

CAMEROON STUDY RESEARCH BRIEF



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The Added Value of Combining a Leadership Development Program with Clinical Training on Postpartum Family Planning Service Delivery

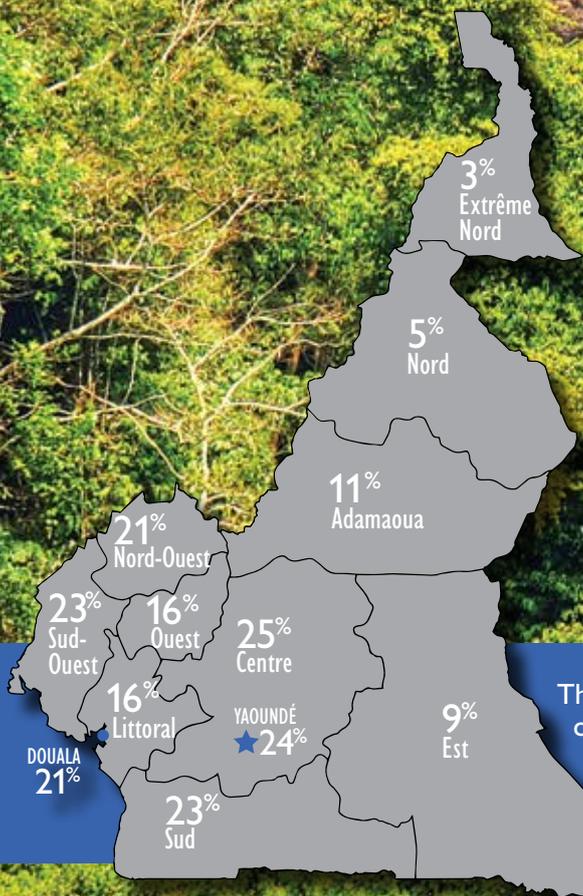


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In Cameroon, modern contraceptive prevalence remains low, at an average of 16.1%.



This map indicates utilization of modern contraceptives by region (percentage of married women 15–49 using a modern contraceptive method)
Source: DHS 2011

BACKGROUND

Postpartum family planning (PPFP) refers to the initiation of family planning services during the 12-month period following delivery (Gaffield & Egan, 2014). PPFP has the potential to reach large numbers of women with life-saving information and services, which aids in the prevention of unintended pregnancies and associated potentially adverse health outcomes. Studies show during their first year postpartum, more than 95% of women want to delay or avoid pregnancy, yet 70% of women are not using contraception. The unmet need for family planning services is particularly high in low- and middle-income countries (Changole et al., 2010; Ross & Winfrey, 2001).

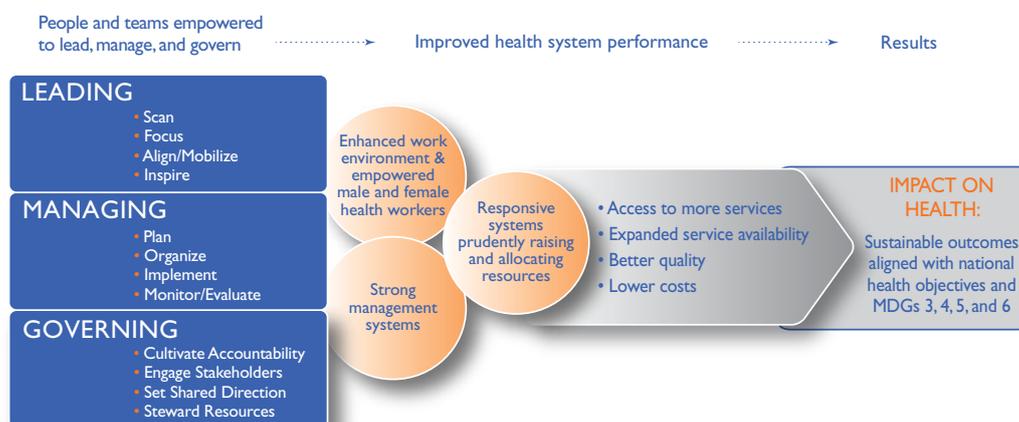
In Cameroon, modern contraceptive prevalence for all women remains low at 16.1% (INS & ICF, 2012). The National Health Development Plan 2011–2015 cites limited contraceptive access for youth and adolescents as a cause of low modern contraceptive use, varying contraceptive prevalence by age, and high rates of unsafe abortion. The National Health Development Plan therefore prioritizes family planning (FP) counseling and service delivery training for health care workers. The Government of Cameroon and other development partners also consider sexual and reproductive health and family planning (SRH/FP) for women and girls a priority (Ministry of Public Health (MSP), Republic of Cameroon, 2010).

To increase access to key health services such as PPFP, strong, functioning health systems are required (Murray & Frenk, 2000). While limited resources are a significant barrier to optimal service delivery, poor leadership and management at the systemic and individual-facility level are often an underlying contributing factor in low-functioning facilities (Eichler, Levine, & Performance Based Incentives Working Group, 2009).

For service delivery integration to be successful, solid leadership, management, and governance (L+M+G) is required to address complex contextual and institutional challenges inherent in the improvement process (Peters, El-saharty, Siadat, Janovsky, & Vujicic, 2009). Strengthening leading, managing, and governing practices is a cross-cutting approach for improving health services that addresses challenges at all levels and across all building blocks of the health system (Figure 1).

This technical brief presents findings from a prospective mixed methods study in Cameroon. The study was the result of collaboration between USAID's Leadership, Management, and Governance (LMG) Project and Evidence to Action Project (E2A). The primary aim of the study was to evaluate the added-value of a leadership development program on E2A's PPFP clinical training program within maternal, neonatal, and child health (MNCH) departments

Figure 1. Conceptual model: leading, managing, and governing for results



Source: LDP+ Manual



EZA associate provides clinical training for FP providers on implant insertion.

of tertiary hospitals in Yaoundé, Cameroon. Six hospitals participated in the study and all received MOH central supply of FP commodities. Teams at four of the hospitals participated in EZA's PPFPP clinical training, and teams at two of the hospitals additionally completed a leadership development program.

The study hypothesis was that strengthening leadership, management, and governance capacity at the hospital level would add value to the PPFPP intervention, such that the difference in baseline and endline PPFPP service delivery measures would be larger in hospitals receiving the LDP+ compared with hospitals receiving clinical capacity building alone.

The following overarching question, broken down into four components, was examined in this study: **Compared to FP clinical capacity building alone, how does leadership, management, and governance strengthening—in combination with clinical training—influence the process and outcomes of a PPFPP service delivery intervention within MNCH departments of a tertiary care hospital?**

1. What are the content, contextual, and process barriers and facilitators to PPFPP service delivery within MNCH services?
2. How does LDP+ training influence hospital leaders'/managers' attitudes and practices towards PPFPP provision within MNCH services?
3. How does leadership, management, and governance capacity building influence hospital personnel's work-related stress in the context of PPFPP integrated service delivery as compared to clinical capacity building alone?
4. What influence does leadership, management, and governance capacity building in combination with clinical training have on PPFPP service delivery outcomes as compared to clinical capacity building alone?

Full results of the study are presented in the study endline report (Baba Djara, Conlin, & Shukla, 2016).

INTERVENTIONS

Leadership Development Program *Plus*

Management Sciences for Health's (MSH) Leadership Development Program *Plus* (LDP+) is a participatory, team-based learning approach grounded in three methodologies: experiential learning, the challenge/feedback/support triangle, and the Challenge Model. Used in over 40 countries, the LDP has contributed to health system improvements, such as reducing maternal mortality in Egypt (Mansour, Mansour, Hasan, & Swesy, 2010) and increasing service delivery at the district level in Kenya (Seims et al., 2012) and in Mozambique (Perry, 2008).

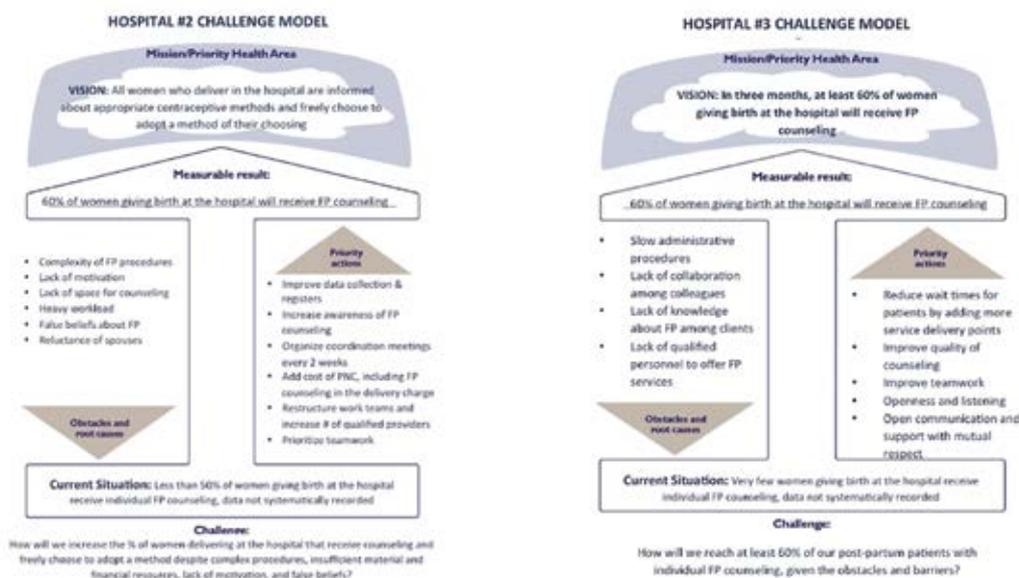
Working in improvement teams, participants learn to face challenges and achieve measurable results by applying leading and managing practices and using tools, including the Challenge Model and a root cause analysis, to develop an action plan and monitor its implementation toward achieving a specified health service delivery improvement goal. In Cameroon, improvement teams brought what they learned back to their departments, where they taught coworkers to apply these practices to the challenge of increasing PFP service delivery.

Of six hospitals participating in the study, two received the LDP+ intervention. Working with a facilitator and a coach, improvement teams from these facilitates sought to:

- create an inspiring shared vision for addressing a priority health area
- apply leading and managing practices to improve teamwork and effectiveness
- use the Challenge Model process (Figure 2 left) to identify and achieve desired measurable results
- align stakeholders around a common challenge

Working with their colleagues, the two hospital management teams (totaling 11 participants) participated in the LDP+ training and learned leading, managing, and governing practices that enabled them to face the challenges hindering PFP service delivery, as well as to achieve measurable improvements in the quality and quantity of care offered to patients. Figure 2 depicts the teams' Challenge Models, identifying the barriers and root causes as well as targeted activities to address the issues.

Figure 2. Challenge Models



Clinical Training Intervention

The E2A clinical capacity-building intervention provided a comprehensive postpartum family planning training program that offered a full range of contraceptive options. This program reinforced capacity to offer voluntary FP counseling and provision of contraceptive methods, with a focus on immediate (48 hours after delivery) and extended-interval postpartum (through the 12 month period after birth) care. E2A project activities included assistance

to improve PFP services and clinical guidelines by developing job aids, reinforcing PFP service delivery record-keeping and health management information systems (HMIS) capacity, and providing clinical training for a full range of FP options. (Please see the Implementation Report for more information on the LDP+ and E2A implementation [Baba Djara, Morgan, Cho, Conlin, and Trasi, 2015]).

METHODS

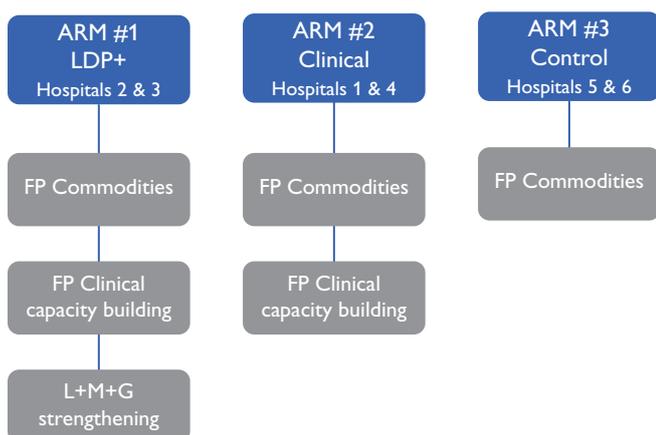
The study took place from October 2014 to September 2015. It was conducted using a quasi-experimental design with purposively sampled non-equivalent intervention and comparison sites. Study sites were purposively sampled in collaboration with the Department of Family Services (DSF) of the Ministry of Public Health (MSP) of Cameroon. All public reference (n=5) and district hospitals (n=4) in Yaoundé were considered.

The study had three arms, as shown in Figure 3. Of six hospitals participating in the study, two received FP commodities, FP clinical capacity building, and

L+M+G capacity building; two hospitals received only commodities and capacity building; and two facilities received only commodities.

Since only Arm #1 benefited from L+M+G strengthening, this study design allowed us to examine the added value of the LDP+ in the context of a FP clinical capacity-building project. It also allowed us to compare both the L+M+G/FP clinical capacity-building combination approach, as well as FP clinical capacity building alone, to standard practice in the control arm of the study.

Figure 3. Study design and study arms



Nurses completing a family planning register

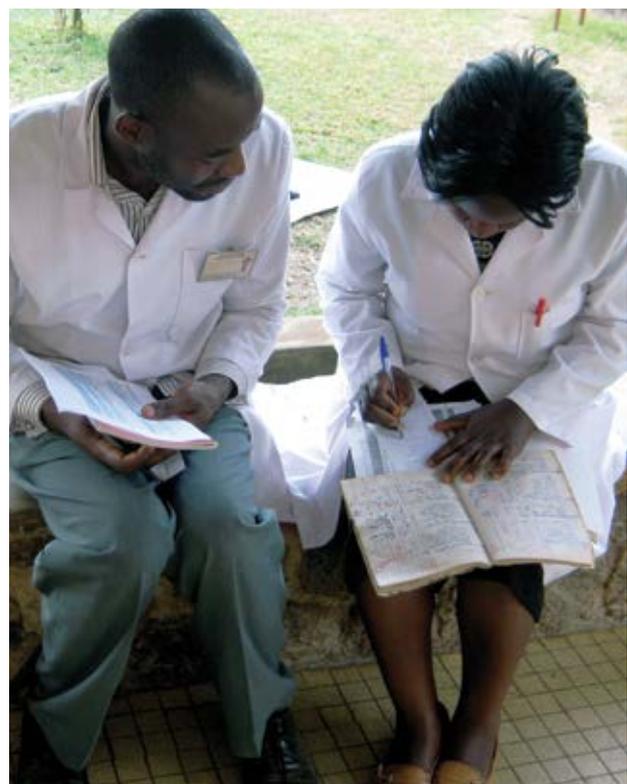


PHOTO BY MONITA BABA DJARA



A nurse surveys the new treatment area created for family planning, the result of an LDP+ team's work.

DATA COLLECTION AND ANALYSIS

Study data were collected at baseline, midline, and endline using both qualitative and quantitative methods. Qualitative methods (key informant interviews [KII], semi-structured interviews [SSI], focus group discussions [FGD], and observation) were used to collect data on the barriers and facilitators to FP/PPFP service delivery as well as health care personnel's attitudes towards FP/PPFP. Qualitative interviews and focus group data were collected with the same participants at baseline and endline.

Quantitative data collection methods included: a baseline facility FP/PPFP capacity survey to assess the hospitals' resources for delivering FP/PPFP services,

pre- and post- service delivery and health system outcome measures, and a behavioral self-assessment survey with LDP+ participants to assess leading and management behaviors pre- and post- LDP+ intervention. Quantitative descriptive, bivariate, and regression analyses were performed to provide background on the sample, to compare study arms for the outcome indicators, to control for covariates, and to compare L+M behavioral assessment responses between the two hospital sites of study Arm #1. A difference-in-differences analysis was also conducted to estimate the causal effect of the LDP+ intervention on the outcome variables (Table 1).

Table 1. Summary of quantitative study data analyses

DATA SOURCE	ANALYSIS
L&M Behavioral Self-Assessment <i>Pre- and post- assessments</i>	<ul style="list-style-type: none"> • Cronbach's α, factor analysis • Paired t-test • One sample t-test
WRS Survey <i>Pre- and post- assessments</i>	<ul style="list-style-type: none"> • Cronbach's α, factor analysis • Paired t-test • Difference-in-differences test
Service Delivery & Health System Outcomes <i>3-month pre- and 3-month post-data collection</i>	<ul style="list-style-type: none"> • Pearson's correlation • One-way ANOVA, MANOVA, MANCOVA • Difference-in-differences test

Study Limitations and Threats to Validity

There are methodological limitations due to the study design and also limitations due to the implementation of both interventions that affected study outcomes including potential bias on the self-assessment due to socially desirable responses and facility-level

documentation challenges. Study design limitations include non-random selection of study sites, small sample size of facilities (two per arm) and the short duration of the study.



The results indicated that LDP+ training, when combined with clinical training, contributed to a greater increase in the number of women attending either ANC or postnatal visits to receive FP/SRH counseling, compared to the clinical training alone.

Figure 4. LDP+ hospitals had greater increases in the percentage of PP clients receiving FP/SRH counseling

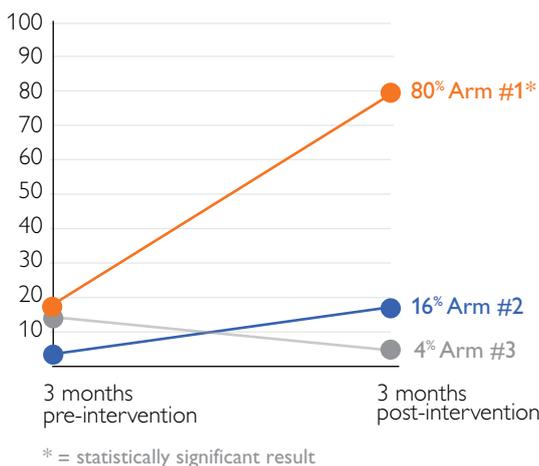
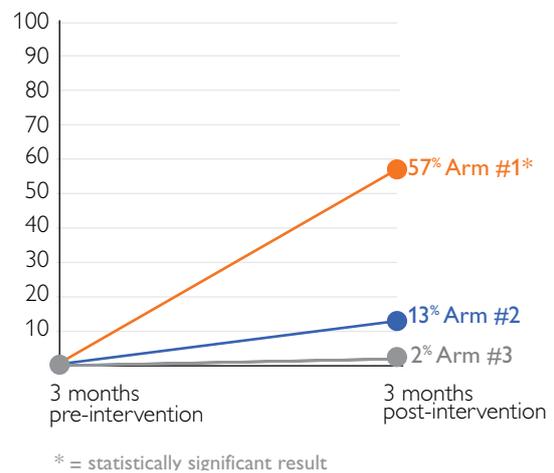


Figure 5. LDP+ hospitals had greater increases in the percentage of ANC clients receiving FP/SRH counseling



RESULTS

At the facility level, the number of staff (MNCH nurses and OB/GYNs) and the number of maternity beds varied and can be found in the table below (Table 2). Using one-way ANOVA modeling, significant mean differences were found at baseline

between Arms in the number of OB/GYNs ($p=0.029$) and the number of MNCH nurses ($p=0.031$).

Outcome data was collected at each of the six hospitals. Below are select findings from the study. The full study results can be found in the endline report, referenced above.

Table 2. Hospital characteristics by study arm

	ARM 1		ARM 2		ARM 3	
	Hospital 2	Hospital 3	Hospital 4	Hospital 1	Hospital 5	Hospital 6
Hospital Classification	District	Reference	District	Reference	District	Reference
Governance Structure	MOH	Autonomous	MOH	MOH	MOH	Autonomous
# Maternity beds	6	22	11	70	12	52
# OB/GYNS	1	15	4	10	2	7
# MNCH nurses	15	24	18	40	14	44

Service Delivery Outcomes

This document presents results on two primary service delivery outcomes included in the study: percentage of antenatal care (ANC) clients receiving FP/SRH counseling and the percentage of women who delivered at the hospital receiving FP/SRH counseling with postnatal care (PNC).

Both Arm #1 and #2 had increases in the number of antenatal and postnatal clients receiving FP/SRH counseling. At baseline, 17% of postpartum women in Arm #1 facilities were counseled on FP/SRH, compared with 80% at endline—a 3.7-fold increase in women counseled. Arm #2 saw a 1.6-fold increase (6% to 16%) in the number of postpartum women counseled, while Arm #3 had a decrease in the number of postpartum women counseled from baseline to endline (Figure 4).

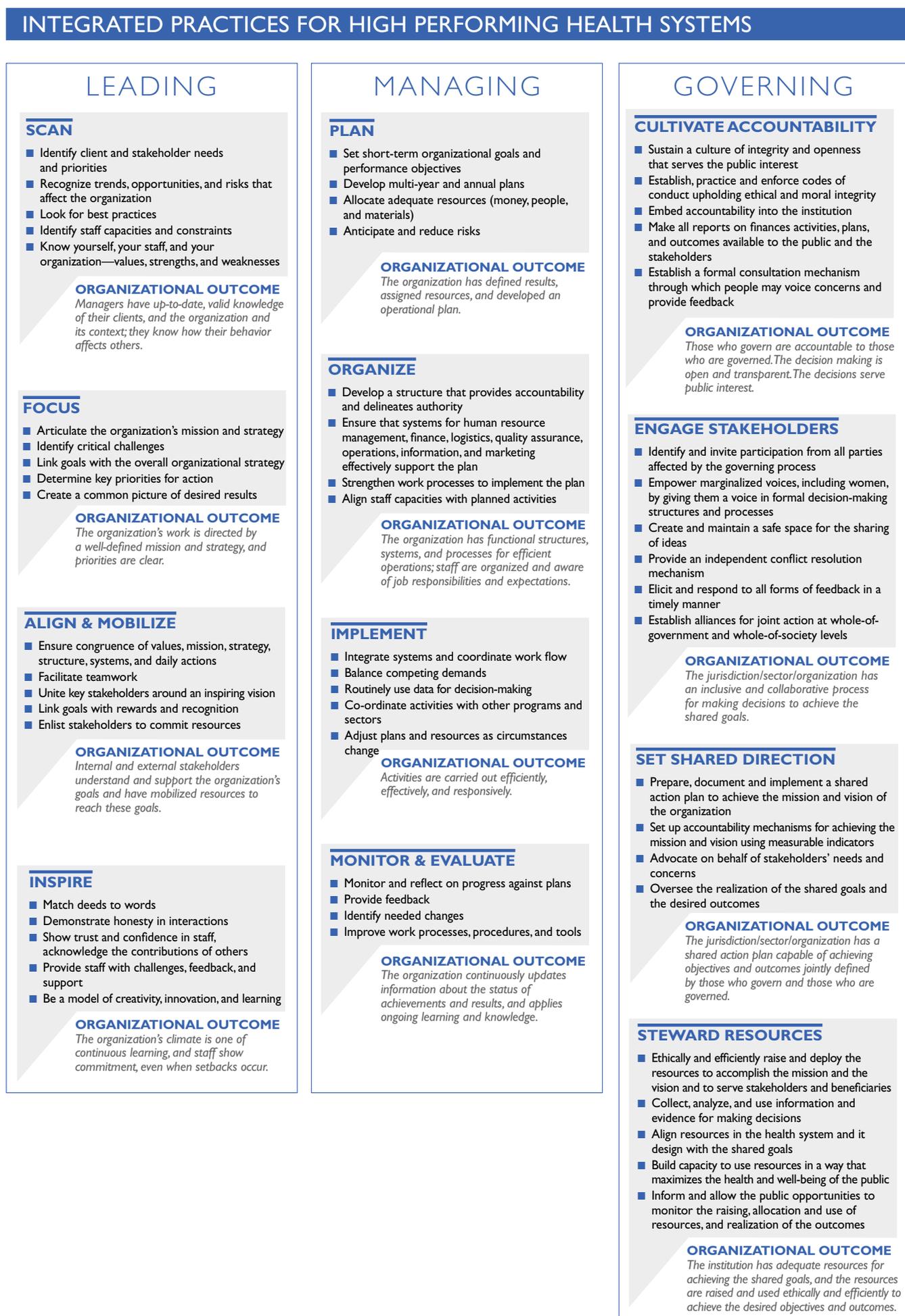
For postnatal counseling, there was also a statistically significant difference between arms, with significant differences between Arm #1 versus Arm #2 and Arm #1 versus Arm #3. This indicates that the **LDP+ along with the clinical training contributed to a greater increase in the number of postpartum women receiving FP/SRH compared to the clinical training alone.**

All hospitals were offering only group FP/SRH counseling sessions at baseline rather than individual counseling for ANC clients and no data were being collected on FP/SRH counseling for ANC clients. However, at endline, all six facilities were collecting these data. The largest change in FP/SRH counseling in ANC was seen in Arm #1 LDP+ hospitals, where there was a percentage point improvement of 57 from baseline to endline (Figure 5). Arm #2 saw an increase of 13 points, while the control arm remained similar to baseline, with a 2% increase.

There was a statistically significant mean difference in Arm #1 versus Arm #2, as well as Arm #1 versus Arm #3. These results suggest that the **LDP+ in combination with the clinical training (Arm #1) contributed to a greater increase in the number of ANC women receiving FP/SRH counseling compared to the clinical training alone (Arm #2).**

The difference-in-differences analysis corroborated the findings above, and showed that the LDP+ intervention combined with the clinical training contributed to an increase in a hospital's antenatal counseling rate by 54% and its postnatal counseling rate by 69%, compared with no intervention.

Figure 6. Leadership Development Program Plus Leading, Managing, and Governing Practices



Clinical training alone increased a hospital's antenatal counseling rate by 12% and had no impact on postnatal counseling rate. When the LDP+ intervention is added on the top of the ongoing clinical training, on average the added value of the LDP+ intervention is a 36 percentage point increase in a hospital's antenatal counseling rate and a 32 percentage point increase in postnatal counseling rate.

Data from qualitative interviews support the findings from the quantitative analysis. Interviews with Hospital management and focus group discussions with LDP+ participants pointed out increased utilization of FP/PPFP services as well as PNC. Both Arm #1 and Arm #2 hospitals reported greater integration of PPFP counseling and services along the

continuum of care for SRH services compared to baseline.

*There has nevertheless been a change, because before the women were not fully informed about the FP unit. Only a few women would come...it has come to the point where there is a lot of...a bit more traffic.... **That means that the frequency...the attendance rate in the FP unit has increased a bit in comparison to 6 months ago.** There are more visitors these days. And even the pregnant women are interested, come to get counseling, and also to choose their method that they will use after delivery. And we take note of it for after they give birth. And the women...the women who have delivered, who were not informed beforehand, are now informed. (Endline Focus Group Discussion #3)*

Behavioral Self-Assessment Results

In order to assess leading and managing practices in the LDP+ intervention hospitals, a L+M behavioral self-assessment was completed by all 11 LDP+ participants (Arm #1) at both baseline and endline. The L+M behavioral self-assessment has 21 questions aimed at capturing the eight key leading and managing practices taught in the LDP+ method (see Figure 6).

A paired t-test was conducted on the LDP+ participants' assessments to determine whether there was a statistically significant mean difference between post-LDP+ behavioral assessment scores compared to pre-LDP+ scores. **The LDP+ participants scored higher on the overall behavioral assessment scale after the LDP+ intervention (58.6 ± 16.8) compared to before the intervention (39.1 ± 27.8),** a statistically significant increase of 19.5 points.

Similar analysis was performed on the individual leadership and management domains (Figure 7). For the leadership domain, the post-LDP+ score was not statistically significantly different from the pre-LDP+ score, however the post-LDP+ score was **statistically significantly higher than the pre-LDP+ score in the management domain.**

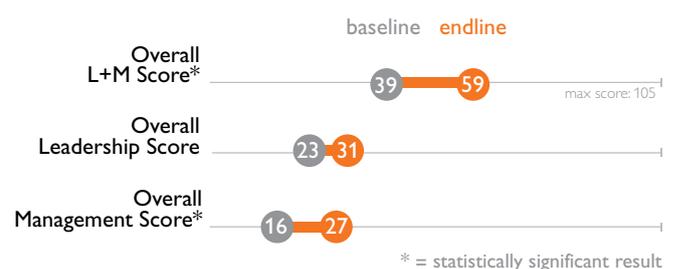
Individual practices within the leadership domain were also assessed, including **scanning, focusing, aligning/mobilizing,** and **inspiring practices.** The change was only significant for the practice of inspiring, with a 4.4 point increase from baseline to endline.

The qualitative data supported the idea that leaders inspired changes in PPFP services. From the perspective of both the LDP+ focus group

participants as well as the hospital managers who were interviewed, the LDP+ teams were seen as catalysts, inspiring changes and improvements in PPFP services. LDP+ participants detailed some strategies they used to motivate their coworkers and noted that their role as leaders was to keep PPFP on the radar within their units and provide encouragement and motivation to coworkers to prioritize PPFP services.

Management practices included **planning, organizing, implementing,** and **monitoring.** Contrary to what was found for leadership practices, post-LDP+ scores were statistically significantly higher than pre-LDP+ intervention scores for three management practices: (1) planning; (2) organizing; and (3) monitoring. The largest shift was seen in the monitoring and evaluation (M&E) domain, where there was a 4.3-point increase reported. Planning and organizing also saw significant positive increases in scores at the post-assessment, with a 2.2-point increase in planning-related behaviors and a 2.9-point increase in organizing behavioral responses.

Figure 7. Overall pre- and post-behavioral self-assessment scores





It is clear from the findings of this study that complex FP/PPFP service delivery integration interventions could benefit from including leadership and management capacity building as a strategic part of improvement projects.

In the qualitative data, LDP+ participants and their managers discussed that, while E2A's clinical training gave them the clinical skills, **the leadership training gave participants the competencies to negotiate with other units to utilize staff with FP skills more effectively and to incorporate FP counseling across the continuum of care**, including in ANC, delivery, PNC, and vaccinations. In conjunction with the key FP/PPFP skills provided by the clinical intervention, LDP+ participants felt that the LDP+ gave them leadership and management practices they were able to translate into concrete solutions to improve PPFP service

delivery. They were able to use the LDP+ strategies they learned to overcome barriers that would have kept them from fully utilizing the clinical knowledge to its fullest potential. As a result, they were able to: improve collaboration and teamwork to achieve better integration of services and better utilization of human resources; take a more proactive approach to identifying challenges and finding solutions to problems; and learn how to advocate for and inspire change by setting aside time to reflect and document services delivered.

DISCUSSION

Building the capacity of leaders and managers to successfully negotiate improvement processes is an important, yet often neglected, part of service delivery strengthening initiatives. The participatory, experiential approach of the LDP+, which emphasizes learning by doing, was particularly suited to addressing the challenges of improving FP/PPFP services. In this study, mid-level managers reported having greater confidence in their ability to lead the improvement process as change agents, and reported having improved capacity to provide high-quality FP counseling and clinical services. LDP+ participants mentioned that since the training, they no longer waited passively for others to solve problems, but that they proactively communicated their needs and used the Challenge Model approach to problem solve.

Providers in both Arm #1 and Arm #2 felt that they had made strides to improve FP counseling, particularly in offering more consistent one-on-one counseling across the continuum of care. This is reflected in both the quantitative and qualitative findings from the study, as both the ANC and PNC counseling rates were significantly improved in Arm #1 at 3 months post intervention. The LDP+ team focused their action planning process on improving FP counseling with postpartum women, but the **improvements in both PNC and ANC suggest that counseling improvements were seen across the continuum of care**. Furthermore, improvements in counseling rates were significantly greater in Arm #1 when compared to Arm #2, suggesting that the improvements were facilitated by the incorporation of leadership training in addition to the clinical training.

The question of how leadership and management strengthening adds value to clinical capacity building in service delivery improvement projects is particularly complex, and it is only partially addressed by the results of this study. The lack of agreement on how to define and measure leadership and management competencies and a lack of rigorous study of the pathways through which leadership and management might influence service delivery are challenges that should be the focus of future research. While the leadership and management behavioral self-assessment identified perceived changes in behaviors, further study is needed to quantify how those behaviors translate into better collaboration, teamwork, and changes in practice, climate, and culture.

However, it is clear from the findings of this study that complex FP/PPFP service delivery integration interventions can benefit from including leadership and management capacity building as a strategic part of improvement projects. To add value to service delivery projects over and above clinical capacity building alone, stakeholder engagement and alignment should be improved from the beginning. Further, change agents should be identified and provided with the necessary leadership and management skills to facilitate the improvement process and to find effective solutions to barriers. More study is needed to clearly identify and quantitatively measure the causal links that contribute to these changes.

CONCLUSION

The implications of this study's findings suggest that improving health workers' capacity to lead and manage may facilitate their ability to address barriers to service delivery improvements. While clinical training, resources, and supportive supervision can lead to measurable improvements in PPF service delivery, less tangible and quantifiable skills—such as teamwork, collaboration, effective communication, problem-solving abilities, human resource management, oversight, and influencing institutional culture and climate—may be especially important

in helping to improve FP/PPFP services. This may be especially true of service delivery areas such as FP/PPFP, where cultural norms and practices can have a strong influence on service providers' personal views and may be reflected in practice. The study results indicate that a focus on the clinical training of a cadre of health workers is necessary, but that it alone may not be sufficient for them to apply the skills in the context of real-life workplace challenges, and that leadership and management training could help to bridge this gap. ■

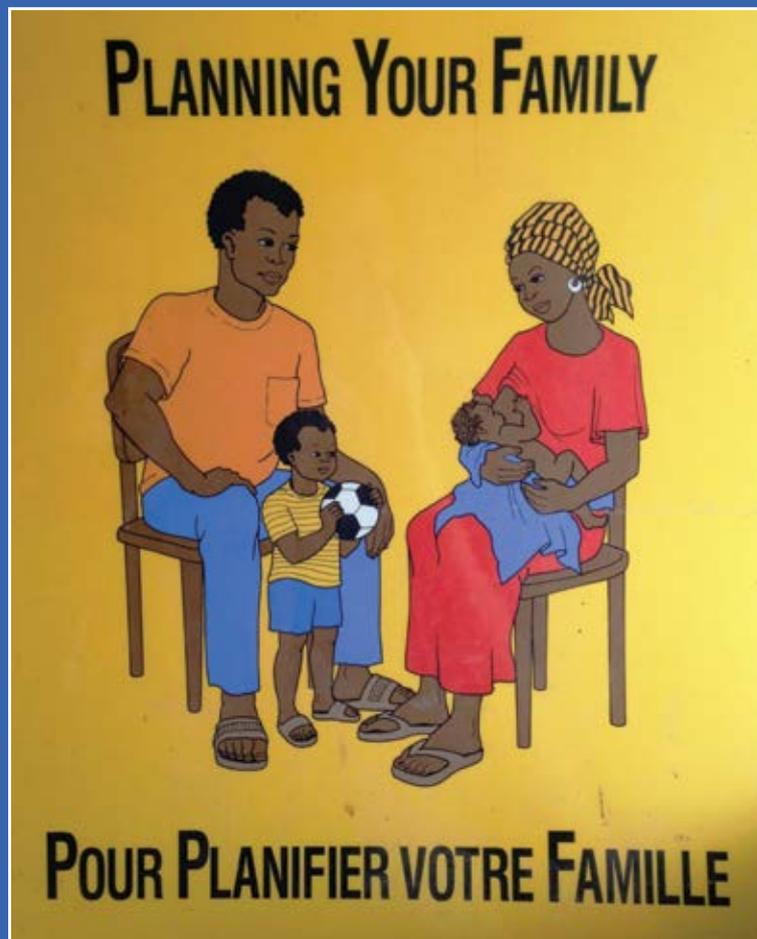
About the LMG Project

Funded by USAID, the Leadership, Management and Governance (LMG) Project (2011–2016) is collaborating with health leaders, managers and policy-makers at all levels to show that investments in leadership, management and governance lead to stronger health systems and improved health. The LMG Project embraces the principles of country ownership, gender equity, and evidence-driven approaches. Emphasis is also placed on good governance in the health sector—the ultimate

commitment to improving service delivery, and fostering sustainability through accountability, engagement, transparency, and stewardship. Led by Management Sciences for Health (MSH), the LMG consortium includes the Amref Health Africa; International Planned Parenthood Federation (IPPF); Johns Hopkins University Bloomberg School of Public Health (JHSPH); Medic Mobile; and Yale University Global Health Leadership Institute (GHLI).

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