Weight	69	95.7	184	98.9	279	92.1
Height	69	94.2	184	92.4	279	91.4
Head circumference	69	88.4	184	91.3	279	91
Appropriate immediate postpartum care for neonates	69	7.2	184	67.9	279	43.7

\*Intervention areas only

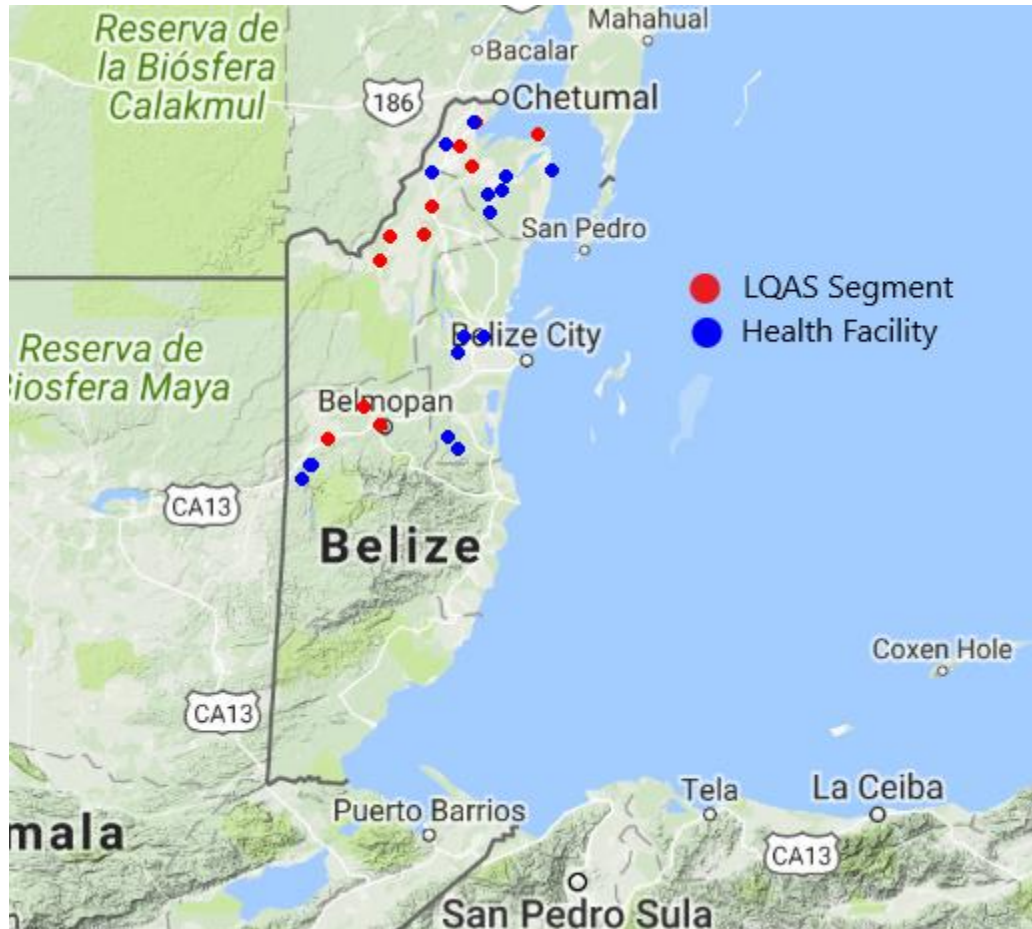
# Nicaragua 4030: Postpartum care within 10 days



\*Intervention areas at second follow-up only; includes check before discharge at in-facility delivery



# Belize



# Belize Performance Indicator Results

#	Indicator short decription	Intervention						Target	Passing
		Baseline (2013)		First Follow-up (2014)		Second Follow-up (2017)			
		%	CI	%	CI	%	CI		
2500	Contraception post-delivery	4.8%	(0 - 24)	0%	(0 - 9)	90.3%	(83 - 95)	17.0%	YES
3040	ANC within first trimester <sup>1</sup>	31.8%	(14 - 55)	29.7%	(22 - 38)	39.9%	(32 - 48)	29.8%	YES
4030	Postpartum care for woman within 7 days <sup>2</sup>	41.7%	(26 - 59)	n/a		75.4%	(64 - 85)	37.8%	YES
4070	Neonatal complications <sup>3</sup>	23.7%	(15 - 35)	n/a		53.5%	(41 - 66)	37.5%	YES
4080	Obstetric complications <sup>3</sup>	21.8%	(13 - 33)	n/a		33.3%	(23 - 45)	37.6%	YES
4095	AMTSL (oxytocin) <sup>4</sup>	60%	(32 - 84)	80%	(70 - 88)	98.7%	(95 - 100)	49.1%	YES
4103	Immediate postpartum care for neonates <sup>5</sup>	30.2%	(17 - 46)	86.8%	(76 - 94)	88.7%	(83 - 93)	39.4%	YES
4410	Growth & development checks	N/A		n/a		69.6%	(63 - 76)	37.5%	YES
4420	Child services enrollment within 7 days	25.3%	(17 - 36)	17.0%	(11 - 24)	66.5%	(59 - 73)	35.3%	YES
5135	Diarrhea (0-59m) treatment	20%	(1 - 72)	n/a		95.3%	(91 - 98)	80.0%	YES

1 The original baseline value was 22.8%. Due to redefinition of the indicator, the recalculated baseline value increased above the absolute target value. The original target for a 7 percentage point increase from baseline was still met.

2 The original baseline value was 22.8%. Due to redefinition of the indicator, the recalculated baseline value increased above the absolute target value. The original target for a 15 percentage point increase from baseline was still met.

3 Data from medical records from the baseline timeframe of complications were recollected during the 36-month evaluation. Indicator values and definitions have been updated accordingly.

4 The original baseline value was 34.1%. Due to redefinition of the indicator, the recalculated baseline value increased above the absolute target value. The original target for a 15 percentage point increase from baseline was still met.

5 The original baseline value was 19.4%. Due to redefinition of the indicator, the recalculated baseline value increased to 30.2%. The original target for a 20 percentage point increase from baseline was still met.



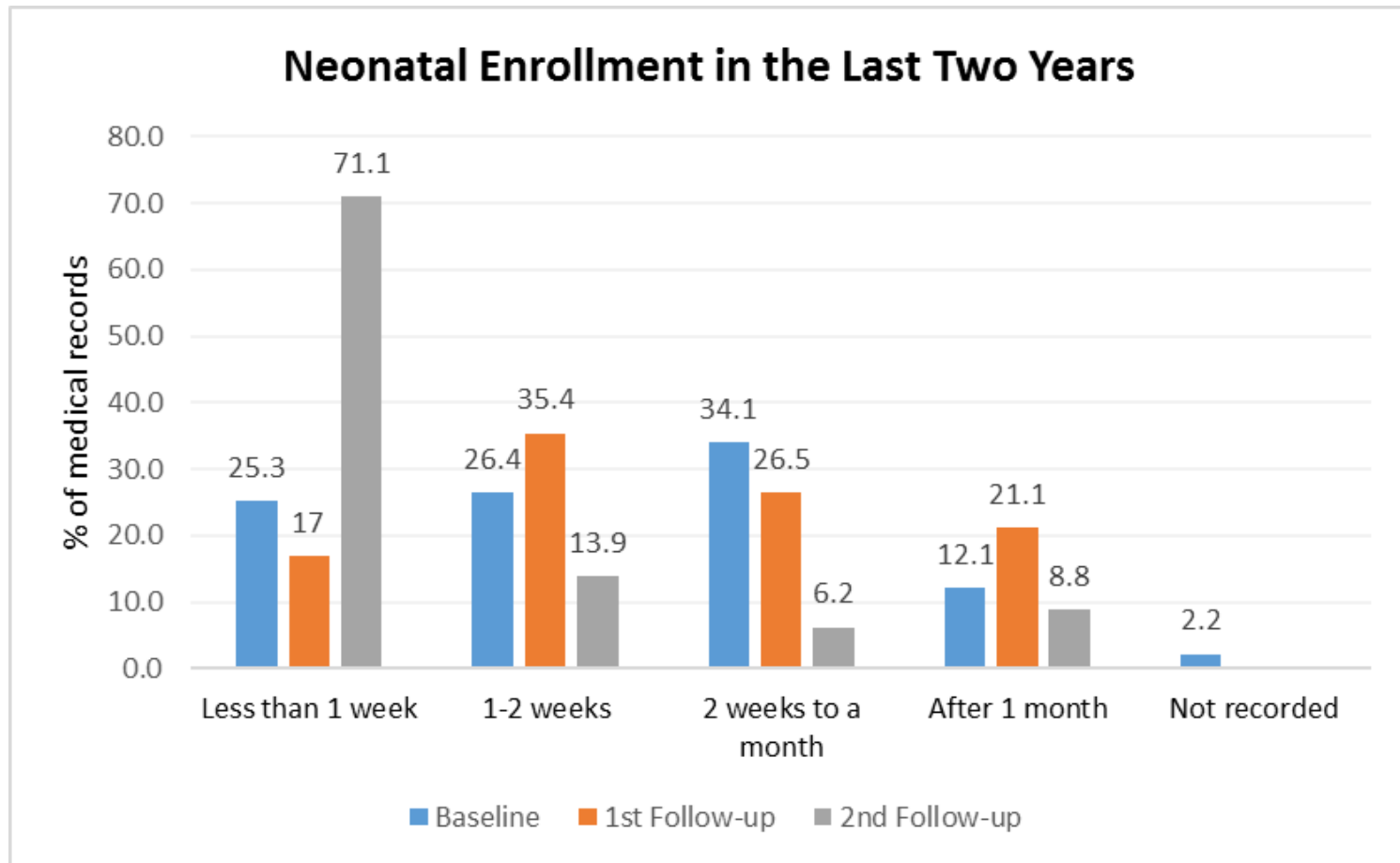
# Belize 4103: Neonates managed according to the norm

	Baseline		1st Follow-up		2nd Follow-up	
	N	%	N	%	N	%
The neonate was checked/administered all of the following:	43	30.2	68	86.8	159	88.7
Vitamin K	43	81.4	68	98.5	159	98.1
Application oxytetracycline ophthalmic prophylaxis or chloramphenicol	43	79.1	68	97.1	159	92.5
Apgar score (at 1 or 5 minutes)	43	53.5	68	100	159	98.7
Pulse/heart rate	43	48.8	68	97.1	159	96.2
Respiratory rate	43	46.5	68	94.1	159	97.5
Weight	43	51.2	68	97.1	159	98.1
Height	43	34.9	68	94.1	159	98.7
Head circumference	N/A		68	94.1	159	98.7

# Belize 4095: Oxytocin/ uterotonic administration following delivery

	Baseline		First Follow-up		Second Follow-up	
	N	%	N	%	N	%
Oxytocin was administered after birth	15	53.3	90	80	156	98.7
Other uterotonic was administered after birth	15	6.7	90	2.2	156	1.9
Oxytocin/other uterotonic was administered after delivery	15	60	90	80	156	98.7

# Belize 4420: Newborn children enrolled in child services in $\leq 7$ days after birth



# Outline

- Introduction
- First Operation Indicator Results
- Second Operation Indicator Results
- **Conclusions and Future Activities**

# Conclusions

- First four countries met 36-month targets, though with varied progress
- Some countries had harder indicators and targets than others
- Some indicators showed promising results:
  - Antenatal care
  - In-facility delivery with skilled attendant
  - Management of complications
  - Diarrhea management
  - Micronutrient consumption
- There is more work to do for other indicators:
  - Post-partum care
  - Anemia reduction
  - Deworming

# Challenges from 2017

- **Social context/security**

- Gang activity reported by field teams in 6 segments
- Replaced 3 segments in El Salvador and 4 in Honduras for reports of violence
- Field teams could not return to some areas for safety reasons

- **Sampling**

- 500+ additional health facilities in Nicaragua
- Issues with changes in medical record storage and numbering:
  - A lot of documentation and communication with field teams regarding recollection of baseline complications records
  - Some facilities where it was not possible to recollect

# Future activities

- Data collection underway in Chiapas, Mexico
- Data collection launches scheduled in Panama, Guatemala, and Costa Rica for April-May 2018
- Link household to health facility data
- Impact evaluation
- 3<sup>rd</sup> operation evaluation

# Thank you!

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