

# FISTULA CARE

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## FISTULA TRAINING STRATEGY, GUIDELINES, AND STANDARDS

Updated

12/12/12



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This publication is made possible by the generous support of the American people through the Office of Maternal and Child Health, U.S. Agency for International Development (USAID), under the terms of associate cooperative agreement GHS-A-00-07-00021-00. The contents are the responsibility of the Fistula Care project and do not necessarily reflect the views of USAID or the United States Government.

Suggested citation: Fistula Care. 2012. *Fistula Training Strategy, Guidelines and Standards*. New York: EngenderHealth/Fistula Care.

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## **INTRODUCTION**

There is a crucial need to initiate and sustain fistula programs that increase access and strengthen the capacity of centers to provide high-quality services for the repair and care of women living with obstetric and traumatic gynecologic fistulae. To do this, it is important to pay particular attention to the quality of training and to proactively determine how and if training fits into other elements of the program's performance. This quality in turn is affected by the adequacy of resources for assessing and ensuring trainers' qualifications, for training and following up with providers, and for improving the quality of care that the program offers. It would be devastating to a fistula program if women, their families, and the community were to lose confidence in the health care system that is supposed to help them because of poor-quality training and service delivery that causes them more harm, thus increasing their burden. It is therefore necessary to have proactive discussions about the quality of training, of supervision, and of follow-up with country missions, local ministries of health, hospitals, professional associations, and nongovernment health organizations. These considerations must be included in the work plan and budget allotment.

This training strategy goes toward informing a uniform training approach and improving the quality of training and subsequent service delivery. It is an outline for more detailed training guidelines and standards that would include more technical content. The assessment of training outcome and impact is a component of monitoring and evaluation.

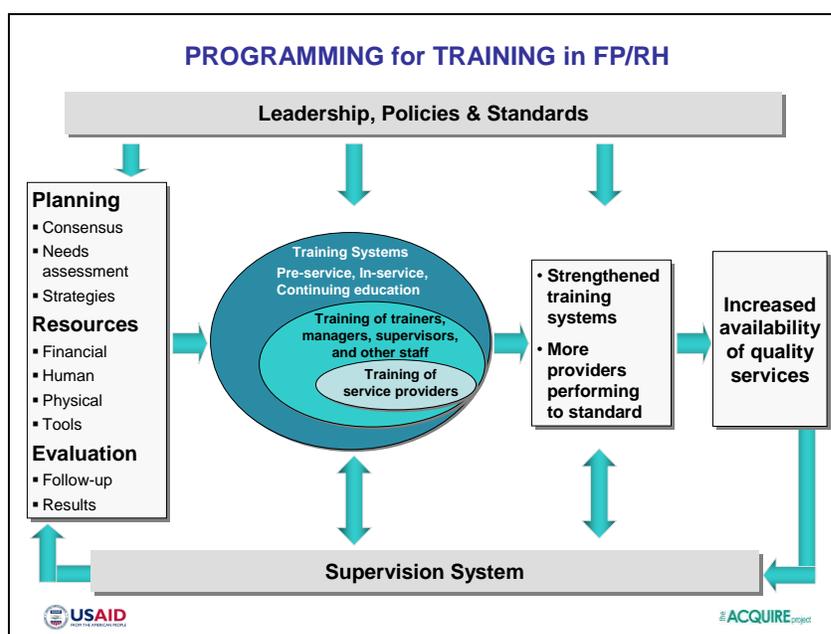
## **THE CONTEXT FOR FISTULA TRAINING**

This strategy for fistula training recognizes and tries to address several distinct challenges that can hinder quality in training. These include:

- The many, different clinical types of fistula and the widely divergent degrees of surgical complexity encountered both in repair and in training
- Lack of standardization in training, in curricula and reference materials, in duration and models for training, and in classification of fistula
  - Standardization requires some collaboration with other key players and stakeholders. Some of the stakeholders are represented in the International Fistula Working Group, led by World Health Organization (WHO), the International Federation of Gynecology and Obstetrics (FIGO), and the United Nations Population Fund (UNFPA), which developed a uniform training strategy. EngenderHealth is represented on this team.
- Differing approaches and skill sets for service provision and for training
- Different training-site resources, including personnel, general surgical and fistula-specific equipment, expendable supplies, and training materials (library books, manuals, references, anatomic models, audiovisuals, videos/films, job aids, computer hardware and software, and case studies)
- A dearth of evidence-based clinical and operations research data

## PROGRAMMING FOR TRAINING IN REPRODUCTIVE HEALTH

**Programming for training** is the process of planning, implementing, strengthening systems for, and evaluating training within the larger setting of reproductive health (RH) service delivery, to improve service delivery outcomes. Programming for training reflects a comprehensive view that considers both the systems in which training and services are provided and the greater social/political environment that influences service delivery. The ACQUIRE Project, in which EngenderHealth was the managing partner, took a holistic, service-oriented, systems approach to programming for training, focusing on the centrally important fundamentals of care—informed choice, medical safety, and continuous quality improvement (QI). The project provided technical assistance in programming for training to RH program partners, who implemented training in pursuit of service delivery goals.



The Programming for Training model depicts the dynamics of the *inputs* and *activities* that contribute to the desired program *outputs* of strengthened training systems and more providers performing to standard, which in turn contribute to achievement of the larger program *outcome* (goal), **increased availability of quality services**.

## THE OVERALL APPROACH TO FISTULA TRAINING

EngenderHealth/Fistula Care takes a holistic, service-oriented, systems approach to training that focuses on the centrally important fundamentals of care—choice, safety, and QI. With this focus, training is intended to contribute to sustainable improvements in quality of, availability of, access to, and use of fistula services.

This approach to programming for clinical training is based on performance and QI principles and methodologies, of which training is one. The approach reflects a comprehensive view that considers the systems and greater social/political and clinical

environment in which services are provided, including the structure and level of decentralization at the ministry of health level; national service delivery and training policies, protocols, and guidelines; and social/cultural norms. The interventions are guided by processes that involve stakeholders in identifying the gaps in service delivery and provider performance, as well as the interventions for overcoming barriers to optimal service provision. This includes the type of training and the cadre to be involved.

Prior to training, EngenderHealth may engage with national, state, or district-level health authorities regarding development/update and approval of training materials and policies, to identify and strengthen training resources and to develop/agree upon a strategy for training implementation. Simultaneous with training, EngenderHealth works with both on- and off-site supervisors to ensure that trainees' newly acquired skills will be employed and that supervisors and trainers have the skills to provide mentoring and coaching to providers posttraining, so they can become confident in and comfortable with using their new skills.

Training is used as part of the learning process, interacting with and mutually supporting supervision, management, and logistics interventions. This requires program managers, supervisors, and trainers to take an active part in:

- Assisting providers to identify their own training needs
- Creating a supportive environment in which to apply what is learned through training
- Ensuring that providers also have chances to use new knowledge, attitudes, and skills that they acquire in training, with equipment, supplies, reference materials, infrastructure, work environment, and policies affecting services
- Monitoring provider performance

## **KEY PRINCIPLES AND PREMISES IN FISTULA TRAINING**

The training approach is characterized by five key principles:

- The welfare of the client guides all training.
- A combination of didactic and hands-on training is important both to bring less-experienced surgeons to a baseline level of technical skill (for simple repairs) and to help bring surgeons with more experience to a greater level of technical skill.
- It is important to assess and train doctor-nurse teams (with counselors or nursing assistants, if possible) together, to the extent possible.
- Providers must consider and conduct counseling as an integral part of clinical care (from preoperative to postoperative).
- Training should be competency-based, and only the “final” assessment of trainees will inform the level of surgical complexity or fistula class that they are competent to repair.

Didactic sessions involve open and participatory learning activities. The facilitators meet regularly to review progress of the training and to plan subsequent activities.

The training approach is also guided by the following premises:

- It uses an experiential learning model.
- It links training to performance.
- It evaluates training and performance.

*Experiential learning* involves four steps: having an experience, reflecting critically on it, conceptualizing and interpreting its meaning and learning from it, and then applying the learning and review through action in new situations (Kolb, 1984). This model works for knowledge and skills training, one-on-one training, and group training. It builds on the individual's experience and encourages him/her to determine appropriate application to the specific job situation.

Clinical training should be designed and conducted according to **adult learning principles**: It should be participatory, relevant, and practical. It should utilize behavior modeling, be competency-based, and incorporate humanistic learning techniques.

A variety of learning methods can be used to make the learning interesting and relevant, to maintain the trainees' level of motivation and build on their self-esteem, and to relate their learning to their everyday job responsibilities. This can be achieved by creating an environment that is conducive to learning, by providing opportunities for discussion and application of what they have learned, and by providing positive feedback on their success and support for areas that need improvement. They should feel valued and respected for their experience and perspective. Training should be relevant to what they know and should relate to their job expectations. The environment for learning is reinforced using a variety of activities. Learning needs to be applied promptly, both during training and immediately afterwards.

For participants to have a clear picture of the performance expected of them and for them to be able to learn more rapidly and effectively, they are *coached* by watching as trainers demonstrate the requisite skills or activities clearly, before they perform a return demonstration.

The goal of training/precepting is to effectively and sustainably transfer knowledge, attitudes, and skills. To this end, the training must draw on the participants' own experiences, utilize case studies, consider the participants' specific needs and interests, and integrate theoretical/didactic course content with simulation and practicum/clinical practice. The role of the trainer is to guide/facilitate the learning process in a logical order. A key element of this approach, which helps link training to performance, involves giving the participants an opportunity to think about and discuss application of the newly acquired skills to their own work situations.

Competency-based training (CBT) is an approach to training that focuses mainly on what the provider can actually do in the workplace as a result of the training. It is concerned with training to standards rather than with the individual's achievement in comparison with others in the class. It emphasizes progress in the mastery of specified knowledge, attitudes, and skills and is trainee-centered rather than focused on the unit of time and trainer-centered. CBT uses the following guidelines:

- Ensure adequate resources and materials to support the training system (provision of training materials, manuals, equipment, classroom-based training equipment, follow-up and support, etc.)
- Identify training competencies through national and district-level learning needs assessments
- Write training objectives to directly address the training competencies
- Follow a system of facilitative supervision to provide feedback, coaching, and continued support to facility-based providers
- Assimilate/familiarize all trainers on CBT training principles, including skill standardization and competency-based assessment tools (This last aspect is especially challenging in fistula programs.)

Since the training is competency-based, the main focus is on what the trainee can actually do—and will be expected to do—in the workplace as a result of the training. The training also involves instruction in precisely defined skills and knowledge to set standards and assessment of competency through formative and end-of-course observation/assessments.

This approach links training to subsequent desired performance and addresses the learning needs (skills, knowledge, attitudes) of staff at the health care facility. The staff and supervisors are engaged in assessing their own needs and in planning to meet those needs, as well as in planning subsequent ongoing provision of services, including regular monitoring and supervision for improved quality and expanded service delivery. This is where the critical intersection of training and QI approaches and tools has a part to play. QI approaches and tools enable staff to determine if “training really is the (or part of the) answer” to the challenges they face or whether other systemic issues also need to be addressed for skills acquired to be used, updated, and sustained. Without this, it would be wasteful and counterproductive to invest scarce resources in perfunctory training that due to other systemic weaknesses does not result in improved access to and quality of services.

### ***Linking Training to Performance on the Job***

Transfer of learning—defined as ensuring that knowledge, attitudes, and skills acquired during training/learning are applied on the job—is an interrelated series of tasks. These tasks are performed by the recent trainee, supervisors on- and off-site, trainers, and co-workers before, during, and after the training to maximize transfer of knowledge, attitudes, and skills so as to improve performance on the job. National and district-level stakeholders play an important role in facilitative transfer of learning process. Guidelines needed include:

- Institutional commitment (e.g., that national training policies and service delivery guidelines are in place and that providers are oriented to their use)
- Effective supervision (e.g., facilitative supervision), which emphasizes mentoring, joint problem solving, and two-way communication between supervisor and supervisee
- Creation of a supportive work environment to provide trainees with an opportunity to use what was learned and assurance that the resources they need to do the job will be available
- Coaching and confidence-building that facilitate on-site coaching for providers, on-site problem solving, and constructive feedback, all to build provider confidence

- Facilitation of teamwork, by using team-building approaches, COPE<sup>®</sup>, whole-site training, and facilitative supervision
- Follow-up of training, by facilitating follow-up and support of all training events, to ensure that trainees are enabled to start services at their worksites as soon as possible
- Whole site training and supervision (e.g., use of teamwork and sustainability strategies to enhance the application of newly acquired skills)

## **FISTULA TRAINING SYSTEMS, METHODS, AND MATERIALS**

The training approach focuses on strengthening existing local training systems, rather than on establishing new parallel systems.

- The methods are humanistic, with use of anatomic models where available, audiovisuals, etc., to allow trainees to acquire skills and attain competence faster, with less potential for discomfort and possibility of harm to clients. (Since suitable anatomic models are not always readily available, EngenderHealth looks to identify and supply appropriate materials.)
- Although the training is competency-based, data are needed to help in planning—e.g., 10 supervised operative cases and 4–12 weeks for the initial session of skills competence (to be followed by other sessions), although some take longer and others less. Also, given the varying complexity of fistula surgery, only a small proportion of cases may be suitable for the trainee to operate on.
- For didactic sessions before and after the hands-on practicum, it is necessary to use an engaging variety of methods, materials, trainers, materials (e.g., audiovisuals), case histories, and role plays, as appropriate.

The materials and curricula used by EngenderHealth/Fistula Care in clinical training reflect international and/or national standards of practice. Because curricula are somewhat static documents, field staff are encouraged to access the latest international guidelines and standards of practice from WHO and other international agencies, such as UNFPA and the Women’s Dignity Project, and materials from master trainers. Some of these materials can be accessed through the EngenderHealth web site and other resources, such as contraceptive technology updates presented by agency staff and professional meetings, to ensure that the latest scientific findings and recommendations are incorporated and reflected in the trainings they conduct. When necessary, the materials can be adapted to conform to specific program needs. They reflect the agency’s holistic approach to performance improvement, in that they incorporate nonclinical service delivery elements such as counseling and infection prevention.

### ***Assessment of Training Needs***

Assessing training needs should focus on two important aspects of the training domain: performance of providers (in terms of knowledge, attitudes, and skills), and the capacity of the institution or system to provide trainers. The assessment finally should be able to provide direction.

A critical step in planning is to identify the current gap that warrants a training intervention—i.e., the gap between what is *done* and what is *supposed* to be done in the following three areas:

- *Knowledge* focuses on the information necessary to deliver the fistula service. What new knowledge should be included in the course?
- *Skill* is the complete sequence of practical steps that are necessary to perform a fistula repair.
- *Attitude* is a tendency to behave in a particular way in association with the beliefs people have that will influence the job they perform.

Performance needs assessment (PNA) is a method of identifying performance gaps at the national or district level. It is based on an analysis of desired performance and actual performance among providers or systems.

Training for skills and knowledge may be just one of the interventions needed for performance improvement, along with clear job expectations (job description), motivation and incentives for performing to standard, clear and immediate performance feedback, supportive work environment, and job satisfaction,

A training needs assessment is a process that assists in identifying the training capacity (physical infrastructure, human resource, and policy and guidelines) of a national training system and of the institutional service delivery facility, so as to plan, implement, and evaluate a training program.

Institutional (e.g., Ministry of Health) training needs assessments should be geared toward finding the following information through review, interview, and observation:

- The organization that oversees training
- Availability of a training strategy/plan to guide training events
- Types of training curricula available for conducting training (often a challenge in fistula programs)
- Number of training sites available to conduct training
- Number of qualified trainers for specific training categories (e.g., to attaining competence for simple or complex fistula, or to becoming a trainer of trainers)
- Number and cadre of providers to be trained per year/per training type
- Training equipment and supplies (audiovisuals, equipment, and training materials, including training manuals)
- Infrastructure for training follow-up and support to new providers, as well as of trainers within the training system

A facility needs assessment is conducted to identify a training site that provides services and that may have the capacity to provide quality training. For the clinical training component, a facility assessment looks at the adequacy of proposed clinics to provide clinical training and typically includes:

- Availability of fistula services
- Number of staff, by category, routinely involved in fistula services
- Qualifications of service providers

- Types of fistula services offered
- Average number of new and return fistula clients
- Adequacy of infection prevention and other QI practices
- Availability of appropriate equipment and supplies
- Training capacity and capability of the site

## **FISTULA TRAINING MODELS**

The training strategy explores the use of different training models (modified from Maggie Bangser and UNFPA Fistula Training workshop, Niamey 2005). The most frequently used, among others, are:

- On-site training by a master trainer—e.g., an expert trainer visits a hospital to do hands-on training
- Workshop training—intensive trainer-led instruction for a small group of surgeons at a busy center
- Outreach training—e.g., a less-experienced surgeon accompanies an expert during outreach visits to remote hospitals, to gain exposure and training
- Apprenticeship training—e.g., a more experienced surgeon or “mentor” meets with a less-experienced “apprentice” for periodic exchange and hands-on training (This may be on-the-job training, but it needs to be structured and with reference materials.)
- Training center—establishment of a regular training program at a major hospital doing fistula repair
- Medical school and postgraduate training—mostly for theoretical training, but with potential for arranging some structured hands-on instruction at the medical school or at an affiliated site, especially for obstetrics and gynecology and surgery residents

These different models may overlap, and they have varying strengths and challenges, depending on local circumstances (e.g., implications of being trained away from one’s own site for extended periods of time from sites that commonly are already personnel-deprived). The training strategy therefore needs to be flexible and adaptable to the capabilities of specific service and training sites, as well as to trainer and training-site resources. Furthermore, even for a specific site and team, it may be necessary to change or to use a hybrid model for update training, training follow-up, and proficiency-level training.

## **CADRES OF HEALTH CARE PROVIDERS AND COMMUNITY MEMBERS TO BE TRAINED**

The training approach is used to enable various **cadres** of health care providers and community members to perform a range of functions. The training organizer should consider government policies that will support or inhibit trainees from carrying out practical training, including surgical procedures (particularly for trainees/trainers from outside the host country), along with any cultural barriers. There may be some variation in the cadres trained, depending on different country policies.

For each cadre of individuals trained, there are specified skill levels that must be achieved and then documented in the form of a certificate. However, depending on country context, a different form of recognition may be established to acknowledge the level of skill attained. The trainer documents and certifies skill level, areas of strength, and aspects that will need monitoring and strengthening during follow-up. Accreditation in most places is by the Ministry of Health or, occasionally, by a local university. The following are examples of types of training, by cadre:

- *Doctors* with a minimum of three years of surgical experience (obstetrician-gynecologists, urologists, general surgeons, general practitioners, as well as clinical officer/assistant medical officers, depending on the country's policy/regulations [mandated by the Ministry of Health] concerning who can perform surgery), for training on conservative and surgical management of fistula (They may also benefit from counseling training in fistula care.)
- *Nurses*, such as theater nurses and scrub nurses, for functions specific to fistula repair (including client support before and after administration of anesthesia), as well as ward nurses for preoperative and postoperative care (possibly including physiotherapy) and for counseling skills
- *Nonnurse counselors*, for counseling skills specific to fistula service provision, pre- and postoperative care, and rehabilitative information and care needs
- *Anesthetists*, who may be specialists, technicians, or nurses, depending on the specific anesthesia support used in fistula repair (Anesthesia may be general or spinal, with or without sedation, depending on site policy.)
- *Physiotherapists* or nurses trained in basic physiotherapy skills, whenever possible (Training includes special techniques most relevant to fistula clients.)
- Facility management/administration, who can also benefit from general training in overall system strengthening, including infection prevention, QI, facilitative supervision, monitoring/reporting, and community outreach/networking (In selected cases, study tours to model sites can help facilitate and motivate administrators to obtain knowledge on different aspects of service administration, logistics, advocacy, costing, QI, and record keeping.)
- *Support staff*, who can benefit from orientation and whole site training
- Community liaisons (including those from nongovernmental and community-based organizations), who can be trained in communicating basic messages about prevention of obstetric and traumatic fistula and in creating awareness about existing repair services and the need for postoperative follow-up, as well as in the provision of selected family planning methods (if/as appropriate or as indicated), in referral for counseling and/ or repair services, and in assistance with social reintegration

### **CRITERIA FOR SELECTING FISTULA SERVICE PROVIDERS TO BE TRAINED**

Deciding on the criteria for selecting trainees is a crucial part of the training process and preparation. It is imprudent to invest scant resources in training a provider multiple times if the training is not going to translate into increased and better quality services for the community. Judicious selection contributes greatly to the success or failure of the strategy. Criteria include:

- Interest in providing fistula services and commitment to the women and families affected
- Motivation and ability to immediately apply new skills upon return to their posts
- Minimum educational requirements, as per Ministry of Health policy
- Basic surgical skills (minimum three years suggested)
- [Or] basic counseling skills, scrub nursing skills, or preoperative/postoperative nursing skills
- Service demand/need and institutional support (including intention to remain in this service for a reasonable minimum length of time and subsequent “tracking,” in collaboration with Ministry of Health, should they relocate to a different site from which they can continue to provide fistula services)

## **SKILL LEVELS ATTAINED AFTER FISTULA TRAINING**

### **Skill Level Attained by General Site Staff**

- Orientation to fistula service provision
  - Whole site training for support staff, site managers/administrators
  - Study tour for selected site managers/administrators to a model site for orientation in administration, logistics, advocacy, costing, record keeping, and community linkages

### **Skill Level Attained by Nurse-Midwife**

- Expanded operating theater and scrub-nursing skills
- Expanded ward preoperative/postoperative fistula repair skills
- Expanded skills for individual and family/couple counseling and rehabilitation
- Expanded/refreshed functions in anesthesia and physiotherapy
- Expanded skills in community collaboration

### **Skill Level Attained by Nurse/Physiotherapist/Anesthetist**

- Competence and (eventually) proficiency in fistula counseling, preoperative/postoperative care, scrub nursing, physiotherapy, and anesthesia (The extent of prior experience is here not as crucial as it is for surgical experience.)
- Training skills (if the trainee is to become a trainer for these skills)

### **Skill Level Attained by Fistula Surgeon**

Surgeons can achieve various skill levels from the training, and these may partly be influenced by the methodology and approaches used:

- *Skills acquisition level:* The surgeon can learn to make a diagnosis, classify a fistula, and refer a client—possibly as a first step toward the next level of skills. The training implements a protocol for determining which cases can be done by trainees and how to refer complicated cases to more experienced surgeons. (This would include timing of referral, referral mechanism, minimum preparation need before referral, outgoing and base records needed, etc.) Trainees need to recognize their skill level realistically, avoiding false confidence; have access to the equipment and support staff and support systems needed (e.g., labs) for postoperative care, depending on the fistula class and

what the trainer/policy allows them to do). The trainee will not be competent to *perform* fistula surgery at this level.

- *Competence level*: The surgeon can learn to diagnose, classify, and perform actual surgery for fistula. Because fistula vary so much in complexity and difficulty of repair, a gradual and progressive increase is envisaged for skill and surgical efficiency in three stages. Although individual country programs may vary their recommendations somewhat, all stages of competence will start with an intensive (large caseload and close clinical oversight) 4–12 weeks of hands-on surgical skills training, followed by a progressive increase in the numbers of fistula repairs and in the degree of surgical complexity:
  - Stage 1: intensive, plus an additional 100–300 simple cases
  - Stage 2: intensive, plus an additional 100–300 simple and moderate cases
  - Stage 3: intensive plus an additional 300–600 simple, moderate, and complicated cases, so as to reach proficiency level
- *Proficiency level*: The surgeon is able to repair most of the complicated fistula cases safely, efficiently, and in the correct sequence in terms of key steps and is able to deal with unexpected complications during surgery. Furthermore, it would be of benefit to add a trainer of trainers skill set at this stage.
- *Updating of fistula surgical training*: A refresher course may be needed occasionally, especially for those who already have basic skills but who have not been performing fistula surgery regularly.

### **SYSTEM FOR REFERRAL OF COMPLICATED CASES**

It is important that the surgeon be able to recognize and accept his or her current skill level. He or she should harmonize that with the diagnosis and classification of the woman's fistula, so that the surgeon does not try to operate on cases of complexity beyond his or her competence. The training should include a protocol for functional upward and downward referral, depending on the particular Ministry of Health system, together with a list of required documentation and minimum pre-referral clinical and nonclinical preparations, and a supportive logistical system.

### **HOW DO WE MEASURE THE COMPETENCY OF THE TRAINEE?**

Despite the recommendations above, formal standards/requirements for qualifying as a competent provider are established by the Ministry of Health in each country program. Trainee competency is assessed by trainers, in collaboration with the Ministry of Health, through observation at various stages during and after the training event. Knowledge pretest and posttest forms, along with clinical skills checklists, are used for formative and end-point evaluation to determine whether trainees perform to standard. Critical steps are identified in the clinical checklists, and providers must perform all of these steps correctly, completely, and consistently to be deemed competent. Because formal standards/scores required for qualifying as a competent provider are established in each country program, there may be some variation among field programs, with requirements for qualifying as competent being about 85% on “must know content” knowledge assessments and in clinical practice, in addition to performing all critical steps competently.

### ***Trainer/Participant Ratio and Duration of Training***

The criteria for the trainer/participant ratio and adequacy of caseload are necessarily flexible and category/situation-specific, depending on the trainee's previous surgical experience and the nature of the training course— whether it is an orientation, a competency training, etc. When organizations are planning for training, efforts should be made to ensure a sufficient trainer/participant ratio—one that allow the trainers to observe and work individually with trainees, as necessary, and to ensure an adequate caseload for practice. Ideally, each trainer should not have to provide hands-on training for more than two surgeon trainees per client at the same time. Twice that number of nonsurgeon trainees can be trained, although care should be taken not to crowd the clinical area, both for surgery and for examination.

EngenderHealth/Fistula Care is well aware of the burden placed on health systems when providers are taken out of their facilities for substantial periods of time for training. Therefore, we try to minimize providers' absences while ensuring adequate time for instruction and clinical practice. Accommodation to local circumstances is usually necessary. The duration of training in simple repair surgery and nursing varies with the trainee's initial surgical skills and professional background and will be divided between didactic and clinical training:

- For specialists (surgeons, urologists, gynecologists), 2–12 weeks
- For general practioners with surgical competence, 4–12 weeks
- For nurses (preoperative, intraoperative, and postoperative care), 2–4 weeks

In almost all cases, this is considered to be just the first step in competency training, especially for surgery. An extra two or more intensive, hands-on training stints will normally be required at varying intervals during follow-up.

### **SYSTEM FOR FOLLOW-UP AFTER TRAINING**

Effective follow-up is a crucial and integral part of training. Following the attainment of a specified fistula care skill, well-coordinated follow-up activities give trainees who are newly qualified (or not) an opportunity to continue asking questions and to improve skills, while also being evaluated in a supportive work environment.

EngenderHealth/Fistula Care facilitates two broad types of follow-up:

- Administrative follow-up and supervision:
  - Administrators ensure continued support, encouragement, and mentoring in the work environment, as well as implementation of the training action plan.
  - Oversight by on-site supervisor is continuous. (External supervisory visits may be quarterly or at least twice a year.)
- Clinical skills follow-up
  - Encouragement and mentoring foster early implementation of new skills, retention and continual improvement in skills, and confidence for progressively more challenging cases. This follow-up should be done in a planned, proactive, structured manner. The baseline for reference is the end of the competency-based training assessment by the trainer—and also subsequent follow-up visits— regarding the repair skills and level of functioning achieved by the trainee. During

follow-up, it is important not only to audit successes, but also to monitor challenges and clinical or system failures (and the reasons for the failures), as well as to design possible strategies to tackle them.

At the end of the formal training, if necessary, trainees can be allowed more time for supervised practice at the end of training or once they are back on the job, under guidance from on-site or off-site supervisors. They can be followed up by a supervisor/trainer during routine service delivery within six weeks and then every 3–6 months after the basic training, depending on documented skill progression. But they will also need intensive hands-on training courses with larger caseloads, either at their own site, at the original training site, or elsewhere. Typically, trainees need two or more follow-up trainings before they become fully confident in their surgical skills even for “simple” fistula surgery.

### **NUMBERS OF FISTULA SERVICE PROVIDERS NEEDED AT SITE**

The training strategy results not only in a certain number of local surgeons being competent to do simple repairs, but also in a subset of them becoming able to perform complicated repairs. Furthermore, some of them also develop training skills. The numbers of personnel needed will vary with their skill level, the type of site, and the magnitude of the fistula problem locally, but the minimum numbers suggested are the following:

#### **Surgeons**

- At least two trained surgeons are needed per site.
- They can be trained in phases.
- They can be trained to competence level for uncomplicated cases.
- They may need follow-up at their own site or may need to return to the training site or some other site.

#### **Nurses**

- At least four nurses should be trained per site, in phases; more can be trained if there is a greater need.
- Two theater nurses should be trained as scrub nurses.
- Two ward nurses/midwives should be trained for counseling and preoperative/postoperative care.

#### **Anesthetist**

- One or two anesthetists should be available, as required, for spinal or general anesthesia, according to site policy.
- Some sites train the fistula surgeon to also administer spinal anesthesia.
- Anesthetists may be trained on-site or off-site, by another anesthetist or an anesthesia-proficient surgeon.

## **SYSTEM FOR IDENTIFYING, SELECTING, AND ASSESSING TRAINERS**

Fistula trainers are clinical providers who must have extensive experience and must be able to perform competently the technique they are teaching. Additionally, they must be able to communicate effectively so as to impart knowledge in instructional sessions and to transfer technical skills in practical sessions. They must be approved as clinical trainers by EngenderHealth/Fistula Care.

The approach for preparing clinical trainers to become fistula trainers is to orient them to the EngenderHealth/Fistula Care's training materials and its training approaches and methodologies. Because of the organization's decentralized structure, this is done largely by country program staff, in consultation with New York Office staff. Clinical trainers for the field programs have been trained as trainers in a number of ways, including by EngenderHealth or other international agencies, such as Jhpiego and IntraHealth International, or by consultants who are internationally or nationally recognized trainers. The training of trainers can occur in a national or regional training center, depending on the location situation, capacity, and resources.

### ***What Is Required to Qualify as a Trainer at Each Level?***

- Criteria for trainer/preceptor include the following:
  - Should be trained to at Stage 2 competency level at minimum (described above) in fistula surgery skills
  - Should have training skills (focus on adult learning)
  - Should adhere to the training principles and criteria
  - Will need training materials for central training and/or for structured on-the-job training
  - Currently employed by state or government or has such support
  - Employed at a site that provides routine (at least one day per week) fistula repair

Other than being competent and highly experienced in the techniques in which they train, fistula trainers have knowledge of different approaches of surgical management to deal with different circumstances and complications encountered at fistula surgery. They take accountability for their own skill levels, drawing from their interest, commitment, and professional/personal aspirations, but they need administrative, policy, and material support.

Trainers should also have demonstrated ability as instructors, with specific competencies in communications, training, and human relations; medicine and surgery; and the service delivery system. EngenderHealth/Fistula Care global and field program staff/trainers determine whether someone meets the qualifications to become a trainer:

- Qualifications in communications, training, and human relations
  - Ability to communicate calmly and effectively with clients and trainees before, during, and after the procedure
  - Ability to impart both theoretical and practical knowledge to trainees.
  - Experience as a trainer
  - Ability to facilitate a group training

- Familiarity with teaching aids that will be used in a training, such as competency-based checklists, films, slides, and anatomical models
- A positive attitude about working with both clients and trainees
- Qualifications in medicine and surgery
  - Commitment to high-quality services
  - Proficiency and ongoing, extensive experience with performing fistula surgery
  - Understanding and ability to manage possible side effects and complications from surgery and medications
  - Knowledge of accepted standard regimens for analgesia and anesthesia
  - Knowledge of relevant infection prevention practices
- Characteristics of the service delivery system
  - Knowledge of counseling, informed choice, and good client-provider interactions
  - Knowledge of medical screening and preoperative assessment
  - Proficiency with postoperative care and follow-up of clients
  - Understanding of how to establish, manage, and supervise logistics, service delivery, and the surgical theater
  - Knowledge of the client record-keeping system and of the referral system
  - Understanding of how to maintain training records

Fistula “master trainers” (who would train other staff to be trainers) should also meet the following qualifications:

- Substantial experienced as a trainer, with advanced training skills and also experience in developing training courses and materials.
- **Proficiency** in fistula surgery (as described above)
- Access to a training center’s material resources
- A large fistula caseload—at least 100–300 a year, to keep up his/her surgical skills

Master trainers are few and far between. To help create a pool of master trainers, it is necessary to get initial and continued buy-in from potential trainers who, if necessary, can then be trained in a high-caseload situation or be sent a large number of cases once they are trained (i.e., have clients referred to them or have them periodically sent elsewhere as visiting trainers at high-caseload sites).

### **HOW DO WE DETERMINE THE QUALITY OF THE TRAINERS AND THE TRAINING?**

In addition to the criteria for trainer identification and selection, trainers are also assessed during and after each training course, both verbally and using semi-structured training evaluation forms.

Initially, the trainer conducts a self-assessment with the EngenderHealth/Fistula Care staff member or others on the training team at the end of each day’s session, reviewing what went well and what could be improved.

The trainees also give feedback about the trainer and the training sessions at the end of each day, as well as midway through the training and at the end of the course.

EngenderHealth/Fistula Care resident staff, or a consultant or others in the training team, assess each trainer and the sessions at the end of each day and at end of the training course. Training teams usually include some representation from the Ministry of Health.

The assessment offers a platform for positive feedback and constructive critique that is objective, is specific, and can be acted on. EngenderHealth/Fistula Care is required to give technical assistance and necessary material and training resources to their trainers, to make them even better and more effective.

For new trainers, policy requires that at least their first training be conducted as they sit in with EngenderHealth/Fistula Care staff or a consultant knowledgeable in fistula surgery and training methodology and approaches.

### **Training Evaluation**

To be effective, training evaluation is best planned in the design phase, according to four levels of evaluation (Kirkpatrick, 1994):

1. *Reaction*—measures the learners’ perceptions of the course (did they like the training program?)
2. *Learning*—measures the knowledge, attitudes, and skills gained (was there a positive change?)
3. *Application*—measures ability and behavior to perform learned skills on the job rather than in the classroom (did the provider implement the newly acquired learning on the job?)
4. *Results*—measures the impact of the training program on the overall services provided (Are more people served, in more places, with a wider and better quality of interventions and services? What has the training program achieved?)

Levels 1 and 2 are built into the training and are relatively easy to conduct during the training event. They are actually assessments of the training processes rather than an “evaluation,” which is a more rigorous process. The training course includes assessment forms and related tools that allow measurement of the trainees’ perceptions of the course. The pretest and posttest questionnaires are designed to assess the change in knowledge during the training.

Level 3 evaluation is more difficult to undertake. It is conducted after the training event, when the trainees return to their work environments and start using the knowledge, new attitudes, and skills learned during the training. It takes more effort and financial resources. The data collected provide insights into the transfer of learning from the classroom to the workplace and assist in identifying implementation of the new knowledge and skills learned during the training. This level of evaluation can be integrated into regular program monitoring and evaluation with appropriate resource allocation.

Level 4 evaluation is a more intense and difficult process to conduct. It is more expensive and in particular needs to be planned at the design phase (even moreso than the other levels). Furthermore, the outcome of the evaluation is influenced by the length of the

program and is dependent on how long the services have been in place as a result of the training intervention. It is sometimes difficult to isolate the results of the training in programs. It is common for a Level 4 evaluation to be conducted after the program has completed its life in a given geographic area.

### **CRITERIA FOR SELECTION OF THE FISTULA TRAINING SITE**

Fistula training sites are strengthened through technical assistance and the donation of start-up equipment and supplies for service provision and training, as necessary. Training sites are selected and prepared according to criteria outlined in the Medical Division Coordination Manual and the Training Desk Reference (TDR), with caseload and quality of care being key determinants of whether a facility can be used as a training site.

The requirements for the site aggregate those for fistula service provision with additional requirements that are specific to clinical training. With this in mind, the site must have:

- Accepted medical standards and the equipment and staff to handle all immediate complications related to anesthesia or fistula surgery
- Adequate demand or potential demand to allow trainees enough of a caseload to perform the number of procedures needed to gain competency within a short period of time
- Services that model the basic characteristics of quality service delivery, such as:
  - Infection prevention practices
  - Counseling and informed choice
  - Client-provider relationships
  - Records management
- Adequate staff (with surgeons, nurses, and support staff), so that the training course does not disrupt routine activities unduly and so that the trainer and trainee can be present in the training area at all times
- Adequate examination rooms (with privacy), procedure rooms, and /or surgical and recovery areas/wards (preferably dedicated to fistula, but potentially also shared)
- Suitable infrastructure and amenities/utilities (power, running water, etc.)
- Appropriate general and fistula-specific equipment for the wards and operating theater, adequate supplies and any emergency medications required to carry out fistula surgery
- A supportive policy, guidelines, and supervision
- Readily available teaching aids, audiovisual equipment, computer hardware and software, printed materials, and other training and library/reference materials
- A trainer/trainer of trainers with documented experience in fistula repair proficiency and training skills (Such a trainer may be visiting/sessional or residential.)
- Means, where applicable, of addressing language and cultural differences among trainers, trainees, clients, and clinic staff
- A clear agreement between EngenderHealth and the training site regarding administrative and financial arrangements
- Government ownership or formal recognition, so that even Ministry of Health staff can be sent there
- Community networks for the support of women and families affected by fistula

- Space for didactic sessions and practicums

The space required will be for classroom and for clinical teaching:

### ***Classroom Space***

The requirements for a classroom space depend on the number of trainees, as there is need for adequate space for demonstrations/return demonstrations and practice on models, if any. Classroom venues need to be close to the clinical training area, to facilitate integration of clinical and nonclinical aspects of the course.

### ***Clinical Site***

Clinical sites must meet the minimum defined standards and selection criteria. Each site should be visited by field program staff within six months of training to assess its readiness in terms of equipment, logistics, staff, and caseload, using checklists. Such a visit should include observation of service delivery and assessment of the institution's capability/capacity to provide training in fistula service provision. A second visit should be conducted immediately before the training event, to ensure that everything is in place and that the necessary arrangements have been made, especially with regard to ensuring an adequate number of clients for hands-on training.

If necessary, agency staff can conduct several pretraining visits to work with counterpart staff to prepare the site. This may also involve donating equipment and/or start-up supplies. If the site will be used on an ongoing basis, medical site visits should be conducted at least annually and immediately before a training event.

## **SUPPLEMENTAL FISTULA TRAINING**

Important examples of supplemental training courses are those designed to position fistula within the broader concept of safe motherhood. They may or may not be sought by in-country stakeholders, depending on context (e.g., for demand generation, or for prevention of fistula). They might include:

- Fistula prevention interventions, including emergency obstetric and neonatal care (basic or comprehensive), and hospital-acquired fistula)
- Community outreach, information, education, and communication, advocacy, QI mechanisms (such as COPE<sup>®</sup>), and referral systems
- Cross-cutting issues, such as infection prevention, HIV, engagement of Men As Partners in the prevention and treatment of fistula, quality of care (e.g., informed choice, COPE for Maternal Health Care, and facilitative supervision)
- Traumatic fistula and gender-based violence
- Poverty, women's rights, and health equity

## **COMMUNITY COLLABORATION IN FISTULA TRAINING**

Community representatives can function as liaisons between fistula training sites and the community to:

- Identify women/families in need
- Provide information regarding fistula repair services
- Provide fistula prevention messages

- Extend the fistula training site’s capacity to track women following repair and to support reintegration
- Link women and families with other sexual and reproductive health and social services.
- Contribute to standard operating procedures for programming clinical training and for evaluating various aspects of clinical training (i.e., trainees, trainers, sites, training course, and the community’s needs)

### **CLINICAL TRAINING SOPs**

EngenderHealth’s formal training SOPs and Training Resource Package contain the guidelines and standards for programming and evaluation of training. Agency country offices, with support from global staff, are responsible for programming training in accordance with the guidelines included in these documents. The monitoring for training events includes number, type, and cadres trained.

Fistula Care’s SOPs for evaluating clinical training include the indicator of performing to standard (PTS), which is the proportion of persons in clinical trainings that performed to established guidelines and standards by the end of the training, by training type and cadre. Where appropriate, global staff work with field staff to ensure they are evaluating trainee performance based on international and/or national standards of practice and certifications requirements.

Multiple channels are used for communicating and updating global and field staff on standards for clinical training, trainers, sites, performance evaluations and follow-up. The channels include intranet and extranet, internet exchanges, and one-on-one engagements by NY and/or field based staff. Similar to other aspects of clinical training, responsibility for communicating standards has also, at least in part, been decentralized to country offices, but with proactive, frequent consultation with NY-based clinical staff.

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