

COMMUNITY HEALTH SYSTEMS CATALOG

COUNTRY PROFILE: ZAMBIA

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Advancing Partners & Communities

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ACRONYMS

| | |
|--------|--|
| APC | Advancing Partners & Communities |
| CBD | community-based distributor |
| CBV | community-based volunteer |
| CBW | community-based worker |
| CDA | community development assistant |
| CHA | community health assistant |
| CHS | community health system |
| CHW | community health worker |
| DMO | district medical office |
| FP | family planning |
| IUD | intrauterine device |
| MCDMCH | Ministry of Community Development, Mother and Child Health |
| NGO | nongovernmental organization |
| NHC | neighborhood health committee |
| PHC | primary health care |
| PMO | provincial medical office |
| TB | tuberculosis |
| USAID | United States Agency for International Development |
| WASH | water, sanitation, and hygiene |

INTRODUCTION

This Community Health Systems (CHS) Catalog country profile is the 2016 update of a landscape assessment that was originally conducted by the Advancing Partners & Communities (APC) project in 2014. The CHS Catalog focuses on 25 countries deemed priority by the United States Agency for International Development's (USAID) Office of Population and Reproductive Health, and includes specific attention to family planning (FP), a core focus of the APC project.

The update comes as many countries are investing in efforts to support the Sustainable Development Goals and to achieve universal health coverage while modifying policies and strategies to better align and scale up their community health systems.

The purpose of the CHS Catalog is to provide the most up-to-date information available on community health systems based on existing policies and related documentation in the 25 countries. Hence, it does not necessarily capture the realities of policy implementation or service delivery on the ground. APC has made efforts to standardize the information across country profiles, however, content between countries may vary due to the availability and quality of the data obtained from policy documents.

Countries use a wide variety of terminology to describe health workers at the community level. The CHS Catalog uses the general term “community health provider” and refers to specific titles adopted by each respective country as deemed appropriate.

The CHS Catalog provides information on 136 interventions delivered at the community level for reproductive, maternal, newborn, and child health; nutrition; selected infectious diseases; and water, sanitation, and hygiene (WASH). This country profile presents a sample of priority interventions (see Table 6 in the Service Delivery section) delivered by community health providers and for which information is available.

APC regularly updates these profiles and welcomes input from colleagues. If you have comments or additional information, please send them to info@advancingpartners.org.

ZAMBIA COMMUNITY HEALTH OVERVIEW

Policies governing community health in Zambia are in a period of transition. In 2011, sub-departments of the Ministry of Health joined the Ministry of Community Development and Social Services to form the Ministry of Community Development, Mother and Child Health (MCDMCH), which aims to holistically reduce poverty and improve primary health care (PHC) at the community level.

In 2014, the MCDMCH developed a draft policy called the *National Integrated Strategy for Community Based Health & Social Development Workers and Volunteers in Zambia* to define and align efforts of: 1) community-based workers (CBWs), including community health assistants (CHAs) and community development agents (CDAs);¹ and 2) community-based volunteers (CBVs), of which there are many uncoordinated cadres in the country. The community health strategy is supplemented by other national vertical and comprehensive health strategies, such as the *National AIDS Strategic Framework* and *Human Resources for Health Strategic Plan*, which include community health components.

Community health policy guidance exists for specific health areas, such as malaria and FP, and includes basic information about community health provider selection criteria, scope of service, training, supervision, and incentives. The community plays a role in managing its health priorities through neighborhood health committees (NHCs), which serve as a link between the community and the national health system. However, the absence of a process to register and track the many volunteer community health provider cadres remains a challenge for understanding the community health realities on the ground.

CHAs, Zambia's primary community health cadre, are formally trained and incorporated into the national health system. The CHA cadre evolved from a community health worker cadre that the Ministry of Health formalized in 2010 under the *National Community Health Worker Strategy*, which aims to improve service delivery through more equitable access and cost-effective health care to families.

Table 1. Community Health Quick Stats

| | |
|--|--|
| Main community health policy/strategy | <i>National Integrated Strategy for Community Based Health & Social Development Workers and Volunteers in Zambia (Draft)</i> |
| Last updated | 2014 |
| Number of community health provider cadres | 1 main cadre ¹ : community health assistants (CHAs) |
| Recommended number of community health providers | 5,214 CHAs |
| Estimated number of community health providers | 307 CHAs ² |
| Recommended ratio of community health providers to beneficiaries | 1 CHA: 3,500 people (rural) 1 CHA: 7,000 people (urban) |
| Community-level data collection | Yes |
| Levels of management of community-level service delivery | National, provincial, district, community |
| Key community health program(s) | CHA Program |

¹ There are other uncoordinated cadres of community-based volunteers (CBVs), including community-based distributors (CBDs) of family planning.

² There are an estimated 100,000 CBVs.

1 | CDAs are not health-focused and are therefore not discussed in-depth in this profile.

The CHA program is funded by the government and international donors and implemented at the district level. At times, international and local non-governmental organizations (NGOs) support training and provide financial incentives and supplies. The program operates in rural and peri-urban areas and is currently scaling up to the national level. The first cohort of 307 CHAs was trained under a new curriculum in 2012 and deployed to health posts in 47 of 105 districts as part of a pilot phase. Over the next four phases, the program aims to scale to 5,214 CHAs nationwide. CHAs are supported by other CDAs and CBVs. Further details about CHAs and these other cadres are provided in the Human Resources section and throughout the country profile.

Table 2. Key Health Indicators, Zambia

| | |
|---|--------------|
| Total population ¹ | 15.9 m |
| Rural population ¹ | 60% |
| Total expenditure on health per capita (current US\$) ² | \$86 |
| Total fertility rate ³ | 5.3 |
| Unmet need for contraception ³ | 21.1% |
| Contraceptive prevalence rate (modern methods for married women 15-49 years) ³ | 44.8% |
| Maternal mortality ratio ⁴ | 224 |
| Neonatal, infant, and under 5 mortality rates ³ | 24 / 45 / 75 |
| Percentage of births delivered by a skilled provider ³ | 64.2% |
| Percentage of children under 5 years stunted ³ | 40.1% |
| HIV prevalence rate ⁵ | 12.9% |

¹ PRB 2016; ² World Bank DataBank 2014; ³ CSO, MOH, and ICF International 2014; ⁴ WHO 2015; ⁵ UNAIDS 2015.

LEADERSHIP AND GOVERNANCE

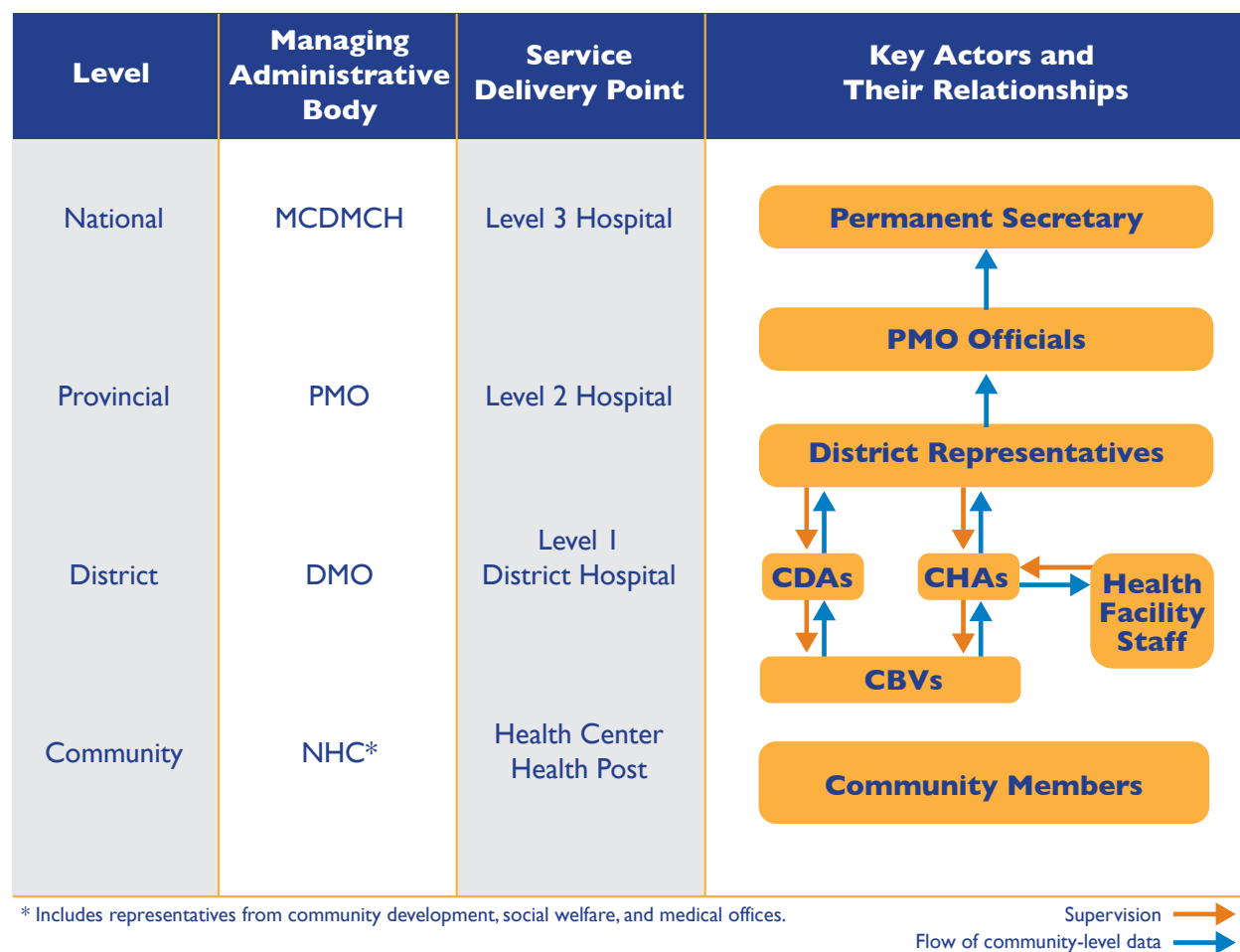
Community-level service delivery in Zambia is managed and coordinated across the national, provincial, district, and community levels. Each level has a distinct role in supporting policy and program efforts.

- The **national-level** governing body, the MCDMCH, is led by the Permanent Secretary and oversees operations of each of its constituent departments: community development, social work, and mother and child health. The MCDMCH develops policies and strategies, coordinates programs and projects, and supports provincial and district implementation of PHC programs.
- The provincial medical office (PMO) coordinates the MCDMCH medical offices at the **provincial level** and is responsible for planning, monitoring and evaluating district-level program implementation.
- The district medical office (DMO) manages health service delivery at the **district level** and collects and synthesizes monitoring and evaluation data from health centers.
- At the **community level**, NHCs determine health priorities and coordinate health programs and activities, often in collaboration with CBWs and CBVs who work through health centers and health posts.

Zambia's 2014 draft community health policy serves as a basis for understanding how the national, formalized cadres of community health providers and other volunteer cadres should align efforts at the operational level to better reach families with critical health and social welfare services.

Figure 1 summarizes Zambia's health structure, including managing administrative bodies, service delivery points, and key actors.

Figure 1. Health System Structure



HUMAN RESOURCES FOR HEALTH

The 2014 draft policy defines two main categories of community providers working in Zambia: CBWs and CBVs. CBWs include CHAs, Zambia’s main cadre of community health provider, and CDAs, who provide social services (other than health) in their communities. CBWs are formally trained and paid monthly according to the MCDMCH salary scale.

CBVs, on the other hand, are supported by other, often smaller public and private programs and initiatives operating at the community level in the domains of health, social welfare, and community development. CBV work is intended to complement and support CBW activities. Health-related CBVs include community-based distributors (CBDs) of FP services, HIV counselors, caregivers, and malaria control agents, among others. The MCDMCH has had difficulty counting and defining CBVs because of their different roles and lack of coordination between the programs that support them. Recent country estimates show that there are at least 100,000 CBVs operating in Zambia, including both those who are health-focused and those who are not.

Table 3. Community Health Provider Overview

| | CHAs | CBDs | Other CBV cadres |
|----------------------------------|--|---|---|
| Number in country | 307 trained and deployed as of 2012 | <i>Information not available in policy</i> | Estimated 100,000 ¹ |
| Target number | 5,214 after scale-up | <i>Information not available in policy</i> | <i>Information not available in policy</i> |
| Coverage ratios and areas | 1 CHA: 3,500 people (rural) 1 CHA: 7,000 people (urban) Operate in rural and peri-urban areas | <i>Information not available in policy</i> | No ratio specified Usually operate in a subsection of a health post or health center catchment area |
| Health system linkage | Employed by the government | Supervised by CHAs and health facility staff | Supervised by health and social welfare professionals (e.g., CHAs, CDAs) |
| Supervision | Supervised by professional staff at health centers and representatives from district-level offices for community development, social welfare, and health | Supervised by CHAs and health facility staff | Supervised by CHAs, CDAs, health facility staff, and/or sponsoring NGOs |
| Accessing clients | On foot Bicycle Public transport Provide services from their homes, health posts and health centers | Door-to-door services | On foot Bicycle Public transport Provide services from their homes |
| Selection criteria | Chosen by community Grade 12 education Two O-levels; one O-level in English ² 18-38 years old Women preferred over men Previous CBW/CBV experience | Endorsed by community Permanent resident of community Male or female 24-45 years old or as approved by community Volunteer Able to read and write English Completion of grade 9 Committed and trustworthy Good communication skills Role model | Endorsed by community Permanent resident of community Able to read, write, keep records and teach Other criteria may vary by program |
| Selection process | Identified and selected by community structures | <i>Information not available in policy</i> | Identified and selected by community structures |

Table 3. Community Health Provider Overview

| | CHAs | CBDs | Other CBV cadres |
|------------------------------------|--|--|--|
| Training | 12 months' training, including classroom and practicum sessions | Pre- and in-service | Duration of training varies by NGO and type of health program, ranging from 3 days to 1 month. Some programs include follow-up training. |
| Curriculum | <i>National Community Health Assistant Curriculum (2012)</i> . Includes information on the health care system; health behavior change communication and promotion; environmental health; the human body; diagnostic procedures; basic first aid; reproductive health including FP; child health; communicable and non-communicable diseases; medicines and commodities management. | <i>Community Based Distribution of Family Planning Participants' Manual (2014 draft)</i> . Includes client rights; reproductive anatomy; FP concepts, benefits, methods, misconceptions, counseling, and communication; commodity management; sexually transmitted infection/HIV prevention, treatment, and management; prevention of mother-to-child transmission of HIV; youth-friendly services; reporting; referrals; follow-up; community assessment, and social mapping. | Varies by program, but policy recommends 2 major training packages (one on health, one on social development) and a standardized curriculum. |
| Incentives and remuneration | Salaried; no non-financial incentives Financed by the government | Information not available in policy | Generally unpaid, though incentives are largely dependent on the program and may include per diems, cash or in-kind payments; membership in community-level cooperatives; t-shirts; or formal social recognition. Supported by NGOs. 2014 draft policy recommends CHVs receive a standardized incentive package. |

¹ Estimate includes both health-focused CBVs and non-health-focused CBVs.

² O-level, or "Ordinary Level" refers to a secondary school subject-based qualification within the British education system.

HEALTH INFORMATION SYSTEMS

CHAs and various CBVs in Zambia are responsible for submitting community-level data including activity reports, stock sheets, and registers of the number of clients they serve to their supervisors at health posts and health centers. Health data collection is integrated with data collected by CDAs supporting community development programs.

Data flows upward from the community level, starting with CBVs, who report to CBWs (CHAs and CDAs). CHAs report to supervisors from both the district level and health facility. DMOs compile data from health facilities into reports, which are then passed on to PMOs and then to the MCDMCH. The data is then entered in the national health management information system. The blue arrows in Figure 1 show how the data moves through the health system.

While this data informs some future actions, like when to replenish stock, it is unclear if there is a formal mechanism for feeding data back from higher levels to inform community-level decision making.

HEALTH SUPPLY MANAGEMENT

Supervisors at health posts and health centers provide CHAs and CBVs with the materials, products, and supplies they need to complete their work. Implementing NGOs may also provide this support to CBVs working on their programs. Community health providers are given a start-up package according to their estimated number of clients, and they replenish stocks according to the stock sheet balances. They bring medical waste to the health facility for disposal. Although the full list of commodities that CHAs and CBVs provide is not available, information about selected medicines and products included in the *Zambia Essential Medicine List (2013)* is presented in Table 4.

Table 4. Selected Medicines and Products Included in the Zambia Essential Medicine List (2013)

| Category | | Medicine / Product |
|---------------------------------|-------------------------------------|------------------------------------|
| FP | <input type="checkbox"/> | CycleBeads® |
| | <input checked="" type="checkbox"/> | Condoms |
| | <input checked="" type="checkbox"/> | Emergency contraceptive pills |
| | <input checked="" type="checkbox"/> | Implants |
| | <input checked="" type="checkbox"/> | Injectable contraceptives |
| | <input checked="" type="checkbox"/> | IUDs |
| | <input checked="" type="checkbox"/> | Oral contraceptive pills |
| Maternal health | <input checked="" type="checkbox"/> | Calcium supplements |
| | <input checked="" type="checkbox"/> | Iron/folate |
| | <input checked="" type="checkbox"/> | Misoprostol |
| | <input checked="" type="checkbox"/> | Oxytocin |
| | <input checked="" type="checkbox"/> | Tetanus toxoid |
| Newborn and child health | <input checked="" type="checkbox"/> | Chlorhexidine |
| | <input checked="" type="checkbox"/> | Cotrimoxazole |
| | <input checked="" type="checkbox"/> | Injectable gentamicin |
| | <input checked="" type="checkbox"/> | Injectable penicillin |
| | <input checked="" type="checkbox"/> | Oral amoxicillin |
| | <input type="checkbox"/> | Tetanus immunoglobulin |
| | <input checked="" type="checkbox"/> | Vitamin K |
| HIV and TB | <input checked="" type="checkbox"/> | Antiretrovirals |
| | <input checked="" type="checkbox"/> | Isoniazid (for preventive therapy) |
| Diarrhea | <input checked="" type="checkbox"/> | Oral rehydration salts |
| | <input type="checkbox"/> | Zinc |
| Malaria | <input checked="" type="checkbox"/> | Artemisinin combination therapy |
| | <input type="checkbox"/> | Insecticide-treated nets |
| | <input checked="" type="checkbox"/> | Paracetamol |
| | <input type="checkbox"/> | Rapid diagnostic tests |
| Nutrition | <input checked="" type="checkbox"/> | Albendazole |
| | <input checked="" type="checkbox"/> | Mebendazole |
| | <input type="checkbox"/> | Ready-to-use supplementary food |
| | <input type="checkbox"/> | Ready-to-use therapeutic food |
| | <input checked="" type="checkbox"/> | Vitamin A |

SERVICE DELIVERY

CHAs and CBVs provide health education, mobilize communities, and deliver select preventive and treatment services. Table 5 highlights the modes by which they conduct these activities.

CHAs provide condoms, oral contraceptive pills, and injectable contraceptives in communities. Discussions of piloting the provision of implants by CHAs are also underway at the national level.

Community health providers refer clients to the next tiers of service—health posts, health centers, and district hospitals. Often, CBVs may refer clients to CHAs. Counter-referrals are rarely mentioned in policy, though referral forms for CBDs, who deliver FP services, include a box to indicate counter-referrals.

Using FP as an example, CHAs and CBDs may refer clients to:

- **Health posts** for injectable contraceptives and emergency contraceptive pills.
- **Health centers** for methods available at health posts, implants, and intrauterine devices (IUDs).
- **District hospitals** for methods available at health posts and health centers and permanent methods.

Table 6 provides details about selected interventions delivered by CHAs and CBDs, according to policy, in the following health areas: FP, maternal health, newborn care, child health and nutrition, tuberculosis (TB), HIV, malaria, and WASH.

Table 5. Modes of Service Delivery

| Service | Mode |
|-------------------------------|--|
| Clinical services | Door-to-door |
| | Periodic outreach at fixed points |
| | Provider's home |
| | Health posts or other facilities |
| | Special campaigns |
| Health education | Door-to-door |
| | Health posts or other facilities |
| | In conjunction with other periodic outreach services |
| | Community meetings |
| | Mothers' or other ongoing groups |
| Community mobilization | Door-to-door |
| | Health posts or other facilities |
| | In conjunction with other periodic outreach services |
| | Community meetings |
| | Mothers' or other ongoing groups |

Table 6. Selected Interventions, Products, and Services

| Subtopic | Interventions, products, and services | Information, education, and/or counseling | Administration and/or provision | Referral | Follow-up |
|------------------------|--|---|---------------------------------|-------------|-----------------------|
| FP | Condoms | CBD, CHA | CBD, CHA | Unspecified | CBD |
| | CycleBeads® | Unspecified | Unspecified | Unspecified | Unspecified |
| | Emergency contraceptive pills | Unspecified | Unspecified | Unspecified | Unspecified |
| | Implants | CBD, CHA ¹ | CHA ² | CBD, CHA | CBD, CHA ³ |
| | Injectable contraceptives | CBD, CHA | CBD ⁴ , CHA | CBD, CHA | CBD, CHA ³ |
| | IUDs | CBD, CHA ¹ | No | CBD, CHA | CBD, CHA ³ |
| | Lactational amenorrhea method | CBD, CHA ¹ | | Unspecified | CBD |
| | Oral contraceptive pills | CBD, CHA | CBD, CHA | CBD, CHA | CBD, CHA ³ |
| | Other fertility awareness methods | CBD, CHA ¹ | | Unspecified | CBD |
| | Permanent methods | CBD, CHA ¹ | No | CBD, CHA | CBD, CHA ³ |
| | Standard Days Method | CBD, CHA ¹ | | Unspecified | CBD |
| Maternal health | Birth preparedness plan | CHA | CHA | Unspecified | Unspecified |
| | Iron/folate for pregnant women | Unspecified | Unspecified | Unspecified | Unspecified |
| | Nutrition/dietary practices during pregnancy | CHA | | Unspecified | Unspecified |
| | Oxytocin or misoprostol for postpartum hemorrhage | Unspecified | Unspecified | Unspecified | Unspecified |
| | Recognition of danger signs during pregnancy | CHA | CHA | CHA | CHA |
| | Recognition of danger signs in mothers during postnatal period | CHA | CHA | CHA | CHA |
| Newborn care | Care seeking based on signs of illness | CHA | | | Unspecified |
| | Chlorhexidine use | Unspecified | Unspecified | Unspecified | Unspecified |
| | Managing breastfeeding problems (breast health, perceptions of insufficient breast milk, etc.) | CBD, Unspecified | | Unspecified | Unspecified |
| | Nutrition/dietary practices during lactation | CBD, CHA | | Unspecified | Unspecified |
| | Postnatal care | CHA | Unspecified | CHA | CHA |
| | Recognition of danger signs in newborns | CHA | CHA | CHA | CHA |

| Subtopic | Interventions, products, and services | Information, education, and/or counseling | Administration and/or provision | Referral | Follow-up |
|-----------------------------------|--|---|---------------------------------|-------------|-------------|
| Child health and nutrition | Community integrated management of childhood illness | CHA | CHA | CHA | CHA |
| | De-worming medication (albendazole, mebendazole, etc.) for children 1–5 years ⁵ | Unspecified | CHA | Unspecified | Unspecified |
| | Exclusive breastfeeding for first 6 months | CBD | | Unspecified | Unspecified |
| | Immunization of children ^{6,7} | CHA | No | CHA | CHA |
| | Vitamin A supplementation for children 6–59 months | Unspecified | CHA | Unspecified | Unspecified |
| HIV and TB | Community treatment adherence support, including directly observed therapy | Unspecified | Unspecified | Unspecified | Unspecified |
| | Contact tracing of people suspected of being exposed to TB | Unspecified | Unspecified | Unspecified | Unspecified |
| | HIV testing | CBD ⁸ | CHA | Unspecified | Unspecified |
| | HIV treatment support | Unspecified | CHA | Unspecified | Unspecified |
| Malaria | Artemisinin combination therapy ⁹ | Unspecified | Unspecified | Unspecified | Unspecified |
| | Long-lasting insecticide-treated nets | Unspecified | Unspecified | Unspecified | Unspecified |
| | Rapid diagnostic testing for malaria | Unspecified | CHA | Unspecified | Unspecified |
| WASH | Community-led total sanitation | CHA | CHA | | |
| | Hand washing with soap | Unspecified | | | |
| | Household point-of-use water treatment | CHA | | | |
| | Oral rehydration salts ¹⁰ | Unspecified | CHA | Unspecified | Unspecified |

¹ Not explicitly stated in CHA training curriculum; only states information for FP methods generally.

² Plans for CHAs to pilot administration of implants.

³ Follow-up is only mentioned as it applies to all clients referred to health facilities; follow-up is not mentioned for each specific FP method.

⁴ Plans for CBDs to pilot administration of injectable contraceptives.

⁵ Also applies to people other than children under 5 years.

⁶ Immunizations include measles, DPT3, BCG, TT2, TT2+, and poliomyelitis.

⁷ Includes newborns and children under 5.

⁸ CHAs may provide information / education about HIV testing during pregnancy. Information / education about HIV testing is not otherwise specified in available policies.

⁹ CHA scope of work indicates CHAs can treat malaria, but does not specify whether or not this includes children under 5 years or use of ACT.

¹⁰ Includes children under 5 years and general population.

KEY POLICIES AND STRATEGIES

Ministry of Community Development, Mother and Child Health (MCDMCH) and Ministry of Health (MOH), Republic of Zambia. 2014. *Community Based Distribution of Family Planning Participants' Manual*. Lusaka: MCDMCH and MOH, Republic of Zambia.

———. 2014. *National Integrated Strategy for Community Based Health and Social Development Workers and Volunteers in Zambia (Zero Draft)*. Lusaka: MCDMCH and MOH, Republic of Zambia.

MOH, Republic of Zambia. 2010. *National Community Health Worker Strategy in Zambia*. Lusaka: MOH, Republic of Zambia. Available at http://zschs.weebly.com/uploads/2/0/2/8/20289395/nchw_strategy-august-_2010_final.pdf (accessed May 2016).

———. 2011. *National Human Resources for Health Strategic Plan 2011- 2015*. Lusaka: MOH, Republic of Zambia. Available at http://www.who.int/workforcealliance/countries/ccf/HRH_plan_zambia2011-2015.pdf (accessed May 2016).

———. 2011. *Nutrition Guidelines for Care and Support of People Living with HIV and AIDS*. Lusaka: MOH, Republic of Zambia. Available at http://www.fantaproject.org/sites/default/files/resources/Zambia_Nutrition_HIV_Guidelines_June2011.pdf (accessed May 2016).

———. 2012. *National Health Strategic Plan 2011-2015*. Lusaka: Ministry of Health, Republic of Zambia. Available at <http://www.zuhwa.com/resources/reports> (accessed May 2016).

———. 2012. *Community Health Assistant Curriculum: Modules 1-12*. Lusaka: Ministry of Health, Republic of Zambia.

National HIV/AIDS/STD/TB Council (NAC), Republic of Zambia. *National AIDS Strategic Framework 2011-2015: Towards Improving the Quality of Life of the Zambian People*. Lusaka: Ministry of Health, Republic of Zambia. Available at <http://zambia.unfpa.org/sites/esaro/files/pub-pdf/ZambiaNASF2011-2015.pdf> (accessed May 2016).

Republic of Zambia. 2012. *National Health Policy*. Lusaka: Ministry of Health, Republic of Zambia. Available at <http://www.mcdmch.gov.zm/sites/default/files/downloads/National%20Health%20Policy%20-%20Final.pdf> (accessed May 2016).

UNICEF and Ministry of Health, Republic of Zambia. 2013. *Zambia Essential Medicines List (ZEML)*. Lusaka: Ministry of Health, Republic of Zambia. Available at http://www.who.int/selection_medicines/country_lists/Zambia_EML_2013.pdf?ua=1 (accessed May 2016).

REFERENCES

- Central Statistical Office (CSO) [Zambia], Ministry of Health (MOH) [Zambia], and ICF International. 2014. *Zambia Demographic and Health Survey 2013-14*. Rockville, MD, USA: Central Statistical Office, Ministry of Health, and ICF International. Available at <https://www.dhsprogram.com/pubs/pdf/FR304/FR304.pdf> (accessed August 2016).
- PRB. 2016. *2016 World Population Data Sheet*. Washington, DC: PRB. Available at <http://www.prb.org/pdf16/prb-wpds2016-web-2016.pdf> (accessed August 2016).
- UNAIDS. 2015. "AIDS Info." Available at <http://aidsinfo.unaids.org/> (accessed June 2016).
- World Bank DataBank. 2014. "Health expenditure per capita (current US\$)." Available at <http://beta.data.worldbank.org/indicator/SH.XPD.PCAP?view=chart> (accessed June 2016).
- World Health Organization. 2015. *Trends in Maternal Mortality 1990 to 2015: Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division*. Geneva: World Health Organization. Available at http://apps.who.int/iris/bitstream/10665/194254/1/9789241565141_eng.pdf (accessed April 2016).

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