

### Improving ANC Attendance through Enhanced Services and Targeted Incentives, Including those Focused on Nutrition and WASH

#### Context

Antenatal care (ANC) visits provide important moments of opportunity to reach pregnant women with a range of services and health messages for the benefit of both mothers and their young children. According to the 2008–2009 Kenyan Demographic and Health Surveys, less than half of pregnant women had four or more ANC visits and very few received care in their first trimester. In order to increase attendance (as well as enhance services) in rural western Kenya, the U.S. Centers for Disease Control and Prevention (CDC) partnered with the Safe Water and Aids Project, Kenya, the Kenya Medical Research Institute, and the Ministry of Health in Suba and Mbita districts to test a strategy of providing incentives for each of the four recommended visits and for delivery at a health facility.

A secondary goal was to increase household water treatment and improve personal hygiene, in light of the high rates of childhood diarrhea in the area. Targeted incentives included WASH as well as nutrition-related products.

The intervention was carried out in 25 health facilities, with incentives supplied to 2000 pregnant women. Funding for the one-year pilot study was provided by the CDC and Procter & Gamble.

#### Activities/Channels

Incentives for attendance were low-cost and locally available products. These included (for ANC visits one and three) a hygiene kit consisting of soap and WaterGuard (a chlorine-based water treatment), and (for ANC visits two and four) a one-kg bag of protein-fortified flour used to make ugali, a staple in the diet. The incentive provided for delivery in a health facility included a safe water storage



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*Observed proper hand washing increased significantly.*

bucket with lid and tap, clean delivery supplies (surgical gloves, a razor blade, and a swaddling cloth), and an additional hygiene kit containing PUR water treatment packets. Mothers are typically expected to bring their own supplies for the delivery and this can otherwise be costly for them.

To enhance services, the project provided training for facility nurses in the active management of the third stage of labor, obstetric emergencies, neonatal resuscitation, and improved communication to ensure patient-centered care. The project also supplied ambubags for neonatal resuscitation as well as simple hand washing and drinking water stations. It was important for the facilities to be able to model the same behaviors they were promoting, and some had no facilities for hand washing or drinking water.

Nurses disseminated messages about the incentives at health facilities and community health workers disseminated messages in the villages.

## Results

The one-year study followed 302 women who initially visited one of the 12 program health facilities in their first or second trimesters of pregnancy. The survey included data from maternal registries; women's self-reported ANC, delivery, and postnatal practices; as well as observations in the home related to their WASH practices. Evaluators observed a significant increase (from 47 percent to 62 percent) among mothers who could demonstrate proper hand washing techniques. During the home visits at endline, 18 percent of families were observed using the buckets and tap for clean drinking water storage (as opposed to 0 percent at baseline). Overall, point-of-use water treatment rose significantly from 82 percent to 94 percent. Use of filters rose significantly from 31 percent to 43 percent. Reported use of WaterGuard was already high at 85 percent at the program start and remained the same at follow-up. Use of PUR, which was not a familiar product in this area, remained low. Evaluators speculated that promotion of filters in the same area by another program contributed to the increase in point-of-use practices.

To evaluate use of maternal health services, practices of mothers who at baseline reported on previous pregnancies were compared with practices during the study period. There was a significant increase in the percentage of mothers with four or more ANC visits (from 55 to 76

percent); health facility deliveries rose significantly from 41 to 73 percent; and postnatal checks rose significantly from 38 to 61 percent.

## Lessons

The program demonstrated that low-cost health- and nutrition-related incentives can help improve ANC attendance, and that ANC visits can provide important moments for changes in multiple practices (in this case, hand washing in particular). The evaluators recommended that future programs evaluate water treatment using microbiologic methods. Tests for residual chlorine in home drinking water suggested low rates of water treatment at both baseline and follow up. However, a majority of women (more than 75 percent) who reported using WaterGuard said they last treated their current drinking water over 24 hours before the home visit. For budgetary reasons, water quality testing was limited to residual chlorine, which is a useful marker only for periods up to 24 hours.

## Resources

The Impact of targeted incentives and enhanced services on use of maternal health services in Rural Western Kenya [abstract]. In: Proceedings of the 1st Annual Epidemic Intelligence Service Conference. Apr 16–20, 2012.

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