

Operational Guidance for Maternal and Child Survival Country Programs: In-Service Clinical Training

Current Evidence and Recommendations to Support Design and Implementation of Clinical Training Activities

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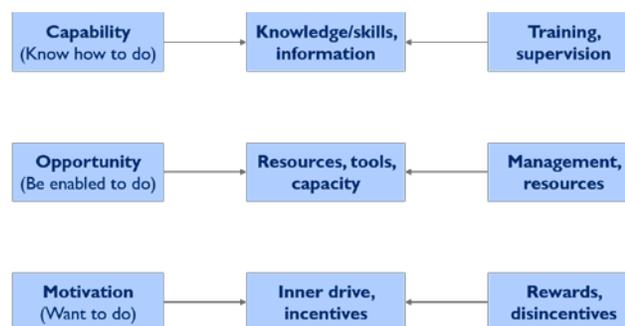
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This operational guidance presents evidence-based recommendations for in-service training of health care providers affiliated with the Maternal and Child Survival Program (MCSP). It also provides illustrative country examples of innovative approaches to address common challenges to clinical training. This guidance can be used in MCSP country programs to strengthen competency-based training to increase knowledge and skills of health care providers, contributing to the larger MCSP quality improvement and local health systems strengthening efforts.

More specifically, this operational guidance:

- Presents evidence from the literature focused primarily on professional and nonprofessional health workers but can be applied to MCSP training interventions that target different audiences
- Focuses on training, i.e., the need to develop **standardized, up-to-date knowledge, skills and attitudes of health care providers** to deliver specific clinical services
 - It assumes programs have analyzed health care provider performance and determined that capability is the problem, i.e., providers *do not know how* to provide the standard of care expected.
 - It keeps training in context; often, training alone is not sufficient to improve performance or quality of care, and it should always be part of a robust, continued professional development system and support competency maintenance or competency development.
 - It does not specifically address other elements in Figure 1 (such as motivation, opportunity, or other job performance factors) but acknowledges that training, by design, can incorporate some elements that influence these other performance areas.
- Contributes to improving quality as defined in the World Health Organization’s Quality of Care Framework for Maternal and Newborn Health (Tuncalp et al. 2015), specifically: “competent and motivated human resources”

Figure 1. Performance improvement framework



Context

Millions of dollars have been invested in interventions to improve health care worker performance, primarily by funding in-service training events. Training is not a strategic focus of MCSP that is funded by the United States Agency for International Development (USAID). Still, many countries invest in training as a primary

strategy for improving maternal and newborn health. Despite the past 20 years of clinical training for maternal, newborn, and child health and family planning, countries continue to face significant training-related challenges, such as:

- Training is disconnected from the workplace and expected workplace performance.
- Sending providers for training disrupts services, particularly for remote communities and peripheral facilities with limited staff.
- Providers' new knowledge and skills are not fully applied in their workplace for various reasons (e.g., a lack of equipment or commodities, limited cases/clients to maintain their skills, other providers in their workplace continue outdated practices, etc.). As a result, skills atrophy, and performance does not significantly improve.
- In-service training often is not linked to continued professional development requirements.
- Pre-service education is not always competency-based, so in-service training is often teaching the basics to top up skills.

“As current trends indicate, in-service training may continue to form the mainstay of human resources development assistance provided to facilities, and thus, represents a timely opportunity to take stock of existing practices and identify strategies by which in-service training can be improved to ensure sustainability, effectiveness, and efficiency.”

–USAID ASSIST Project (2013)

Current Evidence

Jhpiego reviewed the literature to ensure that its in-service training strategies aligned with evidence-based practices that support transfer of learning and ongoing improvements in performance (Bluestone et al. 2013). The findings from this literature review are summarized below. In addition, an exhaustive systematic review (Rowe et al. 2009) to estimate the effectiveness of all strategies aimed at improving health worker performance over the past 40 years has contributed other significant evidence.

Training in Context: A Few Things to Keep in Mind

1. Consistent with USAID's Human and Institutional Capacity Development guidance, training should occur if an analysis determines a gap in knowledge or skills. Training should be one piece of a robust, continued professional development program and linked to maintaining or developing a new competency.
2. Four essential elements of clinical training need to be included in any training design, regardless of the approach: 1) transfer of knowledge; 2) skills acquisition and practice; 3) coaching for an experienced provider or trainer; and 4) assessment of skills, ideally while providing services (Jhpiego 2010).
3. Training alone, without other interventions, results in low effect size (Rowe et al. 2009). Evidence suggests it is **highly unlikely** that a one time, isolated training event will result in changes in a health care provider's performance.
4. Training that is combined with other structural interventions (including supervision, performance and quality improvement, community engagement) has the greatest effect size in improving a health care provider's performance (Rowe et al. 2009).

Techniques: Practice and Simulation Heavy, Not Lecture

The techniques most likely to change practice behaviors are interactive, promote mental processing, are directly linked to job performance, and maximize feedback.

- Case studies, role-plays, and simulations are more effective than lectures.
- Techniques that do not fully engage the learner in critical thinking are unlikely to change practice behaviors. For example, interactive exercises where the participant needs to understand and apply new knowledge and skills will be more effective than narrated presentations.
 - In Pakistan, a new type of clinical simulator for postpartum intrauterine contraceptive device (PPIUCD) training was introduced and tested. Called the Mama-U, it was more realistic for PPIUCD training. By design, it allowed participants to see the correct placement, thereby addressing one of the barriers to instilling competency and confidence among PPIUCD providers. The new model improved the quality of simulation. It also improved the quality of counseling because PPIUCD providers used it with clients to explain the procedure, thereby increasing the method's uptake.

- Blended learning combines various delivery approaches, typically mobile- or computer-based learning with live instruction.
- Simulation-based training has strong evidence to support it, particularly for managing emergencies and building teamwork skills through practice (Deering 2009). Emergency drills are particularly effective for assessing and strengthening emergency preparedness. Basic emergency obstetric and newborn care (BEmONC) and comprehensive emergency obstetrical and newborn care trainings can use team-based simulations to concurrently practice clinical skills and reinforce communication and teamwork. For example, in India, Jhpiego is conducting simulations for a team of providers by videotaping and playing back the recording to participants, so they can jointly assess and critique their performance.

Setting: Workplace-Based, Not Hotel-Based

People learn best when the training setting is very similar to their own work environment.

- In-service clinical trainings will be more effective in settings that allow for sufficient, realistic practice opportunities similar to the workplace. For example, some hospitals have in-service training facilities within their compounds, so participants can move easily from training to observing cases throughout the day.
- On-the-job training has the added benefit of helping identify barriers to implementing new practices, improving worker productivity, and increasing cost-effectiveness. Some examples include: postabortion care and obstetric fistula training in Nepal; and modular BEmONC training in Pakistan.
- In Indonesia, providers from *puskesmas* (community health centers) are invited to the nearby referral hospital for a 1-month clinical rotation. This informal internship focuses on developing their BEmONC knowledge and skills, as well as in fostering strong and positive relationships and communications with the referral hospital.

Frequency: Low-Dose, High-Frequency as an Alternative to One Long Training Course

Once is not enough—single training events can be replaced with shorter, more frequent training opportunities that reinforce important messages, provide opportunities to practice important skills, and foster interaction. This approach is referred to as low-dose, high-frequency (LDHF), where providers are trained in smaller “chunks” of content (such as prevention and management of postpartum hemorrhage as a component of BEmONC) to make the content easier to learn and retain; this training is followed by frequent opportunities to practice their newly-learned skills. MCSP’s use of LDHF prioritizes simulation, practice, and feedback as the primary techniques. The Helping Babies Breathe program is a key example of a simulation-based, LDHF design: it is a 1-day, simulation-based clinical training that is delivered in the workplace and followed by regular practice sessions with a clinical simulator (i.e., the NeoNatalie) to maintain newborn resuscitation skills.

Media: Enhancing Effectiveness and Efficiency

Learning doesn’t have to be an event. There are ways to bring learning to health care providers while they work. The use of highly available mobile technologies in low- to middle-income countries can support delivery of these types of evidence-based training techniques. Radio, mobile devices, tablets, and computers can all support delivery of content and learning events. Some examples include using: e-learning BEmONC modules developed by Jhpiego in collaboration with UNFPA; WhatsApp to support social learning; and mobile mentoring to reinforce desired behaviors and key knowledge. Media should be selected based on how efficiently and easily it can bring learning to the learner, thereby reducing costs and increasing opportunities for practice.

Summary: Simple Things Every MCSP Program Can Do

- Analyze provider performance carefully to assure that a lack of knowledge and skills is a serious problem. Thoroughly understand what skills need to be updated and why. If the gaps are small, they may be addressed through on-site coaching or quality improvement activities. At the same time, look for other barriers to performance that may undermine training investments. For example, PPIUCD services still may not be available after the training if there are no intrauterine devices, many senior providers think the method is “not appropriate for our women,” or infection prevention practices are so poor that

instruments are not regularly sterilized. In these cases, other complementary program investments are needed to maximize training results.

- Seek ways to deliver relevant knowledge before a training to reduce training time and increase practice time.
 - Consider using mobile or e-learning or even mailing the training manual to providers in advance and instructing them to read it before arriving at the training course, as preparation for a written examination on the first day. This was done in Nepal for the self-paced, non-scalpel vasectomy training.
- Explore ways to alter the training design:
 - Reduce lecture time to a minimum, and increase time spent in practice activities. If participants are listening for more than 20 minutes, the session should be revised to increase opportunities for practice.
 - Find ways to deliver training interventions that provide repeated practice opportunities, in particular, for highly critical skills that are less frequently performed.
 - Bring some or all of the training into the workplace (or a simulated work environment) to ensure that practice is realistic and behaviors transfer to the workplace.
 - Emphasize other skills such as teamwork where possible, and look for opportunities to provide workplace-based, whole team training to improve chances of changing provider behavior.
- Provide performance support tools (World Health Organization’s surgical safety checklist, etc.) that are used throughout the training (including in the clinical practice sites) and given to participants to bring home to their workplaces.
- Use mobile number or an online forum for posting questions to provide performance support.
- Convert existing group-based live instruction to an on-the-job approach that links to expected workplace performance.
- Budget in mobile mentoring after training to help learners problem solve and make rational choices about who needs an in-person supervisory or follow up visit.

Connect with Your Colleagues

Join the community and access key resources, such as sample materials, tools, and study protocols from countries implementing alternative approaches to training; view and contribute to discussions to learn from colleagues who are working on this issue.

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