		Lagos (N=14)			Jigawa (N=16)		
		Government	Private Mission		Government	Private	
		N = 6	N = 6	N = 2	N = 8	N = 8	
Facility	PPMV	N/A	2	0	N/A	2	
type	Pharmacy	N/A	-	-	N/A	2	
	Primary	4	0	0	4	4	
	Secondary	2	4	2	3ª	0	
	Tertiary	-	-	-	1 <sup>a</sup>	0	
			Lagos (	N = 96)	Jigawa (N	= 68)	
			N(	%)	N(%)		
Job title	Doctor (consultant)		1 (1%)		0 (0%)		
	Doctor (senior)		5 (5%)		1 (1%)		
	Doctor (medical officer)		10 (10%)		5 (7%)		
	Nurse	Nurse		56%)	26 (38%)		
	Midwife	Midwife		9%)	5 (7%)		
	CHO	СНО		2%)	4 (6%)		
	CHEW	CHEW		5%)	22 (32%)		
	Pharmac	Pharmacist		%)	2 (3%)		
	Patient a	Patient attendant		)%)	3 (4%)		
Facility type	PPMV	PPMV		<b>!%</b> )	2 (3%)		
	Pharmac	Pharmacy			2 (3%)		
	Governm	Government primary		81%)	20 (29%)		
	Private primary		-		5 (7%)		
	Government secondary		33 (34%)		30 (44%)		
	Private s	Private secondary		1%)	-		
	Mission	secondary	16 (1	7%)	-		
	Governm	nent tertiary	-	- 9 (13%)		)	

## Table 1: Characteristics of facilities and providers surveyed in Lagos and Jigawa, Q1 2019

<sup>a</sup> Outside of LGA. N/A = not applicable

		Jigawa IMCI Knowledge ª	Lagos IMCI Knowledge <sup>a</sup>
		(mean, range)	(mean, range)
Overall		3.9 (1.7 – 6.9)	4.3 (0 - 7.3)
IMCI	Yes	$4.6(2.4-6.5)^{b}$	4.4 (2.3 – 7.3)
Training	No	3.9 (1.7 – 6.9)	4.1 (0 - 6.4)
Facility	Pharmacy	4.6 (3.7 – 6.9)	2.9 (0 – 4.3)
type	Primary	3.6 (1.7 – 5.9)	4.4 (2.4 – 7.3)
	Secondary	4.3 (2.1 – 6.3)	4.2 (0 - 6.9)
	Tertiary	4.7 (2.0 - 6.5)	-
Job title	Doctor	5.0(2.4-6.5)	5.0 (0 - 7.3)
	Nurse/midwife	4.3 (2.0 – 5.9)	4.2(0-6.9)
	CHO/CHEW/Attendant	3.8 (1.7 – 6.9)	$3.5 (0 - 5.9)^{\circ}$

<sup>a</sup> Maximum score of 9, fractions were awarded for partially correct answers, and fractions taken off for choosing incorrect components when multiple components of an answer could be selected though the minimum score per question was 0 i.e. we didn't allow negative scores when more incorrect components of an answer were chosen than correct components (these responses scored 0 for that question)

<sup>b</sup> significant difference (increase in IMCI Knowledge score of 0.71, 95%CI: 0.08, 1.33, p=0.028) in multivariable regression of Jigawa data with IMCI training, facility type and job as predictors of IMCI score

<sup>c</sup> significant difference (IMCI Knowledge score relative to doctor: -1.6, 95%CI: -2.5, -0.6, p=0.002) in multivariable regression of Lagos data with IMCI training, facility type and job as predictors of IMCI score

## Table 3 Cases seen per week per health worker by job cadre and facility type in Jigawa and Lagos, Q1 2019

			Jigawa		Lagos		
Number of cases seen a week		Children	<b>"Severe</b>	Referrals	Children	<b>"Severe</b>	Referrals
		Median, IQR,	Pneumonia"	Median, IQR,	Median, IQR,	Pneumonia"	Median, IQR,
		range	Median, IQR,	range	range	Median, IQR,	range
			range			range	
Overall		38, 15–135, 1–430	2, 1–5, 0–50	2, 0–3, 0–20	28, 10-80, 1-300	1, 0–2, 0–40	0, 0–1, 0–15
Job type	Doctor	55, 5–200, 2–300	2, 1–3, 0–20	2, 1-4, 1-5	80, 25–100, 5–220	1, 1–2, 0–40	1, 0–5, 0–10
	Nurse/midwife	40, 15–150, 2–430	3, 2–6, 0–50	2, 0–3, 0–20	25, 10-70, 1-300	1, 0–2, 0–20	0, 0–1, 0–15
	CHO/CHEW/Attendant	35, 15–120, 1–400	1, 0–2, 0–10	2, 0–4, 0–14	18, 6–55, 2–100	0, 0–1, 0–5	0, 0–2, 0–10
Facility type	Pharmacy	15, 8–25, 1–35	2, 1–5, 0–7	2, 2–4, 2–4	8, 6–10, 6–10	0, 0–3, 0–3	0, 0–0, 0–0
5 51	Primary	25, 10-49, 2-313	1, 0–2, 0–6	1, 0–3, 0–14	55, 25–96, 3–220	1, 0–2, 0–15	1, 0–3, 0–10
	Secondary	110, 25–225, 5–430	3, 2–10, 0–50	2, 1–3, 0–20	25, 10-60, 1-300	1, 0–2, 0–40	0, 0–1, 0–15
	Tertiary	30, 15–70, 3–200	2, 1–4, 0–6	-	-	-	-

IQR: Inter-Quartile Range

## Table 4 Cases and deaths in the last month (survey during Q1 2019) by state and facility type

State	Facility Type	Cases seen in last month: under-5 children (number of cases at each facility separated by , )	Cases seen in last month: acute respiratory infections (number of cases at each facility separated by , [% of under-5 cases] <sup>a</sup> )	Deaths in last month: under- 5 children (number of deaths at each facility separated by , [% of under-5 cases])	Deaths in last month: acute respiratory infections (number of deaths at each facility separated by , [% of ARI cases])
Jigawa	Tertiary government (n=1)	607	43 [7.1%]	2 [3.3%]	1 [2%]
	Secondary government (n-3)	1024, 2191, 2666	33 [3.2%], 56 [2.6%], 64 [2.4%]	14 [1.4%], 16 [0.7%], 39 [1.5%]	0, 2 [4%], 10 [16%]
	Primary government (n=4)	12, 104, 229, 709	0, 1 [1.0%], 4 [1.7%], 40 [5.6%]	0, 0, 2 [0.9%], 4 [0.6%]	0, 0, 0, 0 [0%]
	Primary private (n=4)	3, 10, 15, 99	1, 2, 4, 6 [6.1%]	0, 0, 0, 1 <b>[1.0%]</b>	0, 0, 0, 1
	Pharmacy (n=2)	1, 140	1, 40 [28.6%]	0, 0 [0%]	0, 0 [0%]
	PPMV (n=2)	16, 20	2, 5	0, 0	0,0
	TOTAL	7846	302 [3.8%]	78 [1.0%]	<b>24 [7.9%]</b>
Lagos	Secondary government (n=2)	5, 122	3, 14 [11.5%]	0, 13 [10.7%]	0,0
	Secondary private (n=4)	4, 7, 50, 83	0, 2, 2 [4.0%], 38 [45.8%]	0, 0, 0 <mark>[0%]</mark> , 0 <mark>[0%]</mark>	0, 0, 0, 0 [0%]
	Secondary mission (n=2)	14, 373	1, 10 [2.7%]	0, 1 [0.3%]	0, 0
	Primary government (n=4)	243, 850, 920	0 [0%], 1 [0.1%], 59 [6.4%]	0 [0%], 0 [0%], 0 [0%]	0, 0, 0 [0%]
	PPMV private (n=2)	no data	no data	no data	no data
	TOTAL	2671	130 [4.9%]	<b>14 [0.5%]</b>	0 [0%]

<sup>a</sup> % only shown if denominator is >20 cases

## Health Systems Childhood Pneumonia Nigeria

Table 5	Facility	audit	summary	results
I able 5	Lacinty	auuu	Summary	results

Facility Audit		Lagos			Jigawa	
Summary	PPMV / Pharmacy	Primary	Secondary	PPMV / Pharmacy	Primary	Secondary / Tertiary
IMCI equipment						
ETAT equipment						
IMCI drugs						
ETAT drugs						
Oxygen supply						
Pulse oximeter						
Power source						
Power last 24hrs						
Water						
Opening times						
Housing & on-call rooms						
Staffing						
Wards						

Black = not required (and 0%) Grey = no data

Red = lacking most essential equipment, drugs or supplies (<50% availability on average), lacking mains power (<50% of facilities), <12hrs of power in the last 24hrs, lacking mains water (<50% of facilities – these facilities typically have access to facility or shared boreholes), open 6hrs a day on average and not on weekends, <50% of facilities have staff housing and on-call rooms, expected staff cadres available, and expected wards

- Yellow = stocked with some essential equipment, drugs or supplies (50-99% of facilities), some mains power (50-99% of facilities), 12-23hrs of power in the last 24hrs, some mains water (50-99% of facilities), open 12hrs per day on average, and weekends; has staff housing and on-call rooms (50-99% of facilities), all expected staff cadres available (50-99% of facilities), and expected wards available (50-99% of facilities)
- Green = stocked with all essential equipment, drugs or supplies (100% availability), mains power (100% of facilities), 24hrs of power in the last 24 hours, mains water (100% of facilities), open 24hrs a day, 7 days a week (100%), has staff housing and on-call rooms (100% of facilities), all expected staff cadres available (100% of facilities), and expected wards available (100% of facilities)