ZAMBIA'S COMMUNITY HEALTH ASSISTANTS (CHAs)

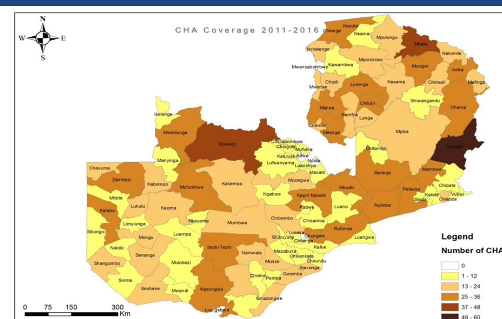
BACKGROUND & IMPACT ON COMMUNITY HEALTH | AUGUST 2016

BACKGROUND

Universal health coverage (UHC) cannot be realized without an adequate health workforce. In rural Zambia, there are 12.4 clinicians per 10,000 persons,[1] which is significantly below the World Health Organization's recommended threshold of 22.8 clinicians per 10,000. It is in these rural communities, where 60.5% of the Zambian population resides, that the disease burden and mortality ratios are highest. An estimated 20% of children under five in rural areas contract malaria,[2] while the immunization rates have remained at 65% for the last 10 years. These factors contribute to an under-five mortality rate of 75 per 1,000 live births and a maternal mortality rate of 398 deaths per 100,000 live births – far above the average in developing countries of 239 per 100,000.[3]

Against this backdrop, the Ministry of Health (MoH), with support from the Clinton Health Access Initiative (CHAI) and UKaid, introduced the Community Health Assistant (CHA) program through the 2010 National Community Health Worker (CHW) Strategy. This strategy aims to train 5,000 CHAs by 2020 under the following mission statement:[4] "**A cost-effective, adequately trained and motivated community-based health workforce that will contribute to improved management of malaria, child and maternal health and common preventable health conditions.**"

CHAI PROGRAM DESCRIPTIONS



RECRUITMENT

CHAs are recruited from, and deployed back to, rural health posts in their local communities. They are thereby both embedded within and accountable to these communities. Recruitment occurs 3 steps:

1. Information campaigns in communities outlining the CHA role, the two O-level (grade 12 final examinations) eligibility criteria, and interview date.
2. Interviews of eligible candidates by a panel from the District Medical Office and community members from Neighborhood Health Committees (NHCs). For each health post, 2 candidates are selected for training, with 3 on a waiting list.
3. All candidates receive endorsement from community headmen and chiefs. A final verification of candidates is done at national level before the school issues acceptance letters.

TRAINING

The MOH has established two CHA training schools in Ndola (Copperbelt Province) and Mwachisompola (Central Province). The rigorous one-year course incorporates both theoretical and practical training on:[5]

1. The health care system in Zambia;
2. Communicating and promoting health;
3. Behavioral health sciences;
4. Disease prevention and control and primary health care;
5. Environmental health;
6. Introduction to the human body;
7. Diagnostic procedures;
8. Basic healthcare procedures;
9. Medical and surgical conditions;
10. Reproductive and maternal health;
11. Introduction to child health;
12. Health commodities management.

DEPLOYMENT

The first class of 307 CHAs were deployed in 2012, and as of December 2016, there are **1403 CHA working at 789 facilities in every rural district**. The map above outlines the saturation and geographical distribution of CHAs around Zambia. **The attrition rates are extremely low, with only 5 CHAs no longer working** (3 of these due to death).

In order to reach Zambia's highly dispersed rural population, CHAs are mandated to spend 80% of their time in the community and 20% at the health post. Through this work, the **CHAs are projected to provide access to preventative and curative services to nearly 3.9 million rural residents (50% of the rural population)[6] by 2018**

1. Government of the Republic of Zambia, Ministry of Health. (2014). Consolidated MOH and MCDMCH payroll data as of January 2014.

2. USAID Zambia President's Malaria Initiative Operational Plan 2015

3. Central Statistical Office (CSO), Ministry of Health (MOH), Tropical Diseases Research Centre (TDRC), University of Zambia, and Macro International Inc. (2014). Zambia Demographic and Health Survey 2014. Calverton, Maryland, USA: CSO and Macro International Inc.

4. Ministry of Health, (MoH) National Community Health Worker Strategy, 2010

5. Full scope of work see the Annex B of USAID MCHIP 'Developing and Strengthening Community Health Worker Programs at Scale: http://www.mchip.net/node/2140

6. Calculation includes the pilot class staffs 161 HPs, and assumes 500 new CHAs per year, staffs 250 Health Posts (2 CHAs per HP) HP serves a catchment population of 3,500 people. Rural population denominator of 7.9 million from the GRZ 2010 census.

THE IMPACT OF ZAMBIA'S CHAs

TASK SHIFTING AND UPTAKE OF SERVICES

A 2013 CHAI/MoH impact evaluation measured the impact of the first class of CHAs at 16 rural health facilities in four districts of Zambia using facility-based health service delivery records. **The deployment of two CHAs to a health post led to an uptake of basic health services: an additional 11.6 adult visits, 172 child visits and 5.2 antenatal visits per month.**[8]

CHAs also shifted routine tasks away from nurses and midwives, thereby freeing up more time for highly trained staff to provide more advanced health services for complicated/severe referral cases, like attending deliveries. The key takeaway **is the need to pair CHAs with skilled health workers in order to optimize the work of all cadres.**

EVIDENCE-BASED STRATEGIES TO RECRUIT HIGH PERFORMAING CHAs

To evaluate how to recruit motivated CHA candidates, researchers from IPA, LSE, and Harvard, collaborated with MoH to test two strategies during the pilot class deployment in 2012. The first strategy was a community-service poster outlining the opportunity to help communities through health education and services. The second was a career-orientated poster, highlighting the chance to have a career in Zambia's health system. Using a randomized controlled trial (RCT), data was collected from 47 districts, 47 health posts and 738 households.

The career-orientated recruitment strategy not only generated more highly qualified candidates, but these candidates also completed **30% more household visits when deployed after their training.**[9] As a result, this evidence-based recruitment strategy has since been scaled up nationwide by MoH.

RESULTS SUMMARY

Compared to CHAs recruited with posters emphasizing the position's benefits to one's community, CHAs recruited with a poster emphasizing career benefits had the following health impacts in their communities:

- **31% more institutional deliveries**
- **24% more child outpatient visits at health posts**
- **22% more child growth monitoring visits at health posts**
- **20% increase in polio vaccination among children under 1**
- **Increase of 5 percentage points in breastfeeding**
- **16% increase in deworming**
- **25% decrease in the prevalence of underweight children**

STRENGTHENING COMMUNITY-FACILITY LINKAGES

Qualitative findings outline that CHAs serve as a bridge between health facilities and communities. CHAs improve health-seeking behavior by helping communities identify and address their own health needs in collaboration with Neighbourhood Health Committees (NHCs) and Community Based Volunteers (CBVs). This is highlighted by process evaluations undertaken by CHAI/MoH[10] in 2013 and 2015 and by a World Vision study which documented the building of 200 standardized latrines and use of primary health care services tripling in one community.[11]

The evaluations outline three ways stakeholders can support improved community-based primary healthcare:

- Establishing a **Community Health Strategy** which outlines how skilled health workers, CHAs and CBVs should coordinate health service provision
- Strengthening the **Community Health Information System** to support primary healthcare
- Ensuring adequate supervisors training is given to health workers for effective supervision of CHAs

CONCLUSION: INVESTING IN CHAs IS INVESTING IN COMMNUITY HEALTH

This brief outlines Zambia's CHA program and the impact of a nationwide salaried CHW cadre on primary healthcare. It demonstrates that CHAs:

- **Increase the volume of health services provided in rural areas** through expanding access to basic health services
- **Improve health outcomes in under-served rural areas**
- **Coordinate community-health facility linkages** & **improve health-seeking behavior** of rural communities
- **Are most effective when paired with skilled health workers**

8. Walsh F, Keller B, Musonda M, Vosburg KB, McCarthy E. "Determining the cost-effectiveness of task shifting to Community Health Assistants (CHA) on health service provision in Zambia's rural areas: a difference-in-difference evaluation." Abstract submitted for CHW Evidence Summit.

9. Ashraf N, Bandiera O, Lee S., Do-Gooders and Go-Getters: Selection and Performance in Public Service Delivery. Working Paper

10. K. Shelley, Y. Belete, S. Phiri, M. Musonda, E. Kawesha, E. Muleya, C. Chibawe, J. van den Broek and K. Vosburg, "Implementation of the Community Health Assistant (CHA) Cadre in Zambia: A Process Evaluation to Guide Future Scale-up Decisions," Journal of Community Health, vol. 41, no. 2 doi: 10.1007/s10900-015-0110-5., pp. 398-408, 2016.

11. World Vision International. Changing Lives Through Social Accountability Report. http://cdn.worldvision.org.uk/files/9314/3386/2069/Changing_Lives_Through_Social_Accountability.pdf

CLINTON HEALTH ACCESS INITIATIVE

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UKaid from the Department for International Development