Background

Madagascar ranks 154th of 188 countries on the Human Development Index and has one of the highest proportions of its people – 88% – living on less than US$1.25 a day. Over 60% of Malagasy live in rural areas more than five kilometers from a health facility. However, even when they reach a basic health center services may be unavailable or of poor quality due to a lack of human, financial, infrastructure, and other resources. Even as key health indicators have improved over the years, Madagascar’s fertility rate (4.8), maternal mortality ratio (353 per 100,000), and child mortality rate (49.6 per 1,000) remain high, in part because women cannot access essential services.

To meet the health needs of underserved and vulnerable populations, the Government of Madagascar issued a national community health policy in 2009. It encourages communities to take charge of their own health through community resources that govern and promote healthy living, such as community health volunteers (CHVs), communal health committees, and savings and loans groups.

Communities identify and elect their CHVs. They provide a range of services, including provision of contraceptive pills, condoms, Depo-Provera or Sayana® Press, and counseling on natural methods. They also provide maternal and newborn health care, including referral and counseling for antenatal care (ANC); distribution of chlorohexidine to pregnant women; referral for delivery and follow-up when back in the community;

3. For comparison, the maternal mortality ratio and child mortality rate in Rwanda are 290 and 42, respectively, according to the World Bank. http://data.worldbank.org/indicator/SH.STA.MMRT; http://data.worldbank.org/indicator/SH.DYN.TOLM.
referral of newborns with complications; and childhood services such as growth monitoring; prevention, diagnosis, and treatment of malaria, pneumonia, diarrhea, and referral of severe cases. The CHVs meet monthly at the health centers to resupply medicines and commodities, submit service statistics, and receive supervision and support.

Importantly, the government, and health centers in particular, have been under-resourced and unable to adequately support the full implementation of the national community health policy. Instead, USAID Mikolo and other donor projects have assisted CHVs to provide services and promote health in their communities. USAID Mikolo works with Ministry of Public Health staff at the district and commune levels to provide support for and improve CHV services through technical assistance, training, tools, supervision, linkages, and more.

This technical brief examines the relative contribution of CHVs to reach people, particularly women of reproductive age, and children under the age of five years, with primary health care services and examines the role of CHVs in assuring a continuum of care for pregnant women and young children between 2014 and 2016.

**Methods**

Routine service data reported by CHVs were compared to routine service statistics reported by basic health centers between 2014 and 2016. The data were recorded and reported through the health information system and obtained by USAID Mikolo. Data were entered into an electronic database and analyzed in MS Excel.

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**THE USAID MIKOLO PROJECT** increases access to and availability of community-based primary health care services, especially for women of reproductive age, children under age five, and infants living in remote areas in Madagascar. Implemented by Management Sciences for Health (MSH), with partners Action Sociosanitaire Organisation Secours, Catholic Relief Services, Institut Technologique de l’Education et du Management, and Overseas Strategic Consulting, Ltd., the project is aligned with Madagascar’s national community health policy and specifically focuses on reproductive health; family planning; maternal, newborn, and child health; and malaria prevention and care. The five-year project serves an estimated 4.6 million people who live more than five kilometers from a health facility in 8 of Madagascar’s 22 regions, 42 districts, and 506 communes.

The USAID Mikolo Project supports the Ministry of Public Health by training and supporting community health volunteers to support a continuum of care under the supervision of the local health center. The community-based delivery of the service package they offer is endorsed by the World Health Organization and has been shown to be an effective way to address shortages of human resources without compromising the quality of care.

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**Figure 1. New family planning users and continuing family planning users served by health centers and CHVs, 2014–2016**
Results

Between 2014 and 2016, the number of CHVs supported by USAID Mikolo rose from 4,489 in 375 communes to 6,694 in 506 communes. During this time, the proportion of CHVs reporting timely and complete data on their monthly activities increased from 70% to 87%.

In 2015, 29% of new and 14% of regular family planning (FP) users were initiated by CHVs, compared to 30% and 16% in 2016, respectively (Figure 1).

The number and proportion of children under the age of five years who were treated for malaria and diarrhea by CHVs and health centers, respectively, also increased from 2014 to 2016 (Figures 2 and 3).

The number of referrals made for long-acting and permanent methods (LAPM) of FP rose from 4,009 in 2014 to 5,993 in 2016.

The number of pregnant women referred to the nearest health facility by CHVs for and receiving ANC increased from 10,071 in 2014 to 30,728 in 2016. The number of newborns referred by CHVs for and obtaining emergency care increased from 2,032 in 2014 to 3,138 in 2016. (Figure 4)

Implications

The USAID Mikolo experience showed that in its target communes, CHVs play a critical role in the provision of FP, reproductive, maternal, newborn, and child health; and referral services, stimulating both access to and use of services. The data also showed an important increase in the proportions of clients reached by CHVs relative to health centers over time.

These findings reflect the rapid expansion of CHV services in underserved communities in the USAID Mikolo Project target regions between 2014 and 2016. The results underscore the importance of CHVs in extending FP and other primary health care coverage relative to health centers.
CHVs are the foundation of Madagascar’s national community health policy. Due to their proximity to the beneficiaries, CHVs reach an important number of women and children who, in their absence, would not receive essential primary health care services. As such, CHVs are important extensions of the health system, both to increase coverage and to assure access to the continuum of care, particularly for children and pregnant women. CHVs are also involved in promoting childhood vaccinations and in educating communities about healthy behaviors. Given their critical role in health service coverage, supervision of CHVs by health centers is a centerpiece to improving service quality.

However, to ascertain the validity of these findings, more research is needed to estimate the completeness of data reporting by health centers as no information was available on reporting rates by health centers.

As health centers are under-staffed, and solutions to ensure CHVs receive adequate supervision need to rely on alternative models such as peer supervision, which USAID Mikolo has begun testing at small scale. By engaging highly performing CHVs to become peer supervisors, this model not only reduces the need for health center staff to supervise CHVs, but it also reduces the cost of supervision and offers a career path to CHVs.

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