



Fund for Innovation  
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CANADIAN PHYSICIANS FOR AID AND RELIEF (CPAR)

# Remote Ultrasound Capacity Building for Antenatal Access

## Context

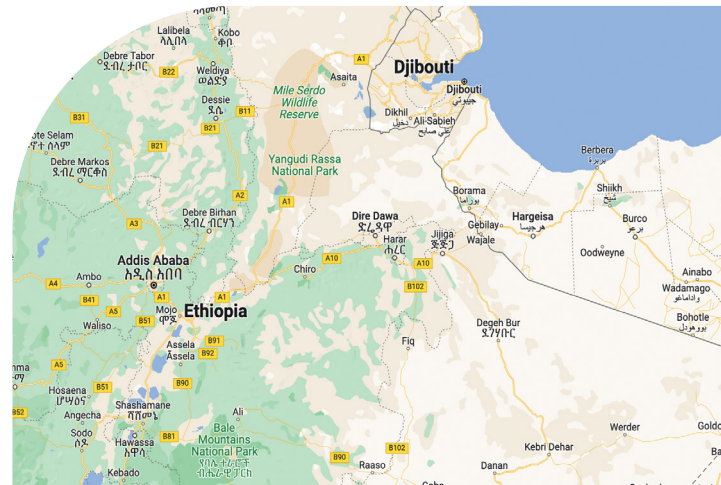
Ethiopia has one of the highest maternal mortality rates in the world, with 412 deaths per 100,000 live births. In rural areas, chances of maternal mortality and stillbirth are higher still. Prior to the innovation, CPAR found that 66% of women in the target region had three or fewer antenatal care visits during their pregnancy, while 25% of mothers between the ages of 15 and 24 received no care. More than half of the mothers surveyed had received no dietary advice during pregnancy and 70% indicated they took no supplements.

## The Innovative Solution

Supported by FIT, CPAR tested a solution aimed at improving antenatal care (ANC) and obstetric services through the use of ultrasound technology in remote locations of the North Shoa Zone. The project aimed to decrease maternal mortality and increase the capacity of accessible medical care. The test included the provision of telemedicine services using the synchronous-based Phillips Lumify ultrasound technology, coupled with the training of 14 local front-line healthcare workers (midwives and health officers) linked to an obstetrician in an urban hospital. It also included an awareness campaign on the benefits of ANC and the importance of nutrition and supplements during pregnancy.

## Advancing Gender Equality

Eight women and six men frontline health professionals, alongside women administrative personnel, including the project manager, were involved in this project with a conscious intent of increasing female staff capacity. As part of this innovation's operations, data was gender and age disaggregated to examine the disparities in experience, knowledge, talents, and needs between men and women, allowing policymakers to identify future initiatives and address both men and women's needs.



### COUNTRY

Ethiopia

### AMOUNT

\$224,211

### TESTING PERIOD

15 months  
Ended November 2021



**GENDER RESPONSIVE (GE2)**

**THEME: HEALTH AND NUTRITION**

# Testing Framework

The innovation was tested through the comparison of pre and post rates of community awareness and attitudes towards ANC including ultrasound technology, and uptake and compliance with the recommended ANC schedule of 4 + visits throughout a pregnancy. Uptake and efficacy were measured by comparing data from participating health centers within the hospital's catchment area with those that did not participate in the innovation, specifically looking at maternal morbidity and mortality rates, number of patients getting ultrasound imaging, number of complications identified and emergency obstetric referral records to Fitcha General Hospital. The pilot has also been designed to test the applicability and feasibility of the approach in rural vs. peri-urban health centers, by selecting one facility from each category to participate.

## Results and Impact

The innovation improved ANC access for 2,795 pregnant women, exceeding the target by 23%. Women accessing care were often accompanied by their spouses, which allowed healthcare professionals to educate men on basic maternal nutritional needs. The test also sought to reduce the number of ultrasound imaging referrals to general hospitals for follow up care in the region. Through the project implementation, only 3.8% of women were referred for follow up care as compared to 19% referral at the baseline level. Undetected complications in pregnancy were reduced from 20% at baseline, to 6% at endline.

## Key Lessons

1. Initially, the health care workers regarded ultrasound technology as complicated and unattainable, believing that they would not be able to comprehend all the information supplied. Through the capacity development exercises, the health workers appreciated the information provided and were keen to adapt it in their working routines, and share learnings with other health workers.
2. Normally, the Zonal Health Authority faces significant turnover in staff for the health centres. However, not a single person trained as part of this project has left their position. A lesson learned is that innovative technology and increased scope of practice is well received by health workers and may decrease attrition.
3. CPAR initiated a Saturday market pivot to test if accessibility to ANC improved by providing services during a day when women typically gather. After CPAR began offering ANC with ultrasound services on Saturdays, it was noted that Saturdays were a clear preference for women. The Saturday Market ANC option is now slated for scaling.

"I feel happy to obtain the ultrasound nearby our residence - it saves time, money, and we can [attend] on Saturday and nights. Last week I felt the absence of fetal movement. I came to the health center at midnight and the midwives examined me with an ultrasound and confirmed my baby is fine and I returned to my home." - 35 year-old Ethiopian mother.

### PARTNER ORGANIZATION

- The Ethiopian Ministry of Health
- CPAR Ethiopia

### TARGET PARTICIPANTS

14 health workers (8 women, 6 men) trained.

2,795 pregnancy women accessed antenatal services.

800 community members participated in awareness-raising events.

### FOR MORE INFORMATION

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### ABOUT FIT

The Fund for Innovation and Transformation supports Canadian small and medium-sized organizations (SMOs) testing innovative solutions that advance gender equality in the Global South.



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