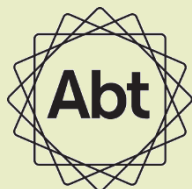# Strengthening Private Sector Health Providers: mHealth Implications

Pamela Riley

Strengthening Health Outcomes through the Private Sector (SHOPS) Project

mHealth Summit December 3, 2012
Panel Health Workforce Capacity Development

Presentation Overview

Different needs of private healthcare providers

    Why private providers matter

    Who constitutes private providers

    Private provider challenges: implications for mHealth

        Fragmentation

        Limited engagement with government
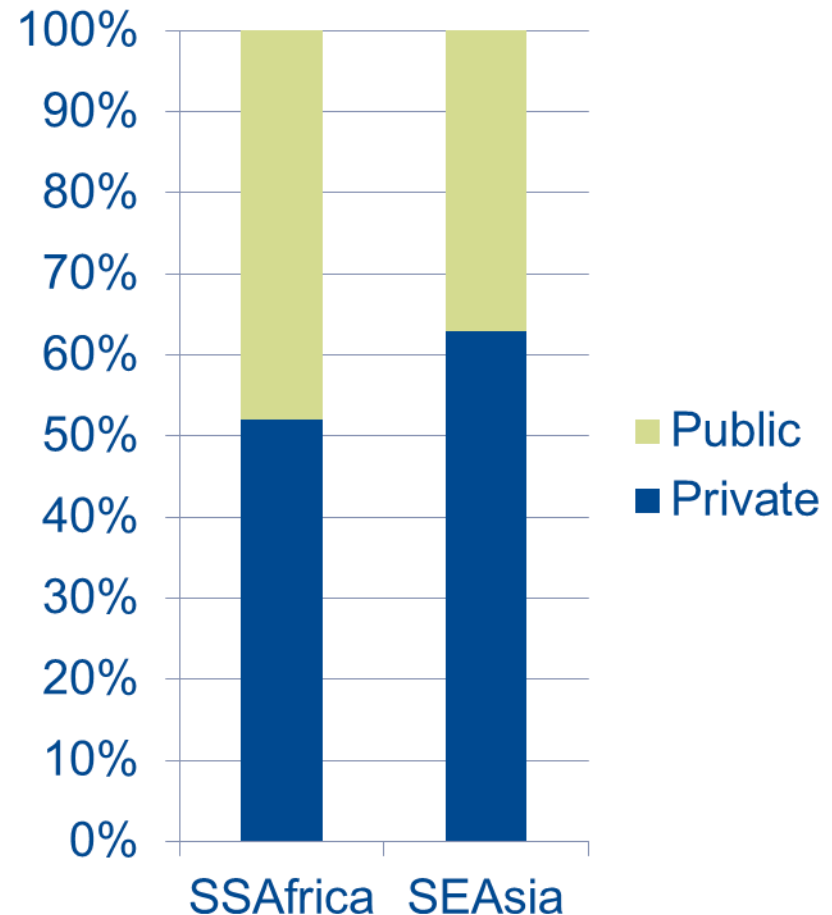
        Quality control

Case study Ghana drug vendors

Conclusion

Why private sector matters

- 50% of all expenditures for healthcare in Africa
- Private sector serve all quintiles, not just the rich
- Private sector located in underserved rural, hard-to-reach areas

Where poorest 20% seek healthcare

Source: ps4h.org

Who constitutes private providers?

Retail: shops, street vendors, pharmacies

Practitioners: midwives, doctors, traditional healers

Facilities: for-profit clinics, faith-based, NGOs , hospitals

Private provider challenges (1): mhealth implications

Fragmentation

- Wide diversity skills, formal & informal
- Often non-networked, isolated
- May be financially unstable

Mobile solutions

Provide link to credentialing organizations

Facilitate referrals, peer support

Access to resources including financing, supplies

Mobile messages provide an organizing force to otherwise disconnected providers

Private provider challenges (2): mhealth implications

Lack of engagement with government → **Mobile solutions**

- Operates as a parallel health system
- Underutilized, inefficient allocation of resources
- Limited documentation, informal processes

- Incentives for engagement

- Collaboration platform

- Data sharing

Mobile platforms facilitate dialogue between the sectors

Private provider challenges (3): mhealth implications

Quality control

➡️ **Mobile solutions**

- Training opportunities more limited

- Gaps in technical and operational capacity

- Incentives for non-credentialed

Tailored to needs of small business

Customized content including financial mgmt

Airtime, recognition through group messages

Mobile services take training to providers, and provide feedback loops

Ghana case study

- Pediatric diarrhea a leading cause of morbidity, mortality for children < 5
- Caregivers seek care from OTC drug shops
- Not receiving WHO recommended treatment: ORS and zinc
- SHOPS providing broad range supply & demand side interventions

About Ghana Licensed Chemical Sellers

- 7000+, variable education levels
- Licensed cadre created to serve rural, underserved areas where few pharmacists
  - Ghana Pharmacy Council is a role model for other regulatory bodies in the region
- High mobile phone ownership, low-end phones
- Attend regular face-to-face trainings as a condition of licensing

Research to evaluate impact of text message reinforcement

ALL LCS RECEIVE MANDATORY ZINC/ORS TRAINING
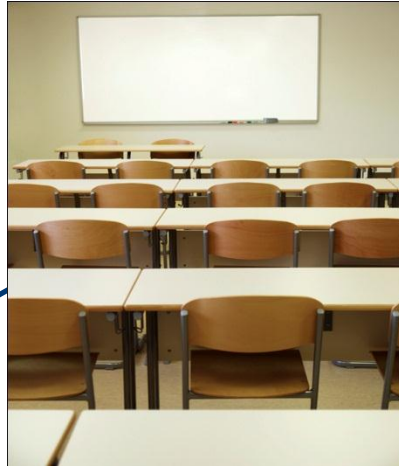
- **CONTROL (n=472)** Training only

TREATMENT (n=472) Training + 3 texts/week for 8 weeks

Text message impact evaluation

- Methodology
  - Both control and treatment groups interviewed about knowledge and practice: researchers blind to assignment arms
  - Mystery shopper visited each seeking treatment for baby's diarrhea
- Results:
  - Knowledge higher of zinc/ORS as appropriate treatment, fewer sales of (non-recommended) antibiotics

  Training + texts result in statistically significant improvement in adherence to recommended protocols compared to training-only

Implementation feedback: Messages received as welcome and helpful

"The quizzes cast my mind back to the seminar"
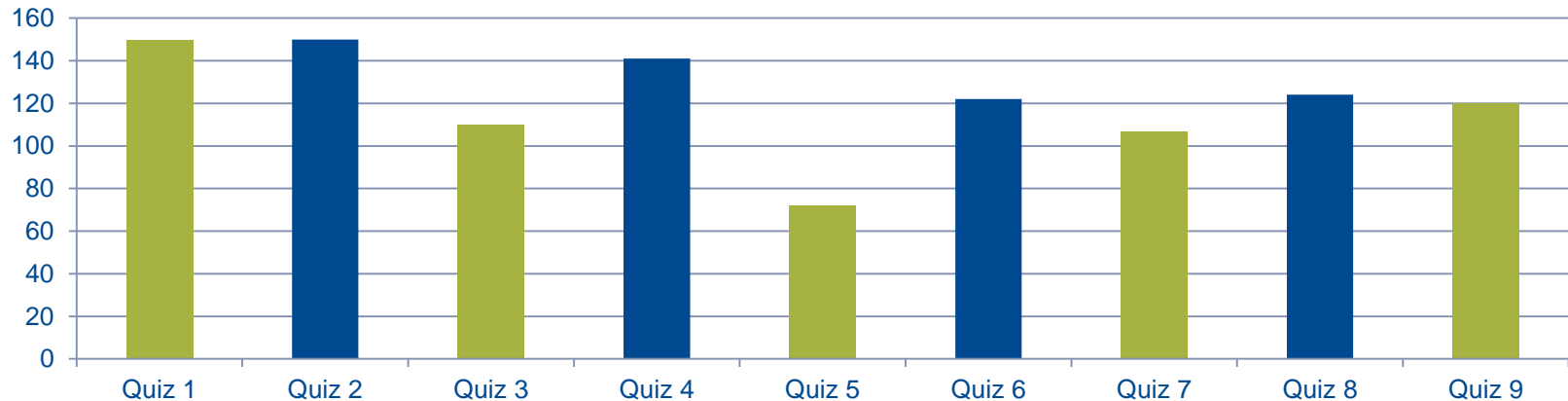
"Both tips & quizzes were very educative"

Universal support for Pharmacy Council to continue use of reinforcing text education

Use of airtime incentives to increase participation

54% LCS text intervention group ever responded to quizzes

Following fall-off at Quiz 5, small airtime top-ups sent to sub-sets of eligible

TOTAL RESPONSES

RESULTS: Airtime recipients had modest increase in quiz participation compared to those with no top-ups

Challenges: Unexpected problems with correct formatting

Total LCS Receiving SMS Quizzes

■ Responders ■ Non-responders

Responders & non-responders did not vary in adherence to recommended treatment

- Failure to use key word SHOPS
- Chatty replies: "SHOPS that is not the answer we learned"
- Literal replies: "Respond SHOPS A, B, or C"
- Other reasons responses not received
  - Don't know how to open/send text
  - Too busy
  - Phone problems

Majority non-responders said they read the texts (including correct quiz answers)

Conclusion

- Private sector capacity building critical to improving healthcare in developing countries
- Still early days building evidence about SMS implementation best practices
- Private provider representatives need seat at the table in developing mHealth policies and solutions
  - Professional associations, pharmaceutical detailers, NGOs, social enterprises