# Opportunities for improving primary health care through PPMVs in Nigeria

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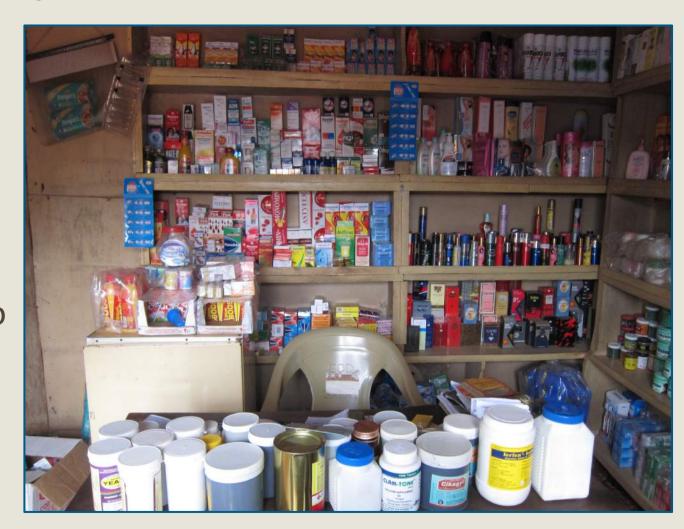
### **Overview**

- 1. The importance of PPMVs in Nigeria
- 2. Major drivers of poor quality
- 3. Opportunities to improve quality
- 4. Lessons and opportunities



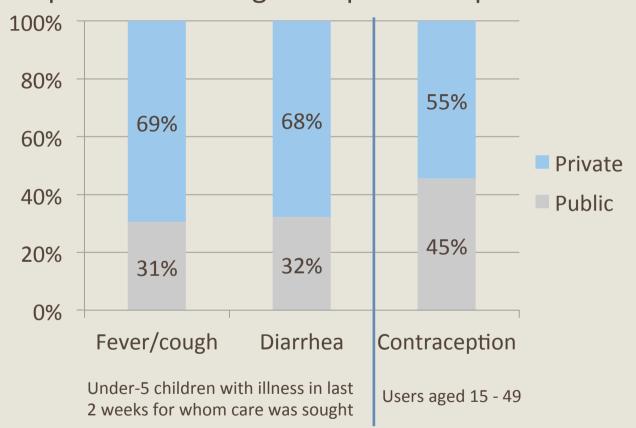
## What are Patent & Proprietary Medicine Vendors (PPMVs)?

- Owner-operated drug shop
- Medical training not required
- Legally allowed to sell only OTC medications (e.g. ACTs, ORS)



# The majority of care-seeking for basic health commodities occurs in the private sector

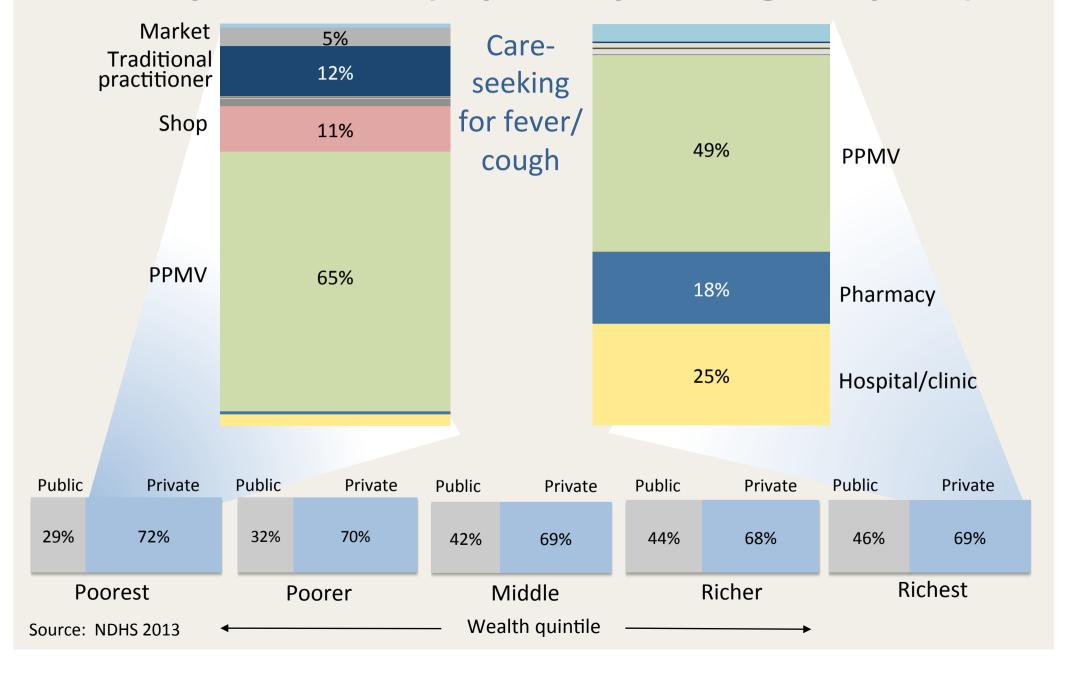
First place for seeking care: public vs. private sector



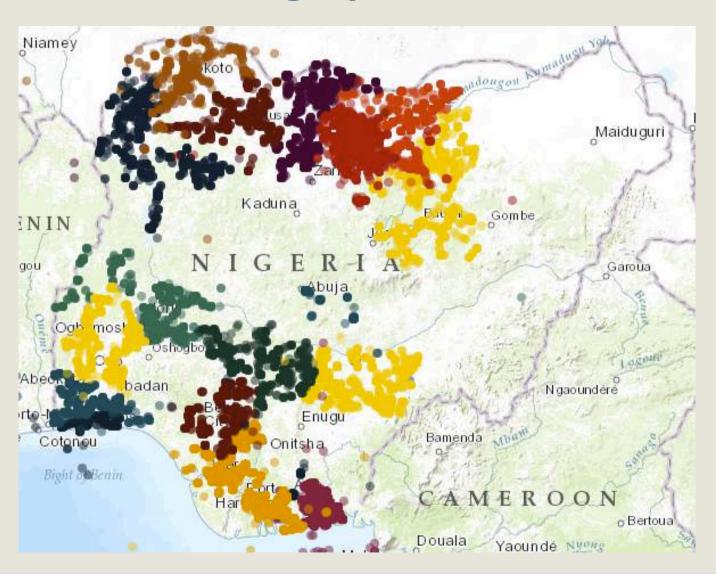
Source: NDHS 2013



### ...mainly at PPMVs (especially among the poor)



### PPMVs are highly accessible



PPMV censuses conducted in 18 states

(2013 - 2014)

#### **Contributors:**

Abt Associates
UCSF/SFH
SFH/ESMPIN

Compiled by Io Blair-Freese, on behalf of the BMGF



# PPMVs are the delivery channel that can reach the most people

- Serve <u>rural and hard-to-reach</u> populations
- Deliver a range of basic health <u>commodities and services</u>
- First point of entry for primary care services
- Offer a <u>large network</u> that can be used to increase access to primary care and scale up interventions

Rough calculation:

	PPMVs	Public health centers
Number	200,000	30,000
Clients treated per day	15*	1.5
Total treated per day	3,000,000	45,000

<sup>\*</sup>Source: ACHIEVE shop survey



## Aims of UCSF/SFH ACHIEVE Project

Nearly 60% of deaths among children under five in Nigeria are due to three preventable illnesses: diarrhea, malaria, and pneumonia

Assess PPMVs' practices for child illness

Understand the major drivers of poor quality at PPMV shops for child illnesses

Identify opportunities for improving the quality of services at PPMV shops



### **Project states**



### **Total number of PPMV shops**

	Kogi N=1088	Kwara N=995
Urban	27%	41%
Peri-urban	25%	24%
Rural	48%	35%

Source: ACHIEVE PPMV census



### **Approach**

- 1. Systematic literature review of PPMV practices in Nigeria
- 2. Census of all PPMVs: shop owner characteristics and drug stocks
- 3. Retail shop survey (~12% sample of PPMV shops)
  - 250 shops surveyed (stratified by rural, peri-urban, urban)
  - 5123 customer observations
    - Exit interviews with those buying drugs

### 4. Qualitative interviews

- Caregivers (190)
- PPMVs (92)
- NAPPMED (30)
- Health Center Staff (21)



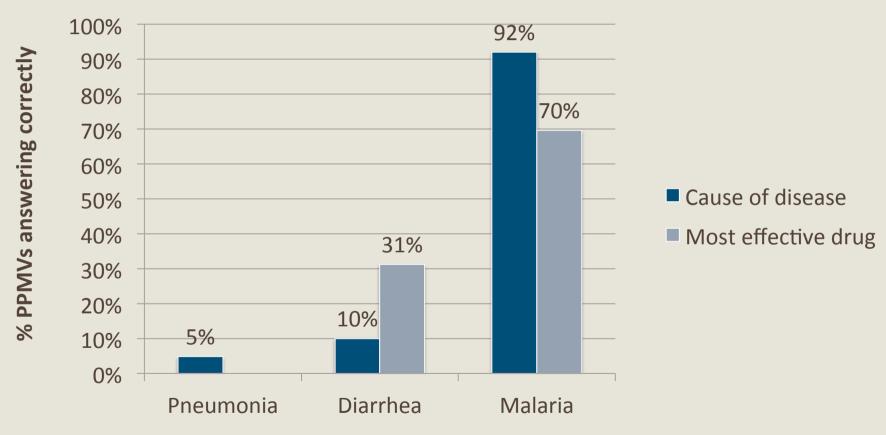
# MAJOR DRIVERS OF POOR QUALITY





### 1. PPMVs have poor knowledge of child illnesses

### **Knowledge of disease and appropriate drugs**

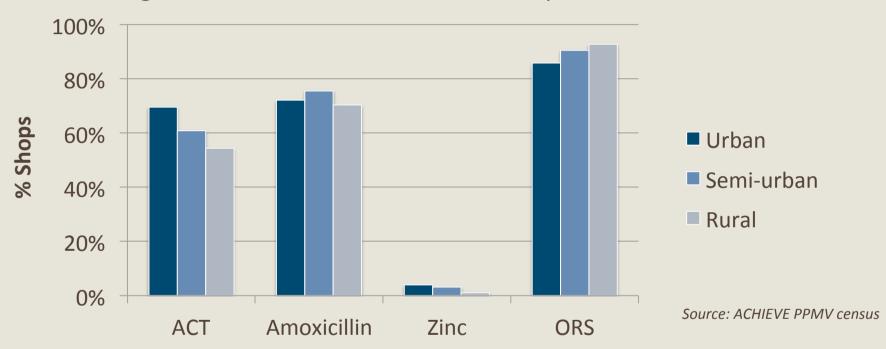


Source: ACHIEVE shop survey



## 2. PPMVs lack essential commodities and diagnostics

Stocking of essential medicines for diarrhea, pneumonia, and malaria



Current regulations prohibit PPMVs from administering diagnostics for malaria and pneumonia and dispensing antibiotics



### 3. Business needs limit ideal health practices

Dispensing practices are influenced by customer demand and profit motivations

- High customer demand for incorrect treatments
- Profit motivation to sell outweighs the incentive to sell the correct drug
  - Total profit from drug sales (~\$2/day)

The customers are the ones that call the drug name... If you buy bigger drugs, since we are in the village they won't agree that they have the money to purchase them.

- PPMV



### 4. Limited oversight and quality assurance

Little enforcement of existing regulations

- Regulatory agency does not have capacity or resources
- PPMVs register with NAPPMED (professional association)
  - NAPPMED lacks mandate to regulate

"Other roles that we have are immunization, injection... and after birth, I advise them with family planning. That's part of our work"

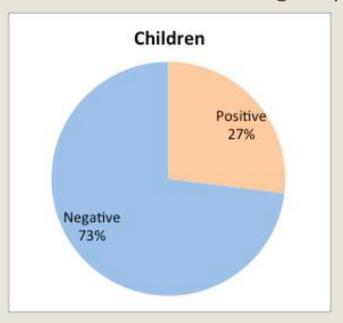
-Untrained PPMV

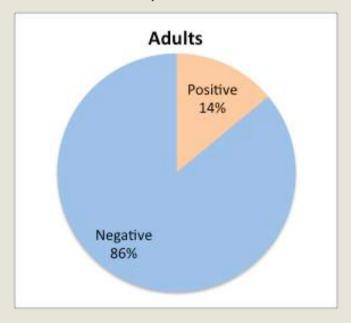
- Many PPMVs offer drugs and services outside their legal scope of practice
  - Cannot be trained on these services in current regulatory environment



# Example: PPMVs provide poor quality <u>malaria</u> services

RDT results among PPMV clients purchasing antimalarial treatments at retail drug shops (Nasarawa state)



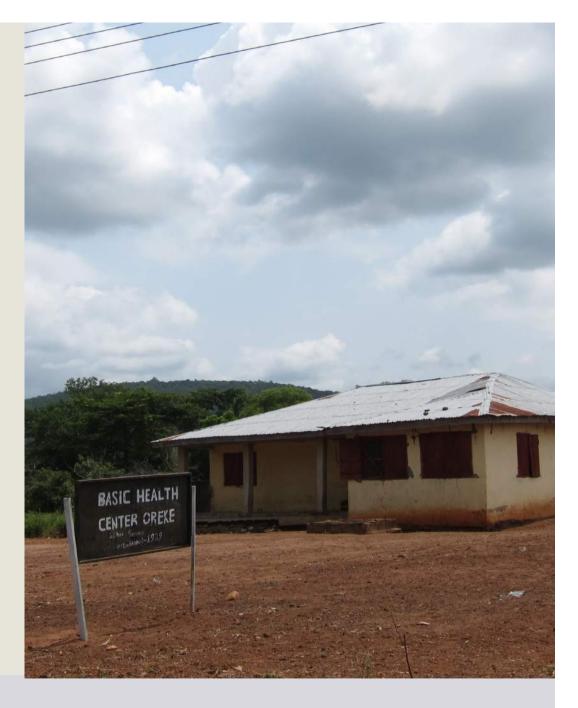


- High rates of malaria presumptive and over-treatment among PPMV malaria clients
- 21% of customers were "diagnosed" by a provider before purchasing antimalarials

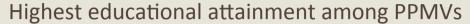
Source: REMEDI Study (Liu et al. 2014)

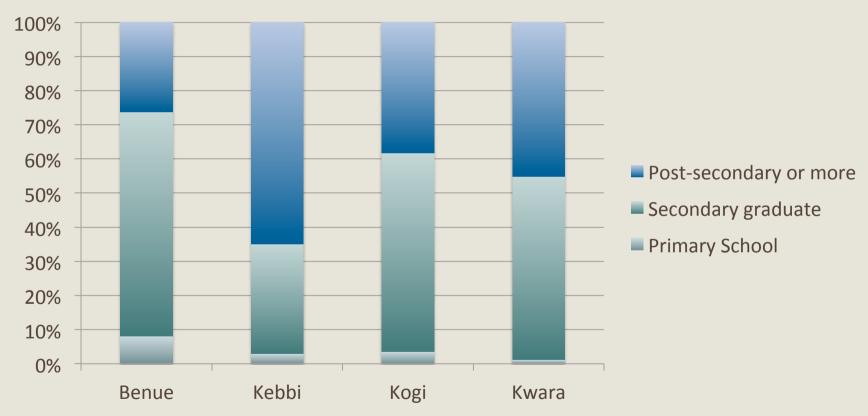


# OPPORTUNITIES FOR IMPROVING QUALITY



## A large portion of PPMVs have post-secondary education



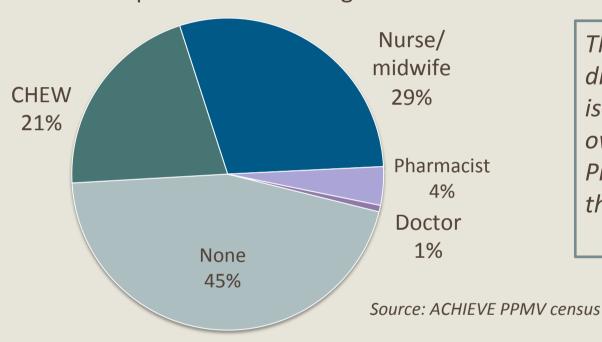


Source: Abt Associates PPMV census; ACHIEVE PPMV census



## 1. Work with the "right" PPMVs

Medical qualifications among all PPMVs



The chemist man knows drugs. Some of the chemist is owned by nurses, is owned by doctors.

Professionals know drugs that they give.

-Caregiver

### Trained PPMVs are more likely to see sick children

Medically-trained PPMVs see 40% more children than untrained PPMVs



## 2. Appeal to reputation motivations

PPMVs know that their business success depends on providing effective services

- Fear of poor customer outcomes is a major determinant of PPMV practice
- PPMVs are aware of their own limitations and legal scope of practice, but tend to overestimate their capabilities

State	Years in community (average)
Benue	6.7
Kebbi	6.9
Kogi	9.5
Kwara	7.2

"Someone that knows what he is doing does not need a campaign...A good market sells itself." -- PPMV

Source: Abt Associates PPMV census; ACHIEVE PPMV census



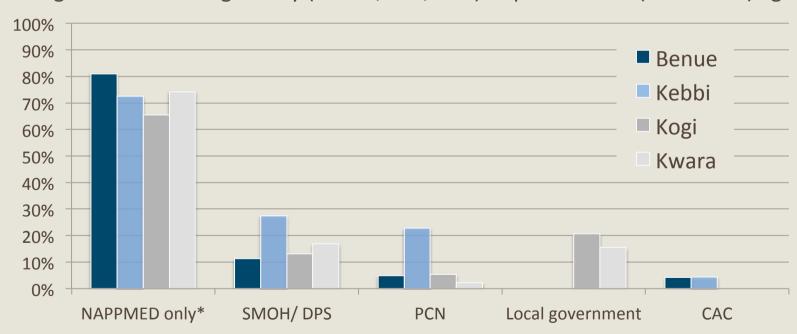
## 3. Build on existing networks

PPMVs are connected to the health system through business, information, and referral networks

- PPMVs ask health providers for advice
- Half report referring difficult cases to primary health centers
- Primary health centers refer patients back to PPMVs for drug purchases

# Example: The PPMV professional association could offer an effective platform for engagement

Registration with regulatory (SMOH/DPS/PCN) or professional (NAPPMED) agencies

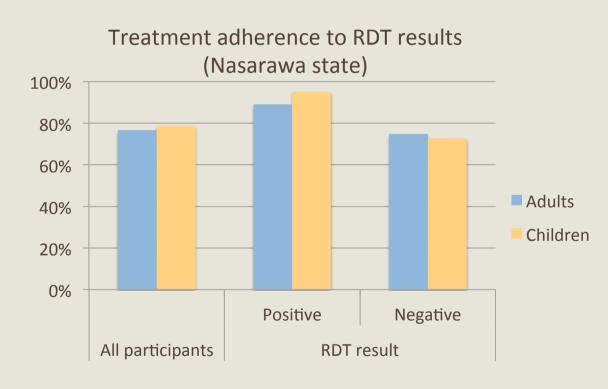


Source: Abt Associates PPMV census; ACHIEVE PPMV census



## 4. Provide simple tools (example: RDTs)

- PPMVs are capable of conducting RDTs<sup>1</sup>
- PPMV clients show high acceptability of RDTs and adherence to test results<sup>2</sup>



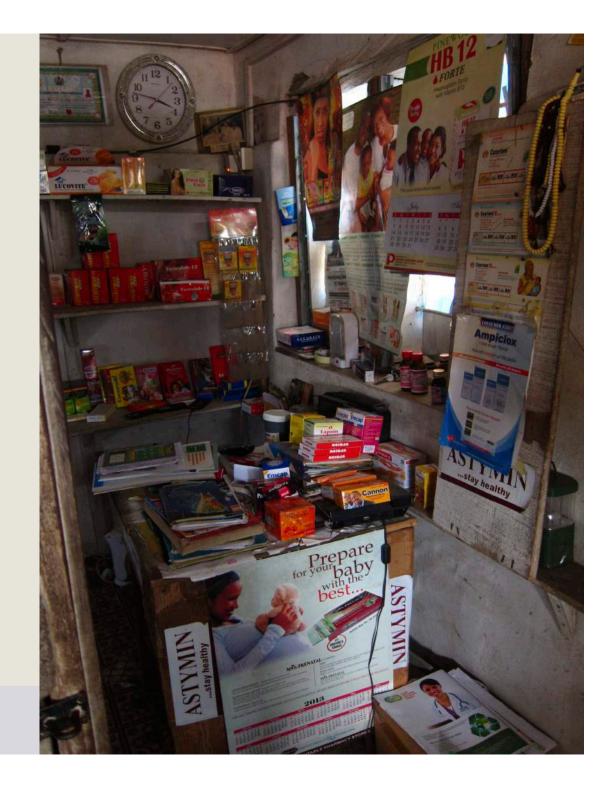
When we introduced RDT tests and results to people buying antimalarials:

- >75% of customers followed the correct treatment according to the RDT result
- High adherence (i.e. not taking anti-malarial) even among RDT-negatives

Source: <sup>1</sup>SFH 2014; <sup>2</sup>REMEDI Study (Liu et al. 2014)



# LESSONS AND OPPORTUNITIES



## **Key lessons**

- 1. Address business model
- 2. Prioritize "medically qualified providers" for primary health interventions
- 3. Provide integrated training across health areas
- 4. Implement effective monitoring mechanisms
- 5. Include PPMVs in all national primary health strategies
- 6. Harmonize policies on PPMV practice

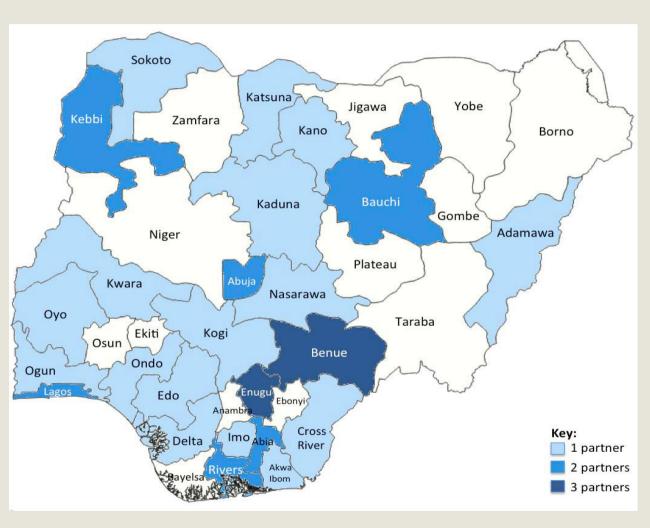


## Capitalize on current momentum

- Current government-led initiatives in MCH aim to improve access to services
  - SURE-P (Subsidy Reinvestment and Empowerment Program)
  - iCCM implementation
- High-level discussions on the PPMV scope of practice are occurring now
  - Include amoxicillin on Essential Commodities list (for all/ some of PPMVs?)
  - Define scope for "invasive procedures" (e.g. mRDTs, injectable contraceptives)



# BMGF partners working on child health and PPMVs in Nigeria



### **Demand-generation**

- BBC Media Action
- Pact
- Abt Associates

### **Supply chain**

- CHAI
- Abt Associates

### **Training**

- Abt Associates
- Society for Family Health

### **Evidence/evaluation**

- PATH
- RTI & Save the Children
- SFH/UCSF



# Disseminate results to influence programs and policy

- May 2014 workshop held with all Gates-funded partners to share research findings, discuss implementation strategies, and align focus areas
- Information dissemination meetings ongoing with key public sector and regulatory bodies
- Working with iCCM Task Force to discuss evidence body and inform implementation plans
  - Focus on integrating private sector delivery channels into broader framework



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