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EVALUATION

Final Report

# End of Project Performance Evaluation for USAID/Egypt: Improving the Performance of Nurses in Upper Egypt

January 21, 2015

This publication was produced at the request of the United States Agency for International Development. It was prepared independently by Chris McDermott, Waleed El-Feky, and Dr. Madiha Said Mohamed Abdul-Razik of Social Impact, Inc.

# ACKNOWLEDGEMENTS

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*Cover Photo: Nurses, Nurse Supervisors and the SI interviewers at Kom Ombo Health Facility, Aswan by Chris McDermott (October 2014).*

# EVALUATION OF THE IMPROVING THE PERFORMANCE OF NURSES IN UPPER EGYPT PROGRAM

## A FINAL PERFORMANCE EVALUATION

January 21, 2015

Task Order AID-263-O-14-00033

# CONTENTS

# ACRONYMS

| | |
|---|---|
| ANC | Antenatal Care |
| AOR | Agreement Officer Representative |
| CLM | Center of Leadership and Management |
| COP | Chief of Party |
| ECG | Electrocardiogram |
| FGD | Focus Group Discussion |
| HQ | Headquarters |
| IC | Infection Control |
| IPN | Improving the Performance of Nurses in Upper Egypt Program |
| IR | Intermediate Result |
| KII | Key Informant Interview |
| LDP | Leadership Development Program |
| LMS | Leadership, Management and Sustainability Program |
| M&E | Monitoring and Evaluation |
| MCH | Maternal and Child Health |
| MOHP | Ministry of Health and Population |
| MSH | Management Sciences for Health |
| NGO | Non-Governmental Organization |
| NICU | Neonatal intensive care unit |
| NS | Nurse Supervisor |
| OHF | Om Habibeh Foundation |
| OHP | Office of Health and Population (USAID) |
| OJT | On-the-job-training |
| PHC | Primary Health Care |
| PHU | Primary Health Care Unit |
| PMP | Performance Monitoring Plan |
| PY | Project Year |
| Q1 | Quarter 1 |
| Q2 | Quarter 2 |
| Q3 | Quarter 3 |
| Q4 | Quarter 4 |
| RF | Results Framework |
| SAM | Senior Alignment Meeting |
| SI | Social Impact, Inc. |
| SOW | Statement of Work |
| TOT | Training of Trainers |
| USAID | United States Agency for International Development |

# EXECUTIVE SUMMARY

## EVALUATION PURPOSE AND EVALUATION QUESTIONS

The purpose of this external, final project performance evaluation is:

1. To review, analyze, and evaluate the effectiveness of the Improved Performance of Nurses (IPN) project in achieving program objectives and completing deliverables;
2. To identify lessons learned in terms of implementation and relationships with counterparts in order to inform USAID future investments;
3. To assess the sustainability of the interventions at an individual (nurses) and an institutional (Ministry of Health and Population [MOHP] facilities) level; and
4. To inform a follow-on health personnel capacity development program.

Per the Evaluation Statement of Work (SOW) in Annex 1, the evaluation of the IPN project seeks to answer the following questions:

1. Given the turbulent operating environment, to what extent did the IPN Program achieve its intended goals and results?
    a. To what extent was IPN able to improve nurses' practices and services provided in hospitals and primary health care units in intervention governorates?
    b. To what extent was IPN able to empower nurses in intervention facilities? And how has this impacted their performance and their ability to address their challenges?
2. To what extent are project interventions sustainable at the level of nurses and at the level of the institutions?
3. What lessons have been learned through the IPN program that can advance future efforts to improve leadership and management skills of Egyptian health care personnel?

## PROJECT BACKGROUND

The IPN project is one of several activities contributing to the Office of Population and Health's current Development Objective 4: *Access to Health Services Improve*d, and to Intermediate Result (IR) 3, *Management of the Health Sector Improved*. The objective of the project is to improve nursing services in MOHP hospitals and primary health care (PHC) units in Upper Egypt, specifically, in Aswan, Luxor, and Qena. USAID/Egypt field support allocated to the Global Health (GH) Bureau resulted in award of a Leader with Associate Cooperative Agreement (CA) to the Global Leadership, Management, and Sustainability (LMS) project implemented by Management Sciences for Health (MSH). The total funding provided through this mechanism was US $3,626,668, and IPN activities ran from November 2009 through June 2014.

**Project Rationale.** Building the technical and management capacity of physicians, nurses, and paramedic staff is critical for improving the impact of health and health-related services for Egyptian families. Nurses, in particular, may have experienced gaps in their pre-service training (especially high school or diploma nurses), and may have limited on-the-job and in-service training opportunities. IPN's scope is intended to bring about improvements to health services in Aswan, Luxor, and Qena by improving the performance of nurses to lead and manage their teams to address specific, identified challenges and achieve measurable results in three focus areas: (1) infection control, (2) basic nursing

care, (3) communication between health care providers and patients. A fourth focus area, (4) primary health care, was added to the project under an Amendment to the CA in August 2010.

## EVALUATION DESIGN, METHODS, AND LIMITATIONS

The primary audience of the evaluation report is USAID/Egypt, especially its health team and other decision makers. Other important audiences include USAID's Global Health Bureau and Middle East Bureau, Egypt's MOHP, and future leadership and human resource capacity building implementing partners.

This final evaluation of IPN was conducted using multiple mixed methods (both quantitative and qualitative techniques) to address these key evaluation questions and to test the development theory underlying the project's design. Methods ranged from review of secondary reports to collecting primary data through interviews and focus groups discussions with stakeholders, principal actors, and project beneficiaries. As determined in consultation with USAID/Egypt, the evaluation team's principal data collection took place in the three governorates that IPN served during the project: Aswan, Luxor, and Qena. Sites were selected based on a stratified, purposive sampling method, and, on-site, all nurses or nurse facilitators involved in LDP were invited for interviews and/or focus group discussions (FGDs) in order to explore in greater depth the participant's varied experiences and views of LDP. The evaluation team's specific analysis methods for the IPN evaluation were tailored for each method of data collection and each level or category of respondent (i.e. nurses, nurse or physician supervisors, and stakeholders). Data from the interview questionnaires and FGDs was processed to compile summary statistics for the findings, which are presented in text, tables, and graphs. The team developed its report based on the data collected and the team's corresponding analysis for each evaluation question to help ensure evidence-based recommendations for future programming of IPN-type USAID activity.

## EVALUATION FINDINGS, CONCLUSIONS, LESSONS LEARNED, AND RECOMMENDATIONS

The major **Findings** are:

- Despite the political turmoil and civil unrest, the project achieved or nearly achieved most of its performance targets. Analysis of the six performance indicators from the PMP reveals IPN exceeded one planned outcome and achieved or nearly achieved three of its six planned outcomes. Two indicator targets (#1 and #5) were not met.

- According to the MSH project reports and as confirmed through KIIs with nurse supervisors and physician officers in charge, the LDP and refresher technical sessions led by the MOHP increased the capacity of nurses and promoted proper utilization of limited resources to provide care according to MOHP Polices and Guidelines.
- According to both nurses and their supervisors, LDP nurses felt empowered to influence other staff members, e.g., in making changes to enforce patient's rights, to do their jobs thoroughly.
- As a basic measure of cost effectiveness, the project expended a total of $5,129 in each of the 707 persons who participated in and benefitted directly from the LDP. Without a clear standard for comparison, however, the team did not reach any evidence-based conclusion as to whether the costs are appropriate of cost-effective. In the eyes of the LDP participants, however, it's clear that the training was perceived as of high quality and of great professional and personal benefit.
- The IPN did not achieve or maintain the critical mass of trained nurses required to sustain change longer than a year after the LDP training, and to produce self-sustaining transformation

and/or systemic change within MOHP health services. This was particularly evident in hospitals, where only one or two persons from any one section or department were included in the LDP. Even with "in-house" follow-up trainings, the frequent staff transitions meant that the proportion of nurses in any department or throughout the facility were a minority of staff. This mitigated against achieving sustained changes in the facility.

- MSH introduced the LDP with USAID support into some 39 facilities in three UE governorates between 2009-2014, but the program was not formally adopted as an MOHP program – either at central or governorate level. Further expansion and sustainability of the leadership program are handicapped by perception that it is a "donor initiative" and the fact LDP has not and will not receive support under the MOHP recurrent budget.
- USAID added funds for expanding LDP in two other governorates through amendments to the IPN over the course of the project. However, changes in the MOHP leadership and policy as well as civil unrest made it impossible for MSH to work in these "expansion sites." As a result, MSH and USAID agreed to use the incremental funding to expand the scope of the project in the three original governorates (Aswan, Luxor and Qena) and discontinue efforts to implement the LDP in the frontier or other UE governorates.
- As a basic measure of cost –effectiveness, the project expended a total of $5,129.66 per direct beneficiary (LDP participants and facilitators trained). In the absence of a basis for comparison, the team did not reach a conclusion on the appropriateness of these costs. As noted in other findings, however, greater involvement and use of indigenous organizations have the potential to reduce the average cost per beneficiary.

Primary **Conclusions** are:

- The LDP resulted in improved nurse capacity and performance, but, the small number trained (at any one department or hospital) during LDP, and the steady diminution of trained nurses in target facilities have reduced the momentum and sustainability of the project interventions.
- Completion of the LDP is associated with success in changing participant nurses' motivation, mindset, and practices in intervention facilities. The evidence points to improvements in infection control practices, patient communication and care, communication and problem-solving among teams/departments, and improved ante-natal care.
- Further expansion and sustainability of the LDP are handicapped by the MOHP's perception that it is a "donor initiative" and the fact LDP has not and is not expected to receive support from the MOHP under its next 5-year plan or next annual recurrent budget.

Primary **Lessons Learned** are:

- Leadership training requires further development and fine-tuning in the MOHP, and USAID is well positioned to assist in this with future programs.
- LDP training needs to continue indefinitely (after USAID support ends) to achieve and maintain the "critical mass" necessary for sustaining it.
- Multiple iterations (three major revisions) of the IPN show flexibility and commendable resolve by MSH and USAID to accommodate the turbulent situation in Egypt.

The main **Recommendations** for USAID are:

- During project implementation, engage with MOHP officials at the Governorate level regularly (e.g. quarterly) to monitor activities and to maintain support for USAID activities, especially when key changes occur (Effectiveness).

- New leadership programs need to provide frequent (at least monthly) and effective (i.e., supervision, refresher sessions) follow-up to sustain the momentum for improvement (Sustainability).
- Involve local NGOs (and Health Worker Syndicates) and gain from their experience and expertise in design and implementation of any future human resource development projects (Local Ownership and Effectiveness).
- Consider providing technical support to the nurses' syndicate to promote leadership, professional growth, and improved performance of nursing through training, mentorship, and licensing and accreditation programs (Reinforce and Broaden Support for USAID Objectives).
- Future programs to develop human resources should include a gender training component, increasing awareness of gender as a workplace and as a health services issue.

A complete listing of Findings, Conclusions, Lessons Learned, and actionable Recommendations can be found starting on page 13 and also in Annex VI.

# EVALUATION PURPOSE & QUESTIONS

## EVALUATION PURPOSE

The purpose of this external, final project performance evaluation is as follows:

1. To review, analyze, and evaluate the effectiveness of the Improving Performance of Nurses (IPN) project in achieving program objectives and completing deliverables;
2. To identify lessons learned in terms of implementation and relationships with counterparts in order to inform USAID's future investments;
3. To assess the sustainability of the interventions at an individual (nurses) and an institutional (Ministry of Health and Population [MOHP] facilities) level; and
4. To inform a follow-on health personnel capacity development program.

The primary audience of the evaluation report is USAID/Egypt, especially its health team and other decision makers. Other important audiences include USAID's Global Health (GH) Bureau and Middle East Bureau, Egypt's MOHP, and future leadership and human resource capacity building implementing partners. USAID will address the report recommendations in future leadership and management capacity-building activities and share lessons learned with other stakeholders. Management Sciences for Health (MSH) will incorporate lessons learned to improve ongoing projects and future activities in the area of leadership and management. The findings and recommendations will offer an opportunity to Government of Egypt (GOE) counterparts, especially MOHP, to optimize the implementation climate and maximize the benefits of technical assistance.

## EVALUATION QUESTIONS

Per the Evaluation Statement of Work (SOW, available in Annex I), this evaluation of IPN seeks to answer the following questions:

1. Given the turbulent operating environment, to what extent did IPN achieve its intended goals and results?
    a. To what extent was IPN able to improve nurses' practices and services provided in hospitals and primary health care units in intervention governorates?
    b. To what extent was IPN able to empower nurses in intervention facilities? How has this impacted their performance and their ability to address their challenges?
2. To what extent are project interventions sustainable at the level of nurses and at the level of the institutions?
3. What lessons have been learned through IPN that can advance future efforts to improve leadership and management skills of Egyptian health care personnel?

# PROJECT BACKGROUND

The IPN Project is one of several activities contributing to the Office of Population and Health's current Development Objective 4*: Access to Health Services Improved*, and to Intermediate Result (IR) 3, *Management of the Health Sector Improved*. The objective of the project is to improve nursing services in MOHP hospitals and primary health care (PHC) units in Upper Egypt, specifically, in Aswan, Luxor, and Qena. USAID/Egypt awarded a Leader with Associate Cooperative Agreement (CA) to the Global Leadership, Management, and Sustainability (LMS) project implemented by Management Sciences for Health (MSH) to implement IPN beginning in November 2009, and the project was amended or modified six times before completion of activities in June 2014. The total funding provided through this mechanism was US $3,626,668.

**Project Rationale.** Building the technical and management capacity of physicians, nurses, and paramedic staff is critical for improving the impact of health and health-related services for Egyptian families. Nurses, in particular, may have experienced gaps in their pre-service training (especially high school or diploma nurses), and may have limited on-the-job and in-service training opportunities. Further, weak management systems in the MOHP are thought to augment the problems inherent in a highly centralized "command/control" ministry, and also contribute to mismanagement of health facilities and sub-optimal patient outcomes, including the prevalence of nosocomial infections and other preventable diseases.[1] Contributing to the cycle of sub-optimal patient outcomes is the low social status of nurses, who serve on the frontline and are often not well compensated for their labor. Relatedly, the perception and compensation of nurses is an issue of gender parity within the healthcare sector, affecting investments in additional training and professional advancement—two contributing factors to the quality of healthcare service.

## PROJECT OVERVIEW

**Mechanism.** USAID/Egypt field support allocated to the GH Bureau resulted in award of a Leader with Associate Cooperative Agreement (CA) to the Global Leadership, Management and Sustainability (LMS) project implemented by MSH. The signing of the CA on November 19, 2009 marked the beginning of IPN. The project scope was revised several times during implementation due to changes in MOHP leadership and policy, as well as prolonged civic unrest. As finalized, the SOW for the IPN intends to bring about improvements to health services in Aswan, Luxor, and Qena governorates. This was to be accomplished by improving the performance of nurses to lead and manage their teams to address specific, identified challenges and achieve measurable results in three focus areas: (1) infection control, (2) basic nursing care, and (3) communication between health care providers and patients. An amendment to the CA in August 2010 added (4) primary health care as a fourth technical focus, and added Assiut and Sohag governorates to the project area. However, months later when political and security conditions deteriorated and work in Assiut and Sohag was not feasible, USAID decided to exclude these two governorates, leaving Aswan, Luxor and Qena as the three project governorates.

The theory of change behind LMS and MSH's approach stipulates that nurses who completed LDP would gain leadership skills, leading them to successfully identify and address key healthcare challenges and achieve measurable results in their health facilities. Further LDP activities conducted in Phase II (more

[1] For example, see World Bank, 2010, Egypt: management and service quality in primary health care facilities in the Alexandria and Menoufia governorates (Washington, D.C.).

MOHP participation) and in Phase III (MOHP lead with minimal project support) were expected to broaden the impact of changes across districts and governorates and ensure sustainability. More specifically, the project's expected results were:

1. Nurses are aware of the MOHP standards for (a) infection control, (b) basic nursing care, (c) patient-provider communication, and (d) primary health care;
2. Nurses are committed to adhering to MOHP quality assurance standards and to assessing and improving their performance and the health services in the hospitals according to these standards; and
3. Increased local training capacity through a group of trained facilitators. This group was to promote the methodology across districts and governorates, leading to ownership and sustainability of the program.

To achieve the above results, MSH applied their Leadership and Development Program (LDP) approach in the IPN project to strengthen leadership and management skills of nurses and, ultimately, to improve health care delivery. Under IPN, the plan was to build leadership and management capacity through implementation of a phased Leadership Development Program (LDP) approach in the selected governorates. The LDP is a structured, participatory process, applied over four to six months, that enables nurses to face challenges, analyse root causes, design and implement effective action plans, and achieve measurable results.[2] A literature review of leadership training reveals that a number of observers found strong similarities to Quality Improvement (QI) and LDP, and, therefore, observations on successful QI activities are especially pertinent to a full understanding of the LDP approach.

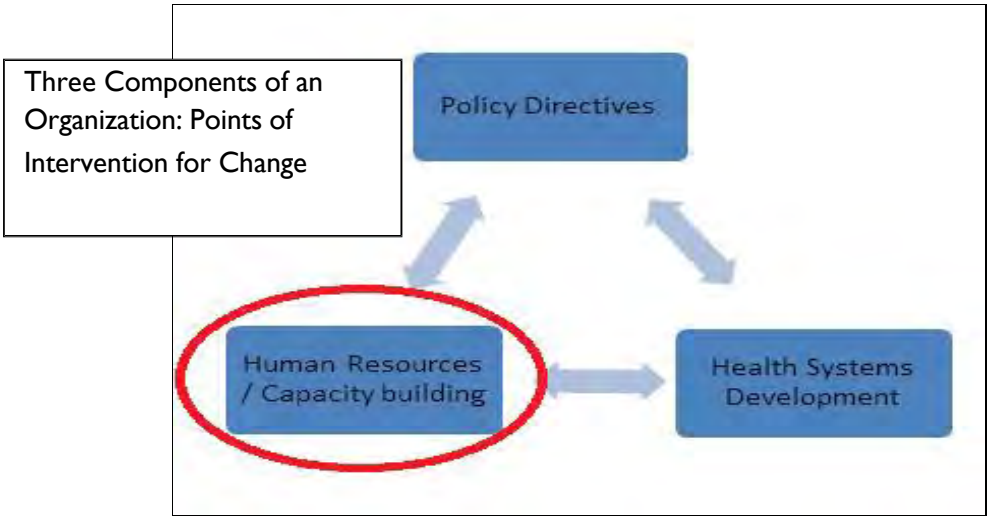
Applying these practices in the work setting is expected to produce changes in work climate, nurse attitudes and practice, and an enhanced capacity to respond positively to change. Although the project design did not include a logical framework, the LDP approach is well documented in the LMS Global Leadership Award and related reports. The theory of change implicit to IPN may be understood as a cycle of intervention (LDP and follow-up) leading to organizational change. In the first LDP workshop, participants identified areas they wished to improve or change. This step in the process is represented in the top oval in Figure 1 below.[3] The participants then (ovals descending clockwise) identified a specific problem, explored solutions and benchmarks, designed interventions and expected results (targets), implemented in the workplace, and evaluated results (during phases 2–4 of LDP). In this conceptualization, however, the type or mix of intervention(s), whether policy measures, change in operational systems or practices, and/or human resources are not specified and, thus, may be considered as applicable to all.

[2] Aku Kwamie, Han Van Dijk, and Irene Akua Agyepong. "Advancing the application of systems thinking in Health: realist evaluation of the LDP Program for district manager decision-making in Ghana," BioMed Central, June 2014.
[3] "What is Organizational Development." Web. 21 November 2014. http://www.managementguru.net/what-is-organizational-development/

FIGURE 1 INTERVENTION CYCLE FOR ORGANIZATIONAL CHANGE


In Figure 1 below, the intervention cycle of organization development is conceptualized differently. In this simplified conceptualization, three key components of the organization are identified as access points for intervention or change. The interventions are categorized as Human Resources/Capacity Building, Operational systems, and Policy directives (including formative bylaws, structures, traditions and styles, etc.). The bi-directional arrows indicate that the process is not unidirectional, but changes in one category may influence other areas (feedback loops). The SI team notes the IPN project's primary and predominant intervention for improving nursing services and health outcomes was the LDP for nurses and supervisors, which focuses exclusively on one of these three key aspects of organizational development, Human Resources/Capacity Building.

FIGURE 1 THREE KEY FUNCTIONAL AREAS FOR ORGANIZATIONAL CHANGE



The analysis, findings, conclusions, and lessons learned during the evaluation are presented below, and these address the validity of the project's theory of change (as well as the other evaluation questions) in terms of results obtained from IPN.

IPN was completed on June 30, 2014, four years and nine months after its inception. During its operation, major political and social changes occurred, which interrupted implementation in one or more governorates and led to USAID and the MOHP renegotiation and revision of several key aspects of the project, including the target governorates. In January 2012, political shifts in the GOE resulted in the MOHP declaring a formal cessation of activities with donors (and international NGOs) for nearly a year and undoubtedly affected the willingness and ability of Egypt's health officials and public health workers to participate.

# EVALUATION METHODS & LIMITATIONS

## EVALUATION METHODS

The final evaluation of the IPN project was conducted using multiple mixed methods (both quantitative and qualitative techniques) to address the key evaluation questions and to test the project's underlying theory of change. Methods ranged from a review of secondary reports to collecting primary data through key informant interviews (KIIs) and focus groups discussions (FGDs) with stakeholders, principal actors, and beneficiaries of project interventions. The team interviewed key informants in Cairo from October 13 to 16 and traveled in Upper Egypt from October 17 to 28, 2014, to visit project sites and to interview and review project activities at a convenience sample of 13 hospitals, five primary care facilities, and four MOHP offices. Sites were chosen in conjunction with USAID/Egypt and MOHP in order to provide for inclusion of all types of challenges (IC, basic nursing, communication and PHC), geographic coverage (sites from various districts across the governorate), and the presence of at least two LDP-participants. In nine of the health facilities where an adequate number of LDP-trained nurses were available, the SI team organized FGDs.

The evaluation team's principal data collection took place in the three governorates that IPN served during the project: Aswan, Luxor, and Qena. Sites were selected based on a stratified, purposive sampling method, and on site all the nurses or nurse facilitators involved in the LDP were invited for interviews and/or focus group discussions. A total of sixty nurses and seventeen nurse supervisors/physicians in the three governorates informed the evaluation. A roster of facilities (general hospitals, specialty hospitals, and PHC units) where IPN participants (nurses) are working forms the universe from which the sample was drawn for KIIs and FGDs. In all, the team managed to visit 13 hospitals, comprising 52 percent of the hospitals involved in the IPN, and 5 of 14 PHC units, or 26 percent of the total in IPN. Further detail about the specific quantitative and qualitative methods used can be found in Annex III.

## QUANTITATIVE METHODS

**Desk Review.** Prior to field visits, the evaluation team reviewed all IPN related documents provided by USAID, MSH and IPN staff, and other stakeholders. This review included but was not limited to design documents, quarterly/annual reports, monitoring data, relevant assessments and evaluations, appropriate

contextual data, and other information from government sources, program implementers, and researchers. A full list of documents reviewed by the evaluation team can be found in Annex V.

**Internal Consultations**. SI also carried out consultations with USAID/Egypt officials, the primary intended users of the evaluation of IPN, to gain their understanding of the development hypothesis/theory of change for the program, identify areas of consideration to be explored in the evaluation, and inform SI's evaluation tools. These consultations were distinct from KIIs with USAID officials as part of the sample frame for discussion of IPN's performance.

**Review of IPN Performance Targets and Actual Achievements.** With the Performance Management Plan (PMP) developed by IPN and project reports, the evaluation team reviewed and reported on the extent to which the project met its performance targets. Target achievement was assessed via reported results per the PMP, and analysis included an assessment of timeliness and how internal project (such as changes in personnel) as well as external factors (government changes) may have affected the results obtained. One of the PMP indicators is pre- and post-scores on the Work Climate Assessment (WCA) tool administered at the onset and end of LDP training. These results were also examined in detail.

**Health Care Facility Administrative Records Review.** To assess IPN's contribution to changes in infection control procedures, basic nursing care, nurse-patient communication/teamwork, and primary health care, SI queried nurse teams about the results of their challenge and reviewed documentation available on the current status of the intervention. For example, at Kom Ombo Hospital in Aswan the team reviewed IC statistics from the past four quarters to track the rates of infection. Appropriate records were reviewed when available. The team also probed in interviews and FGDs to determine whether the "LDP challenge" approach was still being used in some fashion (explicitly or implicitly) by nurses to improve operations and health care delivery.

## QUALITATIVE METHODS

### Individual and Key Informant Interviews

Findings gleaned from KIIs provide critical contextual data with which to gain detailed understanding of IPN effectiveness and to triangulate with existing quantitative data. KIIs included nurses, nurse supervisors, and others who had LDP training; USAID/Egypt's Office of Population and Health, including Activity Managers (current and previous); IPN Technical Advisors from MSH; MOHP officials (as advised by USAID/Egypt) in Cairo and in three governorates; physicians and administrators at hospitals/Primary Health Care units where IPN activities occurred; and LDP mentors from Suez Canal University.

In most instances, two members of the evaluation team conducted KIIs, one who led the discussion (a native Egyptian Arabic speaker), and the other who recorded observations and key responses. The team analyzed the results and summarized "key responses" by method (KII, FGD), current position (nurse, supervisor, etc.), and gender. The list of persons contacted (see Annex V) reflects gender considerations, to allow generation of information on women and men from different cadres, and taking into consideration possible gender discrimination and unequal power relations. KIIs were largely structured, with opportunity for comments on any aspect of IPN and related topics. Interview responses were not recorded verbatim but rather categorically and thematically.

The SI team used semi-structured questionnaire guides (see Annex IV) to gather the views of stakeholders on the key themes of the evaluation exercise to allow adequate and uniform coverage of topic areas while encouraging the natural evolution and expansion of the iterative qualitative data collection process, which the team could then adjust for each type of stakeholder based on the rationale for the interviewee's selection and their level of knowledge of queried subject areas.

### Focus Group Discussions

FGDs are particularly useful for supplementing KIIs and quantitative data by gleaning valuable information from discussions among group participants. The evaluation team conducted FGDs with various cadres of IPN stakeholders, from a sample of facilities with IPN-trained staff, to gain an in-depth understanding of their experiences with project interventions. Each FGD was organized around a group of participants that had common characteristics of engagement with IPN, which included the type of intervention/benefit received and also their geographical distinctions (e.g., governorate, urban, rural). FGDs were held at several sites for each type of facility (e.g., general hospital, primary health care unit) in Aswan and Luxor. In Qena, the small number of LPN-trained nurses (usually two or three) available during the evaluation team's visit prohibited the application of FGDs. Analysis of results from the interviews and discussions contributed a great deal to the team's understanding of the IPN experience. This included both positive and negative aspects of the training and follow up, as well as verification and amplification of identification of quantitative results, lessons learned, and assessment of future prospects for sustaining the LDP program within the governorates.

In some cases, the team used positive deviance assessment and appreciative inquiry in these focus groups. Positive deviance allows focus group participants to identify nurses or facilities that have been very successful to help pinpoint factors that have led to their success. Appreciative inquiry was also employed to help determine specific factors working well for program participants and implementers, and whether and why they were able to leverage these functional areas to identify other ways to create leadership and better health outcomes in other areas. An analysis of these discussions contributed to a greater understanding by the team about why certain nurse leadership conditions exist and how challenges might be addressed by USAID and other implementers.

## ANALYSIS

The evaluation team's specific analysis methods for the IPN evaluation were tailored for each method of data collection and each level or category of respondent. These include organizing responses by code and array, and disaggregation by factors such as the type of challenges completed, health facility type, and geographic location. Data from questionnaires was processed using Excel, Word, and PowerPoint to compile summary statistics from the findings, which are presented in text, tables, and graphs. Where similar findings were obtained across the different data collection methods, the team triangulated evidence and confirmed the credibility of the results in order to develop confidence in its assessments and recommendations. As such, the team developed its findings, conclusions, recommendations, and lessons learned based on the data collected and the team's corresponding analysis for each evaluation question to help ensure evidence-based recommendations for future programming of IPN-type USAID activities. Moreover, the team's recommendations are based solely on the evidence collected, its independent analyses, and the conclusions reached.

## LIMITATIONS

The validity of the evaluation findings may have been affected by several factors, which SI addressed proactively. As pointed out in the analysis section above, SI minimized the effects of bias (particularly recall, response, and selection bias) by using multiple sources of data to triangulate answers to each evaluation question. The evaluation also used questions about specific examples ("anchoring responses") to probe general responses more thoroughly. Finally, key informants with different "causal distances"

from the activity, such as indirect beneficiaries and external experts, were interviewed, in order to obtain different perspectives of the project's contributions.

Another challenge was the short timeline to conduct the evaluation, with just nine weeks from start to completion. In Qena, a particular limitation was the long recall period since the LDP training sessions, and, as a result, fewer than the desired numbers of nurses (or nurse supervisors) were available for interview and discussions. In Luxor, the four days of the team's visit coincided with National Immunization Days for polio, which meant that staff from the PHC units who were committed to the campaign and had only limited time for meeting with the team. Despite these constraints, the team managed to meet LDP informants from a wide array of districts and facilities.

A final limitation is that IPN took place when Egypt's governance and economy were disturbed, such that distractions and many parallel activities may have disguised or offset IPN's results. SI developed its instruments in collaboration with the USAID/Egypt Health Team to ensure the highest possible accuracy in identifying context, trends, events, and other factors affecting IPN results and in specifying and measuring IPN's results.

## THREATS TO VALIDITY

In order to ensure that data of the highest quality was collected and analyzed, the evaluation team first consulted with USAID/Egypt staff to determine the extent to which available data was complete and likely to be accurate. Second, the team queried MSH former staff on a number of issues to more fully understand performance reports. For instance, the number of pre-LDP and post-LDP participants who took the WCA are not shown in the MSH reports, but these were obtained to compute weighted averages for the WCA. SI also developed its instruments in collaboration with the USAID/Egypt Health Team to ensure the highest possible accuracy in identifying context, trends, events, and other factors affecting IPN results and in specifying and measuring IPN's results. The consistent triangulation of quantitative and qualitative data in the analysis ensured findings drawn from best available evidence.

Another important change occurred with the composition of Key Personnel. For personal reasons, the evaluation Senior Technical Advisor had to withdraw from the assignment and was quickly replaced by Dr. Madiha Said Mohamed Abdul Razik prior to the first week of data collection.

## REPORTING

Following the completion of fieldwork in Egypt, the evaluation team prepared and delivered a presentation to USAID/Egypt consolidating data collected into formulation of preliminary findings, conclusions, and recommendations. Based on feedback from the presentation, the team drafted an annotated outline of the draft evaluation report consistent with the standards set forth in USAID's Evaluation Policy. Within two weeks of the teams' departure from the field, SI submitted a full draft of this report to USAID/Egypt for review, comment, and further guidance. Further, the evaluation team will prepare an expanded executive summary in both English and Egyptian Arabic.

# FINDINGS

**QUESTION 1:** *Given the turbulent operating environment, to what extent did IPN achieve its intended goals and results?*

a) *To what extent was IPN able to improve nurses' practices and services provided in hospitals and primary health care units in intervention governorates?*
b) *To what extent was IPN able to empower nurses in intervention facilities? How has this impacted their performance and their ability to address their challenges?*

## QUANTITATIVE ANALYSIS

TABLE 4.1 PERFORMANCE MANAGEMENT PLAN INDICATORS FOR IPN WITH TARGETS AND RESULTS ACHIEVED

| PMP Indicator | Target | Result | % of Target | Status |
|---|---|---|---|---|
| 1. Number of LDP facilitators trained | 58 | 46 | 79.3% | Not met |
| 2. Number of persons completing the LDP, by cadre (e.g., doctor, nurse, etc.) | 742 | 661 | 89% | Nearly achieved |
| 3. Number of teams completing the LDP | 94 | 88 | 93.6% | Met[4] |
| 4. Percent change in Work Climate Assessment Score (pre- and post-test) by type of facility<br>- Hospital<br>- PHC units | 10%<br>10% | 81%<br>132% | 810%<br>1320% | Exceeded |
| 5. Percent of teams that select a new challenge independently after completing their Action Plan | 60% | 38.6% | 64.3% | Not met |
| 6. Number (percent) of hospitals that develop scale up plans by the end of implementing their Action Plans | 13<br>(50%) | 14<br>(56%) | 14/13<br>(108%) | Met |

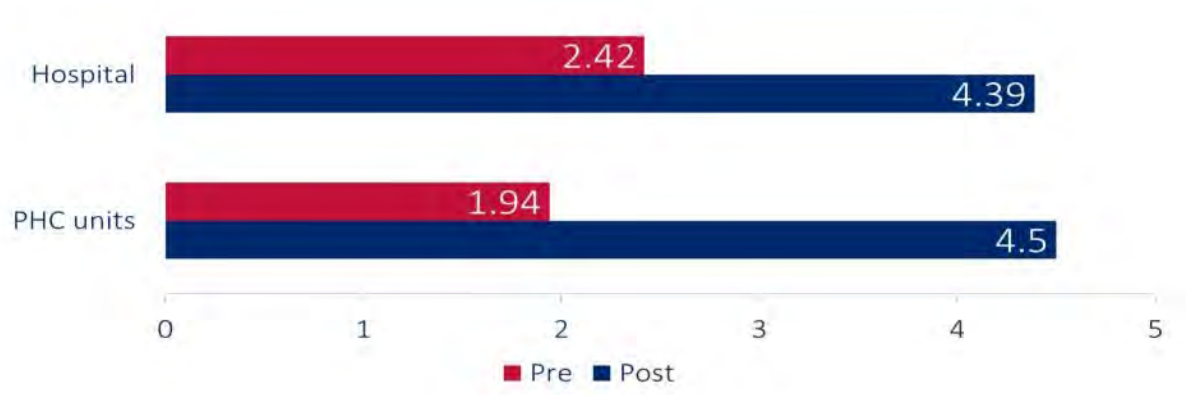
1. At a minimum, the USAID Monitoring and Evaluation (M&E) system requires a PMP to establish baselines and targets for projects to meet by project completion (see Table 4.1 above).

[4] The process of setting targets for performance indicators at the onset of a project sometime requires a "leap of judgment" due to lack of prior experience and solid evidence on which to base the projections. For this reason, the Evaluation team made some decision rules prior to our assessment of performance. "Meeting" (met) an objective was defined as reaching between 90 to 110 percent of the target, "exceeding" it as reaching more than 110%, and, obviously, achieving less than 90% as not meeting the target or "not met."

Despite the political turmoil and civil unrest, the project achieved or nearly achieved most of its performance targets. Analysis of the six performance indicators from the PMP reveals the project exceeded one and achieved or nearly achieved three of its six planned outcomes. Two indicator targets (#1 and #5) were not met.

2. The first three PMP indicators provide objective evidence about the scale and pace of project implementation  For instance, the target for the first indicator, training 58 LDP facilitators, was not met, as only 46 (79%) were trained. Similarly, the target for the second indicator, completion of LDP training for 742 nurses, was not quite met, as only 661 (89%) nurses completed the LDP.  The third indicator, on the number of teams completing the LDP, was also nearly met. These results are unsurprising in light of the previously noted major security and political changes resulting in delays, disruptions and revisions to IPN activities.  Due to these external factors, the project achieved somewhat less than expected in terms of outputs or scale of implementation.
3. The fourth PMP indicator, changes in Work Climate Assessment in facilities where nurses received LDP training, provides some evidence of whether LDP participation is associated with perceived changes in nurses' attitudes and deportment.  As a "quality" indicator, the results on Indicator 4 say more about the degree of change experienced by the participants, and less about the number of health providers or facilities experiencing changes.  Since only participants in LDP completed the WCA, it was less affected by external factors which disrupted or delayed the extension of leadership training to planned areas.  Pre and post applications of the Work Climate Assessment (WCA) tool showed dramatic changes in all three governorates, suggesting that the impact of the LDP on Egyptian nurses was positive and consistent across the governorates.  It also indicates morale and perception of nurses on their role in providing health care changed considerably after 4–6 months of enrollment in the LDP. The weighted averages for Hospitals and PHC units are shown in the figure below.

FIGURE 3 WEIGHTED AVERAGES OF PRE- AND POST-LDP TRAINING WORK CLIMATE ASSESSMENT SCORES FOR HOSPITALS AND PRIMARY HEALTH CARE UNITS




4. Indicators 5 and 6 from the PMP, on the number of teams selecting a new challenge after completing their action plan and the percentage of hospitals developing a scale-up plan after implementing the initial action plan, respectively, can be understood as proxy indicators of sustained project activity.  Per Table 4.1 above, only 64 percent of teams selected a challenge after completion of the first one, and the failure to achieve this indicator suggests that the momentum achieved during the LDP training was lost as early as one year after the completion of the training sessions.  Some 56 percent of hospitals, or slightly more than half, continued with scale-up plans for continuing LDP, again suggesting that institutional sustainability is an issue. It is

interesting to note that the PMP targets required only 50/60% of facilities to develop scale up plans and address new challenges after the formal LDP sessions had ended. This might suggest that even at the beginning of the project, there were indications that the follow-through expected (and essential) from the MOHP would be uneven and not reach all participants. In hindsight, USAID might have pushed for a higher percentage (e.g. 90 or even 100) to be attained on these "sustainability" indicators. The evaluation team observed that neither the project objectives nor evaluation questions (e.g., "were nurses empowered") specifically address broad, sustained institutional change. Instead, the project emphasized changing nurses' attitudes, knowledge and practices, which, according to the theory of change underlying the IPN, would result in specific changes in the practice of health care in the four technical challenge areas. While changed behaviors and improved health care were observed in technical areas of the challenges, the evaluation did not find conclusive evidence that these changes have been adopted institutionally or on a broad scale.

5. As Table 4.2 below illustrates, teams of nurses (usually 4 to 5 per team) working on defined challenges were **mostly** successful. For the evaluation team, the success rate for achieving defined challenges may be considered a proxy indicator of IPN-trained nurses' adherence to leadership principles and the extent to which (six months to a year after training) these were put in practice at their facility.
    - Overall, 88 teams addressed 91 challenges over the course of the IPN project, and 76 (84%) of the challenges were achieved. Nurse participants and their supervisors jointly determined challenges to be addressed as part of the LDP.
    - Basic Nursing skills were the most common technical area, comprising 39 out of 91 (43%) of the total, and Infection Control (IC) challenges were second (30%). Provider-patient communication was third (14%), and Primary Health Care was fourth and least, with just 13 percent of total challenges.
    - Rates of achieving targeted results were high. For instance, Primary health care achieved 11 out of 12 (92%) of their targets. Achievement rates were 24 out of 27 (89%) for Infection Control, 29 out of 39 (82%) for Basic Nursing Care, and 9 out of 13 (69%) for patient-provider communication.
    - Interviews and FGDs with key informants suggest that the process for choosing challenges in the LDP varied by district/facility. In some instances, it appears that supervisors had the major say, while in others the challenges and targets were chosen through consensus discussions among participants and trainers. In Qena and Luxor, some participants recalled they chose "easy" targets to ensure success. However, in most instances participants cited the difficulty of achieving them and were proud of their accomplishments. By governorate (not shown in table), Aswan teams had the highest rate of success in meeting challenges—94 percent. Qena fell in the middle, with an 82 percent success rate, and Luxor had the lowest success rate, at 75 percent.
    - The success rate for challenges in the four technical areas ranged from 69 to 92 percent. Interviews and analysis of these results lead the team to conclude that all four technical areas were appropriate, and required considerable effort to achieve. Also, informants felt that failure to achieve a challenge could be attributed to a) changes in personnel, b) failure to enlist cooperation of some colleagues, patients or supervisors, or c) overly ambitious target setting.

TABLE 4.2 LDP CHALLENGES UNDER IPN

| *LDP Challenges under IPN* | | | |
|---|---|---|---|
| *Technical area* | # Challenges | Achieved? | |
| | | Yes | No |
| *Infection Control* | 27 | 89% | 11% |
| *Basic Nursing* | 39 | 82% | 18% |
| *Communication* | 13 | 69% | 31% |
| *Primary HC* | 12 | 92% | 8% |
| *Total #* | **91** | | |
| ***Achieved %*** | | **84%** | **16%** |

## QUANTITATIVE FINDINGS

**Finding 1.1** In terms of the PMP and other quantitative indicators, despite the political turmoil and civil unrest, the project achieved or nearly achieved most of its performance targets. The IPN met or nearly met three of six targets on performance indicators, and exceeded on one. Two indicators (#1 and #5) were not met.

## QUALITATIVE ANALYSIS

The detailed analysis from KIIs, FGDs and unstructured interviews can be found organized by governorate below. In general, many of the key points made by respondents aligned well and indicated a strong consensus among nurses on the benefits as well as the shortcomings of the LDP. One interesting observation was that Nurse Supervisors (NSs) play a critical role in motivating nurses and sustaining LDP gains or—if they were not involved in LDP and hold any misgivings—in playing a constraining role on follow-up and continuation of LDP practices. Nearly all the facility supervisors and district supervisors were positive about LDP and wanted to see it expanded in the future. The results of KIIs and FGDs across the three governorates were analyzed for common themes and patterns of responses. Divergent responses were also noted and checked against project documents and other sources (stakeholders) to assess their validity and application. The results by governorate are presented in detail in the sections below and within the Findings, Conclusions, and Recommendations table within Annex VI. The generalized results pertaining to question 1 (performance) are presented as key findings below.

**Finding 1.2** Training in the LDP improved nurses' problem solving skills and resulted in more pro-active deportment among nurses and with their supervisors (KIIs with nurses, NSs, and managers).

**Finding 1.3** According to the MSH project reports and as confirmed through KIIs with nurse supervisors and physician officers in charge, the LDP and refresher technical sessions led by MOHP

increased the capacity of nurses and promoted proper utilization of limited resources to provide care according to MOHP Polices and Guidelines (KIIs with nurses, NSs, and managers).

**Finding 1.4** There were no standardized selection criteria for participation in the LDP. Criteria varied across governorates and across type of facility (hospital or PHC unit), according to the preferences of local MOHP officials (KIIs with stakeholders).

**Finding 1.5** According to both nurses and their supervisors, LDP nurses felt empowered to influence other staff members, e.g., in making changes to enforce patient's rights, to do their jobs thoroughly (Nurse FGDs and KIIs with all groups).

**Finding 1.6** Based on IPN's achievements, the project's theory of development regarding changes in nurses' behavior and improved health services was at least partially validated.

**Finding 1.7** Nurses and supervisors credit LDP with changing participants, including increased awareness and adoption of MOHP quality standards of practice, patient-centered care, and problem solving approaches.

**Finding 1.8** Leadership and other MOHP programs/initiatives share many common features with Quality Improvement, Centers of Excellence, and other ongoing MOHP initiatives.

## FINDINGS: GOVERNORATE LEVEL

### Aswan -- Analysis

In terms of quantitative indicators (see Annex VI), the Aswan LDP met most of nearly all of its PMP objectives and, in addition, nurse teams from Aswan met 94 percent of challenges (the highest of the three governorates). The quantitative results are highly consistent with the results of interviews and FGDs, which are summarized below. LDP participants maintain strong commitment to LDP as a relevant and continuing influence on their outlook and work.

A total of 19 interviews and five FGDs were held with nurses, nurse supervisors, and stakeholders in Aswan Governorate at five district hospitals and three PHC units during October 19–23, 2014 (a summary of the interviews and FGDs are found in Annex II). Another KII was conducted with Om Habibeh NGO, a subsidiary of Aga Khan Foundation. Key points are discussed below.

- Nurses and supervisors interviewed in Aswan spoke repeatedly about the increased ability among nurses to identify a work-related challenge and to organize collectively an effective team response. A challenge was clearly defined, with clear presentation of the root causes of the problem to be addressed. In addition, nurses were capable of planning a clear and scientific methodology for undertaking their challenge and presenting evidence-based results to demonstrate changes. Nurses reported that they learned to develop and use appropriate tools such as showing indicators before and after intervention. These comments are indicative of a changed mindset of the individual nurse, yet there were only a few who readily claimed changes had occurred in all nursing practices or the performance of the facility in general.
- Increased self-confidence was another common benefit mentioned by respondents completing the LDP program. Some nurses had gained enough confidence to make presentations to facility directors; some used Microsoft PowerPoint, while others used colorful flow diagrams or summary tables of hospital forms to document changes measured over time in the area addressed by their challenge.
- In facilities where the LDP training had taken place three or more years before, nurses had difficulty recalling or showing evidence of their work on challenges. Respondents also reported

that in 2012 when the Ministry stopped collaboration with NGOs, the lack of any material and technical support from MSH restricted their ability to conduct observational visits or follow-up trainings.

- Nurse Supervisors the team interviewed shared an impression around the strength of the LDP program in prompting change in multiple aspects among nurses. One Nurse Supervisor even said, "It's the first time we had a project dedicated for nurses."
- Om Habibeh Foundation (part of the Aga Khan Network) played a critical role in the early phases of the LDP program. The primary reasons for discontinuation were due to concern about the limited timeline for LDP and the sustainability of the LDP program after conducting the training.
- All groups credited the LDP with enhancing their skills in addressing problematic behaviors of their colleagues, patients or supervisors. However, a number noted they had limited success in changing behaviors, especially among those supervisors or colleagues who had little knowledge of the LDP program. In a few cases, the interaction of trained and untrained colleagues led to fragmentation of efforts and a lack of institutional support for sustaining efforts after the training was complete.
- Another critical challenge nurses faced was the issue of time, highlighting their extensive tasks and long work hours. The LDP was an additional burden on nurses' work and duties inside their respective facilities.
- Nurses and supervisors emphasized the challenge of extended breaks between the different phases of the training program and the travel time to and from their homes to the training venue. They suggested that on-the-job training would be a better solution to the extended travel time that negatively affected their performance either in the training or inside their facilities.
- All groups found that more continuous intervention was needed both in terms of quantity of nurses trained and quality of training given. When asked, several admitted that they were no longer doing "challenges" per the LDP methodology.
- Although training on technical and basic nursing skills was not formally part of LDP, it is clear from interviews with supervisors that when gaps in skills were identified (e.g., proper intramuscular injections), special training classes were held that addressed these gaps, usually with assistance from the district or governorate office.
- The district nurse director at Aswan District also mentioned the value of continued effective communication through the development of a Facebook group page for nurses to exchange information and for her to follow-up on the work of her nurses working inside PHC units in her district. This is a clear example of how digital social media contributed to sustaining the level of communication among PHC nurses in Aswan district and including their supervisor. The page is shown in Annex II and the link is at https://www.facebook.com/groups/222924277893721/.

### Aswan – Findings

**Finding 1.9** More than a year after completing the LDP, nurses are losing acquired skills, and this underlies their recommendation for continuous refresher training.

**Finding 1.10** LDP participants maintain strong commitment to leadership and see LDP as a relevant and continuing influence on their outlook and work.

**Finding 1.11** Om Habibeh Foundation (Aga Khan Network) played a key role in providing a base of support for the project in Aswan during its start-up phase, maintains close relations with the MOHP, and continues to work closely with them on nurse development in the governorate. As part of the Aga

Khan Network, OHF continues to work with nurse development but has a wider scope of training and a longer time horizon than MSH.

## Luxor – Analysis

A total of 18 interviews and three FGDs were held with nurses, nurse supervisors, and stakeholders in Luxor Governorate at selected health facilities during October 25–28, 2014. KIIs with nurses were conducted in a group setting; nurse supervisors were usually interviewed individually with structured questions from the questionnaire. FGDs were organized at the facility following the interview sessions, usually with three or more nurses available in the afternoon. The number of participants at PHC units was further reduced by competition from the National Polio Immunization days during the week of our visit. A summary analysis of the responses, which clusters similar responses by the number of times they were mentioned, and the evaluation team's further discussion, is provided in the tables below.

- Nurse Improvements/Benefits. Among all KII respondents, improved problem solving skills was the most frequently cited benefit to nurses of the LDP program. As we see in the summary notes from KIIs and from some FGDs as well, there was clear recognition and appreciation for individual learning and change stemming from the LDP, but there was little testimony of sustained, broad organizational change (systemic change).
- Nurses enthusiastically discussed the increased confidence they felt after completing the LDP. Some nurses showed the posters (or PowerPoint presentations) on their challenges and how they were met (or nearly met), and others testified that the LDP had changed their personal as well as professional lives. When asked more about these changes, nurses talked about taking initiative to organize their approach, communicate their concerns with supervisors (or family members), and look for creative solutions.
- For supervisors and hospital directors, the changes they observed focused more on behavior change, such as nurses reviewing lab reports and other evidence-based data to understand patient status and condition, and the improvements related to the challenge their team had addressed. In Luxor, the Infection Control (IC) challenges were mentioned the most, and there is convergence among the various ways the team obtained information on how IC had improved in their facility and the statistical reports to show it.
- Negative Aspects. Interviews with some a minority of informants revealed that not all supervisors and colleagues were supportive and cooperative, especially among those who had not taken the LDP training. Among those respondents who claimed a lack of full cooperation, the conflict between management and nurses was the most common. In these instances. For supervisors, on the other hand, who talked about conflict in the workplace, the lack of cooperation and harmony among LDP-trained and untrained nurses was their primary concern. Additionally, in a few hospitals, the physician directors we interviewed (e.g., at both Luxor hospitals) were not well informed about LDP, and, with one exception (Om Kobo), were not actively supportive. All respondent groups (KIIs and FGDs) noted time management as an obstacle to fulfilling the promise of LDP, with nurses highlighting their many tasks (including menial as well as patient care) and long hours as issues inhibiting their ability to provide quality services (adhering to MOHP standards). Nurse supervisors, on the other hand, emphasized the challenge of having adequate staffing on all three shifts, due, at least in part, to the expectation in Upper Egypt that married female nurses would only work the morning shift. Several noted that

male nurses are in high demand because they are often willing to work long hours and take evening or night duty. [5]

## Luxor – Findings

**Finding 1.12** Infection control challenges initiated by LDP were successful in Luxor and had lasting impact on nurses' awareness of MOHP standards, their practice of IC procedures, and on patient services (in some areas).

**Finding 1.13** Continuation of promising IC activities in Luxor is impeded by the lack of communication and agreement between the IC department and the MOHP leadership in the Governorate.

**Finding 1.14** Among the physician directors of Luxor hospitals, knowledge and support of LDP is weak, and most are not familiar with the content and objectives of the leadership program.

## Qena – Analysis

A quantitative review of findings in Qena reveals that targets were nearly met in most instances. Among the challenges (projects) faced by nurse teams, 82 percent were completed successfully. As in the other governorates, the work climate assessment (WCA) showed vast improvement between the pre-LDP and post-LDP tests. The one published study (see References) of this tool suggest that it provides consistent results in various settings (cultures, institutions). However, because only a few staff members from any MOHP clinic or hospital were enrolled in LDP (and thus completed the WCA), the findings apply to the LDP participants and not necessarily to the institution where they work. Thus, the WCA does not provide convincing evidence that the MOHP institutions changed as much as it does individual perceptions (of those institutions) changed.

Two team members traveled to Qena project hospitals and held KIIs there during October 21–23, 2014. In Qena, the LDP was implemented only at hospitals (and particular departments of those hospitals), and not in PHC health centers/clinics. Structured interviews were held with nurses and supervisors – and not FGDs, due to the smaller number of LDP-trained persons available at site visits in Qena.[6] A total of eight structured interviews were held at four Qena hospitals with nurses and nurse supervisors with LDP experience. KIIs with nurses were conducted in a group setting, while interviews with nurse supervisors were usually done individually, using structured questions from the questionnaire. The challenge topics covered by the nurse teams included: (a) preparing patients before surgical operations, (b) correct steps in administration of medications to patients, and (c) routine hand washing. PHC units were not involved with LDP training in Qena.

Among the primary benefits of LDP cited by nurses and supervisors, the following were salient:

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[5] At the team's meeting with policy makers in the MOHP we learned that the number of nurses assigned to work in MOHP had been increased (males and females). This was intended to ensure adequate job allocations of staff. Additionally, the nursing syndicate as well as NGO (Masr-El-Kheer) are working in a program for having another category of health manpower "medical assistants", who will conduct administrative work, record keeping and retrieval. The nursing syndicate enforces policies for making this category of "medical assistants" to be part of MOHP staff

[6] In general, six to twelve persons are considered ideal for holding FGDs. In Qena, only 2- 3 LDP-trained nurses were available at the site visits. This is attributed to the three to four year gap between the LDP and the time of the evaluation, and the resultant high turnover of staff.

- Improved communication skills, resulting in effective nurse-patient communication
- Improved awareness of nurses about MOHP standards and guidelines for care
- Completing a challenge gave team members real-life experience with principles of leadership and setting targets, organizing, and striving for achievement.
- Practice with developing evidence-based approaches to problem solving and presenting them built confidence and created enthusiasm and competition among groups, with potential to result in better performance.
- Nurses and supervisors cited improved nurse-community communication as a benefit, and this could be seen in higher immunization (e.g., tetanus) coverage among women throughout the four years of the LDP program. Training of Trainers (TOT) improved the personality of trainers and added new skills in training, especially role play.
- The MSH trainers used new (and effective) techniques in conducting the training programs in basic nursing care, IC, re-activation of heart and lungs, and other technical nursing care issues. Training in LDP was of high quality and applicable to "on the job" experiences. More of this kind of training would be appreciated.

The District Nursing Director and several hospital nurse supervisors observed that the LDP was associated with recognition for strong performance and promotions for nurses and nurse supervisors. The nurse supervisors involved in the LDP also claimed to have strengthened their role and participation in decision making in hospitals.

Other key points taken from the interviews include:

- LDP trained nurses serve as leaders in QI and other MOHP programs, conducting peer to peer sessions to extend LDP.
- LDP led participants toward adopting new approaches to "induce change." For example, after LDP the nurses prepared handmade posters with drawings showing the proper steps in hand washing. Those posters were distributed in all departments to promote adherence to standards for hand washing.
- Communication with nurses throughout four workshops triggered needs for filtering manpower and reallocating nurses according to efficiency and effectiveness in different nursing systems at the governorate level.

Interviewees also identified several shortcomings of the LDP. The key shortcomings noted were:

- Sometimes LDP teams settled on challenges they could easily address, and thus, expended little effort to achieve them as opposed to taking on more difficult problems.
- The low number (often just one) of nurses trained in a hospital department, and the high turnover of the trained nurses over several years, resulted in an inadequate number of trained nurses remaining to change the "character" of the institution.
- Physicians did not acknowledge the "new look" of the trained nurses. The trained nurses' role in insisting on compliance with the standard of practice in IC by physicians often resulted in their resistance and disinterest.

### Qena – Findings

**Finding 1.15** The LDP program in Qena started and stopped again, impeding the pace and scale of operations.

**Finding 1.16** Despite the lack of MOHP support for IPN activities during much of the project and the minimal follow-up of the LDP workshops, the experiences gained by nurses were positive and created demand for further leadership and "on the job" training.

**QUESTION 2:** *To what extent are project interventions sustainable at the level of nurses and at the level of the institutions?*

## Sustainability

The cascade training and refresher courses planned for Phase II and Phase III[7] in the LDP ceased operations in Upper Egypt when the project ended (June 2014) or before. The team found that the formal "challenge-response" model of LDP did not become an established practice after LDP. It survives in the awareness of the LDP participant nurses and is still evident in the actual challenges (e.g., hand washing signs and reminders). But, it is not being practiced formally to identify new challenges and address them (using the 8 steps, etc.). Nurses (KIIs and FGDs) claim they are "still doing what they learned," but nurse supervisors and facility managers (KIIs and Facility Records review) showed little evidence of new challenges being implemented.

Interviews with senior MOHP officials in Cairo revealed observations about LDP and its relation to the ministry structure, strategic plan and operations. Although the MOHP has a Quality Improvement Directorate, the IPN and the MOHP chose to implement the project under the direction of the Ministry's preventive and curative departments. The reasons for this are not clear, but it may be surmised that the QI department is smaller and less influential. In addition, the introduction of LDP into 25 hospitals (in three UE governorates) was a major departure from existing management practices. It was less novel to the preventive care sector – which has used target setting and problem solving for decades. The principles and application of operations research (OR) that identifies challenges, focuses on solutions using available resources, and tests them in measured actions were not well established in hospital administration and management. For instance, the Ministry's hospital performance indicators focus on length of stay, bed census, supply of key materials, and other outputs. The practice of measuring and reporting on patient satisfaction and outcomes was new and untried in the hospital sector. Further, the LDP trained only one or at most two nurses in any hospital department. Combined these conditions made sustainability particularly difficult to obtain.

- MSH introduced the LDP with USAID support into some 39 facilities in three UE governorates during 2009-2014, but the program was not formally adopted as an MOHP program – either at central or governorate level.
- USAID added funds for expanding LDP in two other governorates through amendments to the IPN over the course of the project. However, changes in the MOHP leadership and policy as well as civil unrest made it impossible for MSH to work in these "expansion sites." As a result, MSH and USAID agreed to use the incremental funding to expand the scope of the project in the three original governorates (Aswan, Luxor and Qena) and discontinue efforts to implement the LDP in the frontier or other UE governorates. Key findings include:

[7] As per the explanation on pages 5-6, the LDP is implemented in three phases of training and follow-up. Phase I is led by MSH technical staff with minimal MOHP input, Phase II depends on both MSH and MOHP technical and facilitative expertise, and Phase III training and follow-up are conducted primarily by MOHP with minimal MSH support.

**Finding 2.1** There is no MOHP department or senior-level officer with official authorization or recognition of responsibility for leadership training at any level: national, governorate, or district.

**Finding 2.2** Some senior MOHP officials in the governorates (Aswan, Qena) are generally not familiar with LDP and have not yet made a "home" for LDP within any department or ongoing/planned MOHP initiative (e.g., Quality Improvement, Centers of Excellence, Five-year Strategic Plan).

**Finding 2.3** The critical mass of trained nurses required to sustain change and produce transformation or systemic change within MOHP health services was not achieved and maintained.

**Finding 2.4** The head of the Nursing Syndicate expressed an interest in furthering leadership through developing programs it could offer to its Pial for replication in other localities.[8]

**Finding 2.6** The principles and application of operations research (OR), which identifies challenges, focuses on solutions using available resources, and tests them in measured actions, were not well established in hospital administration and management. For instance, the Ministry's hospital performance indicators focus on length of stay, bed census, supply of key materials, and other outputs. The practice of measuring and reporting on patient satisfaction and outcomes in LDP was new and untried in the hospital sector. Further, the LDP trained only one or at most two nurses in any hospital department. Combined these conditions made sustainability particularly difficult to obtain.

**Finding 2.7** The LDP as implemented under the IPN project shares some common features with other ongoing and planned MOHP programs/initiatives. In the competition for future MOHP support, LDP has not competed successfully to either replace or influence the MOHP's Quality Improvement Directorate, or the proposed Centers of Excellence, and other ongoing MOHP initiatives.

## CROSS-CUTTING ISSUE: GENDER ANALYSIS AND FINDINGS

Gender studies and analysis carried out in Egypt over the past decades have documented the strong role and differences in gender identity held by most Egyptians. Most nurses are female, but an increasing number of men are completing nursing school (especially the six-year program), and the team observed male nurses (and/or supervisors) in most of the facilities we visited. During KIIs, interviewers asked the nurses if they had experienced differences in the way male and female workers behaved, and whether they had observed any problems or conflicts. Responses were then further probed for evidence of gender inequity or experiences with words or actions in the workplace that made them uncomfortable or concerned.

In many cases, female nurses at hospitals cited the particular roles they prefer male nurses to perform on male patients, such as managing urinary catheters, assisting in operations like hemorrhoid treatment, giving enemas, and other operations that can "scratch" female modesty. On the other hand, female nurses were more accepted in managing female patients. Female nurses also credited male nurses with skill in avoiding quarrels among the nursing team, carrying patients who cannot move, and expertise in the emergency department. Other preferred male nurse roles included giving ECG exams for men,

[8] Om Habibeh's approach to nurse training and empowerment was not assessed by SI as it is beyond the scope of the evaluation. But, it appears to have the full support (and participation) of local MOHP authorities and may well merit a more in-depth assessment as part of any design work on a future health provider development project.

working at reception, protecting them from difficult patients and family members, and working as a nursing supervisor.

Female nurses face particular socio-cultural barriers, and several volunteered complaints that they suffered gender discrimination from the community and from their families, who did not appreciate the important role of female health workers. Despite these problems, they remain positive and hopeful to overcome these barriers and gain more satisfaction from their work in health.

The team's female interviewer asked all-female groups about their experience with sexual language or innuendo from male co-workers, physicians (who are largely male), or patients. With few exceptions, they responded that their families and supervisors were conscientious about their dignity and would protect them if co-workers became aggressive or acted inappropriately. Further probing yielded little or no firm evidence of sexual harassment. Both nurses and supervisors, however, were quick to point out the different expectations on male and female workers based on marital status. The team learned that in Upper Egypt, a married female nurse is not expected to work in the late afternoon or night shift, and mostly works the morning shift. Men on the other hand, are more than happy to work night shifts and extra shifts, which supervisors appreciate. The community norms and expectations for married women nurses could be seen as a constraint to women's advancement in the health workforce. Even with equal pay rates, men would have the advantage of earning more (longer hours) and potentially advancing faster (as supervisors) than their married female counterparts. Though this may well be the case, no one interviewed expressed dismay or great concern about this, merely noting it in passing. This underlines the dominance of gender-assigned roles in Upper Egyptian society and its strong influence in the workplace.

The future of nursing looks quite different. Discussions with nursing directors in Aswan and Luxor Governorates made clear that more men are attending nursing school, and that should the trend continue (along with high female attrition in nursing), gender parity (equal numbers of men and women) might be realized in a few decades. This would profoundly alter the public's perception of nurses, and, if prevailing gender norms remain as they are, might easily lead to greater gender differentiation in hiring and promotion. The MOHP, along with universities, and nursing educational institutions need to be vigilant about shifting gender balance in the nurse workforce, and, at the very least, take measures to heighten gender awareness and equality in the nursing profession.

**Finding 3.1** Extensive investigation with nurses in the three UE governorates reveals a prevailing opinion that nurse supervisors and facility directors are managing male and female nurses adequately in terms of balancing community with individual employee expectations, but female nurses will remain professionally and economically disadvantaged under these conditions.

## COST EFFECTIVENESS

Although it falls outside of the three evaluation questions given explicitly for this evaluation, USAID/Egypt expressed an interest in the cross-cutting issue of cost-effectiveness. A review of the MSH budgets and the IPN project budget revealed nothing unusual or noteworthy from the perspective of USAID centrally managed projects. In general, and in the case of the IPN, when home office support and external TA and travel are involved in starting up and managing a project, costs are higher than when only local personnel and organizations are involved. On the other hand, the project documentation maintains the argument that innovation and expertise of the LDP were required to achieve the desired results.

It is interesting to note that none of the evaluation's informants, even when prompted for a response, expressed concern over the cost of training under IPN. Some USAID informants suggested the costs

were high for the level of output. However, the evaluation team does not have the analytical background nor comparative data base to address this concern. In the most basic analysis, the project invested an average of $5,129 in the 707 persons who participated and benefitted directly in the LDP. Without a clear standard for comparison, the team could not reach any conclusion as to whether the costs were appropriate or cost-effective. In the eyes of the LDP participants, however, it is clear that the training was perceived as of high quality and of great professional and personal benefit to them.

**Finding 4.0** As a basic measure of cost effectiveness, the project expended a total of $5,129.66 per direct beneficiary (LDP) participants and facilitators trained). In the absence of a basis for comparison, the team did not reach a conclusion on the appropriateness of these costs. As noted in other findings, however, greater involvement and use of indigenous organizations have the potential to reduce the average cost per beneficiary.

# CONCLUSIONS AND LESSONS LEARNED

## QUESTION 1: PROJECT ACHIEVEMENTS AND NURSE EMPOWERMENT

The team's independent analysis of the evidence leads to the conclusion the IPN was mostly successful in achieving its intended goals and results despite the political turbulence and extensive civil unrest that unfurled in Egypt during the life of project. The final evaluation assessment also concluded the following.

### Conclusions

1. Completion of the LDP is associated with success in changing nurses' motivation, mindset, and practices in intervention facilities. The evidence points to improvements in infection control practices, patient communication and care, communication, and problem-solving among teams/departments, and improved ante-natal care.
2. Participation in MSH's leadership program empowered nurses to be pro-active in decision making, learn to assess and solve problems (e.g., address conflict) better, communicate vital information to peers and supervisors, set and measure performance, and share an improved work climate.
3. The LDP program had a synergetic effect in raising awareness regarding MOHP guidelines on Infection control, basic nursing services and patient communication.
4. LDP activities were designed and implemented with little to no synthesis (or alignment) with other USAID health and governance activities. The IPN did not succeed in arranging complementary or reinforcing activities from other projects.
5. USAID and the MOHP could capitalize on current MOHP initiatives (or departments) to advance LDP principles and practices. For example, greater integration with quality improvement or infection control (as in Luxor) at MOHP would bolster the sustainability of leadership as practiced in LDP.
6. The inadequate number of nurses and nurse supervisors trained and the lack of joint MSH/MOHP follow-up (due to withdrawal of MOHP support) prevented the IPN from achieving all of its performance goals.

## QUESTION 2: PROGRAM SUSTAINABILITY FOR NURSES AND INSTITUTIONS

At the level of nurses, there were indications of profound, lasting changes occurring as a result of the interventions implemented by MSH under IPN. Nurses interviewed, as well as their supervisors and officers in charge, were consistent in citing that nurses attending LDP had come away with new confidence, more effective, evidence-based approaches to problem solving, and heightened willingness and ability to communicate with patients, as well as with supervisors and other nurses. Others cited increased abilities in organization of work, time management, and planning. These skills were also partly in evidence in nurse-patient communication and nurses' awareness of and adherence to MOHP standards. The PMP indicators (5 and 6 above) show that only about half of the LDP facilities were able to develop a scale-up plan one year after LDP. Thus, evidence for sustainability at the institutions was not compelling, and this suggests that the project's gains are only partially sustainable, along with the conclusions reached below.

### Conclusions

1. LDP resulted in improved nurse capacity and performance, but the small number trained (at any one department or hospital) and the steady diminution in the number of trained nurses at target facilities reduced its momentum and sustainability.
2. The results obtained from the evaluation's integrated analysis of PMP, challenge, and qualitative (KIIs and FGDs) data lead us to question the theory of change for sustainability underlying the project. Specifically, the project's emphasis (if not exclusive focus) on human resource/capacity development of nurses without complementary interventions designed to induce and sustain systemic changes in operations and policy may not have been sufficient to achieve the desired profound, sustainable changes in nurse performance and health services.

## QUESTION 3: LESSONS LEARNED THROUGH THE IPN PROGRAM THAT CAN ADVANCE FUTURE EFFORTS TO IMPROVE LEADERSHIP AND MANAGEMENT SKILLS OF EGYPTIAN HEALTH CARE PERSONNEL

### Lessons Learned

The development lessons derived from the Findings and Conclusions in the preceding sections include:

1. To sustain a culture of effective leadership within a large organization such as the MOHP, USAID needs to ensure that the intervention finds a "home" within the Ministry which would provide strong advocacy for its continuation. A number of approaches to follow-up and refresh leadership development have been tested and reported on in the literature. At present, the MOHP has some elements of leadership training incorporated into its ongoing Quality Assurance and planned Centers of Excellence programs, but these have not fully incorporated the lessons and experience of the LDP.

   **Lesson Learned:** Leadership training requires further development and fine-tuning in the MOHP, and USAID is well positioned to assist in this with future programs.

   **Lesson Learned:** Future USAID projects should include (or ensure from another partner) a continuing component of leadership training for physicians and administrators who have management roles, as well as for nurses, and also ensure MOHP agreement that these will be part of their operational strategy and plans too.

2. As the initial enthusiasm and the number of LDP-trained staff diminish over time, the "leadership mindset" becomes less widespread throughout the facility.

   **Lesson Learned:** LDP training needs to continue indefinitely (after USAID support ends) to achieve and maintain the "critical mass" necessary for sustaining it.

3. Leadership training for physicians and administrators in positions of authority, in addition to training for nurses, could strengthen the culture of leadership and amplify the benefits of nurse training. To sustain LDP in the MOHP generally, USAID needs to ensure more advocates are trained (for a critical mass) within each and every hospital department or PHC facility. The only way this could be feasible, given the limited funding available to donors, is for USAID to ensure that future programs negotiated with the MOHP are included in the Ministry's Strategic plan and operational budgets.

**Lesson Learned:** USAID should ensure that future programs negotiated with the MOHP are included in the Ministry's Strategic Plan and operational budgets.

4. A key observation of the evaluation is that agreement and shared commitment between Nurse Supervisors and Nurses on LDP are crucial to maintaining momentum. In addition, supervisors who became LDP facilitators also indicated they need some small, but essential funding for transport and logistics for follow-on activities. In some (but not all) districts, the MOHP nurse supervisor became the LDP facilitator and, pending the availability of MOHP funding, could carry on leadership activities.

   **Lesson Learned**: MOHP nurse supervisors or locally available trainers (from NGOs or universities) should be trained as facilitators during the project and provided continuing support (during and post project) as this is an essential step to sustaining gains in leadership and performance.

5. Since leadership shares some common features with other ongoing and planned MOHP programs/initiatives, USAID might increase the return on its health sector investments through the design of interventions that continue key aspects of leadership training in ongoing or planned MOHP activities. The technical literature notes the strong similarities among quality assurance, total quality management and leadership training. For instance, all of these approaches emphasize continuous scanning to identify problems, devising, measuring and testing solutions in group settings. Further, the principles and application of operations research (OR), which identifies challenges, focuses on solutions using available resources, and tests them in measured actions, are also essential aspects of these programs.

   **Lesson Learned**: New USAID programs should attempt to "build in" leadership with the MOHP, rather than "build out" (as an externally branded project initiative) with expectations that the MOHP will adopt it by end of project.

6. It is clear from numerous reports (see references) that the principles of OR and the LDP were not well established in hospital administration and management of the MOHP. As one example, the Ministry's hospital performance indicators focus on length of stay, bed census, supply of key materials, and other outputs. The practice of measuring and reporting on patient satisfaction and clinical outcomes in the LDP was new and untried in the hospital sector. Thus, it was difficult for the IPN to "bridge the gap" between ongoing MOHP practices and what was proposed and essential under the LDP.

   **Lesson Learned:** USAID programs to improve health services, whether focused on access, effectiveness or quality of care, should include operations research (OR) as part of its technical approach. Creating familiarity and skill in conducting OR, would contribute to the MOHP's ability to improve management and make informed management decisions.

7. A key finding of the evaluation is the LDP trained only one or at most two nurses in any hospital department. Thus, there was lack of critical mass at any one institution. While specific behaviors were changed, and compliance with several specific MOHP guidelines/standards improved, the changes were not evidenced institution-wide. Lack of critical mass, uneven support for changes among the non-LDP participants, and frequent nurse turnover in Egyptian facilities, impeded institutional change. These conditions made sustainability particularly difficult to obtain.

**Lesson Learned:** In the design of new programs, USAID needs to adopt a more strategic approach to "scaling up" interventions that will lead to sustained, provider change.

## GENDER ANALYSIS

### Conclusions

1. Gender issues are evolving rapidly as more male nurses enter the profession.
2. The LDP training did not specifically and adequately address gender issues in the workplace, nor did it provide gender training as part of its formal training sessions and follow-up activities.

# RECOMMENDATIONS

Based on the evaluation's investigative research, resultant findings, conclusions, and lessons learned as described above, the evaluation team developed a list of recommendations. Below, the key program recommendations are intended to inform any follow-on program in human capacity building (e.g., leadership), health services reform, or quality assurance. Recommendations for the principal stakeholders, USAID and the MOHP, stem from the findings, conclusions, and lessons about what is important and crucial for success. Notably, the recommendations do not imply fault or that the recommendations were not followed in the design and implementation of the IPN project. Rather, they are intended to serve as guideposts for future activities, built on the foundation of what was accomplished and can be distilled from the project's experience to date.

## PROGRAMMATIC RECOMMENDATIONS

1. Follow-on activities to improve health worker performance should have impact-level performance measures as well as outcome and output measures. Further, organizational and institutional performance changes should be measured in addition to individual changes (Program measurement).
2. Selection criteria for participation in leadership (or related) training should be standardized and consistent with a project's development theory, that is, lead to sustained changes in organization and performance (Program consistency).
3. New or extended leadership programs need to involve enough of the workforce (over time) to reach a critical mass, whether at PHC, hospital, or governorate levels—or by health *cadre*—nurses, as well as physicians and administrators in management roles, to affect widespread systemic change (Impact and Effectiveness).
4. The declining influence of LDP over time suggests that the scale and duration of any future program should be revised to simultaneously address reinforcing changes in policy and operational systems in order to enhance the likelihood of systemic, sustainable change (Impact and Sustainability).
5. Initiatives such as leadership training should promote linkages and harmonize efforts with other established Egyptian programs, such as MOHP's Quality Improvement, Centers of Excellence, etc. (Effectiveness and Sustainability).
6. Reinforce leadership by making it a cross-cutting component of all training programs, including technical, quality improvement, management, health reform, etc. (Sustainability).
7. Other human resource development approaches, such as "Sustained Organizational Performance," continuous quality improvement, mentorship, and peer-review for nurses merit further review and consideration for future activities, as they combine human resource interventions with policy and system change, have some foothold in Egypt, and may contribute to transformative and sustainable change (Examine Alternatives for Effectiveness).

## RECOMMENDATIONS FOR MOHP

1. Further integrate leadership training inside ongoing or planned MOHP in-service education (training) programs, or through creating a leadership center within MOHP.
2. Make leadership training (establish a standard) a mandatory requirement for all supervisory positions in the MOHP (nurses, physicians, pharmacists, etc.).
3. Periodically, but at least annually, conduct anonymous employee work climate assessments to monitor employee morale and perceptions.

4. Develop nursing performance indicators for routine tasks to better monitor their performance and test the impact of any interventions (e.g., leadership training).

## RECOMMENDATIONS FOR USAID

1. During project implementation, engage with MOHP officials at the Governorate level frequently to monitor activities and to maintain support for USAID activities, especially when key changes occur (Effectiveness).
2. New leadership programs need to provide frequent (at least monthly) and effective (i.e., supervision, refresher sessions) follow-up that continue on after the external intervention to sustain the momentum for improvement (Sustainability).
3. Involve local NGOs and gain from their experience and expertise in design and implementation of any future human resource development projects (Local Ownership and Effectiveness).
4. Consider providing technical support to the nurses' syndicate to promote leadership, professional growth, and improved performance of nursing through training, mentorship, and licensing and accreditation programs (Reinforce and Broaden Support for USAID Objectives).
5. Future programs to develop human resources should include a gender training component, increasing awareness of gender as a workplace and as a health services issue.

# ANNEXES

## ANNEX I: EVALUATION STATEMENT OF WORK (SOW)

# STATEMENT OF WORK (SOW)
# Part (1)

# End of Project Performance Evaluation of USAID/Egypt
# Improving the Performance of Nurses in Upper Egypt Program

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## ARTICLE I. PURPOSE

The purpose of this evaluation is to conduct an end of project performance evaluation of Improving the Performance of Nurses in Upper Egypt Program (IPN).

## ARTICLE II. BACKGROUND

The broad human resource base of Egypt's public health sector, including physicians, nurses and paramedic staff, is a potential strength in terms of improving the quality of care and addressing the needs of the growing population. One of the key factors that drive the critical gap in health sector leadership and management is inadequately trained health sector leaders and managers. Health care providers and managers receive little to no training on leadership and management before or during their service. Medical and nursing schools' curricula in the Egyptian education system are primarily clinical with no emphasis on enhancing the leadership and management skills of health personnel. The Ministry of Health and Population (MOHP) employs more than 111,000 nurses. Despite their critical role in health service delivery, especially in remote areas where they may be the only frontline providers of care, nurses—have low salaries and low social status. This factor, coupled with a lack of authority and control, contribute to a low morale among nurses and, in turn, poor standards of care and low client satisfaction.

In 2003, USAID, in collaboration with MOHP, supported the one-year pilot of the Leadership Development Program (LDP) approach in Aswan Governorate in order to address the issue of poor management and leadership skills among nurses. Eighty MOHP nurses from the national, governorate and distirict levels took part in the LDP porogram.

In 2009, USAID/Egypt, through a field support fund to the global Leadership, Management and Sustainability (LMS) project, started the "Improving the Performance of Hospital Nurses in Upper Egypt" to conduct activities in Aswan, Luxor and Qena Governorates. The aim of the project was to improve nursing performance in the three areas of (1) infection control, (2) basic nursing care, and (3) patient provider communication.
Management System for Health (MSH) facilitated the LDP for 107 hospital nurses in the three intervention governorates. Consequently, this first two-year phase was extended for two additional years. The program's new scope expanded to inlcude a selected number of Primary Health Care Units (PHUs). The modified program was named "Improving the Performance of Nurses in Upper Egypt" or IPN. The new program also included two additional Upper Egypt governorates; Sohag

and Assiut. The aim of this extension was to ensure that nurses in the five selected governorates, at both the hospital and primary health care level, are trained in leadership and management.
The expanded program started rolling out the methodology to more hospitals and initiated activities at PHU level in Aswan, Luxor and Qena Governorates. These sites also started initiating their sustainability activities, with greater responsibility for all aspects of implementation falling under the responsibility of the MOHP teams. The project was also in its early stage of engaging stakeholders in Sohag and Assiut Governorates.
However, following the January 25 Revolution and the resulting transition led to considerable uncertainty in the implementation environment. Government decrees in January 2012 requested international or internationally-funded NGOs to not implement any new activities within the public sector. This has had a significant impact on the program at PHU level.

The project had planned to train 480 of hospital and PHC nurses in Sohag, Assuit, Aswan, Luxor and Qena from January 2012, through the end of the project. Due to the MOHP decree, the project limited its activities to carrying out monthly and quarterly support visits and sessions in Aswan, Luxor and Qena Governorates (and no longer worked in Assuit and Sohag as planned). This support has mainly been directed at hospital level, working with Steering Committees as they implement LDPs independently, and develop plans for future replication.

With these restrictions, the IPN project has continued to engage in discussions with the MOHP and key individuals in the nursing sector in hopes of restarting activities. Near the end of 2012, MOHP decided resuming the project's activities. The MOHP initially requested to change the intervention governorates to North and South Sinai, Mersa Matrouh and Greater Cairo. MSH started to introduce and position activities in this new set of Governorates. Shortly thereafter, the MOHP requested MSH to change the governorates again. The MOHP and USAID agreed that the project would continue to intervene in Luxor, Qena and Aswan and to expand to two additional Frontier Governorates, namely Red Sea and North Sinai.

These suggested changes did not take place because MOHP's key officials questioned the cost-effectiveness of the project. After June 30 event, MOHP requested that the IPN program resume its activities in Luxor and Aswan. Lately, USAID granted a five-month no cost extension to the IPN to resume its activities.

## ARTICLE III. SCOPE OF WORK

### Development Hypothesis

The development hypothesis underlying the IPN project is that building management and leadership capacity of nurses, who constitute an integral part of the health system, and have little or no preparation in management and leadership, improves their performance in providing health services.

## Program Objectives

The objective of the LMS/IPN Associate Award, supported by USAID/Egypt, was to improve health services in Aswan, Luxor, Qena, Sohag and Assiut governorates. This was to be accomplished by improving the performance of nurses to lead and manage their teams to address their challenges and achieve measurable results in three focus areas: (1) infection control, (2) basic nursing care, and (3) communication between health care providers and patients the program worked with. Nurses at all levels will successfully identify and address key health care challenges and achieve measurable results.

More specifically, the projects expected results were:

i. Nurses are aware of the MOHP standards for a) infection control, b) basic nursing care, and c) patient-provider communication.
ii. Nurses are committed to adhering to MOHP quality assurance standards and to assess and improve their performance and the health services in the hospitals according to these standards.
iii. Increased local training capacity through a group of trained facilitators. This group was to promote the methodology across districts and governorates, leading ownership and sustainability of the program.

To achieve the above results, the implementer, MSH, used their Leadership and Development Program (LDP) approach in the IPN project, to strengthen leadership and management skills of nurses.

## Program Approach

The LDP is a structured, participatory process, applied over four to six months, that enables "naturally occurring teams[9]" to address challenges in the workplace and achieve desired results by applying leadership and management practices. At the core of the LDP is the conviction that achieving measurable improvements in health outcomes is attributable to good leadership. The LDP aims to achieve positive health outcomes by strengthening leadership practices and skills and teamwork to improve the organization and delivery of quality health services.

Exposure to the LDP approach enables health professionals to a) learn leadership and management practices; b) apply these practices to bring about changes in work climate, management systems and practices, and c) enhance the capacity of the system and the staff to respond positively to change. All three, along with the application of best practices in clinical medicine and public health, are critical contributors to improved health services and outcomes.

The LDP approach invites teams at all levels of an organization to participate, acquire and practice management and leadership skills. A key LDP principle is that leadership can be learned at all levels. The LDP approach demystifies leadership by teaching participants to work as a team

[9] Teams that already work together on various tasks within the same organization.

and apply leading and managing practices to address their day-to-day challenges. In contrast to other leadership programs which are a one-time didactic session; the LDP is a series of four participatory workshops, incorporating real and practical challenges with continuous coaching support. Additionally, the LDP aims to improve the working environment, contributing to positive change in the work climate. The Work Climate Assessment (WCA) is a tool that measures work climate before and after the intervention of the LDP. The LDP, along with the WCA, result in behavior change for better working relationships and conditions.

The program uses a three-phase approach:

Phase I: targets an initial number of nurses and facilities in a given governorate and is under the responsibility of the project team. Phase I is implemented by the IPN project staff members with the goal of developing local facilitation and coaching capacity.

Phase II: targets an additional number of nurses and facilities in the governorate. Activities are implemented jointly with MOHP teams with direct technical support from IPN staff. Phase II represents a shift of the activities' logistics to MOHP. Phase II participants serve as a model to the local MOHP facilitators which serves the sustainability strategy.

Phase III: is implemented by the MOHP with minimal technical support from the IPN team. The MOHP coordinates, plans and provides logistical support for the LDPs. During this phase the IPN technical team starts focusing on those activities that contribute to sustainability and full transfer of the program to the participating governorates. Follow up is provided through monthly and/or quarterly meetings.

In each of the governorates, the following activities take place to implement the LDP:

1. Senior Alignment Meeting for key senior-level managers from the governorate and district levels, the participating hospitals, the MOHP, and the Directorate of Health. The meeting is facilitated by MSH to create commitment and ownership of the program.

2. Five-Day LDP Training of Trainers (TOT) Workshop- This workshop aims to prepare a cadre of local trainers who have a good understanding of the methodology and can deliver the training to local MOHP trainees.

3. Five-Day Scanning Workshop-This workshop reinforces information on infection control, basic nursing care, and patient-provider communication and introduces the timeline, objectives, frameworks, and processes of the LDP. Participants identify a challenge they are facing in their workplace.

4. Three-Day Focusing and Planning Workshop-This workshop applies the leading and managing practices to move from vision to action, and complete an action plan to address the identified challenge.

5. Three-Day Mobilizing and Inspiring Workshop-This workshop focuses on improving teamwork and reinforce concepts of monitoring and evaluation as the participants continue to implement their action plan.

6. Monthly Coaching Meetings between Workshops during which feedback and support are provided by peers, local facilitators, and MSH staff. During these coaching meetings, teams have the opportunity to review their progress in facing their selected challenge with a trained local Monitoring and Evaluation (M&E) Specialist. Nurses learn how to use the available data to monitor, evaluate and report their progress and results.

7. Results Presentation Meeting, involving key stakeholders from the governorate and district levels, the participating hospitals, and senior managers from the MOHP and Health Directorate. At these meetings, the team representatives share results achieved and make commitments towards the sustainability and expansion of the program.

**Critical Assumptions**

The successful implementation of USAID –supported IPN projects assumed that:

- the national and governmental authorities, at all levels, realize the importance of and maintain a strong willingness for building the leadership and management capacity of nurses; and
- the MOHP at the facility-level is willing to provide support and enhance an enabling environment for trained nurses to assume their responsibilities and play an increasingly significant role.

### A. Project Management Modifications

In August 2010, the agreement was modified to extend the initial 2 year award to 3 years, to incorporate two additional Governorates, Assiut and Sohag. The TEC was increased from $2,626,688 to $3,626,668 and the name of the project was changed from "Improving the Performance of Hospital Nurses in Upper Egypt" to "Improving the Performance of Nurses in Upper Egypt" in order to reflect the inclusion of Primary Health Care units nurses.

In April 2013, USAID amended MSH agreement to extend the period through end of November 2013, at no additional cost. The Ministry requested that the program be implemented in a new set of Governorates - Red Sea, Luxor, Aswan and Qena - where the MOHP will be applying the new Health Insurance System. USAID added North Sinai to this set of Governorates as North Sinai is a priority governorate for the mission. Consequently, MSH agreement was amended to substitute Assiut and Sohag Governorates with Red Sea and North Sinai Governorates.

In September 2013, the agreement was modified to extend the project through the end of April 2014, at no additional cost. Following the July 2013 change in government the MOHP has requested the project to resume activities in Luxor and Aswan Governorates. Accordingly, MSH agreement was amended to implement the training activities in Luxor and Aswan.

### B. Relevant Documentation

The evaluation team should consult a broad range of background documents apart from project documents provided by USAID/Egypt, MSH headquarters and IPN staff. These may include documents that relate to health systems strengthening, leadership and management capacity building, legacy review of 30 years of investment in Egypt (http://www.ghtechproject.com/files/Egypt_Health_and_Population_Legacy_Review.pdf), and a gender assessment of the USAID/Egypt health portfolio completed in 2010 (http://www.healthpolicyinitiative.com/Publications/Documents/1410_1_Egypt_Gender_Assessment_Final_FINAL_acc.pdf).

The team may also find the MSH website useful as well as background information on the state of the Egyptian health care system. USAID and IPN team will provide the evaluation team with soft copies of a package of briefing materials, including:

- Project's agreement and amendments
- Project quarterly reports, annual and ad-hoc work plans and review document developed as part of routine monitoring.
- Budget information
- Gender Analysis
- Project's Performance Monitoring Plan

## I. Evaluation Rationale

### A. Purpose

The USAID/Egypt Mission is planning to conduct a performance evaluation of its IPN project. The purpose of this evaluation is to:

1. Review, analyze, and evaluate the effectiveness of the IPN project in achieving program objectives and completing deliverables.
2. Identify lessons learned in terms of implementation and relationships with counterparts in order to inform USAID future investments; and
3. Assess the sustainability of the interventions at an individual (nurses) and an institutional (MOHP facilities) level.
4. Inform a follow-on health personnel capacity development program.

The life of the current USAID activity is scheduled to come to an end in April 2014. Findings and recommendations of this evaluation will guide the design and the implementation of the new activity.

### B. Audience and Intended Uses

The audience of the evaluation report will be the USAID/Egypt Mission, specifically the health team, the Global Health Bureau, the Middle East Bureau, the MOHP and the future implementing partner of leadership and management capacity building activities.

USAID/Egypt will review and share the executive summary, expanded executive summary, final report, and recommendations (see IV. A. Deliverables) with the MOHP, other donors in Egypt working on leadership and management capacity building, and the general public via the Development Education Clearinghouse (DEC).

USAID will address the report recommendations in future leadership and management capacity building activities and share lessons learned with other stakeholders. MSH will incorporate lessons learned to improve future activities in the area of leadership and management. The findings and recommendations will offer an opportunity to GOE counterparts, especially MOHP, to optimize the implementation climate and maximize the benefits from technical assistance.

### C. Evaluation Questions

The evaluation will answer the following questions:

1. Given the turbulent operating environment, to what extent did the IPN Program achieve its intended goals and results?

    c. To what extent was IPN able to improve nurses' practices and services provided in hospitals and primary health care units in intervention governorates?

    d. To what extent was IPN able to empower nurses in intervention facilities? And how has this impacted their performance and their ability to address their challenges?

2. To what extent are project interventions sustainable at the level of nurses and at the level of the institutions?

3. What lessons have been learned through the IPN program that can advance future efforts to improve leadership and management skills of Egyptian health care personnel?

## 4. Evaluation Design and Methodology

### A. Evaluation Design

This is a performance evaluation and is intended to focus on how IPN has been implemented, what it has achieved, and whether expected results have occurred according to the project design and in relation to the development hypothesis. The evaluation will focus on identifying lessons learned that will guide future USAID investments. The evaluation will also assess the sustainability of the interventions at an individual (nurses) and an institutional (MOHP facilities) level. Evaluators will use a mix of quantitative and qualitative data collection and analysis methods to generate answers, and will use USAID Evaluation Policy (http://www.oecd.org/derec/unitedstates/USAID_Evaluation_Guidelines.pdf) as a guideline in the evaluation design.

## B. Data Collection Methods

The evaluation team should develop data collection tools that are consistent with the evaluation questions to ensure high quality analysis. The evaluation team is required to share data collection tools with the USAID Evaluation Program Manager for review, feedback and/or discussion with sufficient time for USAID's review before they are applied in the field.

The external evaluation team will start work on a paper review of all, but not limited to, resources cited in the "Relevant Documentation" section above prior to arriving in Egypt. The local evaluation team members should complete the paper review prior to the external evaluation team's arrival.

These tools may include a combination of the following:

- Desk review of relevant documentation, (e.g., quarterly reports, output from the project monitoring system, other OHP, MOHP, etc.);
- Site visits to IPN intervention facilities;
- Key informants interviews;
- Focus group discussions with IPN, MOHP, training beneficiaries, and other counterparts and stakeholders.

<u>Interviews</u>
Key Informant Interviews will include, but may not be limited to:

- USAID/Egypt Health Team – including Activity Manager
- MOHP staff
- IPN staff
- Participants of IPN training programs
- Others

The evaluation team will provide a more detailed explanation of the proposed methodology for collecting the data.

The Evaluation Team may be accompanied by a staff member from USAID/Egypt, as appropriate, to observe interviews and field visits. A list of interviewees and key stakeholders will be provided by USAID prior to the assignment's inception.

## C. Data Quality Standards

The evaluation team shall ensure that the data they will collect clearly and adequately represents answers to the evaluation questions, is sufficiently precise to present a fair picture of performance, and is at an appropriate level of details.

## D. Data Analysis Methods

Prior to the start of data collection, the evaluation team will develop and present, for USAID/Egypt review and approval, a data analysis plan that details how focus groups and key

informant interviews will be transcribed and analyzed; what procedures will be used to analyze qualitative and quantitative data from key informant and other stakeholder interviews; and how the evaluation will weigh and integrate qualitative data from these sources with quantitative data from performance indicators and project performance monitoring records to reach conclusions about the effectiveness and efficiency of IPN activities conducted by MSH.

The Mission expects the evaluation team to present strong quantitative and qualitative analysis, within data limitations, that clearly addresses key issues found in the research questions. The Mission is looking for new, creative suggestions regarding this evaluation, and it is anticipated that the implementer will provide a more detailed explanation of the proposed methodology for carrying out the work.

The evaluators should consider a range of possible methods and approaches for collecting and analyzing the information required to assess the evaluation objectives, and the findings should be supported by data from a range of methods. The methodology will be discussed with and approved by USAID/Egypt Activity Manager and the Evaluation Program Manager prior to implementation.

### E. Methodological Strengths and Limitations

Key informant interviews and focus group discussions are suggested as a primary data source for this evaluation. It is anticipated that some interviews may be conducted in the presence of at least one or more outside observers, including project and USAID staff, and that interview responses could be affected by the presence of these observers.

USAID expects that all issues affecting validity be discussed and documented in the evaluation planning stage – including measures to minimize precision and validity issues Measures to mitigate these issues will be addressed with all team members and USAID team in the implementation phase and detailed in the final report.

## 5. Evaluation Products

### A. Deliverables

***Work Plan:*** During the team planning meeting the evaluation team will discuss the detailed work plan, which will include the methodologies to be used in the evaluation, timeline, and detailed Gantt chart. The work plan will be submitted to both the IPN AOTR and the USAID Evaluation Program Manager for approval no later than the sixth day of work.

***Methodology Plan****:* A written detailed methodology and data analysis plan (evaluation design, data analysis steps and detail, operational work plan, see sections III. C and D) will be prepared by the team and discussed with USAID during the planning meeting.

***List of Interviewees and Schedule:*** USAID will provide the evaluation team prior to the team's arrival in Egypt with a stakeholder analysis that includes an initial list of interviewees, from which the evaluation team can work to create a more comprehensive list. Prior to starting data

collection, the evaluation team will provide USAID with a list of interviewees and a schedule for conducting the interviews. The Evaluation Team will continue to share updated lists of interviewees and schedules as meetings/interviews take place and informants are added to/deleted from the schedule.

***Data collection tools:*** Prior to starting fieldwork, the evaluation team will share the data collection tools with the USAID Evaluation Program Manager for review, feedback and/or discussion and approval.

***In-briefing and Mid-term brief with USAID:*** The evaluation team is expected to schedule and facilitate an in-briefing and mid-term briefing with USAID. At the in-brief, the partner should have the list of interviewees and schedule prepared, along with the detailed Gantt chart that maps out the evaluation through the report drafting, feedback and final submission periods. At the mid-term brief, the partner should provide USAID with a comprehensive status update on progress, challenges, and changes in scheduling/timeline. In addition, to facilitate a smooth implementation of the data collection and analysis phases, the evaluation team will be expected to coordinate and communicate with the Mission's POC on evaluation team ongoing basis.

***Discussion of Preliminary Draft Evaluation Report:*** The team will submit a rough draft of the report to the USAID Evaluation Program Manager, who will provide preliminary comments prior to final Mission debriefing. This will facilitate preparation of a more final draft report that will be left with the Mission upon the evaluation team's departure.

***Debriefing with USAID:*** The team will present the major findings of the evaluation to USAID/Egypt through a PowerPoint presentation after submission of the draft report and before the team's departure from country. The debriefing will include a discussion of methodology, findings, achievements and issues as well as any conclusions, and recommendations. The team will consider USAID/Egypt comments and revise the draft report accordingly, as appropriate.

***Debriefing with Partners:*** The team will present the major finding of the evaluation to USAID partners (as appropriate and as defined by USAID) through a PowerPoint presentation prior to the team's departure from country. The debriefing will include a discussion of achievements and activities *only,* with no recommendations for possible modifications to project approaches, results, or activities. The team will consider partner comments and revise the draft report accordingly, as appropriate.

***Draft Evaluation Report:*** A draft report of the findings and recommendations should be submitted to the USAID Evaluation Program Manager ***prior*** to the team leader's departure from Egypt. The written report should clearly describe findings, conclusions, and recommendations. USAID will provide comment on the draft report within two weeks of submission.

***Final Report:*** The team will submit a final report that incorporates the team responses to Mission comments and suggestions no later than five days after USAID/Egypt provides written comments on the team's draft evaluation report (see above). If USAID/Egypt determines that its comments on the first draft have not been satisfactorily addressed, it will provide further feedback for the team to address within five days. The evaluation report will be deemed final

only with USAID/Egypt's approval. The format will include an executive summary, table of contents, methodology, findings, and actionable recommendations. The report will be submitted in English, electronically. The report will be disseminated within USAID and to stakeholders according to the dissemination plan developed by USAID.

***Expanded Executive Summary:*** The team will submit an expanded executive summary to accompany the final report that will include a background summary on the evaluation purpose and methodology, and an overview of the main data points, findings, conclusions, and recommendations. The expanded executive summary should be easy to read for wide distribution to local audiences and the partner is encouraged to look for creative presentation styles, formatting and means of dissemination. The expanded executive summary will be submitted in English and Egyptian Arabic, in hard copy (50 copies) and electronically. The report will be disseminated within USAID and to stakeholders according to the dissemination plan.

***Data Sets:*** All data instruments, data sets, presentations, meeting notes and final report for this evaluation will be presented to USAID on a flash drive to the Evaluation Program Manager. All data on the flash drive will be in an unlocked, editable format.

A two-day **team planning meeting** will be held in Egypt before the evaluation begins. This meeting will allow USAID to present the team with the purpose, expectations, and agenda of the assignment. In addition, the team will:

- Clarify team members' roles and responsibilities;
- Establish a team atmosphere, share individual working styles, and agree on procedures for resolving differences of opinion;
- Review and develop final evaluation questions (work out realistic expectations of the team during meetings with MOHP and USAID);
- Review and finalize the assignment timeline and share with USAID;
- Present data collection methods, instruments, tools, and guidelines (materials should be developed prior to this meeting);
- Review and clarify any logistical and administrative procedures for the assignment;
- Develop a preliminary draft outline of the team's report; and,
- Assign drafting responsibilities for the final report.

### B. Evaluation report requirements

The format for the evaluation report is as follows:

1. **Executive Summary**—concisely state the most significant findings and recommendations (2 pp);
2. **Table of Contents** (1 pp);
3. **Introduction**—purpose, audience, and summary of task (1 pp);

4. **Background**—brief overview of IPN project in Egypt, USAID project strategy and activities implemented in response to the problem, brief description of IPN, purpose of the evaluation (2 pp);
5. **Methodology**—describe evaluation methods, including threats to validity, constraints and gaps (1 pp);
6. **Findings/Conclusions/Recommendations**—for each evaluation question, the report will state findings, conclusions and recommendations in clearly demarcated sub-sections;, also clear distinctions will be made between findings, conclusions, and recommendations *(15–20 pp);*
7. **Challenges**—provide a list of key technical and/or administrative challenges, if any (1–2 pp);
8. **Future Directions** (2–3 pp);
9. **References** (including bibliographical documentation, meetings, interviews and focus group discussions);
10. **Annexes**—annexes that document evaluation scope of work, evaluation methods and limitations, copies of the actual data collection tools, documents reviewed, schedules, interview lists and tables— should be concise, relevant and readable. Annexes should also include a disclosure of any conflict of interest by evaluation team members.

The final report will be reviewed using the Checklist for Assessing USAID Evaluation Reports (http://www.usaid.gov/policy/evalweb/evaluation_resources.html).

The final evaluation report will conform to the Criteria to Ensure the Quality of the Evaluation Report found in Appendix I of the USAID Evaluation Policy. The Evaluation Program Manager will determine if the criteria are met. This evaluation will not conclude until the Evaluation Program Manager has confirmed, in writing, that the report has met all of the quality criteria.

The final version of the evaluation report will be submitted to USAID/Egypt electronically. The report format should be restricted to Microsoft products and 12-point type font should be used throughout the body of the report, with page margins 1" top/bottom and left/right. The report should not exceed 30 pages, excluding references and annexes.

## V. Team Composition

USAID encourages the participation of local experts on evaluation teams. MOHP staff is also encouraged to participate on evaluation teams, as are implementing partners or other stakeholders when their participation would be beneficial for skill development and not present a conflict of interest nor a threat to validity, or their engagement in the evaluation would help to ensure the use of evaluation results within USAID. All attempts should be made for the team to be comprised of male and female members. Team members will be required to provide a written disclosure of conflicts of interest (per USAID Evaluation Policy).

The evaluation team will be composed of four members- a team leader, two consultants one of them is a local specialist, and a local logistic coordinator. The evaluation team must have in one or more team member(s) the following experience:

- Human resources capacity building in a developing country;
- Implementing and evaluating USAID health programs;
- Demonstrated experience in Egypt;
- Egyptian Arabic fluency; and
- Demonstrated quantitative and qualitative data analysis skills.

It is desirable to have in one or more team member(s) the following qualifications:

- Implementation of USAID-funded health system strengthening programs;
- Monitoring and Evaluation experience;
- Human resources management experience; and
- Implementation of leadership and management programs preferably the LDP approach.

Offerors may comprise their team as they see appropriate, so long as all experience the team must have that mentioned above is represented by an appropriate number of team members. All other factors being equal, maximizing a team's ability to fulfill more qualifications in the "desirable" criteria might enhance an application.

Team Leader: a senior consultant with extensive experience in leading and conducting USAID health program evaluations. S/he should have an MPH or related post graduate degree in public health. S/he should have at least 10 years senior level experience in at least one of the qualifications mentioned above that the evaluation team must have. Excellent oral and written skills are required. The Team Leader should also have experience in leading evaluation teams and preparing high quality documents.

The Team Leader will:

- Finalize and negotiate with USAID/Egypt the evaluation work plan;
- Establish evaluation team roles, responsibilities, and tasks;
- Facilitate the Team Planning Meeting (TPM)
- Ensure that the logistics arrangements in the field are complete;
- Manage team coordination meetings in-country and ensure that team members are working to schedule;
- Coordinate the process of assembling individual input/findings for the evaluation report and finalizing the evaluation report;
- Lead the preparation and presentation of key evaluation findings and recommendations to USAID/Egypt team prior to departing Egypt.

Local Consultant:
The local technical specialist is expected to be fluent/professionally proficient in spoken Egyptian Arabic. S/he should have an excellent understanding of the Egyptian public health system. S/he should also have a proven experience in conducting evaluations/assessments and drafting high quality reports. The local specialist will assist the team to better understand different cultural and social issues related to the sector of nurses in Egypt. S/he will also assist in

communications and interviews with local stakeholders. S/he will participate in different Evaluation activities and may be assigned specific tasks by the Team Leader as appropriate.

Local Logistics Coordinator:
The Logistics Coordinator should be a local staff member for handling the travel related logistics and providing administrative support to the technical team members. The Logistics Coordinator will also be responsible for setting up meetings with USAID and stakeholders.
Required qualifications include:

- Demonstrated: ability to be resourceful and to successfully execute complex logistical coordination; ability to multi-task, work well in stressful environments and perform tasks independently with minimal supervision.
- Capacity for effective time management and flexibility.
- Must be able to interact effectively with a broad range of internal and external partners, including international organizations and host country government officials.
- Must be fluent in both English and Arabic.
- Proven ability to communicate clearly, concisely and effectively both orally and in writing.

## VI. Evaluation Management

### A. Logistics

USAID will provide overall direction to the evaluation team, identify key documents, and assist in facilitating a work plan. USAID will assist in arranging meetings with key stakeholders identified by USAID prior to the initiation of field work. The evaluation team is responsible for arranging other meetings as identified during the course of this evaluation and advising USAID/ Egypt prior to each of those meetings.

The evaluation team is also responsible for arranging transportation as needed for site visits in and around Cairo and other governorates. USAID can assist with hotel arrangements if necessary but the evaluation team will be responsible for arranging its own work/office space, computers, internet access, printing, and photocopying. The evaluation team is also responsible for procuring and paying for translation services for interviews, reports and any other evaluation related task. Evaluation team members will be required to make their own lodging and travel payments. USAID personnel will be made available to the team for consultations regarding sources and technical issues, before and during the evaluation process.

### B. Scheduling

Work is to be carried out over a period of approximately 13 weeks starting July 1, 2014.

## ANNEX II: TABLES, FIGURES, AND PHOTOGRAPHS

The following tables, figures, and photographs are from the WCA Assessment[10] and the three governorates (Aswan, Luxor, and Qena).

**Table 1.1** WCA Questions table 1. Standardized factor loadings for the final eight WCA items, by level of analysis.

| Title | Individual Level | Work Group Level |
|---|---|---|
| 1. We feel our work is important.[a] | 0.62 | 0.82 |
| 2. We strive to achieve successful outcomes.[a] | 0.67 | 0.90 |
| 3. We have a plan which guides our activities.[b] | 0.47 | 0.73 |
| 4. We pay attention to how well we are working together.[a] | 0.51 | 0.77 |
| 5. We understand each other's capabilities.[b] | 0.49 | 0.79 |
| 6. We seek to understand the needs of our clients.[b] | 0.66 | 0.93 |
| 7. We understand the relevance of the job of each member in our group.[a] | 0.54 | 0.92 |
| 8. We take pride in our work.[b] | 0.61 | 0.93 |

Notes: [a] Additional items included in the model
[b] Original WCA items

[10] Perry Cary, Nancy LeMay, Greg Rodway, Allison Tracy and Joan Galer. "Validating a work group climate assessment tool for improving the performance of public health organizations." *Human Resources for Health* 3:10, 2005.

**Table 1.2** Success in Completing Challenges by LDP teams in 3 governorates

| *Governorate* | Aswan | | | Luxor | | | Qena | | | **Total IPN** | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Technical area* | Total # challenges | Achieved? | | Total # challenges | Achieved? | | Total # challenges | Achieved? | | **Total # challenges** | **Achieved?** | |
| | | Yes | No | | Yes | No | | Yes | No | | **Yes** | **No** |
| *IC* | 10 | 9 | 1 | 12 | 11 | 1 | 5 | 4 | 1 | **91** | **76** | **15** |
| *BNC* | 12 | 11 | 1 | 16 | 12 | 4 | 11 | 9 | 2 | | | |
| *PPC* | 3 | 3 | | 9 | 5 | 4 | 1 | 1 | | | | |
| *PHC services* | 9 | 9 | | 3 | 2 | 1 | | | | | | |
| *Achieved %* | 94% | | | 75% | | | 82% | | | **84%** | | |

Overall, the 88 teams addressed 91 challenges over the course of the IPN project. 76 of them achieved their goal or 91 percent. Aswan teams had the highest rate of success at 94 percent. Basic nursing skills were the most common technical focus area, comprising 43 percent of the total. IC challenges were second (30 percent of total), provider-patient communication third with 14 percent, and PHC fourth with 14 percent.

**Table 1.3** Illustrative Distribution of Technical Focus Areas

| **Technical Area** | **Percent of Total** |
|---|---|
| Basic Nursing Skills | 43% |
| IC | 30% |
| Provider-Patient Communication | 14% |
| PHC | 13% |
| ***Total # Challenges*** | ***100%*** |

**Table 1.4** PMP Indicators Analysis

| PMP indicators | Target | Result | % of Target | Status |
|---|---|---|---|---|
| 1. **Number of LDP facilitators trained** | 58 | 46 | 79.3% | **Not met** |
| 2. **Number of persons completing the LDP, by cadre (e.g. doctor, nurse, etc.)** | 742 | 661 | 89% | **Nearly achieved** |
| 3. **Number of teams completing the LDP** | 94 | 88 | 93.6% | **Nearly achieved** |
| 4. **Percent change in Work Climate Assessment Score**<br>**Hospital**<br>**PHC units** | <br>10%<br>10% | <br>81%<br>132% | <br>810%<br>1320% | **Exceeded** |
| 5. **Percent of teams that select a new challenge independently after completing their Action Plan** | 60% | 38.6% | 64.3% | **Not met** |
| 6. **Number (percent) of hospitals that develop scale up plans by the end of implementing their Action Plans** | 13<br>(50%) | 14<br>(56%) | 14/13<br>(108%) | **Met** |

## Aswan

**Table 2.1** Summary of Key Points from Aswan KIIs, Nurses Response (n=18)

| Benefits | Challenges | Follow up & Impact | Recommendations |
|---|---|---|---|
| Problem solving | Low number of target trainees | Great impact on work and even personal lives | All facility staff involvement |
| Increased self confidence *"I am a manager in my workplace"* | Focus on nurses only | Little follow up especially with older trainees | Focus more on raising nursing skills |
| presentation skills | Travelling time to training site | Little involvement from higher level | Inclusion of managers at facility, district and directorate levels |
| Showing results based on evidence | High staff turnover | | |
| Organized work based on clear SMART objectives | Turbulent situation in Egypt | | |

**Table 2.2** Summary of Key Points during KII for Nurse Supervisors and MOHP supervisors (n=8)

| Benefits | Challenges | Follow up & Impact | Recommendations |
|---|---|---|---|
| Identifying and addressing work related problems | Physicians not involved | Great impact on individual nurses only | Retrain facility teams |
| Nurses are more organized | Follow up from higher level | *"A candle light is fading"* | Include doctors and dept. teams |
| Collect, read and analyze data | Time between training workshops | Not enough supervisors trained | Need continuity & follow up |
| Increased skills in IC, Basic Nursing services, Patient communication and Patient safety | Lack of support for changes | Facebook page for nurses | Train entire departments or all staff at a facility |

**Table 2.3** Summary of Key Points during FGD with Nurses (average n=5) in Aswan

| Benefits | Challenges | Follow up & Impact | Recommendations |
|---|---|---|---|
| Problem solving | Weak management support | Great impact on nurses | Train more nurses, entire department |
| Teamwork | Lack of follow-up | Encouraging problem solving approach | Need more continuity – management support |
| Increased skills in IC, Basic Nursing services, Patient communication and Patient safety | Trained nurses conflict with untrained, young vs old | Update new physicians and nurses involvement for those who were not in LDP | Train physicians |

## Luxor

Tables 2.4 - 2.6: Summary of Luxor Analysis, Key Results of KII and FGD

**Table 2.4** Luxor Nurses KII Responses summarized on LDP

| KII Nurses Response (n=12) | | | |
|---|---|---|---|
| ***Improvements or Benefits*** | ***Challenges or Negatives*** | ***Follow up & Impact*** | ***Recommendations*** |
| Problem solving | Lack of cooperation from management | Impact fading, forgetting | Should train physicians and entire department |
| Self-confidence | Too few trained | Some learned IC measures, others didn't | Redo training at hospital for all |
| Organizational, planning skills | Work & training = long hours | Continuous learning needs more resources | Focus more on skills than knowledge |
| Presentation skills (communication with managers, patients) | Married nurses - am schedule only | Blocked by physicians | Need more continuity & follow up to sustain |
| Evidence-based analysis, e.g. using lab results | Untrained nurses not cooperating with LDP | Supervisors should support LDP more | |
| Time management | Work and training overlap and make difficulties | Rely on other cadres to do some tasks | |

**Table 2.5** Nurse Supervisors' responses from KII

| KII for Nurse Supervisors, MOHP Directors, and Physician Response (n=6) | | | |
|---|---|---|---|
| ***Improvements or Benefits to Nurses*** | ***Challenges or Negatives*** | ***Follow up & Impact*** | ***Recommendations*** |
| Problem solving | Untrained nurses not cooperating with LDP | Not enough trained | Retrain hospital teams |
| More organized | Physicians non-compliant & don't listen | Older nurses not learning from younger ones | Include doctor and role of doctor |
| Use & respect data | Conflict among hospitals | Married nurses all on am shift | Need continuity & follow up |
| IC improved | NA | Fragments facility | More in-depth on statistics, rates, etc. |

**Table 2.6** Responses from Nurses in Focus Group discussions

| FGD Responses on LDP and Current Situation (n=13) | | | |
|---|---|---|---|
| ***Improved/Benefits*** | ***Negatives*** | ***Supervision & Follow up*** | ***Sustained Impact*** |
| Problem solving | Management support & follow up weak | NS supportive | Train more nurses, entire department |
| Teamwork & nurse communication | Time conflicts - long hours plus training | Encouraging problem solving approach | Need more continuity – management support |
| Nurse-patient Communication | Trained nurses conflict with untrained, young vs old | Work hours - no time for nurse training | Time frame for Behavior Change is longer |
| Take Initiative to solve problems | | Not all supervisors trained | Train physicians - get them behind the LDP |

## Qena

**Table 2.7** Summary of key findings from KII with nurses, nurse supervisors and the MOHP governorate in Qena. Nurses n=10

| KII Nurses Response (n=12) | | | |
|---|---|---|---|
| ***Improvements or Benefits*** | ***Challenges or Negatives*** | ***Follow up & Impact*** | ***Recommendations*** |
| Satisfaction with meeting challenges | End of project resulted in loss of nurses' enthusiasm to continue their activities. | Lost momentum for sustainability as trained groups become dispersed | Train more nurses at every facility |
| Success story on "Preparation of the patients before surgical operation" | Physicians did not acknowledge the "new look" of trained nurses | All trained nurses in Disha hospital left the hospital due to marriage or transfer | Train every nurse in the department; train nurse supervisors |
| Interact with other nurses and exchange of experience. | LDP documents were lost when moved to a new hospital (Queft) | LDP induced changes and reallocation of nurses according to their effectiveness | |
| Became aware of WHO-MOHP standards of Practice (SOP) | Married nurses – terminated or transferred to other areas | Challenge result: 10 points for proper administration of medications – reached 100% then faded to 10% | |
| Use organized objective method to assess & report on performance. | | | |
| More interactive communication with nurse supervisors and management | Work and training overlap and make difficulties | LDP grads became supervisors | |

**Table 2.8** Qena Summary of Nurse Supervisors and Governorate Director KII Responses

Nurse Supervisors and Governorate Director, n=4

| KII Supervisors Response (n=3) | | | |
|---|---|---|---|
| ***Improvements or Benefits*** | ***Challenges or Negatives*** | ***Follow up & Impact*** | ***Recommendations*** |
| Improved communication skills resulting in effective nurse-patient communication, | Only 1 nurse trained in LDP per department | Presentations by nurses in 4th LDP workshop added to their confidence | |
| Success story for "Preparation of the patients before surgical operation" | Focus on building capacity of nurse leaders was not enough to have a critical mass | Political issues clogged scaling up of the MSH | |
| Organizational, planning skills | Physicians turnover high so loss of awareness of LDP | | |
| LDP added new skills in training especially role play | Inadequate support from the health directorates | Health directorate & district not following up with LDP challenges | Need an LDP focal point in Qena |
| Peer education and chance to learn from each other | No fund to support the projects within hospitals | | MOHP should provide funds for new challenges and LDP |
| Time management | Work and training overlap and make difficulties | Rely on other cadres to do some tasks | |

**Figure 2.1** Facebook page update posted by Nurses at Al Seel PHU, Aswan


The screen shot above is from the Facebook group page was shot at "Al-Seel" PHU as the evaluation team completed their visit. The large poster hanging on the wall shows the challenge addressed at the PHC unit and the root cause analysis done by nurses to address their problem.

**Figure 2.2** Facebook page from Aswan Nurses.

https://www.facebook.com/groups/222924277893721

**Figure 2.3**. Flow chart on Challenge and Plan for Meeting it from Aswan Nurses.

**Figure 2.4.** Nurses and Supervisor at Dao Rawo Hospital (Aswan) in interview session with Dr. Madiha Said.

**Figure 2.5.** Nurses, Governorate Nursing Director and Nurse Supervisor after a Focus Group Discussion at Kom Ombo Hospital (Aswan) with three team members.

## ANNEX III: METHODOLOGY AND LIMITATIONS

### EVALUATION METHODOLOGY

This final performance evaluation was intended to determine the effectiveness of the IPN project in improving the performance of nurses to lead and manage their teams in addressing challenges in rendering quality health care and to achieve measurable, sustainable results. The evaluation tested the IPN theory of change (that improvement in nurse leadership and management skills leads to measureable results in infection control, basic nursing care, and communication between health care providers and patients) and provided a detailed analysis of the essential factors of IPN's performance. The evaluation also determined the extent to which planned deliverables were completed, the perceptions of key informants and stakeholders on the effectiveness and impact of the project's interventions, the sustainability of the effectiveness achieved at the individual nurse and MOHP facilities levels, provided lessons learned in USAID implementation and partnerships with counterparts, and suggested guidance for follow-on health and human resource and/or institutional capacity development programs.

The PMP developed for the IPN relies primarily on process and output level indicators. This evaluation first addressed the outputs, answering the questions pertaining to whether planned activities were carried out. The evaluation also reviewed other quantitative and qualitative data to determine the potential impact and sustainability of those completed activities. The team explored in depth the evidence behind those intended outcomes, the reasons behind outcomes that were not achieved and enabling factors for those that were, as well as unintended results. In this context, the evaluation team answered the aforementioned, key evaluation questions.

Social Impact's evaluation methodology combined a comprehensive, rigorous analysis of existing quantitative data with customized qualitative techniques designed to elicit primary data from a wide range of counterparts, partners, beneficiaries and other stakeholders. This mixed-method approach allowed for the triangulation of complementary data to elucidate linkages between project inputs, outputs, and outcomes.

The evaluation team analyzed quantitative and qualitative data in the context of the IPN results framework to investigate the extent to which evaluation findings substantiate the logic underlying the project's development hypothesis, including the sustainability of interventions at the PHC unit and hospital level. Specifically, the team used: 1) secondary data and existing project information, such as quarterly and annual reports and other technical reports, project and health facility databases; and 2) primary data collected through detailed KIIs, group interviews, and focus group discussions FGDs.

The evaluation team recognizes that health care provider knowledge, attitude and behaviors are inexorably linked to gender norms in Egypt. In order for nurses to be "empowered" to initiate and sustain key behaviors, they (female nurses) must negotiate and come to terms with gender barriers to women – who in many instances are not expected to challenge men, and workplace norms regarding the role and status of physicians and nurses. KIIs and FGD addressed awareness of these issues and solicit observations on the interplay between gender roles and key IPN outcomes. In acknowledgment of the critical role gender plays in the achievement of IPN

objectives, as well as the extent to which the project's activities have influenced broader gender considerations, the SI team employed customized gender-focused qualitative inquiry.

Specifically, qualitative interview guides for key informants and focus group participants included questions designed to elicit information on perceptions of gender roles with respect to key behavior changes sought by IPN. The evaluation used this data in conjunction with other completed gender analysis to present a detailed picture of IPN's performance framed within the context of delicate cultural nuances. It should be noted that due to the predominance of female nurses and the less than five male nurses available as KIIs during the evaluation, statistical analysis and presentation of sex-disaggregated data was not feasible.

The SI team met with the USAID Mission team during the week of October 12th and finalized plans for data collection from site visits (including administrative record review), structured and unstructured key informant interviews, and focus group discussions (FGD). Illustratively, the data collection methods and the calendar for the two teams (two members of the evaluation team on each) are shown in the table below within the data collection methodology section.

## DATA COLLECTION METHODOLOGY

### Mixed Method

The final evaluation of the IPN project was evaluated using mixed methods (both quantitative and qualitative techniques) to address the key evaluation questions and the sub-questions, ranging from review of secondary reports to collecting primary data through interviews and focus groups discussions with stakeholders, principal actors, and beneficiaries of project interventions. Site visits were conducted and include direct observations at a sample of primary care and hospital facilities as well as follow up with the trainees as a result of the training, technical assistance, and resources they received from the activity.

To address each of the key evaluation questions, the evaluation team relied on a variety of data sources and data collection methods. The Data Collection and Analysis Matrix in Table 1 below is organized around each of the evaluation's key questions and provides a description of data collection methods to be used. The three data collection instruments (nurse KII, stakeholder KII and FGD discussion questions) are presented in Annex 5 and reveal the tools which guided the collection of data from participant (nurse) KII, stakeholder KII, and FGDs with nurses, other providers, and possibly patients.

The main data collection instruments are as follows:

(a) **Desk Review of Documents**. The e-library consists of project documents, including strategic documents (proposals), past evaluations, work plans, various reports (baseline assessment, quarterly and annual), operational documents, partners reports and other related M&E documents. The evaluation team assessed the extent to which this secondary data could

be used to answer the evaluation questions and then identify data gaps which needed to be addressed as primary data collection during the field visit.

(b) **Collection and review of secondary data in the field**. In addition to the desk review before the field visit, the evaluation team gathered additional documents from stakeholders and partners in the field. From these, they extracted the quantitative and qualitative secondary data which served as the key sources of information for this evaluation including country level performance data for the various interventions in which IPN was engaged. An assessment of data constraints were also documented and the evaluation team mitigated where possible.

(c) **Site visits.** Sites were selected in order to assess the performance of the project interventions using selection criteria that represent the geographical regions, the types of facility (e.g., specialty hospital), the training and position of participants, and gather perspectives from a wide range of stakeholders in order to fill data gaps identified by the evaluation team as well as any gaps in IPN's programming.

**Table 1: Key Evaluation Questions, Data Collection Methods, and Schedule**

| Data Collection Method | Evaluation Question the Data Informs | Week (Sunday) | Team 1 Location | Team 2 Location |
|---|---|---|---|---|
| **Desk review of documents and project performance data** | Questions 1, 3 | 28-Sep | Remote | Remote |
| **In-country consultations with USAID staff (and IPN implementers)** | Questions 2, 3 | 12-Oct | Cairo | Cairo |
| **Key informant interview (KII) with stakeholders** | Questions 1, 2, 3 | 13-Oct | Cairo | Cairo |
| **KII continued** | | 19-Oct | Aswan, | Qena |
| **Focus group discussions (FGD)** | Questions 1, 2, 3 | 19-24 Oct<br>26-28 Oct | Aswan,<br>Luxor | Qena |
| **Structured group discussions** | Questions 1, 2, 3 | 19-23 Oct<br>25-28 Oct | Aswan,<br>Luxor | Qena |
| **Structured and unstructured site observations** | Questions 1, 2 | 19-23-Oct<br>25-28 Oct | Aswan,<br>Luxor | Qena<br>Luxor |
| **Hospital and primary health care facility (PHC) administrative record review** | Question 1 | 19-23-Oct<br>25-28 Oct<br>22 Nov | Aswan,<br>Luxor,<br>Ismaleya | Qena,<br>Luxor<br>Ismaleya |

SI's multi-level evaluation approach is important to understand the multiple phenomena present in the implementation of IPN, and to capture the perspectives of people experiencing IPN from different vantage points, including, for example, direct participants and outside observers. It helped mitigate the bias inherent in any one specific research method, support sound analyses,

and draw accurate conclusions[11]. Furthermore, the iterative nature of data collection allowed one method to inform improvements to the relevance of the next data collection tool to be employed.

The evaluation team's principal data collection will took place in the three governorates that IPN served most fully during the project—Aswan, Luxor, and Qena—as determined in conjunction with USAID/Egypt. The evaluation team used a stratified, purposive sampling method to select participants for interviews and focus groups and sites to visit.

Sites were chosen in conjunction with USAID/Egypt and MOHP in order to provide for inclusion of all types of challenges (IC, basic nursing, communication and PHC), geographic coverage (sites dispersed across the governorate), and the presence of at least two LDP-participants. In health facilities where an adequate number of LDP-trained nurses are available, the SI team also organized a FGD in addition to KIIs.

A roster of facilities (general hospitals, specialty hospitals and PHC units) where IPN participants (nurses) are working formed the universe from which our sample will be drawn for unstructured group interviews, structured KIIs and FGDs.

## Quantitative Methods

### Desk Review

Prior to undertaking field visits, the evaluation team reviewed all IPN related documents provided by USAID, MSH and IPN staff, and other stakeholders. This review includes, but is not limited to design documents, quarterly/annual reports, monitoring data, relevant assessments and evaluations, appropriate contextual data, and other information from government sources, program implementers, and researchers. SI also incorporated experiences and documented findings related to health systems strengthening, leadership and management capacity building, and other aspects of relevant development assistance in Egypt. SI also reviewed, as they were available, notes or recordings from prior Leadership Development Program (LDP) workshops regarding participants' workplace challenge action plans and nurse experiences with enacting them. While these experiences were also explored through other primary data collection methods, workshop records were invaluable resources to capture a wide range of successes and challenges experienced through the program.

The team organized and analyzed these data as a first iteration toward answering the principal evaluation questions. Monitoring data and quarterly reports, e.g. performance monitoring reports, were particularly useful in benchmarking responses to the first evaluation question (understanding the extent to which IPN achieved its intended goals). These evaluation questions were addressed by the SI team through its internal consultations, key informant interviews, discussion and focus groups, and site visits. As such, gaps in data or areas for further exploration were highlighted during this document review phase.

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[11] Bamberger, Michael. (2013). A Mixed Methods Approach to Evaluation. *Social Impact Concept Note Series*. Available at: http://www.socialimpact.com/press-releases/MME613.pdf

### Internal Consultations

SI carried out consultations with USAID primary intended users of the evaluation of IPN in Egypt to gain their understanding of the development hypothesis/theory of change for the program, identify areas of consideration to be explored in the evaluation, and inform SI's evaluation tools. These consultations did not duplicate KIIs in the event that USAID officials were part of the sample frame for discussion of the IPN project performance.

### Review of IPN Performance Targets and Actual Achievements

With the Performance Management Plan (PMP) developed by the Mission and project reporting, the evaluation team reviewed and reported on the extent to which the project results met its performance targets. Targets were assessed via reported results per the PMP, and analysis included an assessment of timeliness, and how internal project (such as changes in personnel) as well as external factors (government changes) may have affected the results obtained.

### Hospital and Primary Health Care Facility (PHC) Administrative Record Review

To assess the contribution of the IPN program to changes in infection control procedures, basic nursing care, and patient communication, SI worked with the USAID/Egypt Health Team to identify reliable indicators within health facility records that could contribute to determining the achievement of this evaluation objective. Site visits allowed the evaluation team to review a sample of administrative records to validate data found in project reports and/or key information interviews, as well as to make pertinent observations of facility and staff performance. SI consulted the administrative records at selected facilities for these indicators to identify and compare indicator values before IPN began with those available after extended IPN activities. A performance evaluation design, in absence of a rigorous counterfactual, cannot attribute changes in factors like nosocomial infections, provider hand washing, or patient care procedures to the program. However, these records provided valuable triangulation and validation of qualitative results to provide a more robust assessment of program effectiveness.

## Qualitative Methods

### Individual and Key Informant Interviews

Key informants constituted a principal source of data for this evaluation. Findings gleaned from key informant interviews provided critical contextual data with which to gain detailed understanding of IPN effectiveness, as well as to triangulate with existing quantitative data. Key Informant Interviews include, but were not limited to:

- USAID/Egypt Health Team – including Activity Managers (current and previous)
- IPN Technical Advisors from MSH
- District and Facility MOHP officials involved with patient care and PHC.
- Global Health Officers familiar with IPN (as available)
- MOHP Officials (as advised by the Mission) in Cairo (Central Ministry) and governorates

- MOHP Facilitators for LDP training; Nurse and Nurse Supervisor participants; LDP mentors from the University (i.e. , Suez Canal)
- PHU Officers in Charge, Physicians working in units where IPN activities occurred

KIIs generally involved two evaluation team members, one who led discussion and the other to record observations and key responses. The results of interviews were summarized by a coding process to record the respondent's type of facility, job title, gender and age group. It is the usual practice in Egypt to obtain the consent of the officer in charge or department head to hold interviews, and conduct them at the health facility or office of the interviewee (although alternative arrangements can be made if necessary), and, based on the semi-structured interview guide, last between 45 minutes to one hour.

The evaluation team initiated its inquiry in each governorate with a courtesy meeting arranged at the Health Directorate and meeting with responsible officials (usually MOHP). The evaluation team explained the purpose of the visit and the objective of the evaluation, and made sure the MOHP letter (in Arabic) sanctioning this work for USAID was received at the governorate. The team then shared the proposed plan for facility visits and the schedule of KII and FGDs, soliciting suggestions and endorsement from the officials. For example, the local officials advised if one of our informants at a facility is away on training or leave, and perhaps suggested a different schedule to ensure success in locating and interviewing key informants. Once a consensus was reached, the SI team initiated its field visits promptly, usually starting with a nearby facility on the same day.

To reach all three of the governorates and to ensure the team covered at least six facilities in each, the SI team, at times, sent two persons out as a team to one set of facilities, and two others to a different location. One person from the team, who was a native Arabic speaker at facility visits, conducted the interview and the second person took notes on the appropriate data collection instrument. When feasible, interviews were conducted in English, though translation was offered if requested. KIIs were largely structured, with opportunity for comments on any aspect of the IPN and related topics. Interview responses were not recorded verbatim, but were categorical and thematic. A summary of the direct multiple choice questions are presented in frequency tables, showing responses by category of worker, and facility. Separate gender tables were not warranted due to insufficient male nurses to provide a meaningful presentation.

The SI team used a semi-structured questionnaire guide to gather the views of the stakeholders on the key themes of the evaluation exercise to allow adequate and uniform coverage of topic areas while encouraging the natural evolution and expansion of the iterative qualitative data collection process. The guide was designed with universal questions that elicit detailed description for the relevant evaluation questions, and the team tailored the questions to each type of stakeholder using the rationale for selecting the interviewee and knowledge of their context.

While the evaluation team conducted some interviews in English, the inclusion of local Egyptian specialists on the evaluation team allowed interviews to be conducted in Arabic when necessary. The review of program data, in consultation with USAID/Egypt, informed the selection of participants for key informant interviews and the protocols for these interviews.

The SI team carried out KIIs covering a sample of key participants, stakeholders, and geographic sites in which IPN operated. The evaluation team worked with USAID and others to construct an appropriate purposive sample frame of institutions related to IPN activities (e.g., USAID/Egypt, USAID/Egypt Health Team, MOHP, MSH headquarters, governorate based health facilities, the IPN project, etc.) and individual respondents related to or with knowledge of IPN activities (e.g., staff in the above institutions, other participants in IPN training programs, patients affected by IPN, and others).Working in collaboration with USAID/Egypt, SI ensured the highest possible degree of representation in terms of gender, geographic distribution, and staff position for the samples selected for data collection. The composition of discussion and focus groups ensured the representation of women at all levels in order to address gender specific issues. Individual interviews were particularly valuable to capture highly specific or personal views that one might feel less comfortable sharing in a group, while KIIs enabled the team to learn more about broader groups of stakeholders.

Individuals or nurse teams noted by stakeholders to have been very successful or unsuccessful were purposively sought to provide insight to contributing factors. In addition, SI sought to sample individual LDP participants and conduct qualitative interviews with nurses, trainers, and health facility administrators and patients with whom the nurses interacted. These interviews assessed whether the program contributed towards proactive problem-solving and leadership activities by the nurse; whether this resulted in changes in health outcomes; the nurse's personal feelings of self-efficacy to lead and enact changes in her workplace; and whether her workplace and trainer provided the necessary support for this change, among other things. These qualitative interviews were complemented by health facility site observations and administrative record review. To the extent this approach provided seminal data and findings for IPN, we included mini-technical case studies in our report as text boxes.

Working collaboratively with USAID, MSH and other stakeholders, SI developed a structured questionnaire for the KIIs with a mix of open-ended and closed questions to balance comparability and the need for interviewees being able to speak freely about their experiences with the different project components. Our KII instrument was tailored for each key informant category and to frame in-depth discussions aimed at gleaning qualitative information on topics such as perceptions of how IPN has contributed to changes in nosocomial infection control, basic care, and patient communication (evaluation question 1); opinions about which factors of an enabling environment for future sustainability exist (evaluation question 2); and personal lessons learned based on experiences implementing or benefiting from the IPN program (evaluation question 3). All were addressed at the institutional, local and governorate levels. Special attention was also given to the influence of Egypt's political events and related IPN program changes on the outcomes of the program. SI pilot tested the KII protocol to ensure validity and clarity of the tool prior to full roll-out and did the same with all other tools developed for the IPN evaluation.

**Focus Group Discussions**

FGDs are particularly useful for supplementing KIIs and quantitative data by gleaning valuable information from discussions among group participants. The evaluation team conducted FGDs with various cadres of IPN stakeholders, from a sample of facilities where IPN trained staff NP to gain an in-depth understanding of their experiences with project interventions, and any large grouping that occur within its operations (i.e. health workers, MOHP officers, others as identified by the evaluation team). Each FGD consisted of a group of participants that had common characteristics of their engagement with IPN – type of intervention/benefit received and also taking into consideration balanced views by geographical distinction (e.g., governorate, urban, rural).

In addition to the individual KIIs, the evaluation team arranged FGDs to probe key questions and elicit open discussion of items that are more complex and merit in-depth discussion. FGDs were held at several sites for each type of facility (e.g., general hospital, primary health care unit). Once again, the FGD responses were not recorded verbatim, but analyzed for important messages, key controversies (if any) and common themes across groups (facilities, position, governorates). Analysis of the results contributed to the team's understanding of the IPN experience, positive and needing improvement, as well as to verify and amplify KII results, identify lessons learned and assess future prospects for sustaining the LDP program within their respective governorates.

Where possible, the FGDs were formed with the ideal number of participants in mind--between 6 and 12 persons--which allows for a wide discussion of opinion without over-crowding. During the FGDs, the convening member of the team began by using discussion questions to introduce relevant themes and topics, but also encouraged participants to elaborate on key points that they make so that depth can be achieved in the responses. The team member ascertained that opinions are representative of the whole group and encouraged wide participation, rather than relying on answers of the most vocal.

Findings from FGDs provided insight into perceptions of the ways in which IPN managed effectively, as well as how IPN activities have influenced behavior change among nurses and other cadres of health workers. FGDs are subject to biases similar to those common to KIIs (i.e. recall bias and subjectivity), and have the added challenge of being dominated by the most powerful voices in a group. Power dynamics between individuals based on status and sex was a key consideration for the evaluation team when constructing and moderating focus groups. Sex-disaggregated focus groups, namely among groups of community beneficiaries, may be used in order to mitigate challenges of this kind.

Data from FGDs was transcribed and coded using summary tables, which lends itself to rapid and efficient analysis and reporting for short-term field evaluations. Focus groups helped the team gain insight into the same topics as KIIs, but with the added benefit of hearing discussants converse about common or divergent experiences and opinions. By triangulating focus group findings with findings from other methods, the team increased confidence in the validity of their conclusions.

FGD targets were Nurse Supervisors who also may have been LDP facilitators, and LDP training participants. We planned several FGDs in each of the three Governorates to be visited. These consisted of at least three FGDs with LDP trainers, and three with nurses trained by LDP (participants in the IPN program). . The FGDs with nurses and LDPs helped elucidate the effectiveness of IPN's workshops supported by the project, how they have helped improve service quality, and provided more in-depth opinions about empowerment and factors contributing to or inhibiting success in achieving positive health changes through program participation. These FGDs also informed the team of the effectiveness and the acceptability of the IPN approach. In some cases, we used positive deviance assessment and appreciative inquiry in these focus groups. Positive deviance allowed focus group participants to identify nurses or facilities that have been very successful to help pinpoint factors that have led to their success. Appreciative inquiry helped determine specific factors working well for program participants and implementers and why, and then to leverage these functional areas to allow nurses to identify ways to create leadership and better health outcomes in other areas. These discussions can help USAID and other implementers to understand why certain nurse leadership conditions exist and how challenges might be addressed.

**Structured Group Discussions**

To complement our FGDs, SI will carried out structured discussions with groups selected from facility managers, service providers and other stakeholders affected by IPN activities in governorate MOHP offices, hospitals, health facilities and other institutions. The evaluation team aimed to understand from them whether or not the IPN activities were effective in achieving measurable results in 1) the three substantive focus areas specified by the project, 2) enhancing nurse leadership, and 3) whether nurse empowerment occurred. These group interviews were particularly useful in understanding community perspectives regarding any changes in health outcomes in the specific facilities as well as elements which might contribute to or mitigate against sustainability of outcomes.

**Site Visits: Structured and Unstructured Site Observations**

As pointed out above, our evaluation team visited at least twenty selected sites in Aswan, Luxor, and Qena and visit mentors at Suez Canal University in Ismaleya governorate. The evaluation team carried out structured and unstructured site observations of IPN program activities at sites in these governorates, using observation checklists and appropriate coding techniques, questions and analytical methods to guide our work during these visits. At sites in which nurse teams implemented a challenge and planned to address it, questions specific to the type of plan (e.g., infection control) were included.

Site visits also presented the opportunity to glean information directly from community beneficiaries; consenting patients may be asked about key provider behaviors, e.g., hand washing, explaining treatments clearly, etc.

Selection included factors such as:

- Duration and level of project support: Areas of relatively recent IPN engagement and areas of more long-term engagement. Facilities receiving support of longer than average

duration provided more useful insights on the project's effectiveness, while a sample including newer sites allowed closer examination of the effectiveness of recently applied tools or approaches.

- Demographic representativeness of beneficiary population socio-economic status: Sites were chosen based on known characteristics of target population (e.g. areas with higher-than-average rates of poverty/malnutrition).
- Performance of the individual health facility: A selection of both high performing and low performing facilities helped to understand factors contributing to success and barriers to achievement.
- Logistical convenience: ease of traveling, location of the facility, security considerations, etc.
- Areas of success and areas of difficulty and/or challenge
- Areas outside of the program area identified as having high vulnerability
- Budget for the evaluation exercise

## ANALYSIS PLAN

The evaluation team's specific analysis methods for the IPN evaluation were, for each method of data collection and each level or category of respondent, to organize (code and array), and disaggregate (separate by gender, by type of factors such as governorate, health facility type and size, and potentially other factors such as type of individual, etc.), and review the data for clustering, grouping, and validity. The evaluation team then triangulated data, using information from different sources and levels independently and in parallel to address the evaluation questions. The evaluation team compared findings, one to one, across each data collection method (KII, focus group, secondary data, etc.), each form of data (qualitative, quantitative), each source of data (nurses, MSH staff, MOHP staff, etc.), and each level of data (facility, local geographic area, governorate, national) or type of respondent (IPN participant, patient, visitor). Then we combined all data (findings) for each evaluation question and sub-question and compared and contrasted the data/findings from different data collection methods and sources for each question, settling on appropriate findings and conclusions for each one.

Our team carried out analysis on a rolling basis to examine, understand, test, and synthesize the data, and to produce clear findings, conclusions and recommendations regarding IPN. By starting the analysis while in the field, the team was able to identify areas where data do not align and collect further data to understand any differences.

Based on the data and corresponding analysis, the team developed findings, conclusions, recommendations, and lessons learned for future programming of IPN type USAID activity overall and for each evaluation question. Our recommendations were based solely on the conclusions we reached. In addition, and in accord with USAID policy, the SI team integrated into its analysis considerations of gender roles and inequalities as they affected IPN effectiveness, as well as to how IPN may itself have influenced gender statuses and relationships.

### Limitations on the Evaluation Methodology

The validity of the evaluation findings was affected by several factors, which SI addressed proactively. As pointed out in the analysis section above, we combatted bias (particularly recall, response, and selection bias) by using multiple sources of data to triangulate answers to each evaluation question. The evaluation team also used questions about specific examples ('anchoring responses') to probe general responses more thoroughly. Finally, the evaluation team included as respondents key informants with different 'causal distances' from the activity such as indirect beneficiaries and external experts who could provide evidence from different perspectives.

Another challenge was the short timeline to conduct the evaluation, with just nine weeks from start to completion. In our work plan, SI frontloaded much of the initial document review so the in-country Team Planning Meetings (TPMs) could be used to finalize the instruments and sampling plan, in coordination with USAID/Egypt and others. This evaluation was also undertaken right at the end of the IPN project, which allowed our team to use our KIIs and FGDs to prompt respondents about past events compared to using other methods such as closed-ended questionnaires.

A final challenge was that IPN took place when Egypt's governance and economy were disturbed, such that distractions and many parallel activities may have disguised or offset IPN's results. SI developed its instruments in collaboration with the USAID/Egypt Health Team to ensure the highest possible accuracy in identifying context, trends, events, and other factors affecting IPN results and in specifying and measuring IPN's results. The team also included documentation from other agencies and partners in our initial document review and took other activities into account when developing instruments and sampling.

### Table 2: Mapping Selection Criteria for Sites Visits

| Region/ Governorate | Intervention | % Nurses Affected | Performance (High, med, low) | Duration of engagement |
|---|---|---|---|---|
| Aswan | LDP | 12-15% | High/Low | 2010-2014 |
| Luxor | LDP | 15%+ | High/Low | 2011-2014 |
| Qena | LDP | 12-15% | High/Low | 2011-2014 |

LDP – 14-22 weeks of Training and On-Site Coaching (IPN annual report)

## INDEPENDENT ANALYSES OF DATA SETS

The evaluation team's initial desk based review identified the sources of data expected to be available and continued to assess this information as it was received during the evaluation period. Using a Data Summary template, the content of the KIIs and FGDs responses were assigned into

categories based on the evaluation themes/questions. The categories were then analyzed for frequency of responses from stakeholders in order to identify the main messages. Once this was done, the primary qualitative information was compared with the secondary quantitative information to interrogate, corroborate and expand on the findings from the secondary sources and then draw conclusions. This process was ongoing during the evaluation so that key themes in the responses could be extrapolated for the production of the preliminary findings and recommendations at the end of the field visit.

As proposed, SI employed triangulation and complementarity methods as per Stern et al, 2012, using definitions to check and clean the data collected. Secondly, information for each sub question was gathered and used to remove outliers, irregularities and subjective responses, fill information gaps, and determine the reliability of the data contributing to the recommendations. Where similar findings were obtained across the different data collection methods, the team could confirm the credibility of the results and demonstrate the confidence it has in the eventual assessments and recommendations. Any findings that the team came across, but which have not been corroborated through the triangulation or complementarity methods (such as suggestions from single sources for future programs) contain a note describing that the data is from a single source and the reason for its inclusion. However, to avoid this, the evaluation team made every effort to reinforce the reliability of the information, and performed further document review.

SI used multi-methods - including tables, graphs, photos, network maps, diagrams, and case studies - to display the data behind the findings in evaluation report. Summary narratives for each interview were used to outline the salient issues and each was linked to existing secondary data. During the evaluation, the summary narrative was used to identify new questions that require further exploration and these were added into the evaluation plan. Recurring themes/ideas were coded in broad categories to facilitate drawing conclusions.

Data from the questionnaire was processed using Microsoft Excel, PowerPoint and SPSS statistical package to compile summary statistics from the findings, which have been presented in tables and graphs. The team also used existing graphs, maps, and diagrams to process the newly collected information so that the findings could be displayed in the geographical coverage of the IPN operations. Tables have been used to summarize the number of beneficiaries (targets groups) and stratified by gender, age groups, and activity in the targeted geographical areas. When possible, photos depict actual project sites with beneficiaries and other activities. The recommendations in the evaluation report were based on the measured achievements of the IPN program and be linked where appropriate.

## DATA COLLECTION AND ANALYSIS MATRIX

| | Key Evaluation Question and Sub-Questions | Methods | Data Source |
|---|---|---|---|
| **Impact** | 1. Given the turbulent operating environment, to what extent did the IPN Program achieve its intended goals and results? Thematic area: Evidence of improved health services in Aswan, Luxor, Qena, Sohag and Assiut governorates. | Review of facility reports and survey data for trend analysis before 2009 to present | Egypt DHS, SPA (2004) |
| **Outcome** | 1 a) To what extent was IPN able to improve nurses' practices and services provided in hospitals and primary health care units in intervention governorates? | Quantitative: review facility/governorate reports on # infections, fatality rates in neonatal wards, project reports; Qualitative: KII, FGDs, group interviews, site visits including record review and observation | Facility reports (MIS), IPN Project reports, special studies |
| **Outcome** | 1 b) To what extent was IPN able to empower nurses in intervention facilities? And how has this impacted their performance and their ability to address their challenges? | | |
| **Outcome** | How did nurse/health care facility perform with respect to: 1) infection control procedures; 2) documenting patient records; 3) communication with patients; 4) communication among team | Quantitative: review facility/governorate reports on # infections, fatality rates in neonatal wards, project reports; Qualitative: KII, FGDs, group interviews, site visits including record review and observation. | Facility reports (MIS), IPN Project reports, special studies |
| **Outcome** | To what extent are practices promoted under IPN being sustained? | Quantitative: review facility/governorate reports on # infections, fatality rates in neonatal wards, project reports; Qualitative: KII, FGDs, group interviews, site visits including record review and observation. | |
| **Output 1** | Changes in nurse/provider knowledge of MOHP standards for a) infection control, b) basic nursing care, and c) patient-provider communication. | Quantitative: review facility/governorate reports on # infections, fatality rates in neonatal wards, project reports; Qualitative: KII, FGDs, group interviews, site visits including record review and observation | MSH Project Data, Project Reports, Special surveys |

| | | | |
|---|---|---|---|
| **Output 2** | Nurses committed to adhering to MOHP quality assurance standards and to assess and improve their performance and the health services in the hospitals according to these standards. | Review of Project and MOHP records (governorate, site visits); KII, FGD and interviews | |
| **Output 3** | Increased local training capacity through a group of trained facilitators | Review of Project and MOHP records (governorate, site visits); KII, FGD and interviews | Project Reports, site visits |
| **Process/Activities** | Number of persons completing Leadership and Development Program (LDP) | Review of Project records, site visits review of facility records and Personnel Department reports. | Project Reports, site visits |
| **Inputs** | Assessment of training quality by participants and stakeholders, and lessons for future interventions | Review of Project and MOHP records (governorate, site visits); KII, FGD and interviews | Project Reports, site visits |

| | |
|---|---|
| | NOTES: List of facilitates (by type) where IPN participants are working will be survey universe for KII and FGD involving nurses and other health providers |

## ANNEX IV: DATA COLLECTION INSTRUMENTS

### QUESTIONNAIRE TO GUIDE KEY INFORMANT INTERVIEWS WITH NURSES AND NURSE SUPERVISORS

| | | | | | |
|---|---|---|---|---|---|
| **Questionnaire - Nurses** | | | | | Team 1 Team 2 (circle) |
| | **Date** | | **Responder Code** | **Facility Code** | **Interviewer Code** |
| | Interview Date: | | | | |
| | **Challenge Addressed :** | | | | |
| | **Q #** | **Question** | **Reply Yes No DK** | **Key Points** | |
| Infection Control (IC) | 1 | In the past two years, have you received specific training on IC? | | If No, then go to Q 5 | |
| | 2 | If YES, was the training under the IPN project? | | If No, then go to Q 7 | |
| | 3 | How many hours/days of training did you receive? | | indicate hours or days by year | |
| | 4 | What were the best or most positive things about this training? | | | |
| | 5 | What were the aspects of training that were not positive? | | | |
| | 6 | Was the training the right duration? In the sit-down learning? In the practical follow on? | | | |

| | | | |
|---|---|---|---|
| | 7 Would you have any suggestions for improving the training offered in IC? | | |
| | 8 Were there changes in practices that came about as the result of IPN training? | | |
| | 9 a. Is there any evidence that IC has improved in your unit/facility since the IPN traning? b. If so, what is the source of this evidence? | | |
| | 10 Were you involved as an IPN Trainer of Trainers? | | If YES< then complete questions on sheet 2 |
| | 11 Men and women may approach work differently. Tell me about your experiences, and have you observed differences? Any problems? | | |

## KEY INFORMANT INTERVIEW (KII) QUESTIONS FOR STAKEHOLDERS

| | | | | |
|---|---|---|---|---|
| | **Project IPN Evaluation** | | | Team 1 Team 2 (circle) |
| | **Date of Interview:** | **Responder Code** | **Facility Code** | **Interviewer Code** |
| | **Q #** | **Question** | **Short Reply Yes No DK** | **Key Points** |
| **Infection Control (IC)** | 1 | Since you became a TOT for nurses, how many training sessions have you completed? Respond by year | | 2010___2011____2012_____2013_____2014 ____ |
| | 2 | What were the main changes brought about by the training? | | |

| | | | | |
|---|---|---|---|---|
| | 3 | Once the Training was completed, was further assistance provided to the training participants? Please give us some Examples? | | |
| | 4 | What were the best or most positive things about being a TOT? | | |
| | 5 | What do you think are the major obstacles in adhering to MOHP IC standards? | | |
| | 6 | Did the IPN training lead you to make changes in IC, can you provide any examples of specific changes made? | | |
| | 7 | Compared with before the training, do you feel greater ability to affect changes to meet IC standards? | | |
| | 8 | Since the IPN Project ended, how many nurse trainings have you held? | | |
| | 9 | Would you have any suggestions for additional actions to improve IC practices? | | |
| | 10 | Men and women may approach work differently. Tell me about your experiences, and have you observed differences? Any problems? | | |

**FOCUS GROUP DISCUSSION (FGD) QUESTIONS**

## Focus Group Discussion (FGD) Questions

Governorate: _____ District: _____ Facility/Town _____

Number of FGD participants: START: _____ END: _____

| | |
|---|---|
| 1. Please raise your hand to show what kind of challenge you addressed following your training (MSH, IPN)?<br>A. IC<br>B. BNS<br>C. Patient provider Communication<br>D. Teamwork – team communication<br>E. Other | Tally totals for each category:<br>A B C D E |
| 2. What were the best or most positive things about this training? | |
| 3. What were the aspects of training that were not positive or need improvement? | |

| | |
|---|---|
| 4. Was the training the right duration? In the sit-down learning sessions? | |
| 5. Was the supervisor supportive of your plan to address a challenge and make improvements? If so, how? | |
| 6. If they were not supportive, what did they do? Please give an example | |
| 7. Do you feel the training has changed the way nursing is practiced in your facility? Do you believe that the changes will continue into the future? | |
| 8. If there was a new training program, would you have any suggestions for improving the training offered?<br><br>For instance, do you see a need to have more technical training (e.g., on IC, nursing care, PHU, M&E, etc.) as well as leadership and management training? Other improvements? | |

## ANNEX V: SOURCES OF INFORMATION

### DOCUMENTS REVIEWED OR REFERENCED

### PROJECT DOCUMENTS AND REPORTS


- Improving the Performance of Nurses (IPN) Implementation Plan (Revised). December 16, 2013.
- Improving the Performance of Nurses in Upper Egypt Program (IPN), Draft Revised Workplan: March 1, 2012 – November 30, 2013.
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## UMMARY OF FINDINGS, CONCLUSIONS/LESSONS LEARNED, AND RECOMMENDATIONS

***operating environment, to what extent did the IPN Program achieve its intended goals and results?***
***to improve nurses' practices and services provided in hospitals and primary health care units in intervention governorates?***
***to empower nurses in intervention facilities? And how has this impacted their performance and their ability to address their***

| | Conclusions and Lessons Learned | Programmatic Recommendations |
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| turmoil and civil unrest, the IPN eved most of its performance mance indicators from the PMP and achieved or nearly achieved s. Two indicators (#1 and #5) | THE IPN Project nearly met its goals and objectives. Political turbulence and civil unrest resulted in impaired pace and scope of project activities. | Follow-on Activities to improve health worker performance should have impact-level performance measures as well as outcome (output) measures. Further, organizational and institutional performance changes should be measured as well as individual changes. (Program measurement) |
| DP improved nurses' problem e pro-active deportment among rs (KIIs with nurses, NSs, and | Completion of the LDP is associated with success in changing nurses' motivation, mindset, and practices in intervention facilities. The evidence points to improvements in infection control practices, patient communication and care, communication, and problem-solving among teams/departments, and improved ante-natal care. | Selection criteria for participation in leadership (or related) training should be standardized and consistent with project's development theory (i.e. lead to sustained changes in organization and performance). (Program consistency) |
| chnical sessions led by MOHP and promoted proper provide care according to Is with nurses, NSs, and | LDP resulted in improved nurse capacity and performance, but the small number trained (at any one department or hospital) and the steady diminution in the number of trained nurses at target facilities reduced its momentum and sustainability. | The evidence points to improvements in infection control practices, patient communication and care, communication and problem-solving among teams/departments, and improved ante-natal care. |
| ardized selection criteria for varied across governorates and PHC unit), according to the ls (KIIs with stakeholders). | LDP activities were designed and implemented with little to no synthesis (or alignment) with other USAID health and governance activities. The IPN did not succeed in arranging complementary or reinforcing activities from other projects. | |

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| **Finding 1.5** LDP nurses feel empowered to influence other staff members, e.g., in making changes to enforce patient's rights, to do their jobs thoroughly (Nurse FGDs and KIIs with all groups). | Participation in MSH's leadership program empowered nurses to be pro-active in decision making, learn to assess and solve problems (address conflict) better, communicate vital information to peers and supervisors, set and measure performance, and share an improved work climate. | Reinforce leadership through making it a cross-cutting component of all training programs, including technical, quality improvement, management, health reform, etc. |
| **Finding 1.6** Based on IPN's achievements, the project's theory of development regarding changes in nurses' behavior and improved health services was at least partially validated. | Nurse supervisors (NS) play a critical role in motivating nurses and sustaining LDP gains. | |
| **Finding 1.7** Nurses and supervisors credit LDP with changing participants, including increased awareness and adoption of MOHP quality standards of practice, patient-centered care, and problem solving approaches. | Agreement and shared commitment between Nurse Supervisors and Nurses on LDP is crucial to momentum. Thus, a lesson learned is that ensuring the involvement and ongoing commitment of nurse supervisors at the facility/department, ideally before training begins, is an essential step to sustaining gains in leadership and performance. This could be done by involving nurse supervisors in pre-training activities or training them as LDP facilitators for follow-up activities, as was done in a number of instances (but not all). | |
| **Finding 1.8** Leadership and other MOHP programs/initiatives share many common features with Quality Improvement, Centers of Excellence, and other ongoing MOHP initiatives. | Other human resource development approaches, such as "Sustained Organizational Performance," continuous quality improvement, mentorship and peer-review for nurses merit further consideration for future activities, as they combine human resource interventions with policy and system change, have some foothold in Egypt, and may contribute to transformative and sustainable change. (Examine Alternatives for Effectiveness) | Involve local NGOs in design and implementation of any future human resource development projects and gain from their experience and expertise. (Local Ownership and Effectiveness) |
| **Findings - Aswan** | **Conclusions and Lessons Learned** | **Recommendations For MOHP** |
| **Finding 1.9** More than a year after completing the LDP, nurses are losing acquired skills, and this underlies their recommendation for continuous refresher training. | As the initial enthusiasm and the number of LDP-trained staff diminish over time, the "leadership mindset" becomes less widespread throughout the facility. A lesson learned is that LDP training needs to cover all or nearly all of the staff in a department/facility and should continue indefinitely to achieve and maintain "critical mass" for sustaining it. | Further integrate leadership training inside ongoing or planned MOHP in-service education (training) programs, or through creating a leadership center within the MOHP. |
| **Finding 1.10** LDP participants maintain strong commitment to leadership and see LDP as a relevant and continuing influence on their outlook and work. | | |

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| **Finding 1.11** Om Habibeh Foundation (Aga Khan Network) played a key role in providing a base of support for the project in Aswan during its start-up phase, maintains close relations with the MOHP, and continues to work closely with them on nurse development in the governorate. As part of the Aga Khan Network, OHF continues to work with nurse development, but has a wider scope of training and a longer time horizon than MSH. | NGOs and indigenous organizations could innovate and reinforce leadership in the MOHP. | Periodically, but at least annually, conduct anonymous employee work climate assessments to monitor employee morale and perceptions. |
| **Findings – Luxor** | **Conclusions and Lessons Learned** | |
| **Finding 1.12** Infection control challenges initiated by LDP were successful in Luxor and had lasting impact on nurses' awareness of MOHP standards, their practice of IC procedures, and on patient services (in some areas). | USAID and the MOHP could capitalize on current MOHP initiatives (or departments) to advance LDP principles and practices. For example, greater integration with quality improvement or infection control (as in Luxor) at MOHP would bolster the sustainability of leadership as practiced in LDP. | |
| **Finding 1.13** Continuation of promising IC activities in Luxor is impeded by the lack of communication and agreement between the IC department and the MOHP leadership in the Governorate. | | |
| **Finding 1.14** Among the physician directors of Luxor hospitals, knowledge and support of LDP is weak, and most are not familiar with the content and objectives of the leadership program. | | |
| **Findings - Qena** | **Conclusions and Lessons Learned** | **Recommendations For USAID** |
| **Finding 1.15** The LDP program in Qena started and stopped again, impeding the pace and scale of operations. | The inadequate number of nurses and nurse supervisors trained and the lack of joint MSH/MOHP follow-up (due to withdrawal of MOHP support) prevented the IPN from achieving all of its performance goals. | Engage with MOHP officials at the Governorate level frequently (e.g., quarterly) to monitor activities and to maintain support for USAID activities; especially when key changes occur. |
| **Finding 1.16** Despite the lack of MOHP support for IPN activities during much of the project and the minimal follow-up of the LDP workshops in Qena, the experiences gained by nurses were positive and created demand for further leadership and "on the job" training. | Multiple iterations (three major revisions) of LDP show flexibility and commendable resolve by MSH (and USAID) to accommodate the turbulent situation in Egypt. | |

| *Question 2. To what extent are project interventions sustainable at the level of nurses and at the level of the institutions?* | | |
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| Findings | Conclusions and Lessons Learned | Recommendations |
| **Finding 2.1** There is no MOHP department or senior-level officer with official authorization or recognition of responsibility for leadership training at any level: national, governorate, or district. | To sustain leadership within a large organization such as the MOHP, the intervention needs to find a "home" with strong advocacy. At the facility, district and governorate level, training of physicians and administrators in positions of authority could strengthen leadership and amplify the benefits of nurse training. To sustain LDP in the MOHP generally, more advocates are needed (for a critical mass) at all levels of the MOHP. Future projects should include (or ensure from another partner) a component of leadership training for physicians and administrators in management roles as well as for nurses. | Initiatives such as leadership training should promote linkages and harmonize efforts with other established Egyptian programs, such as (MOHP) Quality Improvement, Centers of Excellence, etc. (Effectiveness; Sustainability). |
| **Finding 2.2** Some senior MOHP officials in the governorates (Aswan, Qena) are generally not familiar with LDP and have not yet made a "home" for LDP within any department or ongoing/planned MOHP initiative (e.g., Quality Improvement, Centers of Excellence, Five-year Strategic Plan). | New or extended leadership programs need to involve enough of the workforce (over time) to reach a critical mass, whether at PHC, hospital or governorate levels – or by health cadre, e.g., physicians as well as nurses, to affect widespread systemic change. (Impact and Effectiveness) | Consider providing technical support to the nurses' syndicate to promote leadership, professional growth and improved performance of nursing through training, mentorship, license and accreditation programs. (Reinforce and Broaden Support for USAID Objectives) |
| **Finding 2.3** The critical mass of trained nurses required to sustain change and produce transformation or systemic change within MOHP health services was not achieved and maintained. | | The declining influence of LDP over time suggests the scale and duration of any future program be revised to simultaneously address reinforcing changes in policy and operational systems (per Figure 2) in order to enhance the likelihood of systemic, sustainable change. (Impact and Sustainability) |

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| **Finding 2.4** The head of the Nursing Syndicate expressed an interest in furthering leadership through developing programs it could offer to its members and sustain over time. | A number of approaches to follow-up and refresh leadership development have been tested and reported on in the literature. The lesson learned is that this crucial function needs further development and fine-testing in Egypt, and within the MOHP | New leadership programs need to provide for more frequent (monthly) and effective follow up to sustain the momentum for improvement. (Sustainability) |
| **Finding 2.5** The Om Habibeh Foundation (OHF) continues to work closely with the MOHP on nurse development in the governorate. Future activities to strengthen human resources in health would benefit from an in-depth analysis of the OHF approach and its results.<br><br>**Finding 2.6** The LDP as implemented under the IPN project shares some common features with other ongoing and planned MOHP programs/initiatives. In the competition for future MOHP support, LDP has not competed successfully to either replace or influence the MOHP's Quality Improvement Directorate, or the proposed Centers of Excellence, and other ongoing MOHP initiatives<br><br>**Finding 2.7** The LDP as implemented under the IPN project shares some common features with other ongoing and planned MOHP programs/initiatives. In the competition for future MOHP support, LDP has not competed successfully to either replace or influence the MOHP's Quality Improvement Directorate, or the proposed Centers of Excellence, and other ongoing MOHP initiatives | | |
| Findings - Gender | Conclusions and Lessons Learned | Recommendations |
| **Finding 3.1** Extensive investigation with nurses in the three UE governorates reveals a prevailing opinion that nurse supervisors and facility directors are managing male and female nurses adequately in terms of balancing community with individual employee expectations, but female nurses will remain professionally and economically disadvantaged under these conditions. | 1. Gender issues are evolving rapidly as more male nurses enter the profession.<br><br>2. The LDP training did not specifically and adequately address gender issues in the workplace and provide gender training as part of its formal training sessions and follow-up activities. | Future programs to develop human resources should include a gender component, increasing awareness of gender in the workplace and as a health services issue. |
| **Finding 4.0** As a basic measure of cost –effectiveness, the project expended a total of $5,129.66 per direct beneficiary (LDP participants and facilitators trained). In the absence of a basis for comparison, the team did not reach a conclusion on the appropriateness of these costs. As noted in other findings, however, greater involvement and use of indigenous organizations have the potential to reduce the average cost per beneficiary. | | |

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