JHPIEGO Corporation, an affiliate of Johns Hopkins University, is working with medical professionals in reproductive health in Zimbabwe to implement a structured on-the-job training (OJT) program. The goal of this program is to improve the performance of family planning service providers in clinical sites throughout the country. Working with the Zimbabwe National Family Planning Council, the organization that was charged with helping to implement the system, JHPIEGO staff converted an existing group-based clinical training course to a structured OJT course and helped build support for this new training approach. The design and consensus-building activities resulted in the implementation of an effective, structured on-the-job training program. The model for implementing this innovative training approach identifies key steps from conception through pilot testing to full-scale implementation-steps relevant to a variety of training situations.

Background

JHPIEGO assisted the Zimbabwe National Family Planning Council (ZNFPC) in 1993 to develop and conduct a clinical training course for supervisors and service providers. A 1994 evaluation of this integrated program showed only limited success. Many trainees returned from the group-based course to sites where they were not able to practice their newly acquired skills because of other job responsibilities, low caseloads, or inadequate supervision. Results of this evaluation suggested that traditional classroom courses may not always be the most appropriate or effective way to ensure application of new skills on the job. The assessment also emphasized the important link that needs to be made between training and service delivery. To respond to the evaluation team’s
recommendations and to ZNFPC’s need for different training approaches that would maximize their ability to train more service providers more quickly, JHPIEGO assisted the ZNFPC, the Ministry of Health and Child Welfare (MOH/CW), and other organizations in converting the group-based clinical course to a structured OJT course in August 1995.

Organizational Profile

JHPIEGO Corporation, a nonprofit training organization affiliated with Johns Hopkins University, is funded primarily by the United States Agency for International Development (USAID) and works to develop a reproductive health clinical-training capacity in developing countries. In Zimbabwe, JHPIEGO collaborates with the ZNFPC, a parastatal organization charged by the Zimbabwean government with coordinating all family planning activities in the country, including providing technical assistance to the MOH/CW and other organizations as necessary, and coordinating training, contraceptive logistics, evaluation, communication activities, and provision of family planning services.

Industry Profile and Key Players

Currently working in approximately 30 countries, JHPIEGO assists organizations like the ZNFPC and the MOH/CW to establish pre-service education and in-service training programs to prepare clinical, advanced, and master trainers. These trainers then train clinicians to provide quality clinical services to women and men. As the focus of training is on clinical procedures, JHPIEGO trainers use a mastery-learning approach that is competency based, meaning that participants must demonstrate mastery of knowledge and skills with anatomic models before working with clients. To support this training approach, JHPIEGO produces comprehensive clinical-training packages for group-based training. These packages include a reference manual, guides and workbooks, pre- and postknowledge assessments, and performance checklists.

The ZNFPC conducts in-service family planning clinical-training courses for both public- and private-sector clinical providers. Almost all training is group based, which means that participants are brought from work sites to a central location for a specific period of time for a training course. They receive lodging in training centers or hotels, allowances for meals and incidental expenses, and reimbursement for transportation costs.

Key Issues and Events

Through in-country needs assessments, two primary issues were identified in 1994. Although the individuals who attended the group-based training course demonstrated mastery of clinical skills during training, they did not always use these skills in providing services to clients at their work sites. It appeared that the clinician was trained and ready to provide services, but that the job site was not always prepared to offer these services. In addition, the clinician’s supervisor may or may not have been involved in the decision for the individual to attend training and, therefore, may not have had a strong commitment to seeing that knowledge and skills acquired during training were applied on the job.

Another issue related to the link between training and job performance. Because training was
group based, participants would leave their jobs for two weeks to attend the in-service training course at a central site. Participants acquired the latest medical information, practiced skills on new anatomic models, had access to new instruments, and used their skills in the best clinics. To provide quality training, every effort was made to ensure that both classroom and clinical experiences were ideal. When the participants went back to work, however, they often were returning to facilities where they worked in less than ideal conditions. In addition, participants often were not in a position to effect change in their work environment. This resulted in skills not being applied on the job.

In light of the issues that the evaluation raised, it was apparent that either the existing group-based training course would need to be modified, or the focus of training would need to shift to the job site.

Model for Implementing an OJT Strategy

The shift from a traditional, instructor-led, group-based training approach to a self-paced OJT approach is not easy. It is often much easier for trainers to design a group-based course that allows individuals to leave their jobs for a period of time to be trained in a controlled setting and then return after being trained. Supervisors and managers may have little knowledge about what occurs during the training course, however, and may not be prepared to help the trainees apply their new knowledge and skills when they do return to work. By contrast, when training is inserted into the job site with a focus on job performance, it becomes critical to build consensus with key stakeholders and design a quality training event. Recognizing the importance of design, development, and consensus-building activities, JHPIEGO staff developed the model shown in Figure 1. The focus of the left side of the model is on the steps in the design and development of the OJT training strategy. The right side of the model presents the consensus-building activities critical to the success of the design and development steps. Both sides combine to create the implementation model. JHPIEGO’s position was that to implement a successful and sustainable OJT approach required a combination of design, development, and consensus-building activities. The descriptions below each of the steps shown in Figure 1 summarize the approach JHPIEGO used in conjunction with the client to implement the structured OJT in Zimbabwe.
Figure 1. Model for Implementing an OJT Strategy

<table>
<thead>
<tr>
<th>Design and Development of OJT Strategy</th>
<th>Consensus Building Activities</th>
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<tr>
<td>Identification of Training Need</td>
<td>Meet with Key Stakeholders</td>
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<td>Design of the OJT Strategy</td>
<td>Approval of Pilot Test Strategy</td>
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<tr>
<td>Development of OJT Materials</td>
<td>National Level Orientation</td>
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<tr>
<td>Identification of Training Sites and Staff</td>
<td>Conduct Site Orientations</td>
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<td>Train the OJT Trainers and Supervisors</td>
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<tr>
<td>Conduct the OJT Pilot Test</td>
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<tr>
<td>Visit OJT Sites</td>
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<tr>
<td>Present Pilot Test Results</td>
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<tr>
<td>Revise OJT Strategy and Materials</td>
<td></td>
</tr>
<tr>
<td>Approval for Full Implementation</td>
<td></td>
</tr>
<tr>
<td>Implement OJT Strategy</td>
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</tbody>
</table>

Identify the Training Need
In 1993, JHPIEGO assisted the ZNFPC in developing an in-service family planning clinical-training package and in conducting group-based courses using these materials. As discussed above, this group-based approach experienced only limited success. Many trainees returned to sites where they were not able to practice their newly acquired skills because of other job responsibilities, low client caseload for the method in which they were trained, or inappropriate and inadequate supervision. Results of this evaluation suggested that traditional instructor-led courses may not always be the most appropriate or effective way to ensure application of new skills on the job. Given these findings and the ZNFPC’s need for different training approaches that would maximize its ability to train more service providers more quickly, the evaluation team recommended that JHPIEGO assist the ZNFPC in developing a structured OJT package for clinical training.

Meet With Key Stakeholders

After defining a broader clinical-training strategy to expand more quickly the numbers of service providers trained, senior managers decided to pilot test a structured OJT approach. It was imperative that all sectors involved in this type of training be consulted to garner support for the pilot test. Although ZNFPC coordinates all family planning training in the country, a number of key stakeholders have input into what kind of training is needed, where, and for whom. Meetings with these decision makers were held over a period of approximately six months, until both JHPIEGO and ZNFPC felt confident that consensus on this approach had been reached and that the pilot test could move forward.

Design the OJT Strategy

Because structured on-the-job clinical training was a new training approach for JHPIEGO, a decision was made to define the approach through a strategy paper before developing needed training materials. The first step in the development of the strategy paper was to conduct a thorough review of the literature on OJT (see references at the end of this case study), which would allow staff to consider various types of OJT, advantages and limitations, training of OJT trainers, formats of materials, and evaluation strategies. A draft of the paper was circulated to staff for comments and suggestions. After several revisions, the strategy paper was ready for use in developing a specific OJT program.

The strategy paper was useful in describing JHPIEGO’s general approach to structured OJT and provided readers with a clear picture of what OJT should look like. A more specific strategy, however, was needed for the OJT program being requested in Zimbabwe. With the support of key stakeholders, a workshop was held with trainers from those organizations that would be using the OJT approach. Although a centralized training office can develop a traditional, instructor-led course, development of an OJT course must involve the individuals who will be implementing this training approach. Therefore, a strategy development workshop was held in Zimbabwe to ensure that the approach was realistic and to gain the support of those who would be conducting the course at various sites.

During the workshop, participants learned about OJT and reviewed JHPIEGO’s general OJT strategy. Participants then identified key personnel to be involved in the OJT approach, including the trainee, trainer, supervisor, and national OJT coordinator. Participants, working in small
groups, identified the roles and responsibilities of each of these individuals. There were lengthy discussions to reach consensus on the responsibilities of each person involved in the OJT course.

The most critical discussions in the workshop centered on the process for knowledge and skill transfer and assessment. How would the trainee acquire the knowledge contained in the reference manual? How and when would the trainee be assessed? What types of activities would the trainee complete both individually and with the trainer in order to practice or apply newly acquired information? How would the trainee and trainer know when specific activities (e.g., trainee to read a specific chapter, trainer to give a demonstration) were to occur? When would the supervisor administer the final knowledge and skill assessment? The answers to these and similar questions, coupled with the results of the discussion about roles and responsibilities, helped to form the basis for the Zimbabwe OJT strategy.

The output of the strategy design phase is a clear, concise description of how OJT will work in a specific situation. If JHPIEGO were to develop an OJT approach for another country, it would have to go through the same strategy design process again. OJT will necessarily differ slightly in each setting to meet the specific requirements of the country.

**Approve Pilot Test Strategy**

A key step beyond meeting with key stakeholders was to gain approval both within the ZNFPC and among the various agencies in Zimbabwe to conduct a pilot test of the structured OJT for clinical training. At this point, in fact, one of the agencies that had been involved in the early stages declined the opportunity to participate in the pilot test.

**Develop OJT Materials**

One of the keys to the success of any training course is quality training materials. These materials are even more critical in a structured OJT course because the trainee is often working independently, and the materials must make the learning process as easy and clear as possible. In the case of Zimbabwe, an existing instructor-led course was being converted to a self-paced OJT course. This meant that there was an existing reference manual that contained all of the essential, need-to-know information. There also were pre- and posttests, skill checklists, and many other items that could be used in the OJT package.

After the OJT program was designed and the pilot test strategy was approved, a materials development workshop was conducted. The background of the participants selected to attend was an important consideration. To be able to develop quality materials, it was critical that the participants, who would be using the completed OJT package, be proficient trainers who had extensive subject matter expertise and skills. In addition, many of those attending were also involved in the development of the OJT strategy, which helped to ensure that the materials were well designed and that the participants felt a tremendous sense of ownership.

One of the first activities in the workshop was to review the existing (group-based) training package to determine which components could be used in the OJT package. The resulting package comprised six components:
The participants worked in small groups to develop materials for the trainee, trainer, and supervisor. Fortunately, the reference manual required no modifications, saving everyone a great deal of time and effort. The reference manual is the heart of the training package and serves as the source of information for the trainee and trainer. The anatomic models are used to allow trainees to practice skills in simulations before working with clients. Supporting media include videotapes and slide sets that show the steps in clinical procedures.

All the information the trainee needs to learn is in the reference manual. All the course design information directing the trainee, trainer, and supervisor through the OJT course is found in the workbook and guides. Table 1 presents a summary of the primary information contained in these documents. In each of these documents there is a description of the OJT course, responsibilities of those involved, course objectives, and a syllabus describing the course in detail. Both the trainee and trainer have the course pretest. The trainer has the answer key so he or she can give immediate feedback on those areas in which the trainee is strong and on areas in which additional study might be required. All three documents contain the skill checklists, which list the specific steps within the clinical procedures the trainee must master. The trainee uses these checklists first when observing the trainer demonstrate a skill. Following the demonstration, the trainee uses the checklist to practice the skill, under the coaching of the trainer, first on anatomic models and then on clients. When the trainee has completed the OJT course and is ready for the final assessment, the supervisor administers the final knowledge and skill assessments.

Table 1. Contents of Training Package Documents

<table>
<thead>
<tr>
<th>Contents</th>
<th>Trainee’s Workbook</th>
<th>Trainer’s Guide</th>
<th>Supervisor’s Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview of the OJT course</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Responsibilities of the trainee, trainer and supervisor</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Learning objectives</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Syllabus</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Course pre-test</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Course pre-test answers</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
One of the keys to an effective OJT program is inclusion of a step-by-step guide for those involved in the course. In the Zimbabwe training package, this guide is referred to as the course outline (see Table 2). The course outline serves as a guide or map for the trainee, trainer, and supervisor. The primary focus is on the steps each trainee will follow as he or she works through the course. For those steps requiring interaction with the trainer or supervisor, there are directions about what should be done. Trainees check off each step as they complete them. This helps each trainee keep track of his or her progress through the course. At key points in the course outline, the trainer will sign the outline to indicate that the trainee is making satisfactory progress.

Table 2. Portion of an OJT Course Outline

<table>
<thead>
<tr>
<th>Trainee Activities</th>
<th>Trainer Activities</th>
<th>Supervisor Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INTRODUCTION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>__ Read the &quot;Introduction&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>in the <em>Trainee's Workbook</em>.</td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Description</td>
<td>Date</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>__ Meet with your OJT Trainer.</td>
<td>Meet with the trainee to discuss the OJT course goals and objectives, review the training package and then discuss the responsibilities of the trainee, trainer and supervisor.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review the OJT course outline and explain that the trainee should mark and date each step as it is completed. The trainer will sign off each section.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discuss the pre- and post-training knowledge and skill assessments.</td>
<td></td>
</tr>
<tr>
<td>__ Complete the course pre-test.</td>
<td>Administer and score the pre-test following the guidelines found in the Trainer's Guide.</td>
<td></td>
</tr>
<tr>
<td>__ Complete the pre-training skill assessment (counseling).</td>
<td>Administer and score the pre-training skill assessment (counseling) following the guidelines found in the Trainer's Guide.</td>
<td></td>
</tr>
<tr>
<td>__ Complete the pre-training skill assessment (medical examination).</td>
<td>Administer and score the pre-training skill assessment (medical examination) following the guidelines found in the Trainer's Guide.</td>
<td></td>
</tr>
<tr>
<td>Activities completed:</td>
<td>When the trainee has completed the knowledge and skill assessments, sign and date this section.</td>
<td></td>
</tr>
<tr>
<td>OJT Trainer Date</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Days 2-3**

**INTRODUCTION**

__ Read Chapter 1: Introduction to Medical Examinations in the reference manual.  

__ Complete Practice Exercise #1.  

By the conclusion of the materials development workshop, the participants had completed work on all components of the workbook and guides. Following the workshop, the materials were turned over to JHPIEGO’s materials development staff for editing and formatting. In addition, to ensure that the materials were clear, training experts who were not involved in the development process reviewed the draft materials. Copies were also returned to Zimbabwe for review by the individuals involved in the
development workshop. Once all changes were made, copies were prepared for use during the training of the OJT trainers and supervisors.

**Conduct National-Level Orientation**

The newly developed OJT package was presented at a meeting of key Zimbabwean policymakers and decision makers in February 1996 to orient them to the approach and to ensure their support for implementation of the OJT pilot test. Each participant received a copy of the OJT package for reference and review. Those ZNFPC and MOH/CH personnel who developed the materials conducted the following sessions:

- overview of clinical training to date
- overview of the OJT approach and the Zimbabwe-specific OJT model
- essential training elements and the OJT program
- criteria for OJT site and staff selection
- roles and responsibilities of OJT staff
- implementation plan

The recommendations that participants made during the course of the meeting were incorporated, as appropriate, into the OJT package and implementation plan.

**Identify Training Sites and Staff**

Following the national orientation, the national OJT coordinator, in collaboration with technical resource staff at the ZNFPC, worked with the MOH/CW to identify appropriate sites and personnel for the OJT pilot test. Criteria for site selection were presented in the OJT package. The OJT supervisor at each site was the nurse-manager in charge of the site, who already had supervision responsibilities. The supervisor in conjunction with provincial management selected the OJT trainer, who was generally already proficient in the clinical skills in which he or she would be conducting training. The process of selecting trainees for the pilot test varied from site to site. At some locations, the supervisor of the site selected the trainee; at other sites, service providers interested in being trained completed applications and were then interviewed by the supervisor.

Once sites and personnel were identified, ZNFPC technical resource staff visited each location to confirm the MOH’s information and to ensure each site’s readiness for training (for example, by assessing equipment and checking for adequate training space). ZNFPC staff also collected baseline information on the site and OJT personnel (supervisor, trainer, and trainee) that would eventually be used in evaluation of the pilot test. Key information gathered included statistics on delivery of the clinical method in which the trainee was going to be trained. ZNFPC hoped to see an increase in the number of clients accepting the family planning method following completion of training. Many of the sites selected for the pilot test were not currently offering the method. ZNFPC anticipated that this would change following training, however, and that service provision of this method would increase.

**Train the OJT Trainers and Supervisors**

Essential to the success of an OJT course is the preparation of the trainer and, if applicable, the OJT supervisor. In some situations the trainer may be a proficient worker with little or no previous training
experience who has been designated as an OJT trainer. In other situations this individual may be an experienced group-based trainer who is now conducting training one-on-one on the job. In both situations it is critical that these trainers be prepared to conduct OJT.

Although the individuals designated as trainers at the OJT pilot sites in Zimbabwe were practicing clinicians, many had little or no previous preparation as trainers. A workshop focusing on OJT training and supervisory skills was designed and conducted for the trainers and supervisors from the pilot sites. The schedule for the OJT implementation workshop contained a number of sessions and activities to prepare these trainers and supervisors to conduct the OJT program. Participants read supporting information in their training package and then attended sessions focusing on the following:

- an approach to clinical training
- creating a positive training climate
- using interactive training techniques
- using skill-development learning guides and skill-assessment checklists
- coaching in clinical training
- combining coaching with other clinical training techniques

Participants observed trainer demonstrations and then were given opportunities to present a clinical demonstration using anatomic models, coach another participant practicing a skill, and assess a clinician’s ability to perform a skill according to the steps in the skill checklist. Each participant was then given the opportunity to deliver one or more presentations and received immediate feedback from the trainers and other participants.

In addition to the sessions described previously for the trainers, sessions specifically designed for the OJT supervisors included:

- orienting site staff to the OJT program
- communicating with the national OJT coordinator
- conducting the final knowledge assessment
- conducting the final skill assessment
- conducting supervisor visits

A significant portion of the workshop was devoted to orienting the participants to the OJT approach. Participants reviewed the responsibilities of the trainee, trainer, and supervisor. There were lengthy discussions of the OJT site-selection criteria, equipment and supply requirements, trainee learning objectives, use of the OJT course outline, and use of the pre- and posttraining knowledge assessments. Participants were also afforded many opportunities to review and use the skill-development learning guides and skill-assessment checklists. The workshop training resulted in a group of OJT trainers and supervisors prepared to conduct the OJT pilot test.

**Conduct Site Orientations**

During several sessions at the OJT supervisor and trainer workshop, participants discussed the status of their facility as an OJT site and set dates for site orientations. The OJT supervisor at the site conducted this orientation, which was made up of two parts: introduction of the new clinical method that would now be available at the site, and orientation to the OJT approach. Both JHPIEGO and ZNFPC felt it was
crucial that to avoid misunderstandings regarding how a trainee would be spending his or her time, all staff at the site understand what would be taking place. Supervisors practiced giving these orientation sessions at the OJT supervisor and trainer workshop, and the trainers and participants gave them feedback.

After returning from this workshop, the OJT supervisors, with technical assistance from the ZNFPC, conducted the site orientations. The orientation involved all staff at an OJT site, and they had an opportunity to examine the training materials, review briefly the training schedule, and discuss how it might affect each of their roles in carrying out daily activities.

**Conduct the OJT Pilot Test**

The pilot test focused primarily on examining the feasibility of implementing structured OJT for clinical training. The test was conducted at 15 sites in Zimbabwe and covered a period of four months so that at least two trainees could be trained at each site. The structure of the pilot test allowed for dealing with issues that could affect training during the first trainee’s learning period (such as logistics and scheduling) so that an accurate view of the feasibility of OJT could be compiled.

**Visit OJT Sites**

The ZNFPC monitoring activities were a key part of the pilot test. Monitoring technical assistance from the ZNFPC was multifocal. There were site visits made at the beginning of the pilot test, often concurrent with the site orientations to launch OJT. Communication (often by telephone) was maintained regularly during the pilot test, and at least two site visits were made, once during each trainee’s training period. The ZNFPC, usually with a representative from JHPIEGO, visited the OJT training site, primarily to ensure that needed midcourse corrections could be made in the OJT implementation strategy if assumptions were not holding true. In fact, during these visits, we determined that trainees were closely paralleling the time estimates made for completing the OJT program (six weeks) through a variety of work-routine scheduling adaptations and that all logistics had been ensured.

**Present Pilot Test Results**

Synthesis of the results of the pilot test includes examining both the feasibility of implementation as well as identifying potential problem areas when scaling up to full implementation. In Zimbabwe during late 1997, these results were presented at a national forum of key decision makers in the field of reproductive health training (policymakers, program implementers, trainers, service delivery managers, donors, and implementing agencies). Key decision makers at the forum reviewed the pilot test experience, focusing on the effect of the OJT on the daily work routine (that is, service delivery), and recommended ways to expand the structured OJT approach into appropriate settings and topics for additional OJT packages.

The recommendations of the key stakeholders who attended the forum to review the results of the pilot test were then reviewed by senior managers within each agency to determine how the expansion of the existing OJT program could be effected. The process for agency approval includes determining the demand from the field sites and the appropriateness of the OJT strategy already defined for their agency.
In Zimbabwe, the national OJT coordinator has received numerous requests from other sites that have heard about this training approach and have asked to be designated as OJT sites. If the decision is made to continue this training program, these sites will be assessed for adequacy as OJT sites (by applying the same criteria used to select the pilot test sites), OJT staff will be selected, the OJT supervisor and trainer will be oriented and trained, and the site will be oriented to the approach and the clinical method, following the same implementation plan used in the pilot test.

**Revise OJT Strategy and Materials**

The purpose of the pilot test was to implement OJT in a small number of sites to ensure that it was a viable approach to training. Based on the results of the pilot test, revisions to both the strategy and the training materials were recommended. Fortunately, due to the time and effort invested in the design of the strategy and development of the materials, the necessary revisions were minimal.

In terms of the OJT strategy, there were two primary revisions. The first related to the way that OJT was implemented within each of the pilot sites. The approach as originally designed offered only one way for the trainee to move through the course. The course outline gave detailed steps outlining what the trainee and trainer should do at each step in the learning process. In reality, three variations on the OJT approach evolved during the pilot test. For example, the approach as designed was based on the assumption that trainees would be working within their own sites. In several sites, however, trainees traveled a short distance to a neighboring site to participate in the course. These trainees carried their materials back and forth and completed all the reading assignments and practice exercises at home. All skill aspects of the training course were completed at the pilot site. As a result, the OJT program descriptions will now include several implementation options.

The second revision to the basic strategy related to follow-up and monitoring once an OJT course has been implemented. It appears that two of the most critical elements in an OJT approach are the interaction between the trainer and trainee, and between the trainer and supervisor. To help improve these interactions, additional information will be added to the training package and to the workshops for the trainers and supervisors.

The revisions to the training materials included the following:

- Revision of the trainee’s instructions for use of the course outline. Some trainees did not understand how to use the course outline. Although the trainer could explain it to them, it was felt that the instructions should be self-explanatory.
- Revision of the practice exercises. In light of the trainees’ discussions with their trainers about the practice exercises, the trainers recommended several ways to improve the relevance of the exercises.
- Correction of mistakes in the Reference Manual. Even after several editions of the reference manual, minor errors were identified. This was viewed as a good sign that trainees really were reading the Reference Manual.

**Implement the OJT Strategy**

After a sound strategy has been developed, training materials have been revised, and support of the key players has been achieved, it is time to move ahead with full implementation. The implementation plan
will likely include many of the steps presented in Figure 1. The primary steps in the implementation plan include:

- identifying training sites and staff
- training the trainers (and supervisors if applicable)
- establishing an implementation timeline
- monitoring the phased implementation of OJT
- evaluating the effectiveness of the OJT training course

Monitoring and Evaluation

In testing a new type of training, there is a two-pronged approach to assessment of the effect. In the short term, as described briefly under the “present pilot test results” step of the model, the feasibility of implementing structured on-the-job clinical training within existing clinic settings in various organizational types (for example, MOH/CW, ZNFP) was examined. The monitoring and evaluation strategy for this focused on a mixture of data-collection methods. Baseline data established the conditions at the work delivery site prior to the OJT pilot test. These data included documentation of existing caseloads and existing clinic stocks as well as the usual work routine at the site, and summaries of logbooks, stock records, and service statistics.

The monitoring activities (as described under “visit OJT sites”) documented how the pilot-test implementation was proceeding. At each site, interviews of the OJT supervisor, trainer, and trainee (and other personnel, as available) and site visit notes from observations during the visit day documented attitudes toward the training process, perceived and actual changes in the work routine during the training period, and changes in client experience at the site. Monitoring also included examination of the OJT Trainee Workbook and analysis of the trainee’s progress to date through the dating of the completed activities (that is, comparing expected versus actual completion of a section) and review of the cases and experiences that support the structured OJT plan.

Key questions examined in the monitoring visits included the following:

- Trainee progress: How long does each trainee take to complete the OJT sequence?
- Appropriateness of training topics and sequence: How does the training sequence work? Are trainees having problems with a particular section, practice exercise, trainer-trainee practice sessions, and the like?
- Implementation problems: Are there problems with supplies, equipment, or other site issues that hinder effective OJT?
- Service delivery: What effect does OJT have on service delivery? What strategies have clinics used to minimize the disruptions?

Evaluation of the OJT pilot test experience focused on feasibility of implementation, answering the questions outlined above and using a variety of assessment tools. Information from the Trainee Workbook documented the length of the trainee’s training period, the numbers of cases (by type) seen during the training period, and any problems arising that affected training. After the OJT supervisor’s review, this information was submitted to the national OJT coordinator. The supervisor compiled the trainee’s scores on the knowledge assessment and skills checklist and then submitted them to the national OJT coordinator.
The pilot test results were compiled through the middle of 1997. Analysis involves a synthesis of the quantitative data such as service statistics and date progression through the training outline, scores on knowledge assessments, and demonstrated competency on the skill checklist. This analysis is then supported with in-depth interview information, documenting both knowledge and skill transfer along with the success of implementing this training approach.

The longer term assessment, occurring three to six months after the pilot test, will evaluate the ability of structured OJT to produce service providers competent in the clinical skill offered in the training. This evaluation will compare and contrast clinicians trained in group-based (traditional) courses and those trained through the OJT mechanism to determine the advantages, disadvantages, and appropriate use of each training approach in Zimbabwe. The hypothesis is that there is no difference between the training approaches in producing competent clinicians.

Results

The implementation of the structured OJT approach has gone very well at 15 sites in Zimbabwe. Trainees are receiving training in a clinical skill needed for their work, and they value the training because it provided them an opportunity to receive training when they would likely never have been selected to attend a group-based training course. In addition to elaborating the ways in which the approach is being applied, we have identified the key elements that demonstrate its success and can lay to rest commonly asked questions about training that takes place at the job site.

During the pilot test we identified three different models of how OJT is being applied: true OJT, temporary OJT to train staff for other clinics, and site training for hospital rotation needs. These three models occur at different kinds of clinic sites and thus are an adaptive mechanism by the OJT trainers and trainees to use this innovative training approach.

- True OJT: The trainer and trainee are both at the same clinic and work together in training.
- Temporary OJT to train staff for other clinics: Staff travel from a nearby location to the clinic for the training period.
- Site training for hospital rotation needs: In some cases, trainees and trainers are working together in a location where the trainee is not assigned. The trainee has to free up time during the workday to leave the ward or clinic and go to a clinic area either to work with the trainer or work on self-study materials.

The several elements that demonstrate and support the success of implementing structured OJT in Zimbabwe can be categorized into two topics: the training approach of structured OJT and the effect of the training on the work site. As the elements are discussed under the relevant topic, the following issues and hypotheses, raised initially in the planning stages for the OJT pilot test, are discussed and dispelled:

- Trainees won’t be able to find time to do the training during work hours.
- Trainees will be reluctant to do self-study (for example, reading, practice exercises).
- Trainees won’t learn the theoretical knowledge first but will go straight to the practical skills work.
- Trainees won’t be able to do the work at their own pace.
- OJT may have a negative effect on the work routine at the site.
The Training Approach: Structured OJT

A key element of the structured OJT program was the empowerment for many staff to be involved in training. Ownership of the training has been decentralized to the work site, and both the trainers and the trainees identify this training program as their own. Although trainee selection was more formalized at some sites (with use of an application process, for example), staff at the sites feel they are more likely to have an opportunity for receiving training with the OJT strategy than for being selected to attend a group-based training course.

The formal recognition of the training at the site by all staff meant a positive training climate and attention by all staff to ensure the success of the training. Key to this were the site orientations held just prior to the launch of the OJT pilot test.

The guided training plan for the structured OJT provided a focus for supervisors to do the training they consider part of their regular duties. Although the trainer in many instances directs the training, both trainer and trainee feel comfortable with this role and interaction.

There was a personal and professional commitment by the trainees to the training process. Trainees were able to do the work at their own pace and were motivated to progress through the training outline; they were finishing the training in about six weeks, the expected schedule. In spite of some people’s skepticism that trainees would do self-study, by reading, practice exercises, and the like, the trainees were working systematically through the practice exercises, documented by the completion in the Trainee Workbook and supported in some cases by the OJT trainer’s review and notes on the exercises themselves.

There was concern as well that trainees would not learn the theoretical knowledge but would go straight to the practical skills work. However, trainees did not go straight to the practical training, in part because of the value they attached to being able to receive training in the skill. The training was also a mechanism for them to interact with other staff, a situation that doesn’t usually occur in their work. Interaction with the OJT trainer was, for some, “permission” for them to ask questions.

The institutional commitment to the OJT process was also demonstrated. Despite the expectation to the contrary, trainees were released during work hours to spend time reading and practicing. Most clinics configure their own work routines so training time was adjusted around the client flow and busy clinic times. This scheduling meant being able to take advantage of varying clinic hours-time available when few clients come (usually in the afternoon) so the trainee and trainer can work on practice exercises and with anatomic models, and then switching to the busy clinic times when more clients come, once the trainee is ready to work with clients.

Effect of the Training on the Work Site

The OJT taking place at each clinic has had a positive effect on clinic services and has caused a change in the service profile, disputing the expectation that OJT would have a negative effect on services because the training would take time away from the clients. At almost every site, staff felt that OJT has been a positive influence. The number of clinical procedures (the focus of the training) has increased. In some sites, word-of-mouth about the training making a new service available has meant more clients coming for this service. In addition, the trainees have added information about this new service to their initial
interviews and so are able to inform new clients about an additional service. This practice within the work setting means that every client contact is an opportunity for the trainees to apply their new skills as they expand the range of services available at the clinic.

Conclusions and Recommendations

Structured OJT can be implemented in many settings. Many factors play a part in making an OJT program effective. Some of those that contributed to the success of the Zimbabwe OJT program include the following:

- development of the strategy paper
- adaptation of a group-based course
- recognition of the importance of consensus-building activities
- involvement of the end users of the program
- development of a comprehensive training package
- training of key personnel before the pilot test
- follow-up site visits

The development of an organizational strategy paper forced JHPIEGO staff to wrestle with a number of design and philosophical issues before moving into development of materials and training of trainers. This internal consensus-building effort helped staff make key decisions before investing time and resources in other activities. Another factor was the decision to convert an existing, instructor-led course to OJT instead of developing a new course. This allowed staff to work with a proven training package and to take advantage of existing materials. Also, the trainers in Zimbabwe were already familiar with the group-based training package, thus it was easier to orient them to a converted package than to introduce a new training approach and new materials at the same time.

One of the main lessons learned related to the importance of consensus-building activities. Because OJT involves a number of job-site staff in the training process, securing the support of key stakeholders at all levels was a significant factor in the success of the program. Another important factor was the involvement of the end users in the design, development, and implementation of OJT. Once again, when inserting training into the workplace, it is important to involve both potential trainers and trainees in the development of the training approach and materials. The development of a comprehensive training package was also a significant factor that contributed to the effectiveness of the OJT program in Zimbabwe. Ensuring that those involved in OJT had complete reference materials, assessment instruments, and instructions on how to conduct training helped learning to occur as designed. Also critical to the program’s success was the time and effort invested in training the trainers and supervisors before the pilot test. This helped to ensure that these key individuals understood their roles and responsibilities and were prepared to follow the guidelines in the training package. Finally, the follow-up site visits reinforced the importance of the new training approach and provided ZNFPC trainers an opportunity to observe, coach, and assist the new trainers.

The use of structured OJT is a relatively new concept in international training of health professionals. Can the lessons learned from this innovative OJT effort in Zimbabwe be applied to other training situations? Yes! It is obvious from the design and development process in Figure 1 that these same steps could be applied to the implementation of structured OJT in almost any setting. Although the specific consensus-building activities would change, the importance of involving key stakeholders at various points along the way would not.
With the increasing use of electronic performance support systems, computer-based training, Internet-based training, and a myriad of other technology-assisted learning approaches, it is obvious that the shift from instructor-led training to self-paced, on-the-job training will continue. The approach used to implement structured OJT successfully in Zimbabwe can serve as a model for those interested in using structured on-the-job training in their organization.

Questions for Discussion

1. What factors led to the recognition of the need for a structured OJT course instead of a traditional instructor-led course?
2. Describe the importance of the consensus-building activities that paralleled the design and development activities.
3. What was the purpose of developing the organizational strategy paper focusing on OJT before developing the OJT materials?
4. Why was the development of the OJT-training package such a critical factor in the success of the OJT course?
5. This case took place in Zimbabwe. How could the approach used in this case be applied to organizations outside of international health?

The Authors

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