# Adapting eLearning content for an interactive voice response course for professional development in Kenya

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## K4Health Overview – What we do

We help people around the world learn, share, and act on critical family planning and public health knowledge.



## K4Health Overview – How we do it

- Systematic learning
- Meaningful connections
- Digital health strategy



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Health workforce strengthening



## **Context**

- Growing demand for customized training content for health workers
- Mobile phone ownership is very high
- Although increasing, Internet access remains limited for many in low- and middle-income countries

# Interactive Voice Response (IVR)

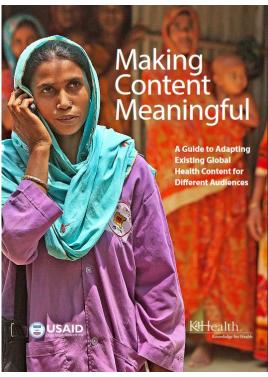
- Delivers information via audio recordings
- Users can provide feedback by pressing a number key
- Works with any type of mobile phone
- Low cost, easy-to-use
- Can reach large population, including those with limited literacy

## Intervention

- Use IVR platform to develop family planning reinforcement training
- Students and health providers in Kenya
  - Kenya Medical Training College Kitui and Kitui District Hospital
- Completed offline family planning courses
- 20 audio questions and explanation via IVR
  - Participants can answer up to 4 questions each day
  - Participants must answer each question correctly on two separate days

## **Content Adaptation**





## Timeline and participant retention

Participants recruited and complete offline courses and baseline knowledge assessment

• 233 participants

Participate in Family Planning Mobile Training Course via IVR (at least 6 weeks after completion of baseline)

- 185 initiated
- 99 completed

#### Complete endline knowledge assessment

- 75 participants completed baseline, IVR program, and endline
  - 55 students & 20 health care providers

## Methodology

- Knowledge retention evaluation
  - Comparison of baseline and endline scores using t-test of unequal variance
- Usability and platform engagement
  - Usability survey
  - Focus group discussions
  - IVR platform data collection

# Findings: Knowledge Retention

Participants (n=75)	Baseline	Endline	P value
Mean score	12.1 (10.9-13.3)	15.9 (15.3-16.5)	<0.05

# **Findings: Usability**

- Most respondents reported that using their mobile phone to complete IVR training was very easy (51%) or easy (41%) (n=73)
- Focus group discussion participants said IVR training was convenient.
- Reported challenges
  - Unable to ask questions
  - No exercises or demonstrations
  - Unable to interact with other participants
- Technical difficulties
  - Sound quality on some mobile phones

# **Findings: Usability**

- Participant suggestions for improvement
  - More interactivity, opportunity to ask questions back
  - Option to receive content via text message

# Findings: Engagement

Participants (n=161)	# of Days of Receiving Training Calls			Average call duration
	Average	Minimum	Maximum	
Completed the course (n=75)	22.6 days	12 days	88 days	5.9 minutes
Did not complete the course (n=86)	8 days	1 day	35 days	3.8 minutes

## **Discussion - Challenges**

- Responses to IVR questions lagged over time
- Participants wanted to know how many questions were left to answer → fatigue
- Began offering phone credit incentive for completion of the training
- Incentive of accreditation or continuing professional development credits may be even more effective
- Added participants to the platform manually automation may be preferable
- Audio clarity
- Lack of interactivity

## Recommendations

- Local program manager
  - Ties to local network
  - Experience in online learning
  - Enthusiasm for technology
- Remember that even open-source technology costs money to set up, customize, and maintain
- Develop content in conjunction with technology
  - Audio: 3-5 minutes or maximum of 500 words
- Engage local partners