Submitted October 2016

FACT Project Semiannual Technical Report

Year 3, Quarters 3-4
(April 2016 – September 2016)

Institute for Reproductive Health, Georgetown University

USAID
FROM THE AMERICAN PEOPLE

FACT
Fertility Awareness for Community Transformation

Recommended Citation:

Institute for Reproductive Health, Georgetown University. 2016. *FACT Project Technical Report: Year 3, Quarters 3-4 (April 2016-September 2016)*. FACT Project. Washington, D.C.: Institute for Reproductive Health, Georgetown University.

This report was prepared by IRH under the Fertility Awareness for Community Transformation (FACT) Project. This report and the FACT Project are made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of the Cooperative Agreement No. AID-OAA-A-13-00083. The contents are the responsibility of IRH and do not necessarily reflect the views of Georgetown University, USAID, or the United States Government.

FACT Project
Institute for Reproductive Health | Georgetown University
1825 Connecticut Avenue, N.W., Suite 699
Washington, DC 20009 USA

irhinfo@georgetown.edu
www.irh.org/projects/FACT_Project

TABLE OF CONTENTS

TABLE OF FIGURES

TABLE OF TABLES

LIST OF ACRONYMS AND KEY PHRASES

ACDO	Assistant to the Community Development Officer
BSK	Bikash Shrot Kendra
C3	Centre for Catalyzing Change
CBP	Community-based provision
CDO	Community Development Officer
CHW	Community health worker
COFP	Comprehensive Family Planning
CRS	Contraceptive Retail Sales
DOT	Dynamic Optimal Timing
DPHO	District Public Health Officer
ECCD	Early Childhood Care and Development
EDEAN	*Emorikinos Daadang Etogogogitoth Alatanakithi Ngidwe*
FACT Project	Fertility Awareness for Community Transformation
FAM	Fertility awareness-based methods
FCHV	Female Community Health Volunteer
FGD	Focus Group Discussions
FHD	Nepal Family Health Division
FP	Family planning
FPAN	Family Planning Association of Nepal
GHSP	Global Health Family and Practice
H4L	Health for Life
HC3	Health Communication Capacity Collaborative
HFOMC	Health Facility Operational Management Committee
HFS	Health Facility Staff
HIV	Human Immunodeficiency Virus
HLFPPT	Hindustan Latex Family Planning Promotion Trust
HMG	Healthy Mothers Groups
ICRW	International Center for Research on Women
IDI	In-depth Interviews
IPV	Intimate Partner Violence
IRB	Institutional Review Board
IRH	Institute for Reproductive Health, Georgetown University
ISHP	Indian Society of Health Professionals
JHU/CCP	Johns Hopkins University Center for Communications Programs
LAM	Lactational Amenorrhea Method
M&E	Monitoring and Evaluation
MCH	Maternal and Child Health
MEval	MEASURE Evaluation
MOH	Ministry of Health
MoU	Memorandum of Understanding
NHEICC	National Health Education and Communication Center
NHTC	National Health Training Centre
NGO	Non-governmental organization
PAA	Population Association of America
PMC	Population Media Center
POC	Proof of Concept
RANM	Roving Auxiliary Nurse Midwife
RATT	REAL Adaptation Technical Team

RE	Reproductive Empowerment
REAL	Responsible, Engaged, and Loving Fathers Initiative
SDM	Standard Days Method
SMILER	Simple Measurement of Indicators for Learning and Evidence Based Reporting
TA	Technical Assistance
TFR	Total Fertility Rate
ToT	Training of Trainers
TWG	Technical Working Group
UNFPA	United Nations Population Fund
UNICEF	United Nation Children's Fund
USAID	United States Agency for International Development
VDC	Village development committee
VHT	Village Health Team
WALAN	*Wake ki Lago Nywal*
WHO	World Health Organization
YIELD	Youth Initiative for Employment and Sustainable Livelihood and Development

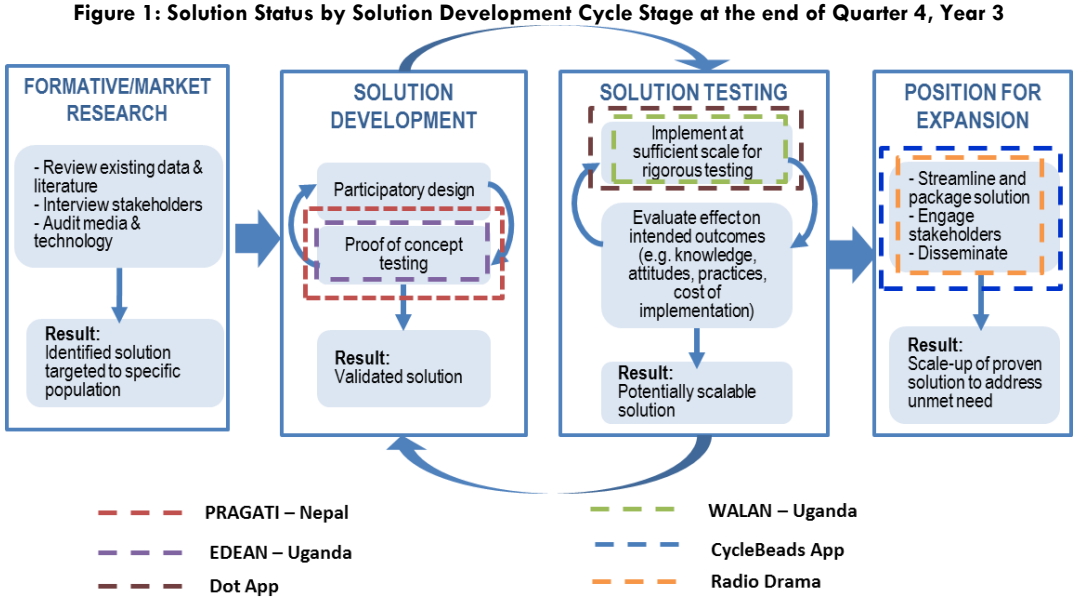
INTRODUCTION

The Fertility Awareness for Community Transformation (FACT) Project is supported by United States Agency for International Development (USAID)'s Office of Population and Reproductive Health Research, Technology, and Utilization Division. It is being implemented by Georgetown University's Institute for Reproductive Health (IRH) in partnership with the International Center for Research on Women (ICRW), Population Media Center (PMC), and Save the Children International (Save the Children).

FACT Project's Solution Design Approach

The goal of the project is to foster an environment in which women and men can take actions to protect their reproductive health throughout the life-course. As a research, intervention, and technical assistance project, FACT is testing solutions for increasing fertility awareness to improve family planning (FP) use and expanding access to Fertility Awareness Methods (FAM) at the community level, with the goal of increasing uptake of FP, thus reducing unintended pregnancies. The FACT hypothesis are, increased fertility awareness improves FP use and expanded access to FAM increases uptake of FP and reduces unintended pregnancies. IRH and its partners employ a systematic approach to testing these hypotheses through developing and assessing innovative solutions to improve fertility awareness and expand availability of FAM. This design approach, the Solution Development Cycle (Figure 1), includes four phases: formative research, solution development, solution testing, and positioning for expansion.

Figure 1: Solution Status by Solution Development Cycle Stage at the end of Quarter 4, Year 3

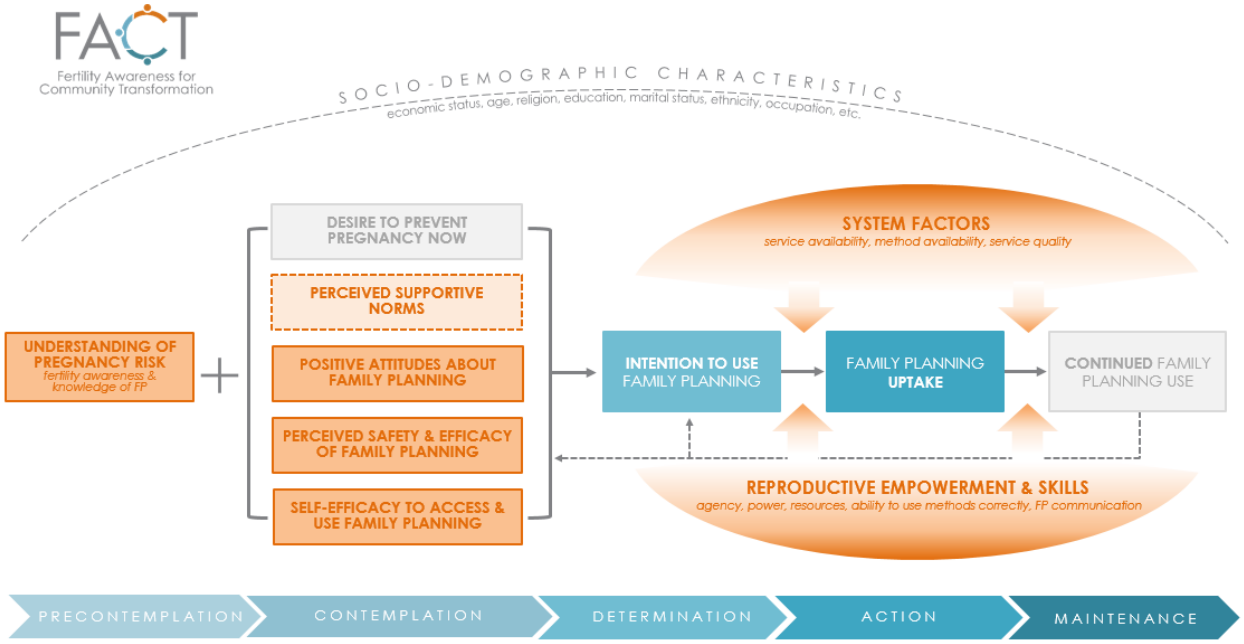


In addition to the development of validated solutions, the FACT Project also serves as a channel for IRH and partners to provide global leadership around fertility awareness and FAM. This global leadership includes, but is not limited to, technical assistance to integrate Standard Days Method (SDM) and other FAM options, as well as fertility awareness information, into national FP programs globally to contribute to state-of-the-practice documents by donor and international organizations such as United Nations Population Fund (UNFPA) and World Health Organization (WHO).

How does FACT address the behavior change pathway to FP uptake?

In Year 3 of the FACT Project, IRH introduced a behavior change model to describe the integrated approach of the project solutions (Figure 2). This model aims to clarify the behavior change pathway beginning with an individual's understanding of their pregnancy risk to FP intent, and ultimately FP use. It also illustrates individual contributions of each solution in the different model components, ultimately showing how they are positioned in the larger narrative of addressing unmet need.

Figure 2: Theory of Individual Behavior Change for Family Planning: The role of the FACT Project



This behavior change model is based on several existing and accepted theories including: 1) the transtheoretical model (previously ASE model), 2) the I-change model, and 3) the extended parallel process model. The I-change model and extended parallel process model have been combined in the orange and blue graphic in the center, and the transtheoretical model can be seen in blue along the bottom.

We know from the trans-theoretical model that several psychological steps must occur before an action is taken: including pre-contemplation, contemplation, and preparation. During this time, a variety of factors are at work to influence a person's intentions. These factors are seen in the boxes on the left hand side. With these factors in place, the individual develops an intention to use FP. Like the I-change model, this model assumes that intentions predict behavior. However, reproductive health research has found that intentions do not always translate into action without several facilitating factors being in place. These factors are described in the circle on the right hand side.

Within the context of family planning, these factors are:

- **Perceived pregnancy risk**: Describes a person's awareness of their ability to influence or control when they get pregnant. This includes comprehensive knowledge of their fertility and FP options.
- **Desire to prevent pregnancy now**: Describes the motivation of the individual to delay or limit pregnancy. This is grey in the model because while we recognize its influence in FP uptake, FACT does not aim to influence this desire.
- **Perceived supportive norms**: Includes supportive social norms for family planning, e.g. belief that neighbors use FP, belief that FP use is permissible for newlyweds. This can also include indirect norms around gender, e.g. expectations for women's/girls' behavior during menstruation.
- **Positive attitudes**: Includes individual attitudes of approval for FP use and the belief that FP facilitates physical, relational, and financial health, etc.
- **Safety and efficacy**: Includes accurate knowledge of FP methods and perceived safety, e.g. addressing concerns around side effects and myths
- **Self-efficacy to access FP**: Includes belief in one's own ability to overcome any barriers to accessing services
- **System Factors:** Includes service availability and quality, human resources, availability of commodities and the range of methods available
- **Reproductive Empowerment & Skills:** Interpersonal dynamics related to empowerment like agency, power, resources, and the skills to access services and communication with one's partner

The FACT Project intervenes in this behavior change process at different points, seen in orange. Each solution in the FACT Project plays a specific role in the behavior change pathway towards FP uptake. Taken together, this collection of solutions addresses challenges at each step. Throughout this semi-annual report, each solution will describe its place within the model and showcase related indicators being collected.

By understanding the steps involved in taking an action like use of FP (and maintaining it as per the transtheoretical model), we can tailor our interventions to the stage of the individual, and we can begin to understand why some interventions may work – or not – for a certain audience.

IR 1: DETERMINE IMPACT OF FERTILITY AWARENESS ON FP USE

Overview

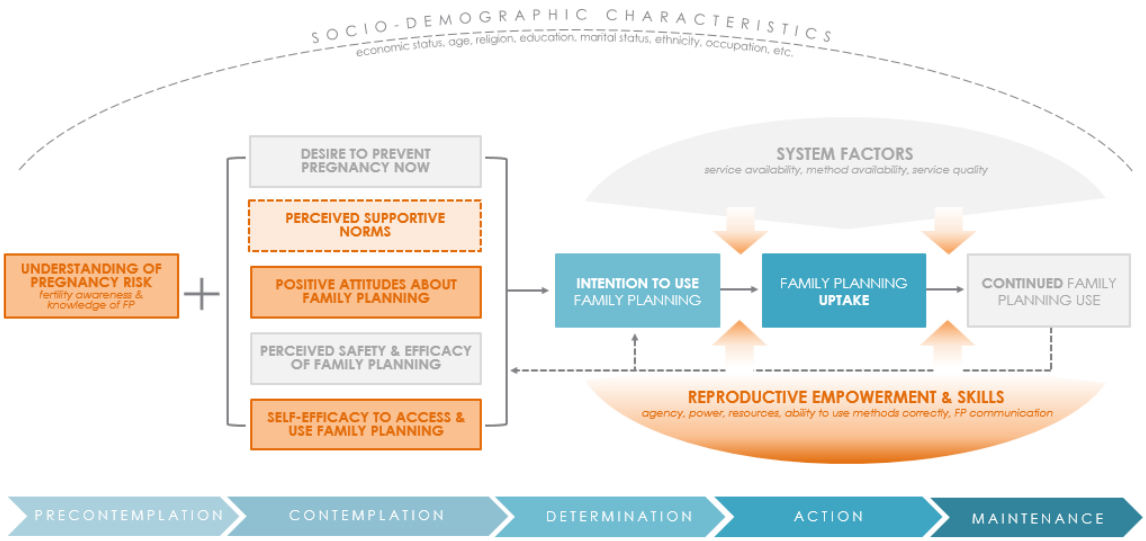
The first FACT hypothesis states: *Increased fertility awareness improves FP use*. Solutions testing this hypothesis progressed steadily in Quarters 3 and 4 of Year 3 with the Radio Drama in Rwanda completing the evaluation phase and analyzing all results. In Uganda, EDEAN's Proof of Concept (POC) testing phase began in May 2016, with Peer Moderators leading Peer Groups through a series of Peer Group Meetings, Theatre Rehearsals, and Community Theatre Performances on four topics: Couple Communication, Menstruation, Fertility, and FP. In Nepal, the fertility awareness solution Pragati – Fertility Awareness for Quality of Life – has been designed and is currently being assessed through a POC phase.

Radio Drama Rwanda

In Rwanda, the FACT Project partnered with PMC, a behavior-change communication organization specializing in entertainment-education programs for TV and radio. They developed a radio drama in Rwanda, which was funded by a coalition of donors and covered a variety of health topics such as FP (including fertility awareness), youth reproductive health, maternal and child health (MCH), and gender-based violence. Other funders of the radio drama were UNFPA, United Nations Children's Fund (UNICEF), and Society for Family Health Rwanda. The program broadcast 104 episodes from October 2014 to October 2015 on two radio stations, Radio Rwanda and Radio Salus. As it relates to the FACT Project, the aim of the program was to create widespread awareness of key fertility concepts and empower the public to seek FP and use it effectively.

The model and results below convey how the solution intervenes along the pathway to FP uptake.

Figure 3: Behavior Change Model: Radio Drama -- Rwanda



Post-broadcast, a community-level household survey was conducted with a nationally representative sample of 1,477 women and men of reproductive age (women 15 – 49 years of age, and men 15 – 59 years of age) to assess differences in knowledge, attitudes, and behaviors between listeners and non-listeners of the Impano n'Impamba radio drama. Eighteen percent of study participants were classified as Impano n'Impamba listeners defined by listening to at least one episode per week. For the indicators below in table 1, unadjusted frequencies are reported disaggregated by listenership. Odds ratios are included if listenership was significantly associated with an indicator in a binary logistic regression model that controlled for demographic variables.

Table 1: Rwanda Radio Drama Indicators

Understanding of Pregnancy Risk

	Non-Listeners N=1208	Standard Listeners N=188	Engaged Listeners N=79	Odds Ratio[1]
Length of menstrual cycle is about a month	48%	44%	57%	1.5
First day of bleeding is first day of menstrual cycle	37%	28%	46%	**1.7***
There are certain days during the menstrual cycle when a woman is more likely to become pregnant	77%	80%	80%	**1.6***
Fertile days occur about halfway between two periods	19%	15%	22%	1.2
First menstruation is sign a girl is now fertile	81%	83%	92%	**3.2***
Ejaculation is sign that a boy is now fertile	61%	69%	79%	**2.5♦**
Men are always fertile	35%	37%	35%	1.1
Breastfeeding women can get pregnant before the period returns	63%	68%	72%	**1.7**

For the indicators that addressed understanding of pregnancy risk, listeners were further classified as "standard listeners" if they listened at least once a week but were unable to name any characters, and "engaged listeners" if they listened once a week *and* could name at least one character. Significant differences in odds ratios for fertility awareness were only seen when comparing engaged listeners and non-listeners. Odds ratios in the tables below compare all listeners (standard and engaged) with non-listeners.

Perceived Supportive Norms

% of respondents who agreed with the statement	Non-Listeners N=1208	Listeners N=267	Odds Ratio
Many married couples use family planning	74%	79%	**1.4**

[1] Engaged listeners compared with non-listeners
* p<.05
♦ p<.01

Many unmarried men use family planning	44%	55%	**1.3**
Many unmarried women use family planning	41%	51%	**1.4**
People who are important to me approve of me using family planning	65%	76%	1.4

Positive Attitudes about Family Planning

% of respondents who agreed with the statement	Non-Listeners N=1208	Listeners N=267	Odds Ratio
It is possible to control family size	90%	94%	1.3
A couple has the right to determine the number of children they will have	94%	97%	1.9

Self-Efficacy to Access & Use Family Planning

% of respondents who agreed with the statement	Non-Listeners N=1208	Listeners N=267	Odds Ratio
I know where to go to obtain family planning services	94%	96%	**2.2**
I am confident that I can access a family planning method (agree or strongly agree)	94%	96%	1.1

Reproductive Empowerment and Skills

% of respondents who answered in the affirmative	Non-Listeners N=1208	Listeners N=267	Odds Ratio
Discussed family planning with partner in the past 3 months	64%	69%	1.2
Discussed family planning with family, friends, or neighbors in the past 3 months	28%	34%	**1.6***
Discussed fertile days during the menstrual cycle with anyone in the past 3 months	24%	27%	1.3

Intention to use Family Planning

% of respondents who answered in the affirmative	Non-Listeners N=1208	Listeners N=267	Odds Ratio
Intends to use a family planning method	56%	67%	1.3

Family Planning Uptake

% of respondents who answered in the affirmative	Non-Listeners N=1208	Listeners N=267	Odds Ratio
Currently using a family planning method	42%	44%	1.1

* p<.05

Key Accomplishments

Community-based household survey to evaluate Impano n'Impamba completed. After broadcasting 104 episodes, evaluations included qualitative interviews conducted by IRH with listeners groups (reported in the last quarter) and a quantitative survey conducted by PMC. PMC shared the quantitative data with IRH, and the team has been analyzing the evaluation data. Key results can be found in Appendix A, and a final report is forthcoming. Essential indicators related to the new behavior change model can also be seen in the section below. Overall, listeners of Impano n'Impamba were more likely to have fertility awareness knowledge, and positive attitudes and communication about family planning. However, there were no differences in FP use between listeners and non-listeners.

Key Challenges

Generating interest among local stakeholders for utilization of study results. During the design and implementation of the radio broadcast led by PMC, local stakeholders were minimally engaged, including the Ministry of Health (MOH). In Rwanda especially, MOH collaboration is necessary for success. Without their involvement in the process from the beginning, it is difficult to generate interest in and ownership of the project results. PMC has no plans to disseminate the results from the radio drama at this point. Therefore, IRH is working with local stakeholders to convene a technical meeting focused on Rwanda's FP communication strategy where the radio drama results will be shared among other things. Final plans for the meeting have not yet been established.

Priorities for Year 4

As the radio drama solution has now ended, Year 4 activities will focus on dissemination and positioning the solution for expansion.

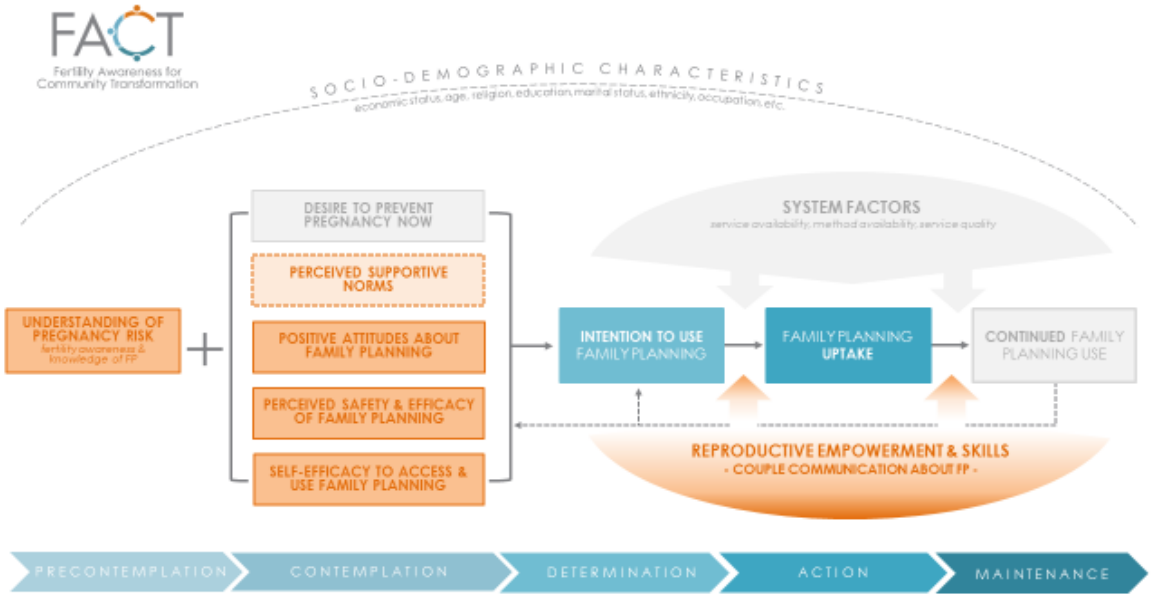
- The FACT Project in Rwanda is expected to end field activities in October 2016 and close down all official operations by January 2017. Final reports related to the radio drama solution and the technical assistance to the MOH will be shared with USAID by December 2016. IRH continues to seek out an opportunity to share results with the FP technical working group before FACT close out.
- The team will draft a manuscript and submit for publication in the Journal of Health Communication or other related scientific journal.
- The radio drama package, which will include guidance for incorporating fertility awareness into narrative formats and impact indicators, will be prepared and disseminated.

EDEAN Uganda

EDEAN's POC testing phase began in May 2016. The full EDEAN model is being implemented in six sites in Moroto and Napak Districts in the Karamoja region of Uganda. Peer Moderators lead Peer Groups through a series of Peer Group Meetings, Theatre Rehearsals, and Community Theatre Performances on four topics: Couple Communication, Menstruation, Fertility, and FP. A factsheet which gives an overview of the EDEAN approach, intervention components, and research and can be found here.

The model and results below convey how the solution intervenes along the pathway to FP uptake.

Figure 4: Behavior Change Model: EDEAN



A quasi-experimental study using mixed-methods is being conducted to assess the delivery and potential scalability of EDEAN, as well as the effectiveness of the approach in increasing fertility awareness knowledge and improving attitudes and behaviors towards FP use. Data collection methods include:

- **Baseline and endline household surveys** across 400 intervention and 200 control participants to assess increases in fertility awareness knowledge, diffusion of information, and FP use
- **Observational data** from peer group meetings, theatre rehearsals, and theatre performances to assess delivery and potential scalability
- **Focus Group Discussions (FGD)** with community members, Peer Group Members, and Peer Moderators to describe their experience with EDEAN and understand how fertility awareness information diffused through the community
- **Key Informant Interviews** with community leaders and health providers to understand their perceptions of the intervention and whether it influenced attitudes towards and uptake of FP

The following table (Table 2) shows the indicators that are being measured through this study. Results are expected during the next reporting period.

Table 2: EDEAN Indicators

Understanding of Pregnancy Risk

% of respondents with correct knowledge of:	**Intervention (% change)**	**Control (% change)**
The menstrual cycle (6 measures)		
Men's fertility (3 measures)		
When pregnancy can occur (4 measures)		
Pregnancy risk (2 measures)		

Perceived supportive norms

% of respondents who report	**Intervention (% change)**	**Control (% change)**
Communication in community about fertility and family planning (*composite: five measures on hearing, communicating, correcting messages*)		
Reduced misconceptions about menstruation and fertility (*composite: six measures*)		

Positive Attitudes about Family Planning

% of respondents who report	**Intervention (% change)**	**Control (% change)**
1. Improved attitudes about family planning use (*composite: 10 item likert scale*)		

Self-Efficacy to Access & Use Family Planning

% of respondents who report	**Intervention (% change)**	**Control (% change)**
Self-efficacy to use FP, including FAM (*composite: 7 item likert scale*)		
Knowing where to access family planning services within community		
Communication with others about using a family planning method		
Communication with health worker for more information about the menstrual cycle		
Communication with health worker for more information about family planning method		

Perceived Safety and Efficacy of Family Planning

% of respondents who report	Intervention (% change)	Control (% change)
Knowing of X family planning methods that are safe to use		

Reproductive Empowerment and Skills

% of respondents who report	Intervention (% change)	Control (% change)
Improved couple communication (5 measures on: discussion, empathy, agreement)		

Intent to use Family Planning

% of respondents who report	Intervention (% change)	Control (% change
Intent to use a family planning method in the future		

Family Planning Uptake

% of respondents who report	Intervention (% change)	Control (% change)
Current use of family planning method (disaggregated by any and modern)		
Use of a family planning method in last three months (disaggregated by any and modern)		

Key Accomplishments

Content and Materials Finalized. Following development and pretesting in the first half of Year 3, the EDEAN content was finalized, designed by a graphic designer, and translated into Nga'Karamojong. The package of materials includes *The EDEAN Moderator's Manual* (Appendices B and C), which contains guidelines for leading activities, activity plans for peer group meetings, and storylines and prompts for theatre performances; *Posters* that accompany each topic; *Reminder Cards* that Peer Group Members keep; and *FP Invitation Cards* given to community members interested in FP Services.

Selection of Peer Group Moderators and Members by Communities. Community meetings were held at the POC sites to nominate individuals for the roles of Peer Moderators and Peer Group Members.

Trainings of Trainers (ToTs) and of Peer Moderators. EDEAN includes two sets of cascade trainings: one at the beginning of the intervention on Couple Communication and Menstruation, and one midway through the intervention on Fertility and FP. These trainings were held in May 2016 and August-September 2016. During the ToTs, IRH and Save the Children staff trained two Community Development Officers (CDOs), two Assistant Community Development Officers (ACDOs) and one health worker as EDEAN Trainers. The Trainers then trained 12 Peer Moderators from the

six POC sites. The trainings covered the content of peer group meetings and storyline dramas as well as skills in facilitating group discussions, directing theatre performances, and completing monitoring forms.

Implementation of Couple Communication, Menstruation, and Fertility Modules. From May through August, EDEAN Peer Groups completed the first three modules on Couple Communication and Menstruation topics. Following the second Training in September, they began the Fertility module. CDOs and ACDOs provided ongoing support through regular calls and visits to the Peer Moderators. Reflection Meetings were held at the end of each module. Preliminary results from systematic observations of program processes show that intervention and fertility awareness messaging being implemented properly by Peer Moderators.

Community Engagement. Save the Children conducted an orientation meeting with 42 community and religious leaders to generate support for EDEAN, reinforce fertility awareness messages, and encourage leaders to support mobilization for community theatre performances. Launch ceremonies were held in the POC districts to further build support for EDEAN at the community level.

Establishing Health System Linkages. To facilitate uptake of FP services, EDEAN has developed linkages with local health systems, although it should be noted that health systems are particularly weak in the Karamoja region. A mapping of FP Service Providers was conducted in POC districts to identify services for referrals. Save the Children and the CDOs led orientations on EDEAN activities, fertility awareness, and the FP Invitation Card system for 24 health workers and 30 Village Health Team (VHT) members in the two districts.

Stakeholder Engagement. In July, Karamoja Advisory Team members visited EDEAN sites to observe Peer Group Meetings and community theatre performances, and subsequently met to discuss ways that EDEAN activities could be incorporated into their organizations' work.

Project Monitoring Results. As of July 2016, 36 performances were delivered to approximately 3,275 participants across six sites[2]. The average number of audience members at each performance was 93. Table 3 highlights key monitoring outputs to date.

Table 3: EDEAN Community Theatre Performances across Six Sites, May to August 2016

Number of Community Theatre Performances Conducted	36
Average number of audience attendees per performance	93
Cumulative number of audience attendees *(not unique individuals)*	3,275
Percentage of women among audience attendees	49%
Percentage of men among audience attendees	51%

[2] Note that this is an aggregate of total participants to date, which include participants who may have attended two or more community theatre performances

Research and Data Collection. Research is being conducted to assess the delivery and potential scalability of EDEAN and the effectiveness of the approach in increasing fertility awareness knowledge and improving attitudes and behaviors towards FP use. Ethical approvals have been obtained from the Georgetown University Institutional Review Board (IRB) and a Ugandan Ethics Committee. The following research activities are taking place:

- **Baseline data collection completed in July 2016**. IRH is reviewing and analyzing baseline household survey data from 400 community intervention participants and 200 control intervention participants. The survey is gathering information about: 1. comprehensive knowledge of FA; 2. attitudes toward FP, 3. use of FP; 4. self-efficacy to access and use FP; 5. couple communication about FP; 6. communication about fertility awareness and FP with others the communities, and; 7. exposure to the intervention.
- **Systematic observations of EDEAN activities.** Two trained research assistants are conducting systematic observations of peer group meetings, theatre rehearsals and performances. Results to date suggest that that demand for fertility awareness and FP information is high, with some performances reaching over 100 community members. In addition, the observations suggest intervention fidelity: moderators are able to follow the meeting, rehearsal and performance steps in the manual and accurate fertility awareness messages are being delivered during community theatre performances.
- **Collection of service statistics.** Quarterly FP service statistics are being collected from health facilities near POC sites on number and types of FP methods provided. In each service delivery point, a health administrator is also asked two questions about 1. Receipt of any FP invitation cards, and contact/referrals of clients from EDEAN moderators, and, 2. Supply stock-outs. Data collection will end in March 2017.
- **Time-Tracking tool being completed by field staff.** Ugandan IRH and Save the Children staff are completing a monthly time-tracking tool to analyze time spent on different EDEAN activities and thus better understand potential scalability. This will be completed by March 2017.

Key Challenges

Addressing Participant Attrition. Following the first training, two Peer Moderators were unable to fulfill their roles and new Peer Moderators were recruited. They received on-the-job training to conduct activities on the first two topics and were fully trained during the second Training.

Regular attendance can be a challenge for some Peer Group Members due to competing priorities and responsibilities. Even so, attendance is reasonably consistent, with an average of 80% of Peer Group Members across all sites attending scheduled activities.

Managing Requests for Incentives. Initially, some Peer Group Members requested compensation for participating in EDEAN. Save the Children organized meetings with all Peer Group Members to re-emphasize the voluntary nature of EDEAN. There were fewer such requests following these meetings.

Weakness of the health system. Because the FACT Project's focus is specifically outside the health system, linking with services is critical to achieving project results. This requires considerable effort in Karamoja, as the health system is extremely weak.

Priorities for Year 4

The EDEAN solution is currently completing the POC phase. Because of time and funding limitations, IRH does not plan to move forward with pilot testing. However, preliminary data suggests that engaging communities in positive discussion and potential action related to fertility awareness and FP via community theater is a feasible approach. Therefore, the EDEAN team will focus on dissemination and packaging materials to facilitate implementation by other organizations.

- Implementation will continue at the six POC sites.
- Peer Groups are scheduled to complete activities in the final module in December 2016.
- In January 2017, endline research will be conducted and will be followed by data analysis and report writing.
- The EDEAN package of materials will be revised based on feedback from Peer Groups and research results.
- Results dissemination will begin in May with events at the local level, national (Uganda) level and global/US levels.
- At least one manuscript will be submitted for publication in a journal.
- A priority throughout Year 4 is to identify opportunities to integrate EDEAN into the work of other organizations. The team will seek to collaborate with organizations across a range of sectors that may be interested in incorporating the EDEAN curriculum, in full or in part, into their work. EDEAN will aim to provide technical assistance to support such integration as project resources allow.

Pragati - Fertility Awareness for Quality of Life, Nepal

Pragati utilizes games and group discussions as a vehicle to disseminate accurate information about fertility awareness, FP, side effects and misconceptions of FP methods, gender and social norms around son preference, and delaying first birth. Pragati is designed to address hard-to-reach groups, which is critical for achieving FP goals in Nepal where FP use has stagnated. The FACT Nepal team has made significant movement toward full program implementation over the last six months. Pragati – Fertility Awareness for Quality of Life – has been designed and is currently being assessed through a POC process. Simultaneously, monitoring and evaluation (M&E) activities resulting in a revised Performance Monitoring Plan were conducted at national and district levels while baseline data collection was collected in all five districts this quarter. SDM integration activities progressed smoothly this quarter and included the implementation of the revised Comprehensive Family Planning (COFP) curriculum for health facility staff in the village development committees (VDCs) in Rupandehi (outlined in the Technical Assistance Nepal section of this report), where SDM will be incorporated into service delivery. Technical assistance activities have included the continuous coordination with stakeholders at national and district levels and collaboration with USAID/DC and USAID/Nepal, which both conducted visits to project sites to monitor activities.

The model and results below convey how the solution intervenes along the pathway to FP uptake.

Figure 5: Behavior Change Model: Pragati

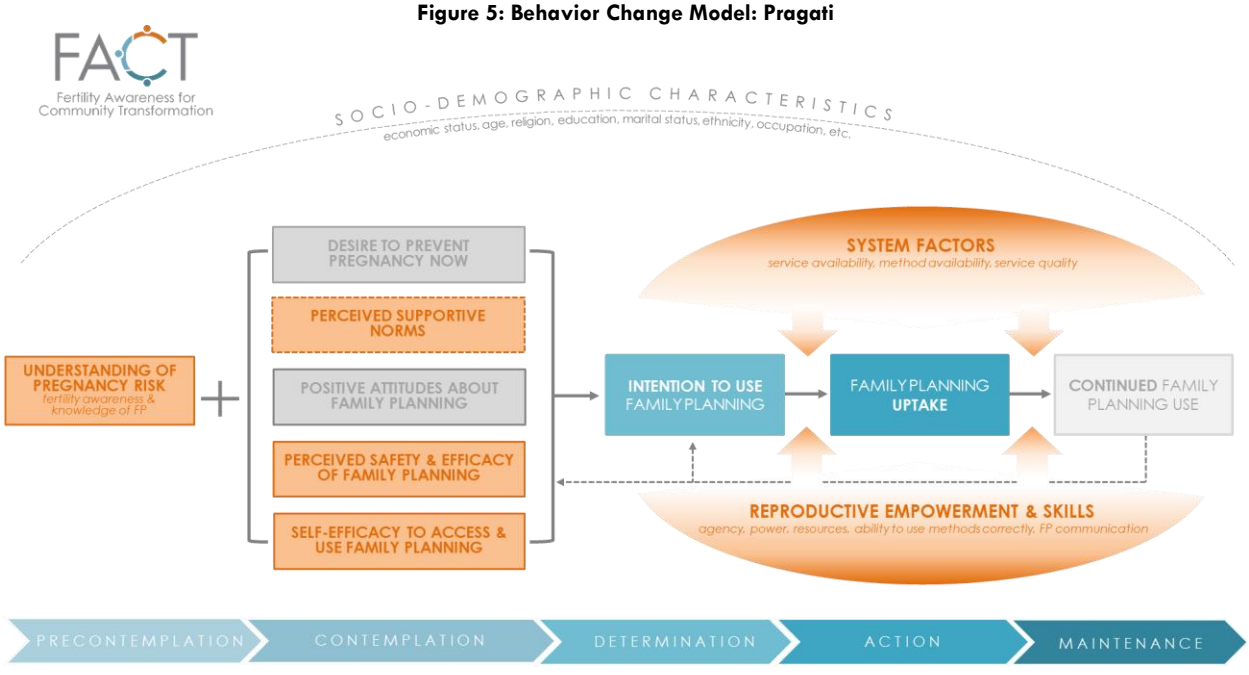


Table 4 identifies the indicators that are being measured in Pragati (described below). The three arm research design provides an opportunity to compare the additive effect of fertility awareness messaging on intention to use FP and actual FP uptake. Within five districts, three clusters of VDCs were identified and randomly assigned to one of three study arms (Pragati intervention, FP only intervention, control).

Cluster Assignment:

- Full Intervention Arm: Fertility Awareness and Family Planning Intervention (FA/FP)
- FP Only Intervention Arm: Family Planning Intervention (FP)
- Control Arm: Existing Family Planning Services

Table 4: Nepal Indicators

Understanding of Pregnancy Risk

% of respondents who correctly answered the statement	Study Arms		
	Pragati	**FP Only**	**Control**
The menstrual cycle and the period are not the same thing			
The period is when a woman is having menstrual bleeding			
There are fertile and infertile days during the menstrual cycle			
Fertile days occur about halfway between two periods			
Men are always fertile after first ejaculation			
Women can get pregnant if they have unprotected sex during their fertile days			

Perceived Supportive Norms

% of respondents who agreed with the statement	Study Arms		
	Pragati	**FP Only**	**Control**
Desire to have a son (son preference)			
Pressure to have children immediately after marriage			
Use of FP methods while husbands are away (migration)			
Negative perception of women using family planning when husband away			
Bleeding during the menstrual cycle is normal and not an unclean process			

Perceived Safety & Efficacy of Family Planning

% of respondents who agreed with the statement	Study Arms		
	Pragati	**FP Only**	**Control**
Fear of side effects from a modern contraceptive method.			

Counseled on side-effect management with a provider (health facility and community levels)			

Self-Efficacy to Access & Use Family Planning

	Study Arms		
% of respondents who agreed with the statement	Pragati	FP Only	Control
Discussed family planning options with a health or family planning worker at the health facility or at the community			

System Factors

	Study Arms		
% of respondents who correctly answered the statement	Pragati	FP Only	Control
Method mix – availability of methods (Monitoring data)			
Received counseling on FP from a health facility staff (provider), a Female Community Health Volunteer, or a Health Mothers' Group champion in the past 6 months			
Providers/promoters trained in Pragati intervention			
Pragati materials used in community group sessions			

Reproductive Empowerment and Skills

	Study Arms		
% of respondents who correctly answered the statement	Pragati	FP Only	Control
Discussed fertility awareness and family planning with partner			
Shared fertility awareness and family planning information with other community members			
Correctly identify key factors in FA			

Intention to Use Family Planning

	Study Arms		
% of respondents who correctly answered the statement	Pragati	FP Only	Control
Intends to use a family planning method in the near of distant future (3 months or 6 months)			

Family Planning Uptake

	Study Arms		
% of respondents who correctly answered the statement	Pragati	FP Only	Control
Currently using a family planning method			
Method of FP used			

Key Accomplishments

Pragati – Fertility Awareness for Quality of Life – solution identified. The solution utilizes games and group discussions as a vehicle to disseminate accurate information about fertility awareness, FP, side effects and misconceptions of FP methods, gender and social norms around son preference, and delaying first birth. Pragati is designed to address hard-to-reach groups, which is critical for achieving FP goals in Nepal where FP use has stagnated. The intervention engages key stakeholders such as Health Facility Operation and Management Committees (HFOMCs), health facility staff, Female Community Health Volunteers (FCHVs), Healthy Mothers' Groups (HMGs) and two champions identified from the HMGs in each of the five districts. Every effort is made to include representatives of the hard-to-reach (beneficiaries) group in the design phase. In addition, a design consultant was identified to create the Pragati games. A Technical Working Group (TWG) composed of government stakeholders (Nepal Family Health Division [FHD] and National Health Education and Communication Center [NHEICC]), staff from USAID/Nepal, and staff from other international non-governmental organizations (NGOs) such as Population Services International and Health Communication Capacity Collaborative (HC3) was created to provide feedback on the Pragati materials and to ensure buy-in. (See figure 6.)

Figure 6: Pragati Intervention

Pragati dissemination meetings held. A total of six dissemination meetings (one in each of the five districts and one in Kathmandu) were held to inform stakeholders about Pragati and share the solution's framework and plans for POC.

Table 5: Pragati Dissemination meetings

Pragati Dissemination meetings date:	
Kathmandu	June 2, 2016
Siraha	May 13, 2016
Nuwakot	July 5, 2016
Rupandehi	May 13, 2016
Pyuthan	July 26, 2016
Bajura	June 2, 2016

Simple Measurement of Indicators for Learning and Evidence-based Reporting (SMILER) Training of Trainers held. One SMILER ToT was held at the national level in Kathmandu for FACT district and central staff. The major objective of the ToT was to

provide in-depth knowledge on the SMILER approach and to develop the M&E system for effective implementation of the project activities. During the ToT, the team established an M&E core group, revised and finalized indicators related to the implementation of Pragati, and developed M&E tools. Subsequently, five SMILER workshops were held, one in each of the five districts to share the indicators and tools with district government stakeholders to ensure buy-in.

Table 6: Pragati SMILER Workshop Dates

SMILER Workshop Dates	
National	June 8-10, 2016
Bajura	July 25-26, 2016
Nuwakot	August 3-4, 2016
Pyuthan	July 24 – 25, 2016
Siraha	July 24-25, 2016
Rupandehi	
Pragati	August 4, 2016
SDM	September 20, 2016

Pragati POC Activities held. Central staff and headquarters staff held a ToT in August (in Kathmandu) for all FACT staff to learn about the Pragati intervention and the subsequent training on games that would be implemented in their districts. District staff practiced the training and games during this time. Prior to POC roll out, the materials were presented to the TWG to receive feedback and to ensure that members of the group understand the intervention. After incorporating their feedback, orientations on Pragati were held for stakeholders (HFOMCs, Health Facility Staff [HFS], FCHVs, and HMG champions) in each district. The intent of the POC was to test the keys messages of Pragati, the M&E system developed through the SMILER workshops, and the games; as well as to assess their acceptability and feasibility. During POC, 83 HFOMC members, 44 HFS, 136 FCHVs, and 192 HMG champions were trained to implement the games across the five districts. A POC evaluation process was established and is near completion, as modifications will be made to Pragati prior to the rollout at the end of November 2016.

Table 7: POC Orientation

POC Orientation	
National	August 8-10, 2016
Bajura	August 28-31, 2016
Nuwakot	August 16-21, 2016
Pyuthan	August 21-Sept. 1, 2016
Siraha	August 23-31, 2016
Rupandehi	August 23-Sept. 27, 2016
Pragati	August 23-Sept 2, 2016
SDM	Sept. 22 - 27, 2016

Pragati POC monitoring visits held. Headquarters and FACT central teams held supportive monitoring and supervision visits to observe the games being played in the communities and provide feedback to the district teams. District Public Health Office

(DPHO) staff participated in the monitoring and supervision visits and provided feedback to the district teams. The observations will be included in the POC evaluation and will inform the revisions to Pragati before pilot rollout in November 2016.

Baseline data collection completed. The FACT team in collaboration with Bikash Shrot Kendra (BSK), a Nepal research organization, held a five day (August 21-25, 2016) researcher's training in Kathmandu. All the required IRB approvals were received from Georgetown IRB, the Nepal Health Research Council, and USAID. Additionally, data collection tools were pretested and finalized. Baseline data collection was completed in September 2016. Save the Children was instrumental in coordinating with district stakeholders and community level health facilities staff for location mapping and identifying participants through discussion with local stakeholders. During data collection activities, IRH/Nepal staff along with BSK core research team members held field monitoring visits at the study sites and observed data collection procedures. Mr. Gajendra Rai from USAID/Nepal also travelled for monitoring visits of baseline data collection in Pyuthan and Rupandehi districts. Quantitative data was collected from 1,315 men and 2,580 women. Data is currently being reviewed, processed, analyzed, and integrated into reports.

Central and district level meetings coordinated. The FACT team held seven formal and informal meetings with FHD, NHEICC, the National Health Training Centre (NHTC), the Policy, Planning, International Cooperation Division (Ministry of Health and Population) and the Director General (Department of Health Services). These meetings provided the opportunity to plan for the rollout of the COFP/Counselling training, update stakeholders on project progress, and brief the new director of NHEICC and Director of Management Division.

USAID FP compliance and coordination visit held. Two USAID/DC staff travelled to Nepal and led a FP compliance meeting for staff working on USAID-funded FP projects. In addition, they conducted a visit to one of the FACT districts, Nuwakot, on May 5. During the visit, FACT project staff provided updates on the project.

Key Challenges

Coordinating a consistent research project across multiple partners. Coordinating with the DPHO delayed some of the project's activities, as they were involved in activities related to the closing of their fiscal year. In addition, there were changes in key staff at Save the Children, which required orientation and significant effort to ensure that staff assigned fully understood the project and were released from other responsibilities sufficiently to fulfill project needs. This placed additional burden on IRH staff both in Nepal and at HQ.

Political strikes and landslides delayed planned activities. Political strikes and landslides delayed many activities in recent months. Timelines were adjusted and alternative plans were discussed to avoid further delay. These delays were district specific only inhibited travel related to those specific project sites.

Reaching hard-to-reach groups as primary beneficiaries. Difficult to reach groups, such as the Janajati, Dalit and Muslims tend to experience higher total fertility rates and lower contraceptive prevalence rates than the national averages. These groups

are identified as 'Difficult to Reach Groups,' because of their limited access to reproductive health and FP services. These groups are often seen as essential for the continuing progression of CPR and to stimulate a country's stagnating TFR. Reaching those groups that are excluded from traditional service delivery was a main goal for the FACT team throughout the development of Pragati.

Address issues of male migration for work as a factor affecting FP use. Partner migration redefines typical definitions of FP use, discontinuation, and unmet need. Initial reviews of baseline data from the Pragati study revealed that more than half of married women have husbands who migrate for work. The majority of husbands are typically away for more than six months, and 42.5% are away for up to one year. Women report regular communication with their spouses via phone and discuss typical household activities and challenges (i.e.; work responsibilities, children and school, and extended family members). They also reported talking with their husband about either planning or preventing pregnancy when he returns. A full report of the baseline data articulating migration dynamics and its association with FP use in December 2016. Affiliated presentations will be made both in Nepal at national and district levels and for the USAID FACT team.

Priorities for Year 4

During Year 4, Pragati will move from POC to pilot testing. Year 4 activities will focus on dissemination of POC results, and on design and implementation of the pilot phase.

- Analysis and report writing of POC and baseline data will be completed.
- POC and baseline results' dissemination events will be held at both district and central levels.
- The Pragati package, based on lessons learned from POC evaluation, will be finalized.
- Pragati pilot launch in all five districts.
- A paper on the process and outcomes of community engagement for solution development will be submitted.
- HC3 has also captured a large dataset that includes data on male migration. The FACT team has begun to engage with the HC3 team around husband migration and its impact on FP use and unmet need. Findings will be incorporated into Pragati as appropriate.

IR 2: ESTABLISH IMPACT OF INCREASED ACCESS TO FAM ON FP USE

Overview

The second FACT hypothesis states: *Expanding access to FAM increases uptake of FP and reduces unintended pregnancies.* This is being addressed through a unique direct-to-consumer approach utilizing smart phone applications (apps) that women can download on their phones. The CycleBeads app supports understanding and use of SDM, while Dot (Dynamic Optimal Timing) supports a newly-developed algorithm. It also is addressed through WALAN, an intervention being tested in Northern Uganda that involves community volunteers providing fertility awareness and FP information through community meetings as well as counseling groups of couples who choose to use FAM.

The CycleBeads app work has progressed in India, Ghana, and Kenya. In India, IRH partner Hindustan Latex Family Planning Promotion Trust (HLFPPT) reached 14,000 with digital media advertisements and outreach of the CycleBeads app. The Dot app for Android has been completed and the research aspects of the app are being integrated for the study launch.

In Uganda, the WALAN pilot intervention launched in April with the selection and training of CDOs and youth facilitators; district entry meetings; orientation of selected healthcare providers and VHTs; and sensitization of community and religious leaders. Research also began in late July 2016 to assess the delivery, effectiveness, and potential scalability of the WALAN intervention.

CycleBeads app: India, Ghana, and Kenya

In India, the CycleBeads app was distributed to over 14,000 people through digital media advertising and outreach efforts by NGO partner HLFPPT. Some 227 CycleBeads app users were enrolled in a three-month longitudinal study, with quantitative phone surveys conducted by the call center partner, the Indian Society for Healthcare Professionals (ISHP), and in-depth interviews (IDI) conducted by Karvy Insights. Interviews with CycleBeads app users assessed whether users were new to FP, how they heard about the app, if they understood and correctly use SDM, and measured many aspects of their experience using the app (reasons for use, satisfaction, couple communication, and continuation/discontinuation). Despite significant loss to follow up, data collection is complete and data analysis has begun.

The CycleBeads app work has also progressed in Ghana and Kenya. Cycle Technologies conducted a Facebook advertising campaign in both countries, which has resulted in 65,000 (total in both countries as of September 30) installs since August 1, 2016. Data collection is ongoing; pop-up surveys are administered to users after they enter their second, fourth, and sixth period dates. To date, over 7,600 people have received the first pop-up survey and 5,600 completed the questions.

The model and results below convey how the solution intervenes along the pathway to FP uptake.

Figure 7: Behavior Change Model: CycleBeads App

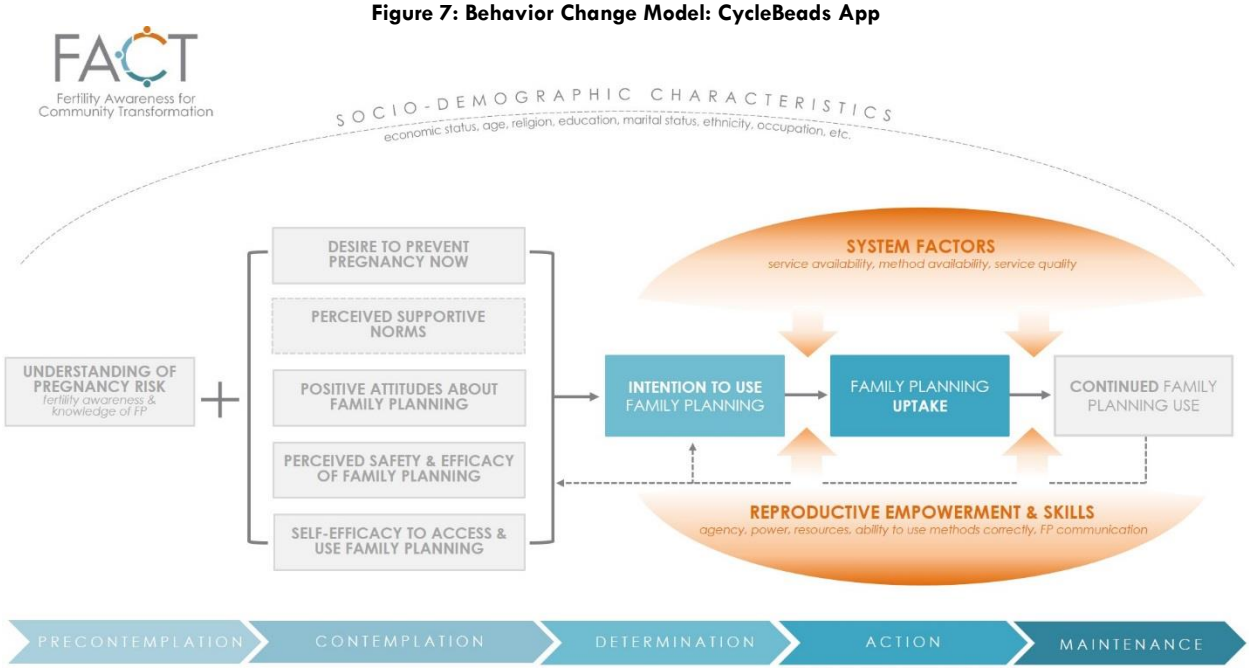


Table 8 shows the indicators being measured in the CycleBeads app study.

Table 8: CycleBeads App Indicators

Reproductive Empowerment and Skills (India)

% of respondents who answered in the affirmative	N= 227
Knew the days on which pregnancy is possible during the menstrual cycle.	77%
Planned to abstain or use a condom on fertile days	69%
Discussed use of the CycleBeads app with their partner within two weeks of downloading	46%

Family Planning Uptake

% of respondents	Kenya	Ghana	India
# of downloads	23,054	40,670	15,300
% using the app to prevent pregnancy	51%	54%	30%
% of preventers who were not previously using family planning	50%	50%	70%

Key Accomplishments

CycleBeads app, India

- In April, IRH staff traveled to Delhi, India to train NGO partner HLFPPT outreach workers and call center partner ISHP enumerators. Both were trained in SDM and CycleBeads app functionality so they could support new users. In addition, the ISHP enumerators were trained on the quantitative survey instruments for

the CycleBeads app study (baseline, midline, and endline surveys for both continuing and discontinued users).

- HLFPPT completed a five-week outreach effort, which consisted of entertainment shows, information events at their local clinics, corporate events, and door-to-door outreach. In total, they conducted 41 events, reaching over 850 attendees and resulting in over 150 downloads.
- Cycle Technologies launched a five-week Facebook advertising campaign, in Hindi and English, which resulted in over 14,000 installs. Sixty four percent of users were still opening the app one month after install. Some 8,600 people downloaded from the Hindi language advertisements, and 5,500 people from the English language advertisements.
- Everyone in India who downloaded the CycleBeads app received an in-app, pop-up, inviting them to participate in a study. Over 800 people entered their name and phone number and were called by ISHP; 227 enrolled in the study.
- ISHP completed quantitative surveys with CycleBeads app users. Two hundred and twenty seven app users were interviewed at baseline, 49 were interviewed at midline (36 continuing users, 13 discontinued users), and 11 were interviewed at endline (six continuing users, five discontinued users).
- Karvvy Insights completed in-depth qualitative interviews with eight CycleBeads app users.

CycleBeads app, Ghana and Kenya

- The protocol for this multi-country monitoring effort was completed and approved by USAID and Georgetown IRB. The IRB agreed that this effort is exempt from review, due to its non-intrusive design and questions.
- Cycle Technologies completed technical updates on the CycleBeads app, enabling tracking tools to follow individuals and pop-up surveys in selected countries.
- Cycle Technologies designed and launched social media campaigns in two countries on August 1 in Ghana and on August 15 in Kenya. To date, this campaign has resulted in over 41,000 installs in Ghana and over 24,000 installs in Kenya.
- Data collection is ongoing. To date, over 17,000 people who installed the app to prevent pregnancy are new to FP. Over 5,200 people have completed the first pop-up survey, which is administered within the app after the second period date is entered.

Key Challenges

CycleBeads app, India. The study experienced significant loss to follow up during the 90-day study period, which will impact how the key study questions are answered. Our experience demonstrates the difficulty of engaging people in a longitudinal study through phone interviews alone. IRH will have to rely heavily on the baseline study, with 227 participants, to answer questions about whether users are new to FP, how they heard about the app, initial understanding of how to use SDM, and reasons for use. We have a limited sample size to answer questions on continuing correct use, variations in use by distribution, and partner communication, but will attempt to fill in gaps with information from the IDI when possible.

CycleBeads app, Ghana and Kenya. The Facebook campaign is large for the size of the Kenyan and Ghanaian markets, which impacts the cost of outreach. As a market becomes saturated with advertising, the cost per install rises. For example, when advertisements first started in Ghana, the cost per install was very low, around $.11. As the campaign continued, the cost per install rose. When it got above $.50 per install Cycle Technologies reacted by pausing the campaign for a week and then re-starting, which appeared to work to reduce the cost on install. As the campaigns finish in each location, we will continue to monitor this effect.

Priorities for Year 4

Year 4 activities will focus on disseminating results of current pilots and piloting the CycleBeads app in two additional settings. As results to date indicate that promoting the app through social media is a cost-effective means for reaching non-users of FP, IRH will consult with USAID and others about approaches for expansion and sustainability.

- Data analysis and results report writing for the CycleBeads app India quantitative and qualitative survey results will be completed.
- Data collection and monitoring for the CycleBeads app in Kenya and Ghana will be completed and analyzed.
- A manuscript for publication of results from India, Ghana, and Kenya will be submitted.
- The CycleBeads app will be translated into French and Arabic and pilot tested in two countries.
- A technical consultation will be held to share results and seek collaboration for expanding and sustaining the CycleBeads app.

Dynamic Optimal Timing (DOT)

DOT is a new, app-based method of FP, designed to accommodate women with menstrual cycles between 20 and 40 days long (compared to 26-32 days cycles covered by SDM), provide higher efficacy, and "personalize" the identified fertile window. The DOT methodology paper was completed and published in the European Journal of Contraception and Reproductive Care in June 2016. IRH is conducting an efficacy trial to determine the efficacy and effectiveness of the DOT algorithm as used via the mobile app Dot. The use of mobile phones for FP is novel, and women's ability to understand and use the app is unknown. Thus, the study also is exploring usability and assessing acceptability of a mobile phone app to support use of this FP (FAM) method. The Dot app for Android has been completed and the research aspects of the app are being integrated for the study launch. The protocol for the efficacy study was registered at clinicaltrials.gov and the paper describing the study has been submitted (by invitation) to the Journal of Medical Internet Research. Of note, by registering the study and publishing the protocol, IRH is following the SPIRIT (Standard Protocol Items: Recommendations for Interventional Trials) approach recommended for improving the quality of clinical trials.

Of particular significance is the development of Proofmode, the research mode of the Dot app, through which the study will be conducted. Proofmode integrates with the existing Dot app, but when activated, adds additional functionality to the app, allowing for the collection of sexual history and survey data that are vital to assessing method efficacy. Proofmode also seamlessly integrates with the study web portal and the research call center. Proofmode is a unique, interactive, and dynamic approach to collecting longitudinal data on mobile smartphones with potential for use in other types of mobile research.

During this reporting period, IRH, along with Cycle Technologies, EastBanc Technologies (a technology management consulting firm), and ROI solutions (the call center handling data collection) received IRB approval to conduct the Dot efficacy study.

The model and results below convey how the solution intervenes along the pathway to FP uptake.

Figure 8: Behavior Change Model: Dot App

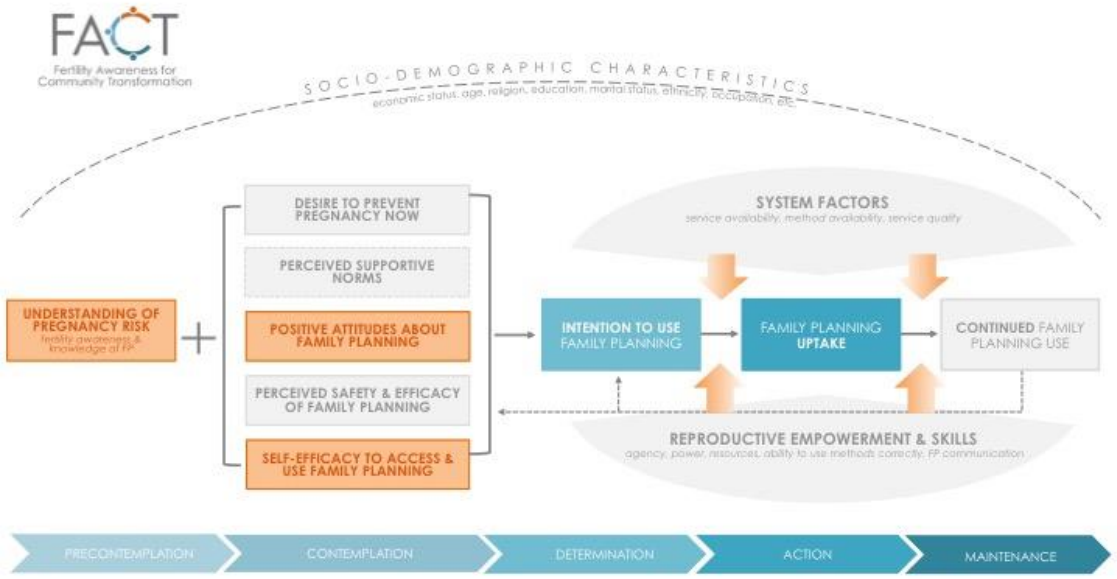


Table 9 below shows the indicators being measured in the Dot study.

Table 9: Dot Indicators

Understanding of Pregnancy Risk

Indicator	%
% of respondents who correctly identified the typical length of a woman's menstrual cycle	
% of respondents who correctly identified first day of a woman's menstrual cycle	
% of respondents who answered "False" to the question, "A woman can get pregnant at any point in her menstrual cycle."	
% of respondents who correctly identified the days of the menstrual cycle when a woman is most likely to become pregnant	
% of respondents who scored a 4 or 5 (Agree/Strongly Agree) on a 5-point Likert scale in response to the statement, "The Dot app has increased my awareness of the importance of knowing my fertility window in order to avoid pregnancy."	

Positive Attitudes about Family Planning

Indicator	%
% of respondents who scored a 4 or 5 (Agree/Strongly Agree) on a 5-point Likert scale in response to the statement, "The Dot app has increased my understanding of my own fertility."	

% of respondents who scored a 4 or 5 (Agree/Strongly Agree) on a 5-point Likert scale in response to the statement, "The Dot app has changed my attitude toward using a natural method of family planning."	
% of respondents who scored a 4 or 5 (Agree/Strongly Agree) on a 5-point Likert scale in response to the statement, "The Dot app has increased my motivation to use a natural family planning method to avoid pregnancy."	

Self-Efficacy to Access and Use Family Planning

Indicator	%
% of respondents who report that using the Dot app to prevent pregnancy is "Easy" or "Very Easy"	
% of respondents who scored a 4 or 5 (Agree/Strongly Agree) on a 5-point Likert scale in response to the statement, "Use of the Dot app will increase women's ability to prevent pregnancy using a natural method of family planning."	

Key Accomplishments

Completion of Research Mode and Web Portal Design Phase. To conduct the efficacy study on the Dot app, IRH and partners completed the study design. The intricate nature of this study design has meant collaboration across partnerships in order to address several key issues, including: 1) how to successfully deploy and engage the research mode (i.e., Proofmode) within the existing Dot app while maintaining the structural integrity of the existing app, 2) how to integrate Proofmode with a secure, study web portal, 3) how to integrate the Dot notifications and surveys with the call center software, 4) instigating collaborations with Amazon to host the solution, 5) designing the research mode to enhance user experience and reduce loss to follow-up through gamification and other user experience best practice techniques, and 6) engaging with Georgetown security and legal teams to ensure data privacy compliance with all design/development plans. All plans have been finalized and are in the process of being deployed during the ongoing development phase, which will be completed in mid-November 2016.

Completion of Study Protocol Paper for Peer-Review. A key priority for this project is to establish a set of best practices around how to develop and assess fertility apps for pregnancy prevention. Currently, no existing prospective efficacy trials on fertility apps have been conducted. In order to demonstrate transparency and provide concrete actionable steps on how to improve the evidence base around fertility apps, the Dot team has written a protocol paper for peer-review, which outlines the aspects of the study design, methodology, and approach. The protocol paper was submitted to the Journal of Medical Information Research, a mHealth journal with broad dissemination across health sectors.

Key Challenges

The key challenge during this phase was the decision to use a different technology partner for the development of the research mode and web portal than originally intended. After many conversations with our previous technology partner, HITLAB, it became clear that their current capacities could not support the development of a complex, integrated research project like the efficacy study. The Dot team was able to successfully identify a new technology partner (EastBanc Technologies) with a proven record of accomplishment for high capacity development projects, and movement forward with this partner has been timely and congruent with project needs. However, the process of coming to this decision, identifying a new partner, and working with that partner to familiarize them with the total project scope of work created some unavoidable delays in implementation. In order to continue to implement the project according to plan, IRH and EastBanc Technologies are employing an integrated design/development/deployment process, which will allow the project to continue in a timely manner

Priorities for Year 4

Year 4 is the critical year for the implementation of the Dot efficacy study.

- Beta-testing will be completed, and integration of the research mode with call center, application management and database functionality will be finalized.
- The Dot Android app with research mode will be launched in the Google Play store.
- Dot Android app download frequency, reported functionality issues and analytics data will be monitored.
- Study participants will be recruited after one month of Dot Android app use.
- Information about Dot, Proofmode, and the study will be disseminated to USAID and other audiences
- At least two papers for publication will be prepared and submitted.

WALAN Uganda

During the period April to September 2016, planning and implementation for WALAN pilot activities took place at headquarters as well as at the Uganda central and district levels. WALAN is a community based intervention that provides information about fertility and FP to community groups, encourages those interested in FP to seek services, and counsels couples who want to use FAM in group sessions coordinated by trained community-level facilitators. Positive results will provide evidence that FAM can be successfully offered to groups (as opposed to the one-to-one provider-client counseling that is typical of FP services), and that community volunteers with no previous health or FP training can successfully provide this service. This would represent a significant opportunity to expand FP services and address un-met need in hard-to-reach areas. The WALAN pilot intervention was launched in April with the selection and training of CDOs and youth facilitators; district entry meetings; orientation of selected healthcare providers and VHTs; and sensitization of community and religious leaders.

Research also began in late July 2016 to assess the delivery, effectiveness, and potential scalability of the WALAN intervention. Ethical approvals have been obtained from Georgetown University and local Uganda IRBs. The research team was trained in August 2016 and data collection activities have been taking place. The POC report is included in Appendix D.

The model and results below convey how the solution intervenes along the pathway to FP uptake.

Figure 9: Behavior Change Model: EDEAN

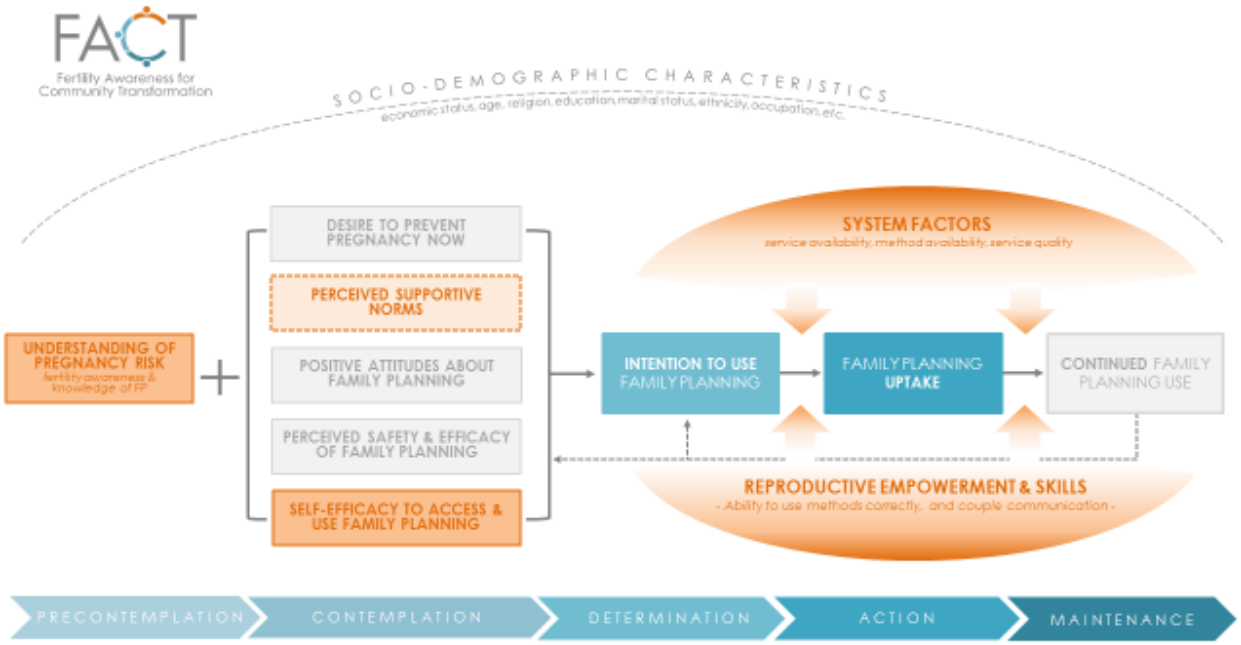


Table 10 shows the indicators that are being measured in WALAN.

Table 10: WALAN Indicators

Understanding of Pregnancy Risk

% of respondents with correct knowledge of:	SDM users	TwoDay Method users
The menstrual cycle (3 measures)		
Men's fertility (3 measures)		
When pregnancy can occur (3 measures)		
Pregnancy risk (2 measures)		

Perceived supportive norms

% of respondents who report	SDM users	TwoDay Method users
Supportive norms about couples' use of FP, including FAM (*composite: 10 item likert scale*)		

Self-Efficacy to Access & Use Family Planning

% of respondents who report	SDM users	TwoDay Method users
Self-efficacy to use FP, including FAM (*composite: 10 item likert scale*)		

Reproductive Empowerment and Skills

% of respondents who report	SDM users	TwoDay Method users
Couple communication skills		
Improved couple communication and decision-making around method use (3 measures)		
Improved intimacy and discussion on management of fertile days (6 item intimacy scale)		
Method use skills		
Correct method use (method verification + management of fertile days)		
Correct knowledge of method use		
Male partner participation in method use		
Pregnancy outcome during method use		

System Factors

	SDM	TwoDay
Youth Facilitator competency		
% of FAM users screened correctly by youth facilitators		
% of youth group facilitators who receive 75% or higher competency score during counseling sessions		
Satisfaction with counseling model		
% of FAM users satisfied with community group counseling model		

Intent to use Family Planning

% of discontinued users who report	SDM users	TwoDay Method users
Intent to use another method of family planning		

Family Planning Uptake

% of FAM users who are:	SDM users	TwoDay Method users
New users of family planning		
Continued use of their FAM		

Key Accomplishments

CDOs and Youth Facilitators trained in fertility awareness, FP, and FAM. Staggered trainings, delivered by IRH-trained CDOs, were held for 30 facilitators (15 pairs of female and male facilitators) from the three districts in April and July 2016. After addressing minor turnovers, all 15 pairs were operating within schedule by the end of this reporting period (Appendix E).

Community learning and group counseling activities underway. Each facilitator pair completed four to six learning sessions on FA, Healthy Timing and Spacing of Pregnancy/FP, and LAM for the community at large, and continue to host group counseling and method support sessions on SDM and TwoDay Method. Delivery of SDM and TwoDay Method group counseling sessions has in turn enabled data collection teams to carryout FAM user visits as planned. Materials for sessions are found in Appendices F and G.

CDOs commitment to mentoring and supporting the project has been essential to strengthen the facilitators' competence, confirm that the group learning and counseling activities are on schedule, collect event attendance forms, and offer guidance to the pairs as needed. Through monthly reflection meetings with Save the

Children, the CDOs provide updates that help IRH and Save the Children assess the progress of the WALAN intervention and offer feedback to the CDOs supervision missions. All issues raised during the meeting are used to improve project implementation, especially in providing support to the facilitators.

Ongoing M&E activities. Based on feedback from the POC testing, the M&E Plan was adjusted and data collection procedures and a system for data entry were finalized. Save the Children conducts routine monitoring visits to pilot sites directly. Additionally, CDOs provide mentoring and supervision on a monthly basis. Key monitoring outputs to date include the following:

Table 11: WALAN Pilot Phase Monitoring Data from 12 sites, May-July 2016

WALAN Pilot Phase Monitoring Data from 12 sites, May-July 2016	
Community Learning Sessions (Fertility, HTSP/FP, and LAM topics)	
Total Number of Sessions held	84
Total Number of Attendees	2,369 (57% females, 43% males)
Number who expressed interest in learning/obtaining FP method	842
SDM Counseling Sessions	
Number of sessions conducted	47
Number of couples attending	178
Number who decided to use SDM	174
TwoDay Method Counseling Sessions	
Number of sessions conducted	13
Number of couples attending	47

Research and Data Collection Activities Underway. The following are completed and planned research activities:

- **First round of SDM user interviews conducted in August 2016**. A total of 58 SDM female users and 39 male partners were interviewed to assess method use. At that time, not enough users had been using the method for at least 30 days to verify correct method use, and as a result, the remaining sample will be collected during a second round of interviews in October 2016 (total sample is 120 SDM women and 60 male partners). TwoDay Method user interviews will also be conducted in November 2016 with 80 female users and 40 male partners. Follow-up interviews will be conducted with both samples between January and February 2017.
- **First round of competency checklist observations of youth facilitators completed**. To understand facilitator competency in delivering group counseling, trained research assistants completed the first round of systematic observations of SDM and TwoDay Method group counseling sessions.
- **Data collection of service statistics underway**. Quarterly FP service statistics are being collected from health facilities in the village catchment areas. Data collection will proceed until April 2017.

Key Challenges

Conducting research on FAM outside of established service delivery systems. As a community-based intervention relying on community-based facilitators (rather than CHWs or facility-based providers), WALAN poses challenges in recruiting and tracking SDM and TwoDay Method users within the eligibility criteria. This has required an increased level of attention, coordination and effort on the part of IRH and Save the Children staff, in addition to the collaborating research firms.

Linking with weak health systems for FP services. As the FACT Project focus is specifically outside the existing health system, it is critical that we link with this existing system to ensure that project results are achieved. In Gulu, health systems are particularly weak, creating challenges to collecting information about the effect of project activities on the number of FP services provided.

Priorities for Year 4

During Year 4, the pilot test of WALAN will be completed and it will be positioned for scale. Activities will focus on collecting and analyzing final data, preparing and disseminating results, and packaging the solution to facilitate scale-up by other organizations.

- POC results will be disseminated in communities where the testing took place with additional dissemination at the national level.
- The pilot study will be completed, with community learning and FAM group counseling sessions continuing through early 2017.
- Data collection will include: FAM user interviews; competency checklist; FGDs with users and facilitators; and in-depth interviews (IDIs) with key stakeholders (November 2016 – April 2017). Youth facilitators will be observed again in January and February 2017 to assess improvements in competency and delivery over time. A second round of interviews with FAM users as well as IDIs and FGDs also are scheduled for February and March 2017.
- Bi-monthly meetings of the MLE local team will take place to review monitoring data, identify, and resolve challenges. The team will also prepare bi-monthly updates for the implementation team.
- A scale up readiness plan for WALAN (planned for early 2017) will be conceptualized.
- The WALAN intervention will be packaged to facilitate scale-up, including the development of implementation guidelines to be paired with the tested tools and resources.
- A paper on strategies and challenges for couple counseling in FP will be submitted for publication.

IR 3: INCREASE RECOGNITION AND INCORPORATION OF FAM AND FERTILITY AWARENESS IN POLICIES, GUIDELINES, AND PROGRAMS

Overview

The third goal of the FACT Project is to disseminate information about fertility awareness and FAM and to encourage a wide range of organizations to include them in their work. IRH continues to contribute to the ongoing conversation within the sexual and reproductive health community about fertility awareness and FAM.

Communications & Global Leadership

Social Media

IRH regularly engages with the sexual and reproductive health global community on social platforms, including Facebook and Twitter, sharing information related to the FACT Project. IRH especially capitalized on relevant holidays and awareness days to tailor FAM and fertility awareness messages such as Menstrual Hygiene Day (#MHDAY2016, #MenstruationMatters), Global Female Condom Day (GFCD2016) and more. IRH had an active social media presence at Women Deliver (#WD2016).

"Know Your Bod" / Fertility Awareness Digital Campaign

IRH increased the analytics capacity of the online fertility awareness/body literacy quiz that launched in December 2015 (www.knowyourbod.org). The team can now collect and analyze additional data, including correct and incorrect answers for each question in the quiz in order to gain insights about which fertility awareness topics are most difficult for users and to optimize user experience. Some 2,875 new visitors have taken the quiz since April 2016.

Traditional Media

A study published in *The Journal of the American Board of Family Medicine* included iCycleBeads among the best apps for predicting the window of fertility. The study was featured in several online publications, including Mashable.

Georgetown University Medical Center issued a press release on the launch of the Dot study. Dot and the upcoming efficacy study earned coverage in a post on Refinery29.

Victoria Jennings was a guest on an episode of the Fertility Friday podcast, where she discussed SDM, Cycle Beads, and Dot.

The FACT Jordan team's research-to-policy submission "TFR Plateaus and Population Agendas: Informing USAID Family Planning Programming in Jordan" was included in the fall issue of Public Association of America (PAA) Affairs.

Blog Posts
IRH has published, contributed to, or been featured in a number of blogs for FACT Project-related topics, including:

- What's the Big Deal About Having Four Children? Behind Jordan's Fertility Stall | Read
- Hey Dads, How About That Birds & the Bees Talk? | Read
- Georgetown Institute Launches Real-Time Study of Smartphone Fertility App Use | Read
- Every Day Can Be a Good Day: Menstrual Hygiene Day 2016 | Read
- Fertility Friday Podcast Features IRH Director | Read
- CycleBeads Android App Launches in India, Provides Women with Family Planning Solution via Free Smartphone App | Read
- Family Planning in Five Years? New case study series on e-commerce and reproductive health supplies | Read
- Population, Plateaus, and Geopolitics: What's up with the Fertility Stall in Jordan? | Read
- Do YOU know more about your body than a 12 year old? | Read
- Focus on Fertility: Experiences from FACT Project | Read

Exhibiting at Conferences
IRH shared or exhibited FAM and fertility awareness resources at Christian Connections for International Health's annual conference (June 2016), and the National Reproductive Health Conference (July 2016).

Meetings and Presentations
FP2020 Team Meetings: IRH gave a presentation on our work to staff at FP2020. This presentation included information about the FACT Project and the importance of FAM and fertility awareness as critical aspects of FP programming. After the presentation, the team met with Beth Schlachter and her staff to discuss areas of overlap and collaboration between IRH and FP2020.

IRH had a second meeting with FP2020 to discuss male involvement in FP in preparation for a meeting held by FP2020 in London in early June 2016. The purpose of the June meeting was to take stock of progress of the Voluntary Rights-Based Family Planning portfolio and plan ahead. The preparatory meeting held in May consisted of participants working in gender equality and reproductive empowerment in the context of FP programming. The meeting was an opportunity to articulate key considerations around gender norms and women's status/empowerment that could amplify work on rights.

RHSC Webinar: IRH hosted the webinar *Reproductive Health Supplies: Family Planning in the Digital Age* to share and promote the findings of a case study series.

Vasectomy Working Group: IRH participated in the quarterly Vasectomy Working Group at Jhpiego, which consolidates USAID and partners around vasectomy into national FP agendas. IRH focuses on the importance of male involvement in FP.

Revision of Nepal Training Curriculum: India-based IRH staff, Naramaya Limbu, among other FP stakeholders in Kathmandu including health facility staff from Rupandehi, Nepal, participated in the National Health Training Center Technical Consultation Meeting and Training in Nepal. The purpose of the meeting was to review the Comprehensive FP Curriculum, which includes a section on SDM. In the training, participants learned about all

FP methods including myths and misconceptions of each method. IRH was asked by the National Health Training Center, Nepal to review the SDM section of the curriculum, which is a newly adopted method in Nepal. The result of our contribution is the provision of clear and correct technical information regarding SDM to ensure its correct use at all levels of the Nepal health system.

USAID Breastfeeding Symposium: IRH was invited by USAID to present at the Breastfeeding Symposium on the perspective of LAM as a critical aspect of breastfeeding programs. The participants were from a variety of sectors outside the FP field. The event was a useful opportunity to disseminate information about the effectiveness and mechanism of action of Lactational Amenorrhea Method (LAM) and encourage integration of the practice across sectors.

LAM Hackathon: Jhpeigo is leading the planning of a technical consultation on LAM using an innovative methodology called a Hackathon, where people from various sectors outside of development participate to find creative solutions to a problem. IRH participated on the steering committee for this event and is invited to be a speaker during the first session.
The objectives of the LAM hackathon are to:

1. Gain key insights into the use of LAM as a method of postpartum FP and transition to other FP methods.
2. Understand the characteristics and drivers of adoption of LAM, as well as the alternatives couples have to prevent unwanted pregnancy soon after childbirth.
3. Examine positive deviants who have higher than average LAM rates to understand drivers.
4. Obtain a deep understanding of the context within which couples practice LAM.
5. Explore landscape of available solutions to increase adoption of LAM and why these are less than successful.
6. Create multidisciplinary teams that will think, discuss, create, build, review, and share creative new solutions.

Upcoming events

IRH was invited to present at several up-coming events, including:

- Monitoring, Evaluating, Research and Learning Tech (October 2016)
- Population Association of America Annual Meeting (April 2017)

Requests for Global Leadership and Technical Expertise

Mali Social Marketing: In August, IRH's Rwanda Country Representative/Regional Technical Assistance Advisor traveled to Mali to support the Palladium Group in SDM integration into their social marketing activities. The Social Marketing Project in Mali, "Keneya Jemu Kan" is a five year project implemented by the Centre for Communication Programs of the Johns Hopkins University (JHU/CCP) supported by its Palladium and Management Sciences for Health partners. Its purpose is to contribute to sustainable improvements in health through the increased use of high-impact services and healthy behaviors. IRH conducted an SDM training for Palladium's marketing team and discussed with the team strategies to increase the sales of CycleBeads. Efforts will be devoted to demand generation activities as well as community-based distributers. A trip report is available upon request, as this travel was supported by the social marketing project.

Technical Assistance Nepal

Technical assistance is a key component of our mission-supported work in Nepal.

Key Accomplishments

SDM Integration activities launched. During the last six months, the COFP/Counselling curriculum has been refined (SDM is now included in the COFP) and has been pretested by the NHTC in collaboration with supporting organizations including and IRH/Nepal. Two COFP trainings of eight days each have been held for the health facility staff in the SDM Integration VDCs. Thirty health facility staff were trained on the COFP in addition to one FACT staff who will be conducting supervision visits in collaboration with the DPHO. NHTC invited IRH staff to conduct SDM session during their COFP/Counselling training for their health facility staff.

SDM integration orientation events held. To create a supportive environment, orientations were held with health facility staff (66 participants: 23 women and 43 men), Health Facility, Operation and Management Committees (89 participants: 36 women and 53 men), and 227 Female Community Health Volunteers. FCHVs will be informing the communities in Rupandehi of the SDM services now available at their health facilities and refer interested community members to the health facilities. During these orientations, CycleBeads are distributed to FCHVs so that they can carry out activities with their respective Healthy Mothers Group members and the community.

Distribution of CycleBeads completed. One hundred CycleBeads have been distributed to each of the health facilities where staff have gone through a COFP training and SDM Integration orientation. To date, 1,566 CycleBeads have been distributed in Rupandehi.

Memorandum of Understanding (MoU) signed for Roving Auxiliary Nurse Midwife (RANM) activities. To carry out the activities under the RANM intervention, a MoU was signed between Save the Children and the DPHO. Following the agreed upon MoU, the recruitment process of the RANMs in Rupandehi started with an agreement on how they will be remunerated for their services. For this demonstration project, a total of nine RANMs will be deployed in six VDCs (six RANMs) and two municipalities (three RANMs) in Rupandehi and recruitment has started and the RANMs are slated to be deployed in November 2016.

Study findings on the acceptability and willingness to pay for CycleBeads disseminated. The FACT team held a dissemination event to present and discuss the findings of the feasibility study conducted in Banke and Bardiya. Additionally, the findings were used to inform the social marketing of CycleBeads' intervention in the two districts. The key findings were disseminated with USAID/Nepal, Contraceptive Retail Sales (CRS), and all USAID partners in FP program in Nepal – HC3, Family Planning Association of Nepal (FPAN), Marie Stopes International, Health for Life (H4L), FHI 360, and Save the Children.

Key Challenges

Coordinating implementation with multiple partners. Meeting with and receiving feedback from district and community levels stakeholders delayed some of the schedule training activities, as they were involved in activities related to the closing of their fiscal year.

Priorities for Year 4

Year 4 is a critical year for implementing this intervention. Activities will focus on:

- Hiring, training, and deploying nine RANMs in Rupandehi.
    - They will receive a training on Pragati and on the COFP in addition to an orientation on SDM integration.
- COFP/Counselling training for all health facility staff in the SDM VDCs.
- Implementation of monitoring procedures associated with SDM and RANM activities.
- SDM/RANM Orientation for health facility staff, RANM, HFOMC, and FCHVs.

Technical Assistance to the Rwandan Ministry of Health in Community-Based Provision of Family Planning

Another activity supported by the FACT Project in Rwanda is FP service strengthening at the community level. As the radio drama is intended to increase demand for FP services, IRH, with the Rwanda MOH, is supporting the implementation of the national community-based provision (CBP) of FP with community health workers (CHWs) in the Gisagara District. IRH and the MOH are undertaking a study in tandem with CBP implementation in Gisagara to assess the competency of CHWs in FP as well as the feasibility of CHWs offering SDM to new users.

Key Accomplishments

Organized a coordination meeting and orientation with new authorities. In early 2016, Rwanda held local elections, which resulted in turnover of select district authorities. The FACT team convened a coordination meeting with existing and new stakeholders at the district level to discuss project progress. This meeting was held in collaboration with MOH officials at the central level. During this meeting all participants discussed challenges in CBP implementation and took consensus on strategies to reinforce CBP activities (table 12).

Table 12: Challenges and solutions discussed during the meeting

Challenges	Possible Solutions
Drop out of some CHWs trained in FP	Each Health Center must seek information about CHWs who dropped out and present the situation to the district. The district will advocate for their replacement.
Low number of FP clients served by CHWs	Each HC should explore the situation in her/his catchment area to know reasons. Local authorities will play a role in sensitization through talking about FP during public gatherings.
Few CHWs do not provide monthly reports or still have many errors in their reports	The in-charge of CHWs should verify each report and support CHWs who have difficulty with their reports. They should take time to give them individual feedback. This has happened successfully during monitoring visits with the support of IRH's M&E coordinator. Follow up will also be done with non-intervention sites to make sure that they are at the same level at the end of the project
Stock out of FP products for some CHWs	The problem of stock out has been resolved during a coordination meeting between all Heads of HCs, Directors of hospitals and the district pharmacy Director. They had a consensus on a new system that will help each CHW to have enough quantity of products. Representative of CHWs confirmed that the problem has been solved.

Broadcast of radio spot to generate demand for community-based services. In this reporting period, IRH worked with the MOH to develop and air a short radio spot on the availability of FP services at the community level in Gisagara. It has been broadcast on Radio Salus and Huye local radio station.

Research activities completed and results analyzed. The final research activities of the study to introduce SDM at the community level have concluded. The MOH required that CHW training be conducted in sites in Gisagara. Because of funding limitations, however, the study was conducted in seven sites. These activities included interviews with SDM clients, IDI with stakeholders, and collection of service statistics from study

sites. The final data was prepared by a local consultant and submitted to IRH for analysis. Key results can be found below and in Appendix H, and a final report is forthcoming. The study found that CHWs are competent in offering SDM, as evidenced by high competency scores in simulated counseling assessment, and a correct-use assessment of client use. The community-based provision of SDM brought new and discontinued users to FP - 88% of clients were either new users or had discontinued their previous method at least three months prior to initiation of SDM. The majority of SDM users were counseled with their male partner present (90%), and they reported that their male partners were involved in use of the method (100%). This high level of male involvement may be due to the fact that it is easier for men to access FP services when they are located in the community and men can agree with the CHW on a convenient time for the counseling. CHWs and clients perceive SDM as a "couple method".

Table 13 shows the indicators used to evaluate this TA effort.

Table 13: Rwanda TA Indicators

System Factors (14 sites)

	N
# of CHWs trained to offer family planned methods	1048
# of health facility catchment areas served	14
# of villages served	524

Reproductive Empowerment and Skills (7 sites)

	%
SDM users with correct knowledge of how to use CycleBeads	89%
SDM users who correctly managed fertile days	99%
Couples with male partners present for SDM counseling session	90%
Male partners cooperating in the use of CycleBeads	100%

Family Planning Uptake (7 sites)

	N
New SDM clients served by a CHW between July 2015 and June 2016	337

Key Challenges

Maintaining strong collaboration with MOH in leading CBP in Gisagara. IRH has encountered some difficulty ensuring MOH ownership of the activities at the district and central levels from a management perspective as well as a financial one. Results from the study indicate that CHWs are able to offer SDM to new users successfully. Furthermore, this activity is already approved in the CBP policy in Rwanda. The next step is to actualize it in implementation across the country. This is something the MOH must lead and for which they must hold partners accountable. IRH seeks to be a supporting partner to the MOH and continues to proactively include staff across various levels in decision-making and supervision. The team hopes that leadership at

the central and district level will be able to take activities forward once the FACT project closes in October.

Priorities for Year 4

- The FACT Project in Rwanda is expected to end field activities in October 2016 and close down all official operations by January 2017. Final reports related to the radio drama solution and the technical assistance to the Ministry of Health will be shared with USAID by December 2016.
- A final package of materials will be handed over to the Ministry of Health during the dissemination meeting. This package will include all proposed revisions to the training curriculum and related tools which should strengthen implementation of community-based SDM provision by CHWs.
- The team will draft a manuscript for publication in the Reproductive Health Journal or other related scientific journal.

USAID - Jordan Family Planning Program Assessment

As part of the FACT Project, IRH conducted an assessment of USAID/Jordan's FP contributions over the last decade. The assessment explored reasons for fertility stagnation in Jordan and USAID/Jordan FP contribution to FP over the last decade. The final report and presentation were submitted to USAID/Jordan in April 2016. Several dissemination activities have since taken place, highlighted below.

Key Accomplishments

Brownbag presentation of key findings presented to USAID/DC, USAID/Jordan, and Jordanian stakeholders. The IRH team presented the final assessment findings in August 2016 to a number of stakeholders, including USAID/DC, USAID/Jordan, and local USAID sub-contractors in Jordan. The presentation was very well received and re-emphasized the need to shift USAID funding and priorities toward community-based social and behavior change strategies.

Publication of two blog posts, and one editorial in PAA Affairs. IRH is disseminating a three part series blog series on the assessment conducted in Jordan. The first blog post was disseminated in April 2016, and second post in August 2016; and focused on the reasons for fertility stagnation in Jordan, and implications for programming. In addition, a "Research to Policy" editorial piece was published in the quarterly PAA Affairs newsletter, in September 2016.

Priorities for Year 4

- **Potential presentation of the assessment findings** at the PAA Conference in April 2017 (Abstract submitted, awaiting response).
- **Submission of viewpoint manuscript to Global Health Science and Practice (GHSP)** (in progress).
- **Dissemination of the third blog post** as part of the aforementioned three part blog series.

Jharkhand, India

IRH's work with the Centre for Catalyzing Change (C3) in India—to finalize expansion of SDM and LAM services in the state of Jharkhand—concluded in September 2016. During a three-year period, C3 completed expansion of SDM in the remaining 12 of the 24 districts where SDM scale up originally took place (under the FAM Project). Accomplishments and key challenges are described below.

Key Accomplishments

Capacity among training teams and community health workers was built at the state, district, and block levels. At the closing of activities, 100% coverage was achieved with over 600 state and block level trainers trained. At the service delivery level 4,140 (96.3%) of the 4,295 ANMs and 17,834 (86.42%) of the 20,636 Sahiyas were trained in the FP training module that includes LAM and SDM.

Quality assurance monitoring through supportive supervision of the Sahiyas shows over 75% competence in SDM and LAM counseling skills. Selected findings from applying a competency checklist to a sample of participants show improvements after providers offer the methods and receive feedback during one supportive supervision visit.

Figure 10: Explaining three LAM criteria

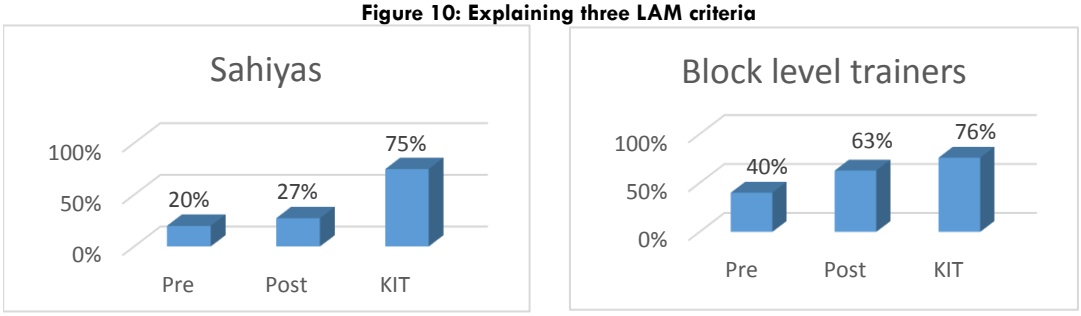
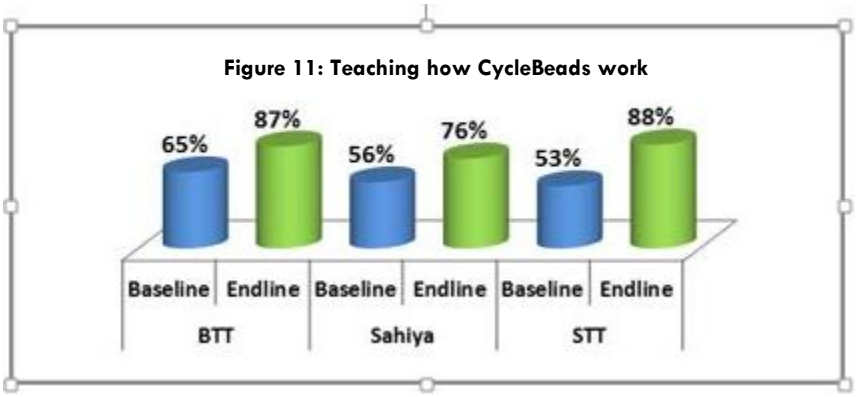
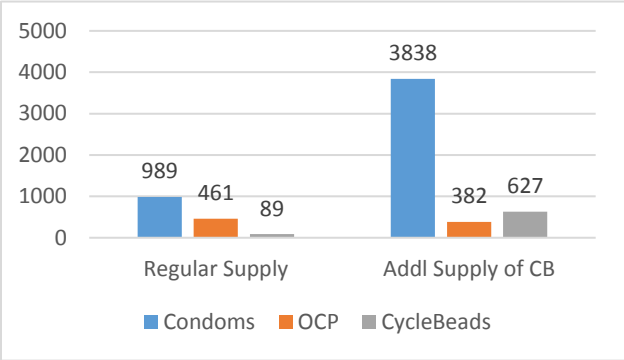


Figure 11: Teaching how CycleBeads work



An assessment of demand for SDM shows that in 20 villages in two districts where Sahiyas receive a higher stock of CycleBeads, method uptake was higher. During a six month period, Sahiyas in villages who received a larger supply of CycleBeads distributed the method 627 clients compared to Sahiyas in sites with regular supply where only 89 clients were offered the method. Clearly, product availability is key to success.

Figure 12: Supply of CB



Key Challenges

At the state level, the government was able to include donated CycleBeads in the logistics system and distributed to the district, block, and community level. However, despite C3's advocacy efforts with the Government of Jharkhand, inclusion of SDM and LAM in the MIS at the 12 additional sites was not secured. Similarly, allocation of funding at the national level to procure CycleBeads, when the stocks are exhausted, was not obtained, despite the districts' request for CycleBeads being added to the state-level program implementation plans.

Priorities for the next quarter

- C3 plans to disseminate the LAM and SDM scaling up experience at the state and national level during meetings in October 2016. With both methods scaled up in all 24 districts in Jharkhand, the Government of Jharkhand is positioned to take full ownership of ongoing and future integration of SDM and LAM into its FP program.

OTHER ACTIVITIES

Responsible, Engaged, and Loving (REAL) Fathers Initiative Integration

The goal of scale up of the REAL Fathers Initiative is to develop costed model for integrating a tested father-centered program to address physical child punishment and intimate partner violence (IPV) prevention. IRH and Save the Children developed and are testing a cascade training model to integrate REAL into: 1) early child development programs; and, 2) livelihoods initiatives (including vocational training and savings groups). This scale up through program integration approach has the potential to lead to broader nation-wide engagement with young men in violence prevention throughout Uganda. Data is being collected on the effect of the integrated intervention, the scalability, and cost of this approach. Integration will take place through the Youth Initiative for Employment and Sustainable Livelihood and Development (YIELD) in Northern region and the Early Childhood Care and Development (ECCD) centers in Karamoja region.

Key Accomplishments

Adaptation of REAL Fathers materials for Karamoja. The mentor curriculum, resource sheets, and training protocol developed for and used in the pilot communities in Atiak, Northern Uganda were found to be unsuitable for Karamoja due to lower literacy rates in the region. Save the Children adapted the materials to better suit this population, testing revised versions among young men similar to the target population and among individuals similar to project mentors. While the overall approach remained the same, activities where reading and writing were required were substituted with more involved facilitation, discussion, images, and pairing mentors with higher literacy with those with lower literacy skills. Sub county CDOs, who are members of the cascade training team, read the revised materials to determine suitability.

Community Introduction Meetings in Northern Region and Karamoja. Introductory meetings to share information about REAL Fathers Initiative and to seek local leader buy-in were conducted in the sub counties of Lolachat and Lorengdwat in Karamoja and Patiko in Gulu. The meetings were well attended with over 500 community members including young fathers, their wives and children, elders, and opinion leaders. The community noted that the program was timely as many families were struggling with IPV.

Selection of Mentors of Young Fathers. Immediately after the community introductory meetings, young fathers and their wives selected mentors. They chose mentors who live peacefully with their wife and children, are intelligent, are at least 25 years old, are respected in the community, and live within a close proximity (within a few kilometers) to the young fathers.

Baseline survey and qualitative in-depth discussions conducted. A total of 1,193 young men were recruited into the baseline survey across the two regions. Baseline

data was collected in the Northern region in December (cohort one) and April (cohort two). In the Karamoja region, baseline data was collected in January (cohort one) and May (cohort two). Baseline IDI were conducted in cohorts one and two among ten men and ten wives in each region.

Training of mentor trainers. Across the study regions, the trainers held meetings to prepare for the mentor training in the various sub-counties. The trainers in Karamoja reviewed, adapted and prepared the revised mentor curriculum. In the Northern region, the trainers implemented the first mentor reunion in Pabo sub-county and mentor training in Patiko sub-county. The mentor program is being implemented among all cohorts and across regions. Monitoring data is being collected and IRH developed a database and began entering monitoring data with will produce monthly statistics for review by the project partners and technical advisory groups.

Mentoring follow-up activities in pilot communities. The mentors in Atiak continued offering mentoring to 225 young fathers in the control groups from the pilot study in the eight parishes in Atiak sub-county. During the reporting period, they covered Session 3: Family Dreams, Session 4: Loving My Family, and Session 5: Communication.

Presentations and Dissemination. The Institute for Reproductive Health's Project Coordinator and Save the Children's Senior Technical Officer traveled to Kampala to participate in a national seminar on parenting organized by the Ministry of Gender, Labor, and Social Development. These two project staff accompanied a REAL Fathers Initiative beneficiary couple who shared their experiences with REAL Fathers Initiative during the seminar. The seminar is within the Ministry's mandate of ensuring the wellbeing of children and strengthening families, in collaboration with the National Child Protection Working Group. The Project Coordinator and Senior Technical Office presented an overview of the intervention.

Journal Article Published in Prevention Science. A journal article documenting the REAL Fathers pilot and evaluation results titled "Evaluation of the Responsible, Engaged, and Loving (REAL) Fathers Initiative on Physical Child Punishment and Intimate Partner Violence in Northern Uganda" was published in Prevention Science.

Key Challenges

Staff attrition. Save the Children Senior Technical Officer, Denis Eluk, transitioned from the organization, which caused an interruption and delay in implementation. Pauline Kabagenyi, a Save the Children veteran who previously led the GREAT project, assumed the role of REAL Fathers lead for Save the Children.

IRH Project Coordinator, Simpson Nwamanya, will leave his post on September 30. Sam Okello, IRH's Gulu-based Monitoring, Evaluation, Research and Learning officer will assume the responsibility of the project coordination. The project also welcomes Emma Ridings, intern from Georgetown University's graduate program in conflict resolution.

Mobility of the young fathers. Men in both regions leave their homes for extended periods looking for income generating activities. This has resulted in recruitment delays for both the young fathers and mentors.

Poor time management by young fathers. Adherences is sometimes an issue when young fathers fail to adhere to their appointments scheduled for mentor visits. Some fathers only participate in the home (individual) sessions, and miss the group sessions. Mentors continue to remind fathers that the sessions build on one another, and that it is important to attend all sessions.

Priorities for next quarter

- **Continue implementation and monitoring activities.** In addition to the implementation and routine monitoring, Save the Children will begin observations of individual and group sessions, completing observation forms. These data will entered by IRH staff into the monitoring database on a monthly basis.
- **REAL Adaptation Technical Teams (RATT)**. Meetings of these two regional technical advisory groups will be held in October in Lira for the Northern region, and in Soroti for the Karamoja region. IRH staff, using an agenda prepared by IRH in collaboration with Save the Children, will facilitate the groups. An outcome mapping approach will be used to plan for and support sustainability of the goals of the REAL Fathers Initiative within the two regions.
- **Analysis of qualitative in-depth interview data.** IRH staff will begin to analyze baseline qualitative data using content analysis and matrices to analyze across cases and domains.

Reproductive Empowerment

During this reporting period, ICRW continued to work on operationalizing the definition and measurement of Reproductive Empowerment (RE). Since completion of abstraction of articles generated from the literature review, ICRW and Measurement Evaluation (MEval) have been collaborating closely to further develop and refine a conceptual framework as well as identify relevant measurement approaches. Both teams have been working on finalizing the full report and planning the expert consultation meeting, which will be held in Washington D.C. on November 2, 2016. As a part of this process, ICRW and MEval have had several planning calls to order to finalize timelines for the remainder of the project period, assign specific tasks, and ensure a shared understanding of project deliverables. ICRW has also begun the process of planning out the next year of activities on the RE project, which will involve a number of data collection efforts aimed at developing a validated set of indicators for the measurement of RE going forward.

Key Accomplishments

Coordinated and continued work on the RE literature review with MEval. ICRW successfully took part in weekly meetings with the MEval team to strategize how to continue to take the RE literature review forward and refine the conceptual framework for Reproductive Empowerment based on established research. Both teams continued to work collaboratively to ensure cohesion of the conceptual and measurement sections of the final report, for which a substantial amount of writing was done. Additionally, key participants for the expert consultation meeting were identified and invited to contribute to this work.

Key Challenges

ICRW and MEval have overlap in scope for the RE project, which can make the work challenging. A coordination plan was developed to address this overlap, which includes weekly check-in meetings to make sure that both teams are up to date and on the same page on how to carry out activities in a concerted manner. This includes discussions on the structure of the final report and the responsibilities of each partner, joint discussions on development of the conceptual model, preparations for the expert consultation meeting (including selection of invitees), and preparation of the report that will serve as a background document for that meeting.

Priorities for next quarter

- **Host expert consultation meeting on the conceptualization and measurement of reproductive empowerment.** ICRW, in collaboration with MEval, will host an expert consultation meeting on November 2, 2016 to seek feedback on the final report, which focuses on the development of the conceptual framework and provides a review of existing measurement frameworks used to measure RE.

Couples Counseling

IRH is conducting a literature review of couples counseling interventions to inform the potential development of a couples counseling product. This review will synthesize the literature on effective couples counseling interventions and provide guidance on the key elements within interventions for future programming needs.

Key Accomplishments

Literature review initial draft completed. Of 5,321 studies found through Google Scholar, Popline, and Pubmed databases, 41 interventions were selected based on our inclusion criteria. Of the 41 interventions, 23 focused on human immunodeficiency virus (HIV) couples counseling, 14 on FP, two studies on MCH, and two studies on abortion. The review findings show that multiple intervention approaches improved key indicators/outcomes across the topic area. Couple counseling contexts varied from facility to community-based settings, and from individual to group counseling formats. The evidence also shows that most interventions did not provide a specific definition of "couples counseling." This suggests the need to have a clear definition, framework and model/s for couples counseling across the reproductive health field, and in particular in the FP sector.

Key Challenge

Translating literature review findings into a practical product. Over the last year, several ideas have been discussed for the final couples counseling product, including a "compendium" for programmers, and a clinical "toolkit" for service providers. This is in part due to the wide net of reproductive health interventions (41) identified in the literature review, which shows that very different models can be effective toward different sectorial outcomes (HIV, FP, MCH, abortion). To address this challenge, the USAID/Gender team suggested that the product instead be in the form of "guidelines" on couples counseling principles. The use of a webinar was identified as an appropriate platform to both present the review findings, and feed into the development of a tentative product on couples counseling principles and guidelines.

Limited response from couples counseling authors. Among the 41 couples counseling interventions that were identified and reviewed, the IRH team has attempted to contact authors from each. Contact is being made to obtain additional intervention related documentation to make available to interested practitioners. Thus far, we have received tools from six authors.

Priorities for Year 4

The review findings were shared with the USAID/Gender team, and next steps were identified as follows:

- Finalize and share the literature review with USAID, including sub-analysis of comparative models and statistically significant outcomes, identifying key elements of "effective" interventions *(October 31, 2016)*.

- Publish a commentary in GHSP on review findings *(December 2016)*.
- Organize a webinar on the review findings with experts in FP couples counseling field *(December 2016 or January 2017)*.
- Based on the webinar recommendations and feedback, tentatively produce a two to four page report brief on "Principles and Guidelines of FP Couples Counseling," for FP providers and practitioners *(March or April 2017)*.

Provide Global Guidance on Fertility Apps

The availability of numerous smart phone applications (apps) that focus on fertility presents both an opportunity and a challenge. They are an obvious vehicle for getting critical information to women globally, and the high number of downloads points to women's interest in them. Through the FACT Project, IRH is currently working with two of them, the CycleBeads app and the Dot app, as described previously in this report. While the results of these initiatives will strengthen the evidence base around the usability and appropriateness of fertility apps, a significant need remains to help potential app users navigate through the numerous apps – many making claims that are not based on evidence – to select one that will meet their needs. IRH has conducted a review of all available literature on fertility apps and has developed a plan for providing the much-needed guidance.

Priorities for Year 4

- **Collect market analysis data from women ages 18-39 who use or would consider using fertility apps, to identify user experience and challenges in navigating fertility app selection.** Currently, no research exists around user experiences with fertility apps, which leaves a dearth of critical information about how women perceive these apps, how they find and select them, and how accurate they perceive them to be. In order to improve informed consumer behavior around fertility apps, specifically for pregnancy prevention, IRH will conduct a market analysis on 1,000 women ages 18-39. The purpose of this preliminary study will be to understand consumer thinking around app classification. Findings will be used to guide the development of the white paper, inform the technical working group meeting, and ultimately build a consumer decision tool around fertility app selection.
- **Draft white paper.** IRH will draft an initial document outlining the scope of the problem with fertility app classification, including user experience findings and all existing literature on the topic of fertility app classification and fertility app use. This document will provide the background for attendees of the technical working group meeting and will be incorporated into the final publication on this topic.
- **Hold technical expert meeting**. IRH will host a technical working group meeting to address the issue of fertility app classification. The purpose of this meeting will be to identify classifications, terminologies and decision-making processes that can and should be promoted to consumers. Outcomes will include a complete white paper with recommendations, and a decision-tree basis for the formation of a consumer tool for fertility app selection.
- **Submit paper for publication.** The white paper output from the technical meeting will be completed and submitted for publication.
- **Launch consumer tool for app classification and selection**. IRH will support the creation of an online consumer tool for fertility app selection. This tool will be based on the market research conducted on users as well as the outputs from the technical working group meeting and will help women who are looking to use a fertility app for pregnancy prevention select the app(s) that are right for them.
- **Disseminate and assess consumer tool**. Subsequent to the launch of the consumer tool, IRH will evaluate use of the online tool.