FISTULA CARE

FISTULA TREATMENT TRAINING STRATEGY

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By

EngenderHealth
for a better life

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INTRODUCTION

There is a crucial need to initiate and sustain fistula programs that increase access and that strengthen the capacity of centers to provide high quality services for repair and care of women living with obstetric and traumatic gynecologic fistulae. In order 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. The quality of training is in turn improved by committing adequate resources to assess and ensure trainer qualifications, to train and follow-up providers and to improve the standard of care that they offer. It would be devastating to a fistula program if women, their families and community lose confidence in the health care system that is supposed to help them because of poor quality training and a service delivery that causes them more harm, thus increasing their burden. It is therefore necessary to have pro-active discussions about the quality of training, of supervision and follow-up with country missions, local Ministries of Health, hospitals, professional associations and non-government health organizations. The key decisions from these discussions must be considered in the work-plan and budget allotment.

This training strategy goes towards informing a uniform training approach and in 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

The strategy for fistula training recognizes and tries to address several distinct challenges that can hinder quality in training. These challenges 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 WHO, FIGO and UNFPA to develop 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, expandable supplies and training materials (library books, manuals, references, anatomic models, audio-visuals, videos/films, job aids, computer ware, case studies.)
- Dearth of evidence-based clinical and operations research data.

PROGRAMMING FOR TRAINING IN RH

Programming for training is the process of planning, implementing, system strengthening and evaluating training within the larger setting of RH service delivery, in order 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. Fistula Care’s programming for training is partly informed by that of ACQUIRE, a Project managed by EngenderHealth, and taking a holistic, service-oriented, systems approach to programming for training. It focuses on the centrally important fundamentals of care – informed choice, medical safety, and continuous quality improvement. The project provides technical assistance in programming for training to RH program partners, who implement 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

The overall holistic, service-oriented, systems approach that focusing on the centrally important fundamentals of care—choice, safety and quality improvement—intends for training to contribute to sustainable improvements in quality, availability, access, and use of fistula services.

The approach is based on performance and quality improvement principles and methodologies, of which training is one. It approach reflects a comprehensive view that considers the systems and greater social/political/clinical environment in which services are provided, including the MOH structure and level of decentralization; 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 to overcome the 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. Simultaneously, EngenderHealth works with supervisors both on- and off-site to ensure that newly acquired skills will be employed. The supervisors
and trainers should also have the skills to provide mentoring and coaching to providers after training so they can become confident and comfortable using their new skills.

Training is used as part of the learning process interacting with and mutually supporting supervision, management and logistic 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; appropriate 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 some 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;
- Doctor and nurse are trained in teams (along with counselors or nursing assistants, if possible) whenever logistics allow;
- Providers must consider and conduct counseling as an integral part of clinical care (from pre-operative, intra-operative, through to post-operative periods); and
- Training should be competency-based and use adult learning principles: “final” assessment of trainees will inform the level of surgical complexity or fistula class 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 is also guided by the following premises:

- Experiential learning model
- Linking training to performance
- Evaluating training and performance

Experiential learning involves four steps having an experience, critical reflection, reviewing the experience, conceptualization and interpretation of meaning and learning from it, and then application of 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 individuals experience and encourages him/her to determine appropriate application to the specific job situation.

Clinical training is designed and conducted according to Adult learning principles: it is participatory, relevant and practical. It utilizes behavior modeling, is competency-based and incorporates humanistic learning techniques.

A variety of learning methods are used to make the learning interesting and relevant; to maintain the level of motivation and build on their self esteem and relating their learning to their every day job responsibilities. This can be achieved by creating an environment that is conducive to learning, providing opportunities for discussion and application of what they have learnt and 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 relate to their job expectations. The environment for learning is reinforced using a variety of activities. Learning is applied promptly; during training and immediately after.

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 performing return demonstration.

The goal of the training/precepting is to provide effective and sustainable transfer of knowledge, attitudes and skills. To this end the training draws on the participants’ own experiences, utilizes case studies, considers the participants’ specific needs and interests, and integrates 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) focuses 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 to others in the class. It emphasizes progress in mastery of specified knowledge, attitude, skills. It is trainee–centered, rather than focused on the unit of time and trainer centered, and uses the following guidelines:

- Ensure adequate resources, materials to support the training system (provision of training materials, manuals, equipment, classroom based training equipment 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 competence 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 quality improvement 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 there are other systemic issues which also need to be addressed in order 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 will not result in improved access and quality of services due to other systemic weaknesses.

**Linking Training to Performance On-the-Job:**

Transfer of Learning – defined as ensuring the 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, co-workers before, during and after the training in order to maximize transfer of knowledge, attitudes and skills to improve performance on the job. National and district level stakeholders including the trainer, supervisor, trainee and co-workers play an important role in facilitative transfer of learning process. Guidelines needed include:

• Institutional commitment e.g. national training policies and service delivery guidelines are in place and providers are oriented to their use
• Effective supervision: facilitative supervision that emphasizes mentoring, joint problem solving and two-way communication between supervisor and supervisee
• Create supportive work environment: provide opportunity to use what was learned, ensure availability of resources to do the job
• Coaching and confidence-building: facilitate on-site coaching for providers, on-site problem solving and constructive feedback to build provider confidence
• Facilitate team work: use team building approaches, COPE, Whole Site Training, Facilitative Supervision
• Training follow-up: facilitate follow-up and support of all training events to ensure trainees are enabled to start services at their work sites as soon as possible
• Whole site training and supervision; team work 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 faster skill acquisition and attainment of competence, less discomfort and possibility of harm to client. Since suitable anatomic models are not readily available, EngenderHealth looks to identify and supply appropriate materials.
- Although the training is competency based, figures 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, others shorter. Also, given the varying complexity of fistula surgery, only a small proportion of cases may be suitable for the trainee to operate on initially.
- For didactic sessions before and after the hands-on practicum, it is necessary to use an engaging and appropriate variety of methods, materials, trainers, materials e.g. audiovisuals, case histories, role plays.

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 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 (CTUs) presented by agency staff, and professional meetings, and to ensure that the latest scientific findings and recommendations are incorporated and reflected in trainings they conduct. When necessary, the materials are adapted to conform to specific program needs. They reflect the agency’s holistic approach to performance improvement in that they incorporate non-clinical 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 (knowledge, attitude, skills) and the training capacity of the institution or system to provide trainers. The assessment finally should be able to provide direction in the following aspects:

A critical step in planning is to identify the current gap that warrants a training intervention, being what is done what and what is supposed to be done under the three areas:

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

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

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

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

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

Facility needs assessment: is conducted to identify training site that provides services and with capacity potentially to provide quality training. For the clinical training component, the assessment looks at the adequacy of proposed facility to provide clinical training. It typically includes:

• Availability of fistula services
• Number of staff by category routinely involved in fistula services
• Qualification of service providers
• Types of fistula services offered
• Average number of new and revisiting fistula clients
• Adequacy of IP and other QI practices
• Availability of appropriate equipment and supplies
• Training capacity and capability of the site
FISTULA TRAINING MODELS

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

- **On-site Training:**
  - by a master trainer: an expert trainer visits a hospital to do hands-on training

- **Workshop Training:**
  - intensive trainer-led training for a small group of surgeons at a busy center

- **Outreach Training:**
  - less experienced surgeon accompanies expert during outreach visits to remote hospitals to gain exposure and training

- **Apprenticeship training:**
  - more experienced surgeon or ‘mentor’ meets less experienced ‘apprentice’ for periodic exchange and hands-on. This may be On-the-Job Training, but needs to be structured and with reference materials

- **Training Center:**
  - establishment of a regular training program at a major hospital doing fistula repairs

- **Medical school and Postgraduate training:**
  - mostly for theoretical pre-service “training”. But there is potential to arrange some structured hands-on practicum at the medical school or at an affiliated site, especially for residents in OB/GYN and Surgery.

The different models often overlap. They may 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 are commonly personnel- deprived already. The training strategy therefore needs to be flexible and adaptable to specific service and training site capability, as well as 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 to cater for update, follow-up and for proficiency-level trainings.

CADRES OF HEALTH CARE PROVIDERS AND COMMUNITY MEMBERS TO BE TRAINED

The training approach is used for enabling 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 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 which 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 the aspects that will need monitoring and strengthening during follow-up. Accreditation in most places is by MOH or, occasionally, by a local university. The following are examples of type of training by cadre:

- **Doctors**
  - With a minimum of 3 years surgical experience (Obstetrician/ Gynecologists, urologists, general surgeons, general practioners. Clinical officers/Assistant Medical Officers, depending on the individual country’s policy, mandated by the MOH, on regulations regarding surgery); trained on conservative and surgical management of fistula. They may also benefit from counseling training in fistula care.

- **Nurses**
  - Theater nurse and scrub nurse functions specific to fistula repair, including client support before and after administration of anesthesia.
  - Ward nurses for pre and post-op care (may include physiotherapy) and counseling skills

- **Non-nurse counselors**
  - Trained in counseling skills specific to fistula service provision, pre- and post-operative care, and rehabilitative information and care needs.

- **Anesthetists**
  - May be specialist, technician or nurse for specific anesthetic support used in fistula repair. The anesthesia may be general or spinal/epidural, with or without sedation, depending on site policy.

- **Physiotherapists**
  - Or nurses trained in basic physiotherapy skills whenever possible. The training includes special techniques most relevant to fistula clients

- **Facility management/administration**
  - Also benefit from general training in overall system strengthening. The training includes infection prevention, quality improvement, facilitative supervision, monitoring/ reporting, and community outreach/ networking. In select cases, study tours to model sites can be facilitative and motivational to access knowledge on different aspects of service administration, logistics, advocacy, costing, QI and record-keeping.

- **Support staff**
  - Can benefit from orientation and whole site training.

- **Community liaisons (including NGO/CBOs)**
  - Trained in basic fistula prevention messages for obstetric and traumatic causes, creation of awareness of existing repair services, post-operative follow-up. Also trained in 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.
This 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 to the community. Although the ultimate specific decision for which provider is selected for training is usually made by site administration, it is critical that all stakeholders’ buy-in into a standard trainee selection criteria. Judicious selection contributes greatly to the success or failure of the strategy. Selection criteria include:

- Interest in providing fistula services and commitment to women and families affected
- Motivation and ability to immediately apply new skills after training
- Minimum educational requirements as per MOH policy
- Basic surgical skills (minimum 3 years experience advised)
- (or) basic counseling skills, scrub nursing skills, pre-post op nursing skills
- Service demand/need, institutional support, including intention to remain in this service for a reasonable minimum length of time and subsequent “tracking” in collaboration with MOH in case they relocate to a different site from which they could continue to provide fistula services.

**SKILL LEVEL 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 overview and community linkages

**Skill level Attained by Nurse- midwife**
- Expanded operative theater and scrub nursing skills
- Expanded ward pre/post fistula repair skills
- Expanded skills for individual and family/couple counseling, 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, pre and post operative care, scrub nursing, physiotherapy and anesthesia. (The extent of prior experience is here not as crucial as it is for surgical experience)
- Trainer for these skills would, in addition, need training skills.

**Skill Level Attained by Fistula Surgeon**
There are several skill levels that can be achieved stepwise from the training, and they may be partly influenced by the methodology and approaches used.
• Skills acquisition level
  o Knowledge and skills to make diagnosis, fistula classification and referral; or as a first step towards next level of skills. The trainee will NOT be competent to perform fistula surgery at this level.

• Competence level
  o For diagnosis, classification and actual surgery for fistula. Because fistulae vary so much in complexity and difficulty of repair, a gradual and progressive increase is envisaged for skill and surgical efficiency in 3 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 week hands-on surgical skills training followed by progressive increase in numbers of fistulae repaired and degree of surgical complexity:
    ▪ stage 1: intensive plus additional 100 - 300 simple cases.
    ▪ stage 2: intensive plus additional 100 - 300 cases simple and moderate complexity cases
    ▪ stage 3: intensive plus additional 300 - 600 cases, simple, moderate and high complexity cases so as to reach proficiency level.
  Ideally, every skilled fistula repair surgeon should want to be a trainer someday, and it would be advantageous to add a Trainer of Trainers’ and training skills standardization set at this stage.

• Proficiency level
  o The surgeon is able to do most of the high complexity fistula cases, safely, efficiently and in correct sequence for key steps, and to deal with unexpected complications during surgery.

Update fistula training may be needed occasionally. It is especially useful for those already with basic skills who have not been providing fistula services regularly, and therefore need a refresher course.

SYSTEM FOR REFERRAL OF COMPLICATED CASES

The training implements a protocol for determining which cases can be done by trainees – harmonizing their diagnosis with the classification and perceived complexity of the fistula- and how to refer complicated case to more experienced surgeons. This would include protocol for upward and downward referral, referral mechanisms and supportive logistical systems, minimum preparations needed before referral, outgoing referral and base records needed. The trainees must recognize and accept their current skill level - avoiding false confidence - so that they do not try to operate on cases of complexity beyond their competence. The trainees will be aware of equipment, staff and support systems needed for post op care etc depending on the fistula class and what the trainer/ policy allows them to do.

HOW DO WE MEASURE THE COMPETENCE OF THE TRAINEE?
Despite the recommendations above, formal standards/requirements for qualifying as a competent provider are established by the MOH in each country program. Trainee competency is assessed by trainers in collaboration with the MOH through observation at various stages during and after the training event. Knowledge pre and post-test forms, along with clinical skills check lists are used for formative and end-point evaluation to determine whether trainees perform to standard. Critical steps are identified in the clinical check lists 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 trainer/participant ratio, 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’s an orientation, or competency training etc. When planning for training, efforts are made to ensure sufficient trainer/participant ratios that allow the trainers to observe and work individually with trainees, as necessary, and to ensure adequate case load for practice. Ideally, each trainer should not have to train more than two surgeon trainees hands-on per client at the same time. Double that number of non-surgeon 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 and therefore tries to minimize provider absence while still ensuring adequate time for instruction and clinical practice. Accommodation to local circumstances is usually necessary. 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 practitioners with surgical competence 4-12 weeks
- For nurses (pre intra and post-operative care) 2-4 weeks

In almost all cases, this is considered as just the first step in competency training, especially for surgery. An extra two, three or more intensive, hands-on training stints will normally be required at varying intervals subsequently either at the training site or their own site or a completely different site. (This is not to be confused with the one-two day mentoring/coaching on site that may be conducted during trainee follow-up). Non-surgical training hardly ever requires quite as many repeat training sessions.
SYSTEM FOR FOLLOW UP AFTER TRAINING

An effective follow-up is a crucial and integral part of training and, ideally, should be done for all trainees. 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 will facilitate two broad types of follow-up:

- **Administrative Follow-up and Supervision**
  - To ensure continued support, encouragement and mentoring in the work environment, and also the 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**
  - The encouragement and coaching/mentoring fosters 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, pro-active, 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 to audit not only the successes, but also the challenges and clinical or system failures, the reasons for the failures and to design possible strategies to tackle them.

At the end of the formal training and if necessary, trainees are allowed more time for supervised practice at the end of training or once back on the job, under guidance from on or off-site supervisors through special arrangements. They are followed-up jointly by the trainer and the on-site and off-site supervisors during routine service delivery, usually after 6-12 weeks, and then at every 3-6 months after the basic training, depending on documented skill progression. But they will also need subsequent intensive hands-on training courses with larger case-loads, either at their own site, at the original training site or somewhere else. The assessment and on the job coaching that occurs during follow up should be guided by national standards and, whenever possible, evidence-based practice. Realistic action plans created during training are a useful tool for structuring the training follow up. Typically, trainees need two or more follow-up trainings before they become fully confident in their surgical skills at a particular competence level, even for ‘simple’ fistula surgery.

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

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

**Surgeons**
- At least two trained surgeons per site;
- can be trained in phases
- trained to competence level for simple cases initially, one or more progressing to higher complexity cases
- may need follow-up at own site, or return to training or other site

**Nurses**
- Training at least 4 per site, in phases; more if greater need
- 2 theater as scrub nurse
- 2 ward nurses/midwives for counseling, pre and post op care

**Anesthetist**
- At least two, for spinal or general anesthesia according to site policy.
- Some sites train the fistula surgeon to also administer spinal anesthesia.
- May be trained on or off-site by other anesthetist or anesthesia-proficient surgeon

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

Fistula trainers are clinical providers who must have extensive experience and 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, its training approaches and methodologies. Because of the organization’s decentralized structure, this is done largely by country program staff in consultation with NYC 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, or consultants who are internationally or nationally recognized trainers.

**What is required to qualify as a trainer at each level:**

- **Criteria for Trainer /Preceptor**
  - Should be trained to a stage 2 competency level at a minimum (described above) in fistula surgery skills
  - Should be trained as a trainer, with standardization of training skills (and a focus on adult learning)
  - Should adhere to the Training principles and criteria
o Will need training materials for central training and/or for structured OJT
o Their TOT can occur in a national or in a regional training center, depending on local situation, capacity and resources
o currently employed by state or government, or has such support
o employed at a site that provides routine (at least one day/week) 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, human relations
  o Ability to communicate calmly and effectively with clients and trainees before, during and after the procedure
  o Ability to impart both theoretical and practical knowledge to trainees.
  o Experience as a trainer
  o Ability to facilitate a group dynamics
  o Familiarity with teaching aids that will be used in a training, such as competency-based checklists, films, slides and anatomic models
  o Positive attitude about working with both clients and trainees

- Medicine and surgery
  o Commitment to high quality services
  o Proficiency and on-going extensive experience performing fistula surgery
  o Understanding and ability to manage possible side effects and complications from surgery and medications
  o Knowledge of accepted standard regimens for analgesia and anesthesia
  o Knowledge of relevant infection prevention practices

- The Service Delivery system
  o Knowledge of counseling, informed choice and client –provider interaction
  o Medical screening and pre-operative assessment
  o Post-operative care and follow-up of clients
  o Establishment, management and supervision of logistics, service delivery and surgical theater
  o Client record keeping system
  o Referral system
  o Maintenance of training records
Fistula Advanced Trainers

- Criteria to Qualify as an Advanced Trainer (who would train other staff to be fistula surgeons and trainers)
  - One should have advanced TOT skills, can train trainers and is able to develop training courses and materials
    - should be stage 3 competency at a minimum, and can do most medium complexity and at least some high complexity fistula repairs
    - should have access to training center material resources
    - moderately large and mixed-complexity fistula case load, at least 100-150 a year to keep up surgical and training skills

Fistula Master Trainers

- Criteria to Qualify as a Master Trainer (who would train other staff to be trainers)
  - To qualify as a “master trainer,” one should be a highly experienced trainer with advanced training skills, who can train trainers and can also develop training courses and materials, and can design and evaluate training curricula.
    - should have achieved proficiency level in fistula surgery (as described above), and can do all simple and moderate complexity fistula as well as most high complexity fistula.
    - access to training center material resources
    - large fistula mixed-complexity case load, at least 100-300 a year to keep up surgical and training 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 the potential trainer who, if necessary, is then trained in a high case load situation or sent many cases to them once they are trained (i.e. refer women to them or periodically send them elsewhere as visiting trainers in high caseload sites)

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

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

Initially, the trainer conducts a self-assessment with the EngenderHealth/Fistula Care staff member and co-trainers in 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, and also at mid-term, end-term 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 MOH.

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

If new trainer comes in, for at least the first training, policy requires that they sit in with EngenderHealth/Fistula Care staff or consultant knowledgeable in fistula surgery and training methodology and approaches.

**Training evaluation**

Training evaluation is a systematic process of collecting, processing, analyzing and interpreting data related to training and its effects on service delivery. Starting with the training needs assessment when baselines are established against which training results will later on be measured both during and after training, it continues during training follow up and can continue long after the training intervention. Evaluation helps to determine if training has achieved its objectives; identify any aspect of training that needs to be improved; identify contributions made by training in strengthening service delivery (availability, access, quality); and describe any aspects training that need to be improved.

It is best planned in the design phase in order to be effective, according to four levels of evaluation (Donald Kirkpatrick 1994)

1. Reaction; measures the learners perception 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; whether the provider implemented the newly acquired learning on the job.
4. Results; measures 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?

1 and 2 are built into, 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 trainee’s perception of the course. The pre-course and post-course test 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 trainee returns to their work environment and starts using the knowledge, new attitudes and skills learned during the training. It takes more effort and financial resources. The data collected provides insight into the transfer of learning from the classroom to the workplace and assists 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 than the other levels. It is more expensive and in particular needs to be planned at the design phase even more than the other levels. Furthermore the outcome of the evaluation is influenced by the length of the program and is dependent upon 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 to find a level 4 evaluation after the program has completed its life in a given geographic area.

**CRITERIA FOR SELECTION OF FISTULA TRAINING SITE**

Fistula training sites are strengthened through TA 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 case load and quality of care being a key determinant 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 be fully equipped and staffed to handle all immediate complications related to anesthesia or fistula surgery
- Adequate demand or potential demand to allow trainees the caseload to perform the number of cases 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 staffing (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 may also be shared
- Suitable infrastructure and amenities/utilities (power, running water etc)
- Appropriate general and fistula specific equipment for wards and theater, adequate supplies and any emergency medications required to carry out fistula surgery
• A supportive policy, guidelines, supervision
• Readily available teaching aids, audiovisual equipment, computer-ware, printed materials and other training and library/reference materials;
• Have a Trainer/Trainer of trainers with documented experience in fistula repair proficiency and training skills; the trainer may be visiting/sessional or residential
• A means, where applicable, of addressing language and cultural differences among trainers, trainees, clients and clinic staff.
• A clear agreement between EngenderHealth/ACQUIRE and the training site regarding administrative and financial arrangements.
• Government- ownership or formal recognition, so that even MOH staff can be sent there
• Community networks for support of women and families affected by fistula
• Space for didactics and practicum

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

Classroom space: The requirements for a classroom space are dependent on the number of trainees, with adequate space for demonstrations/return demonstrations and practice on models, if any. Classroom venues need to be in close proximity to the clinical training area, so as to facilitate integration of clinical and non-clinical aspects of the course.

Clinical site: Clinical sites must meet the minimum defined standards and selection criteria. Each site is visited by field program staff within six months of training to assess its readiness in terms of equipment, logistics, staff, and caseload, using checklists. The visit includes observation of service delivery and assessment of the institution’s capability/capacity to provide training in fistula service provision. A second visit should is 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 insuring an adequate number of clients for hands-on training.

If necessary, agency staff conduct several pre-training 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 are conducted at least annually and immediately before a training event.

SUPPLEMENTAL FISTULA TRAINING

Important examples of such training courses are those designed to posit Fistula within Safe Motherhood. They may or may not be sought by in-country stakeholders, depending on context e.g. for Demand Generation, for Prevention of fistula
• Fistula prevention interventions, including Emergency Obstetric and Neonatal Care (basic or comprehensive), Hospital Acquired Fistulae
• Community outreach, IEC, Advocacy, Community COPE and Referral Systems
• Cross cutting issues such as Infection Prevention, HIV, engaging Men As Partners in prevention and treatment of fistula, Quality of Care (e.g. Informed Choice,
COPE Maternal Health –and, to be anticipated, Fistula-, Facilitative Supervision, cost analysis tools)

- Counseling for obstetric and traumatic fistulae
- Traumatic fistula and Gender Based Violence
- Poverty, Women’s Rights, Health Equity and Governance

COMMUNITY COLLABORATION IN FISTULA TRAINING

Community representative functioning as a liason between fistula training sites and community for:

- Identification of women/families in need
- Provide information regarding fistula repair services
- Provide fistula prevention messages
- Extend fistula training site’s capacity to track women following repair and support reintegration
- Link women and families with other SRH and social services.
- SOPs 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 formal training SOPs and updated Training Resource Package are expected to be in place mid 2008. Meanwhile, the de facto SOPs are contained in two documents: AVSC Medical Division Coordination Manual, 1996 and Training Desk Reference, 1997. These documents 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 the cadres trained

ACQUIRE’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.
References:
1. AVSC International; AVSC Medical Division Coordination Manual, 1996
2. AVSC International; Training Desk Reference; Guidelines and Resources, Working Draft, 1997
3. UNFPA, Niamey Fistula Training meeting, May 2004
4. Bangser, M. Fistula Training Models, Women’s Dignity Project, 2004
6. EngenderHealth, Counseling the Obstetric Fistula Client: a training curriculum, working draft, 2006

Appendix
i. Training quarterly report form