SBM-R in Pre-Service Education

A Supplement to Standards-Based Management and Recognition—A Field Guide

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We would also like to thank all of the staff who have helped to program Standards-Based Management and Recognition (SBM-R) in pre-service education (PSE) programs. Their names are too many to mention, but you know who you are and how rich you have made this process so that this guidance document could come to life for others. The leadership and hard work of many have contributed to this process and resulted in guidance-based on field experiences that improves or enhances the teaching and learning environments for our students and focuses on quality, safety and our mission to save lives.
<table>
<thead>
<tr>
<th>ABBREVIATIONS AND ACRONYMS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARH</td>
<td>Adolescent Reproductive Health</td>
</tr>
<tr>
<td>BEmONC</td>
<td>Basic Emergency Obstetric and Neonatal Care</td>
</tr>
<tr>
<td>CBE</td>
<td>Competency-Based Education</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>ECSACON</td>
<td>East, Central and South African Council of Nursing</td>
</tr>
<tr>
<td>EDC</td>
<td>Educational Development Center</td>
</tr>
<tr>
<td>EH</td>
<td>Environmental Health</td>
</tr>
<tr>
<td>ETS</td>
<td>Effective Teaching Skills</td>
</tr>
<tr>
<td>FP</td>
<td>Family Planning</td>
</tr>
<tr>
<td>GHWA</td>
<td>Global Health Workforce Alliance</td>
</tr>
<tr>
<td>HIV CT</td>
<td>HIV Counseling and Testing</td>
</tr>
<tr>
<td>ICM</td>
<td>International Confederation of Midwives</td>
</tr>
<tr>
<td>ICN</td>
<td>International Council of Nurses</td>
</tr>
<tr>
<td>IMCI</td>
<td>Integrated Management of Childhood Illness</td>
</tr>
<tr>
<td>IP</td>
<td>Infection Prevention</td>
</tr>
<tr>
<td>LBNM</td>
<td>Liberian Board of Nursing and Midwifery</td>
</tr>
<tr>
<td>MOE</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>NGO</td>
<td>Nongovernmental Organization</td>
</tr>
<tr>
<td>NMC</td>
<td>Nurses and Midwives Council</td>
</tr>
<tr>
<td>NTWG</td>
<td>National Technical Working Group</td>
</tr>
<tr>
<td>NWG</td>
<td>National Working Group</td>
</tr>
<tr>
<td>PA</td>
<td>Physician’s Assistant</td>
</tr>
<tr>
<td>PSE</td>
<td>Pre-Service Education</td>
</tr>
<tr>
<td>QIT</td>
<td>Quality Improvement Team</td>
</tr>
<tr>
<td>RH</td>
<td>Reproductive Health</td>
</tr>
<tr>
<td>SBM-R</td>
<td>Standards-Based Management and Recognition</td>
</tr>
<tr>
<td>TOR</td>
<td>Terms of Reference</td>
</tr>
<tr>
<td>TWG</td>
<td>Technical Working Group</td>
</tr>
<tr>
<td>USG</td>
<td>United States Government</td>
</tr>
<tr>
<td>WACN</td>
<td>West African Council of Nursing</td>
</tr>
<tr>
<td>WFME</td>
<td>World Federation of Medical Education</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
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</tbody>
</table>
PURPOSE
The purpose of this guide is to provide direction for a team of programmer(s) and technical advisor(s) in implementing a pre-service education (PSE) program with a Standards-Based Management and Recognition (SBM-R) management approach. Case examples of utilizing SBM-R for PSE will be highlighted.

This guide is intended to be used as a supplement to Standards-Based Management and Recognition: A Field Guide—A Practical Approach for Improving the Performance and Quality of Health Services for implementing PSE programs via a standards approach. A prerequisite for using this guide is to have had experience with SBM-R (or, at the very least, read the SBM-R Field Guide) and be an educator.

OBJECTIVES
1. Describe how SBM-R may be used as a quality improvement approach in PSE.
2. Describe the contribution of PSE working groups to this management process at the country and regional levels.
3. Highlight key considerations in working in the PSE environment with a standards-based management approach.
4. Share lessons learned from different country experiences in implementing PSE with an SBM-R approach.
5. Provide a conceptual framework for monitoring and evaluating SBM-R in PSE.

CONTEXT
Improving education through quality assurance programs is seen as a key strategy for improving health-worker education and training (Crisp, Gawanos and Sharp 2008). Crisp highlights the need to support countries as part of collaborative quality-improvement approaches related to PSE, as well as the need to exchange and share best practices, supported by assessment and dissemination of lessons learned.

Jhpiego has been working with governments, associations and donors to support the development or strengthening of educational institutions since its inception. Strengthening a pre-service educational system and the quality assurance system that supports it requires the commitment of many stakeholders, including professional councils, ministries of health and/or education, professional associations, educators, clinical preceptors, donors and students.

This guide will demonstrate how a Jhpiego management approach based on standards may be applied to promote standardization and also strengthen quality improvement, assurance or accreditation systems that are consistent with international and regional standards. These standards ideally ensure that both academic and clinical sites are in place to support: a) administrative processes; b) management of resources; c) classroom and clinical teaching; and d) development and maintenance of an evidence-based curriculum.
Standards-Based Management and Recognition: A Field Guide—A Practical Approach for Improving the Performance and Quality of Health Services (Jhpiego 2005), is unique (see pages 3–5 of the Field Guide). The process applied in PSE follows the general SBM-R approach, but there are a few differences that are worth mentioning. Resources are available at the end of this document and will be referenced as they are relevant.

- SBM-R in PSE is **not** built around specific content. Rather, it is built on standards that reflect international benchmarks in health education institutions.

- SBM-R in PSE promotes the power of students, faculty and preceptors more than providers, clients and communities by requiring their inputs in assessments and ideally in faculty development.

- SBM-R in PSE promotes the development of networks of educators and preceptors and training institutions rather than networks of facilities.

- SBM-R in PSE is used for accreditation in some countries. A case study illustrating this use in Afghanistan will be highlighted; however, the focus is still internally driven quality improvement versus external assessment.

- The Sample Operational Plan Form (Table 8 in the SBM-R Field Guide) is structured in the same way, but is referred to as an Action Plan.

SBM-R has four steps:

2. Implementing the standards through a streamlined and systematic methodology.
3. Measuring progress to guide the improvement process toward these standards.
4. Recognizing the achievement of the standards.

The same four steps apply in an educational setting. The “area” defines the context in which the standards are being observed. The “standards” serve as a clear and explicit statement of the manner in which PSE should be provided. The tools state the standards for desired performance and provide guidance on how to achieve those standards with verification criteria. **This organization and linkage of area-standard-verification criteria are very important in maintaining this approach.**

The SBM-R approach was first applied for PSE in 2003 in Afghanistan, where midwifery education was undergoing substantial reform. The experience in Afghanistan was shared with other countries (e.g., Ethiopia, Ghana, Mozambique and Liberia) that were interested in implementing SBM-R in PSE programs.

Quality of education and training is a guiding principle of the World Health Organization (WHO), international professional associations (e.g., International Confederation of Midwives [ICM], International Council of Nurses [ICN], World Federation of Medical Education [WFME], etc.) and country regulatory frameworks, where they exist. For example, in Ghana,
the Nursing and Midwifery Council (NMC) set standards for practice, education and supervision of nurses and midwives and works to maintain high standards and influence change to ensure that all nurses and midwives working in Ghana continue to adopt the most up-to-date clinical practices. Regional networks such as the West African College of Nursing (WACN) and the East, Central and Southern African College of Nursing (ECSACON) attempt to promote educational quality through the provision of regional guidance and support to governments and nursing councils.

**Evaluation of SBM-R for PSE programs and training of assessors is not included in this guidance. However, a conceptual framework for evaluation and key indicators for monitoring and evaluation are included in this document at the end in the Resources section.**

**IMPLEMENTATION**

As with the clinical SBM-R approach, use a three-phased modular approach to implement SBM-R for PSE. Module 1 introduces the SBM-R process, devises quality improvement teams for each institution and ends with conducting a baseline assessment of the participating educational institutions and clinical sites. The quality improvement team leaders in the PSE context may be referred to as Educational Development Center (EDC) members (The roles and responsibilities of an EDC will be described under **PROCESS** below). The baseline assessments are two separate assessments with two sets of different standards. PSE standards are more process-oriented and less content-driven. If clinical sites can have implemented SBM-R before or simultaneously with the educational institutions, Jhpiego experience demonstrates that there will be more harmonization and greater congruence with what is being taught in the PSE institution and what is being practiced in the clinical sites. Otherwise, students often get frustrated that the clinical care they are asked to provide is not the same as what they are taught and that clinical protocols are different. Including clinical leaders in the PSE standard-setting process is critical for translation to the clinical environment. The baseline team should provide an immediate feedback session highlighting their strengths in how they performed.

Module 2 activities include sites identifying performance gaps, identifying root causes of gaps, developing and implementing action plans to address the selected causes and improve performance through a series of internal assessments, meetings and teamwork. After three to six months of implementation activities, participating institutions should meet to discuss progress, review internal assessment data and discuss the way forward and further action plans. Institutions should score standards according to the guidance given in the SBM-R Field Guide. Additional guidance on Scoring Achievement will be discussed in the section on “Measuring Progress” (see page 16).

Module 3 aims at identifying persistent gaps and proper interventions, institutionalizing the process, scaling up to other educational institutions and recognizing achievements of participating institutions. Each module is usually separated by intervals of at least three to six months. This implementation follows the same process as the original SBM-R approach, outlined in the 2005 SBM-R Field Guide. We encourage institutional SBM-R quality improvement teams to start identifying their strengths and work from the simple to the complex in order to stay motivated for continuous quality improvement. Action plans help
guide the process of implementing technical assistance, developing workshops, increasing resources, etc.

**PROCESS**

**Build Consensus at the Beginning**
- Identify and orient key stakeholders
- Agree on scope of pre-service intervention
- Agree on roles and responsibilities of working groups

**Identify and Orient Stakeholders**
Implementing the process of SBM-R allows PSE institutions an opportunity to work toward standards that they as PSE stakeholders agree upon and may visualize as achievable within the resources and context that are available to them. A meeting of the stakeholders to prioritize the areas of needed interventions-based on what is feasible is the first step. This meeting could be conducted in the framework of a PSE orientation (see the conceptual framework below.) At this meeting, it is most beneficial to start discussing terms of reference (TOR) (similar to a scope of work), for the existing parties and determine accountability in the process. The TORs will take time to finalize but walking away with an idea of who will be committed to the process and how they will contribute is extremely valuable.

<table>
<thead>
<tr>
<th>CONTEXT</th>
<th>INPUTS</th>
<th>PROCESSES</th>
<th>OUTPUTS</th>
<th>OUTCOMES</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Needs Teaching Challenges in Local Setting Priorities of Governments and Donors International benchmarks Legal and Policy Framework (i.e. MOH, Councils) Professional Associations (Advocacy) Available Clinical Preceptors and Clinical Resources</td>
<td>Administrative Processes (i.e. Student selection criteria) Skilled human resources (qualified, trained, sufficient) Infrastructure, equipment &amp; consumables Simulated drugs &amp; medical supplies Checklists to harmonize with clinical procedures and protocols NWG and EDC Patients</td>
<td>Clinical, Teaching and Curriculum updates Classroom teaching Simulated training Clinical teaching Managerial support processes Leadership &amp; partnership processes Collaborative sharing between teaching sites and clinics</td>
<td>Infusion of national health priorities into curriculum Consistent delivery of evidence-based teaching practices in teaching and clinical sites Increased volume of competent students</td>
<td>Effective, safe, high-quality teaching, coaching and precepting Increased interactive teaching methods Increased simulated practice Teachers/ preceptors mentoring teachers/ preceptors</td>
<td>Improved health and survival (reduced morbidity and mortality) Improved Financing for educational institutions meets HRH need</td>
</tr>
</tbody>
</table>

| SBM-R Assessments | Monitoring Key Indicators |
Agree on Scope of PSE Intervention
Evidence from other country experiences, sample TORs and sample standards should be presented for stakeholders to reflect on, respond to and decide on what working parameters and standards will be achievable and measurable. In the initial stages, discuss the range of options for how the standards may be used as a quality assurance mechanism. Which options are feasible for implementation? Integration with existing registration or regulation processes? Full-scale accreditation? Present a range of options on how the standards may be used to improve PSE and generate some agreement.

Agree on Roles and Responsibilities of Working Groups
As referred to in the SBM-R Field Guide, in the section on “Facilitating SBM-R,” a variety of teams or bodies are involved in the process. -Based on country experiences, the recommendation would be to have a minimum of two levels of working groups and respective TORs; one for the National Working Group (NWG) and one for the Educational Development Centers (EDCs). The NWG and the EDC are recommended for strengthening PSE whether SBM-R is utilized or not. They are mentioned here because they are responsible for managing and sustaining the process. A Technical Working Group (TWG) as an arm of the NWG would have the most experience around the use of standards and would be the subcommittee that finalizes the standards and verification criteria. Their roles and responsibilities are outlined in Resource A.

The NWG consists of members who have a stake in the outcomes of education. Members may be considered the “SBM-R Coordinating Body.” The NWG’s main responsibility is to facilitate smooth implementation of PSE programs and provide policy support so that educational institutions have enabling environments. Members may include representatives from: the Ministries of Health (MOH), Ministry of Education (MOE) or Ministry of Higher Education, Ministry of Finance, chairs of professional associations, WHO, the U.S. Agency for International Development (USAID) and other participating nongovernmental organizations (NGOs). The EDC is a regional or educational institution entity. Members of the EDC may be considered the “SBM-R coaches/facilitators.” The goal of the EDC is to facilitate and institutionalize continuous quality improvement of educational experiences in a manner consistent with recognized accreditation standards and educational and service delivery guidelines. Regional EDCs are recommended when educational institutions are situated in close proximity or are able to meet on a quarterly or semiannual basis. EDCs at an educational institution are recommended when this is not feasible. Examples of members include representatives from each department: instructors, clinical preceptors, administrators and a student representative. Formation of working sub-groups would depend on what is feasible and promotes the most conducive working environment for the stakeholders. The EDC can feed back suggestions, challenges and queries for support to the NWG in a system where the educational process is standardized and has national-level curricula.

Sample TORs, sample standards and the PSE orientation package are available in the Resources section and in JLibrary.
In the planning phase, there should be prioritization and agreement about which areas, and which standards within each area, will be assessed for each educational institution (viewing a draft tool is a great aid). All stakeholders should be aware that every verification criterion within each standard should be assessed. This is because the verification criteria are designed to be the critical elements and should not vary much from setting to setting. Stakeholders should be able first to identify strengths from these critical elements in the system to draw from and then visualize what might be “low-hanging fruit” for teaching institutions, instructors or administrators to “pluck.” This visualization is important as this will position those attempting to implement standards to quickly fill some gaps and motivate them to keep improving the system. Typically, establishing verification criteria does not happen during the PSE orientation. Verification criteria take more time to fine-tune. However, stakeholders should discuss the resources needed to prevent criteria being established that require resources or supplies that are not feasible. Lack of commitment or funding for resources and supplies is a common challenge. Be realistic with the timeline, but limiting the tools too much takes away from the benefit of standardization across PSE departments.

SBM-R contributes to performance improvement and quality improvement and provides educational institutions with the processes, mechanisms and tools to empower them to continually pursue and achieve the desired standards. Accreditation of educational programs can be used as a recognition mechanism within an SBM-R process, and likewise SBM-R can be used a stepping stone for the development of accreditation and certification schemes. Traditionally, accreditation standards and visits are externally-based, whereas SBM-R is a process involving stakeholders at all levels of the education community and the philosophy is centered on internally motivated change. However, the SBM-R process and tools could be used for external validation and accreditation if the regulatory bodies in the country agree to use SBM-R for PSE accreditation. In Liberia, the Liberian Board of Nursing and Midwifery adopted the educational standards for national standards for nursing and midwifery education and is using it for both initial and renewal accreditation.

**Clinical Standards + Educational Standards = Improvements at a System Level**

**SETTING THE STANDARDS**

- Align with international standards
- Tailor to national needs

Depending on the time available, this process could start during the PSE orientation (Resource C) and be finalized with a TWG. Within SBM-R, standards can drive the educational process. While standards may be developed internationally, nationally or locally, aligning them at all levels is essential. International bodies, countries, communities, and local training and educational institutions must develop policies outlining how standards should be implemented. SBM-R can be used both for PSE, and to improve clinical services in the
associated clinical practice sites. If resources are available, on-site strengthening of clinical facilities can be undertaken, possibly in collaboration with partners. Ideally, a comprehensive quality improvement approach using SBM-R for a PSE program would have both sets of standards: PSE standards for the teaching institution and clinical standards for the clinical facilities. In some countries, the clinical standards may be focused on what is required of the Basic Package of Health Services (Liberia), whereas other countries may be looking only at one area like Skill Birth Attendance (India).

**Align with International Standards**

Global standards exist for nursing and midwifery education, medical education and other cadres. These international standards serve as a benchmark for the development of national or institution-based standards. International education standards help education and learning systems move forward toward a common, competency-based outcome in an age of increasing globalization. The graphic below illustrates how global standards can be used to determine competencies needed and how those competencies may be met or developed through training or education.

Below are some specific examples of how the standards could be organized. The bullets below would be the “Areas” for the standards:

**Nursing and Midwifery**

While nursing and midwifery are unique health care professions, the desire to build the workforce capacity with competent practitioners is a common goal as reflected in the WHO’s strategic directions for nursing and midwifery (WHO 2002). WHO has recently identified standards for nursing and midwifery education (2009) in five areas:

- Program Graduates
- Program Development and Revision
- Program Curriculum
- Academic Faculty and Staff
- Program Admission
**Medical**
The World Federation for Medical Education has global standards for medical education as well as guidelines for accreditation. These standards should be the starting point for any standards developed for medical education. Their standards are organized in these areas:

- Mission and Objectives
- Educational Program
- Assessment of Students
- Students
- Academic Staff/Faculty
- Educational Resources
- Program Evaluation
- Governance and Administration
- Continuous Renewal

**Pharmacy**
The Accreditation Council for Pharmacy Education has similar standards for colleges and schools. They are organized in the following categories:

- Mission, Planning and Evaluation
- Organization and Administration
- Curriculum
- Students
- Faculty and Staff
- Facilities and Resources

During the review of existing global materials, cadre-specific competencies may be referenced during the development or implementation of standards. These competencies outline what is expected in that cadre’s scope of work. In midwifery, outlining competencies expected of midwives has been led by the International Confederation of Midwives (ICM 2004), which prepared Essential Competencies for Midwifery Practice. These were further detailed in a set of competencies specific to the Africa Region (WHO/Africa 2006) and can be used to guide the development of PSE curricula.

According to Fleming (2006), these standard areas and their characteristics reflect the recommended components of competency-based education (CBE) programs and systems. Individual schools, nations or world regions are responsible for articulating and implementing specific strategies and appropriate success indicators according to their own unique needs and positions.
Tailor Standards to National Needs

Similar to developing standards for service delivery, developing standards for use in PSE programs should follow the same principles. A standard can be seen as: “a statement of a defined level of quality, which articulates the expectations of initial nursing and midwifery programmes” (WHO 2009), and the development of standards is based on:

- A task analysis of health workers
- International and national guidelines and standards
- Linkage to, or support of, any existing national quality assurance or accreditation efforts
- Up-to-date evidence, e.g., simulated practice
- Relevant policies and legislation considered
- Process mapping to guide tool development (the core and support processes of education such as management of human resources, partnership with service delivery)

Produce a Working Version of the Standards

Encourage stakeholders to set standards considering what they might be able to accomplish within a three- to five-year timeframe as country indicators, strategies and workplans would not usually exceed this timeframe. Stakeholders would also need to discuss whether resources that are necessary for meeting the standards are available.

Standards should be consistent with a cadre’s international standards (if they exist). Generic sample standards mapped to WFME and ICM international standards are included in Resource D.

- Standards should outline the expected level of performance with verification criteria that provide guidance on determining if the standard has been met.
- Standards should be “value-added,” focusing on essentials only.
- Verification criteria should focus on essential steps or components only.

The standards tell the faculty, other training staff and administrators what they should do. The verification criteria tell the faculty, other training staff and administrators how to do it. By knowing desired performance, the faculty, other training staff and administrators can set goals for improving the quality of education, starting with the “low-hanging fruit” and simultaneously motivating them to make a difference in improving their educational process. The standards describe desired performance in specific areas and include detailed, objective verification criteria for each standard. When developing standards it is important to consider these key points in order to establish a system for monitoring the standards:

- From the beginning of the project, identify a few key outcome variables that SBM-R can influence, e.g., teacher-to-student ratio.
Consider what focused efforts toward achieving those key outcome variables would be necessary.

Set up data collection (e.g., assessment records for competency) of the key outcome variables from the beginning.

Identify and include monitoring and evaluation components in the design phase to ensure that data other than assessment scores are available. As with clinical SBM-R, a “service statistics sheet” may be added to the front of the standards. These would be the key indicators for improvement/progress (e.g., percentage of students who graduate on final examinations [target 100]; percentage of graduates competent in provision of counseling on HIV, instructor-to-student ratio; lower preceptor-to-student ratio; number of courses documenting update in evidence-based content, etc.).

Once these standards and verification criteria are established and a tool is created, experienced educators with SBM-R experience should train local educators to assist in collecting the baseline information and they should collect these data together. This data collection, although fairly systematic, is not based in research methods, and subsequent data collection will not be strictly comparable, since samples are observed at different intervals with different staff or in different classrooms. However, over time, multiple assessments and group gap identification will reveal areas for continuous quality improvement. Hence the appropriate intervention or advocacy needed may be identified and an action plan created to work toward improved quality.

Below is an example of a standard, with the detailed verification criteria:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Verification Criteria</th>
<th>Y, N, N/A</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area 1 Std 08 Instructor uses</td>
<td>Observe whether instructor uses learning lab to foster practical learning by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>the skills learning laboratory</td>
<td>01 Allowing students to practice the skill in small groups, taking turns with different</td>
<td></td>
<td></td>
</tr>
<tr>
<td>effectively for student practice</td>
<td>02 Ensuring that each student practices on a model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of clinical skills.</td>
<td>03 Observing students practicing and providing constructive and positive feedback</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>04 Questioning students in order to check their knowledge and problem-solving skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>05 Summarizing the session at the end</td>
<td></td>
<td></td>
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</tbody>
</table>

*Note the use of numbers and rows above for each verification criteria, which will allow for data entry and reporting of trends if the systems are available.*
Afghanistan Case Study: Rebuilding an Educational System

The application of SBM-R in PSE programs was first piloted in Afghanistan as part of a comprehensive approach to strengthening midwifery education. Under the leadership of the Ministry of Public Health (MOPH), Jhpiego and partners (the concept of the NWG came after this experience) developed explicit educational standards of performance to be achieved by midwifery schools in an effort to establish and maintain high standards of educational quality. To further this initiative, an accreditation system was established so that all midwifery programs in the country understand and work to achieve a standard educational methodology, considered important at a time of rapid scale-up as was the case in Afghanistan. To date, the strengthened midwifery schools have trained over 2,000 new midwives and the percentages of births attended by a midwife is increasing. The experience of using SBM-R in Afghanistan is detailed in the case study below.

The maternal and newborn health statistics in Afghanistan are among the worst in the world. The maternal mortality ratio in Afghanistan is 1,600 deaths per 100,000 live births\(^1\) and in addition, newborn survival is poor, with an estimated newborn mortality rate of 60 deaths per 1,000 live births.\(^2\) The classic model for describing causative factors of maternal death, the “Three Delays Model,” is applicable in Afghanistan, where knowledge of danger signs, access to care and quality of care are all less than ideal. In 2002, there were 467 midwives in the country for an estimated population of 23 million. The donor response to rebuilding the health system was vigorous and comprehensive and focused on contracting out the majority of health services. This included contracting NGOs to develop educational schemes for preparing appropriate health personnel. Over a two-year period, 19 new midwifery schools opened in Afghanistan and used a variety of teaching approaches united by a common national curriculum.

A national accreditation program for midwifery education was developed in order to establish standards for the education of midwives, and to reduce substantial variation in program design and implementation. To ensure that all programs follow the standardized curricula and strive for quality in teaching and learning, a National Midwifery Education and Accreditation Policy was developed in 2005. The midwifery education accreditation program began in 2004 in a small group of midwifery schools and now applies to all midwifery education programs in Afghanistan. Using SBM-R, schools first conduct an “internal” assessment using national educational standards that have been developed in five areas: classroom and practical instruction, clinical instruction and practice, school infrastructure and materials, school management, and clinical areas where student midwives undertake clinical experience. These explicit (i.e.,

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written) and mutually agreed-upon standards enable schools to identify gaps between desired and actual performance and undertake performance improvement interventions to address them. When schools achieve at least 80% of the standards, based on an external review from the National Midwifery Education Accreditation Board (NMEAB), they are “accredited.” The NMEAB was established in 2005. The NMEAB is a semi-governmental body that serves as a national technical and regulatory authority for the establishment and maintenance of high-quality midwifery education in the country. As the first accreditation board in the country, the NMEAB has furthered the concept of quality in health worker education and has begun to influence the regulation of other educational programs in Afghanistan.

A recent evaluation of PSE midwifery in Afghanistan (Bartlett et al. 2009) found: “Most of the midwives interviewed were highly satisfied with the quality of their education, rating their program on average from very good to excellent. Notable strengths of the midwifery program mentioned were: quality of faculty (who taught standardized care) and used modern teaching techniques such as case studies, learning aids such as anatomical models and standardized clinical training sites.”

**Lessons Learned**

Human resource needs in a post-conflict environment must be addressed through comprehensive systems. As part of this effort, a standardized approach to address quality improvements in midwifery education has assured strong PSE programs. Challenges in the process include variable quality of care at clinical training sites. Three of the accredited schools received essentially no external technical assistance due to security or funding limitations. Given the detailed nature of the assessment tools and the interaction with other schools and colleagues, however, they were nevertheless able to improve their educational performance in a goal-directed manner and achieve accreditation.

**IMPLEMENTING THE STANDARDS**

- Train external assessors
- Conduct the baseline
- Implement interventions
- Select interventions that make a difference

**Train External Assessors**

Experienced educators with SBM-R experience should train local educators to assist in collecting baseline information and they should collect this data together. This training may involve technical updates in related technical areas or in teaching competencies. Inter-rater reliability should be checked in standardizing the assessors. *A training module on training assessors has yet to be developed.*
Conduct the Baseline
As the baseline is considered a formal assessment, utilize your group of external assessors to conduct the baseline. Similar to SBM-R for clinical sites, after the baseline results are obtained, share them with the educational institution’s administration during an action planning meeting and make sure that an action plan is created. An action plan should be developed and then revised with each assessment. Use the action plan as a key document to re-visit highlights that this process is a management approach and not a highly controlled research approach. Hence the appropriate intervention or advocacy needed may be identified and steps outlined to work toward improved quality. It is an iterative, dynamic process.

As with the clinical SBM-R approach, Jhpiego uses a three-phased modular approach to implement SBM-R for PSE. Module 1 introduces the SBM-R process, devises quality improvement teams (QITs) for each institution and ends with conducting a baseline assessment of the participating educational institutions and clinical sites. The EDC members will most likely be the QIT or be the organizers/leaders of this team. If clinical sites can have implemented SBM-R before or simultaneously with the educational institutions, Jhpiego experience demonstrates that there will be better outcomes. There is no specific difference in this management activity from how this is described in the SBM-R Field Guide. The “responsible” person is sometimes described as the key point person and we encourage the faculty to set start and end dates, rather than a “deadline” because in PSE, depending on the gap or action or time of the school year, a proposed activity may not be able to start immediately.

Implementing Interventions
Key to the success of the use of SBM-R for quality improvement for PSE is the periodic (e.g., monthly or quarterly) coaching and support visits between the modules to provide continuous site-level support for effective and efficient implementation of the program. The assessment tool and action plan are used to guide a process of gradual change and improvements. A TWG or EDC coach who is familiar with the SBM-R process and has particular expertise in PSE improvement should be available to answer questions, motivate and assist in problem solving. Where feasible, this coach should advise on how to address greater infrastructure or resource issues.

Benchmarking visits among facilities is often an effective intervention and a motivating factor for those institutions and individuals performing well. For example, if a training institution is performing very well in one specific area, and another institution has persistent gaps in the same area, they may benefit from a planned and structured benchmarking visit, where they can see and discuss “in real life” how the other institution achieved those standards, or made those changes.

Support for implementation may be provided through regional collaboration. Regional collaboration in quality assurance is particularly relevant to Africa (Crisp, Gawanos and Sharp 2008), given the large number of countries with fragile economies, weak higher education systems and human resource crises. Regional collaboration can include peer reviewing for accreditation purposes, a regional accreditation agency instead of national one...
(especially for small countries), common standards and guidelines for cross-border education, mechanisms for credit-transfer and recognition of qualifications, and sharing of experiences. Regional networks mentioned earlier (the West African College of Nursing [WACN] and the East, Central and Southern African College of Nursing [ECSACON]) work to provide regulatory guidance aimed at ensuring educational quality, and Jhpiego is actively assisting those efforts. The ability to provide regional support is affected by the amount of funding available in different countries, but the basic process remains the same and the number of schools or clinical sites that benefit are the variable elements.

The Importance of the Clinical Teaching Environment

Practice in the clinical setting is essential for developing health care delivery skills, and this component of PSE programs cannot be overemphasized. Experiences in the clinical environment facilitate the process of professional socialization and can be more powerful than those of the classroom. Clinical practice helps prepare students for the roles and responsibilities they will hold in their profession, and gives them opportunities to integrate their knowledge, skills, attitudes and ability to make clinical decisions with the available resources.

While PSE standards focus on education, implementing clinical standards in clinical training sites can help ensure that students observe and practice the correct practices. Clinical standards can be used to ensure that national priority health issues are addressed and managed correctly in the clinical setting. Refer to the figure below, which outlines the role standards may play in driving both PSE and clinical service provision. In Afghanistan and Liberia, clinical standards were used in addition to educational standards to ensure that clinical training sites modeled safe and standardized practices in priority clinical care areas. These standards reflected evidence-based practices and were derived from the nation’s Basic Package of Health Services.

Selecting Interventions That Make a Difference

To address the gaps that emerge during implementation of standards, a variety of interventions are required. Interventions are selected within three main domains:

1. Capability (Know how to do)
2. Opportunity (Be enabled to do)
3. Motivation (Want to do)

We can refer back to the SBM-R Field Guide (see page 17), but examples specific to PSE include:

1. Capability:
   - Improve teaching, simulation and assessment skills to address gaps in teaching performance
   - Follow-up, mentoring and coaching to support transfer of new or revised approaches
2. Opportunity:

- Gaps in resources are common, and to complement training it is vital that trainers also work within an enabling environment. For example, trainers need access to references such as up-to-date textbooks and journals and; simple flipcharts and pens for preparing job aids and identifying local materials for simulating clinical tasks.

- Consideration should be given to the national legal and policy issues related to educating health care providers. Establishing a policy environment was certainly one of the key contributing factors to the success of SBM-R in midwifery education in Afghanistan. For example, competency-based job descriptions formed the base for developing a competency-based curriculum. Engaging policymakers in the process provides additional support and greater sustainability of the process. (A NWG can provide assistance in engaging policymakers and promoting use of SBM-R.)

3. Motivation:

- For adult learners, personal motivation is essential for job performance. Incentives in the form of recognition of improved performance, or expanded authority over job responsibilities, may help address motivation.

- Individuals may appreciate opportunities to expand their competencies as teachers or clinicians (e.g., a career ladder).

- To increase motivation, consider the challenges they face, empower them, reward their achievements, and set up a healthy competition between sites.

As a technical advisor and/or programmer, you should have a “toolbox” of interventions, resources and problem-solving approaches to guide teams. Other interventions range from policy initiatives such as preparing competency-based standardized job descriptions; to resource mobilization (both small and large); to training, such as technical updates for teaching staff. Advocacy efforts can lead to financial and other support by stakeholders including donors but, where possible, resources should be mobilized within existing systems to ensure sustainability. As part of this resource mobilization, it is helpful to undertake a mapping of the activities related to health worker education in the country to clarify roles and responsibilities as well as avoid duplication of effort from other agencies or entities.

As an aside and not related to standards directly, but rather to outputs that you may establish, many of the interventions to improve the quality of education (e.g., Effective Teaching as referenced in the standard below should focus on the processes of teaching and learning as well as program outputs such as the number of graduates who successfully complete a course. Currently, there is still heavy emphasis on classroom facilitation and not on problem-solving activities or clinical decision-making. Although lecture as a method to reach many is needed, where the opportunity for e-learning exists, evidence has shown that interactive modules can save time in the classroom and allow more time for practice, which in health-related training institutions is critical. With the
increasing number of students, the focus on less “nice to know” and more “need to know” is crucial. Learning through presentation of case studies and dialogue teaching has also led to improved outcomes in clinical decision-making (Bartlett et al. 2009; Netterstrøm, Fiehn and Larsen 2011).

In Afghanistan, a resource guide to assist the midwifery schools to achieve standards was prepared based on both international and national resources. An example of resources is included in below in the far right column. These are located in JLibrary.

### Area: Classroom and Practical Instruction

<table>
<thead>
<tr>
<th>Standard</th>
<th>Verification Criteria</th>
<th>Y, N, N/A</th>
<th>Resources and Suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Classroom instructors facilitate group activities effectively.</td>
<td>During classroom instruction, observe whether:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01</td>
<td>The instructor prepared the group activity in advance</td>
<td>Y</td>
<td>See Effective Teaching manual by WHO/Jhpiego, 2005, Module 7</td>
</tr>
<tr>
<td>02</td>
<td>The group activity is relevant to learning objectives</td>
<td>N/A</td>
<td>Recommend using lesson planning template available through Kabul Institute of Health Sciences</td>
</tr>
<tr>
<td>03</td>
<td>The instructor explains clearly the purpose, content and instructions for activity</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>04</td>
<td>The instructor states the activity time limit clearly</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>05</td>
<td>The instructor moves among the groups while students are at work to offer suggestions and answer questions</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>06</td>
<td>At the end, all students gather together to discuss the activity</td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>

Additionally, small working groups were established to prepare documents, such as job descriptions for teachers and clinical preceptors, to fill gaps common to all teaching facilities.

**MEASURING PROGRESS**

Improvements in PSE may be demonstrated through achievement of performance standards and through monitoring of key indicators. This section provides guidance to ensure comparability across types of assessment (internal versus external), over time and across departments and training institutions.

Materu (2007) considers the capacity-building function of self-assessment as that which is particularly important in the countries of Sub-Saharan Africa where capacity remains weak. Teachers and administrators can measure their progress in different ways. Internal (self- and peer) and external assessments (accrediting personnel or trained assessors) are described in the SBM-R Field Guide. Multiple internal assessments may be done to determine if gaps still exist or new gaps emerge.
The use of external peer assessments is not covered in the SBM-R Field Guide and may help make this process more affordable, feasible and sustainable. Peer assessment may be utilized in lieu of external assessors if the SBM-R process is not being used as an accreditation process and it will still bring PSE institutions closer to readiness for external assessment from an accreditation body. However, this readiness is also a product of the policy environment and the degree to which resources that are outside of the PSE institution’s control could be met. Peer assessment may also create healthy competition between PSE institutions as we have seen with “competing clinical facilities.”

External assessments in general are useful for “Recognition” or systematic evaluation. If it is used for “Recognition,” the data should be collected when PSE institutions state that they are ready for external assessment. Each institution should be recognized and rewarded for their achievements. During Module 3, all stakeholders should gather to discuss how they can scale up or at the very least maintain the current system. Some programs have had funding for several institutions but only one subject area. In this case, discussion regarding scale-up to other subject areas or departments would be important to address a more systemic change in the system. Some departments have been inspired by others to adapt the process to improve their performance and have acted independently, but this varies from country to country. Some countries have managed this process by integrating content into multiple departments to effect a systemic change. Preferably, the sustainability factor is addressed at the beginning in the design of the PSE program/proposal, and potentially PSE advisors/coaches are integrated into the national MOE or MOH infrastructure. Establishing EDCs and a mechanism for supporting EDCs will lend to sustaining continuous performance improvement.

**Scoring Achievement**

Determining the level of achievement of a standard starts with determining whether or not each verification criterion has been met. As with clinical SBM-R, there are three types of responses: Yes (Y), No (N) and Not Applicable (N/A). There has been confusion around the use of the three responses, so a more detailed description (beyond what is presented in the SBM-R 2005 Field Guide) is included below.

- **Yes:** Criterion was met.
- **No:** This includes not only when the criterion has not been met but also when it is not possible to observe or assess the criterion, for example, because the person responsible for the criterion being assessed is not present. In the past, this scenario has been denoted as “not observed.” “Not observed” has now been eliminated based on the idea that if this process cannot be observed during the assessment, its availability is probably limited, and that may be affecting the quality of education. Since we are assessing quality, this is an important distinction.
- **Not Applicable:** This includes those criteria that are considered not relevant to the setting and should be agreed upon in advance, prior to conducting any assessments. Whenever possible, the N/A verification criterion items should be marked before starting the specific assessment. If additional items are marked N/A, a comment explaining why the criterion was N/A is critical. Otherwise, the use of N/A should be minimal since the standards and verification criteria are agreed upon in the planning stages. As previously stated, the verification criteria are designed to be the critical elements and should not
vary much from setting to setting. There is a tendency for some to mark N/A while it may be still feasible to meet the criteria. *This highlights the importance of ensuring that the resources needed to meet the criteria are either available or there is a plan to make them available to avoid this kind of marking.* Some countries conducting clinical SBM-R have eliminated N/A for the reasons discussed here.

**Key Indicators and Data Collection**

Key indicators, as mentioned in “Produce a Working Version of the Standards” on page 9, are essential to complete the picture of the improvements made by the performance standards. Assessing these indicators over time within the PSE SBM-R program helps inform whether the work is being implemented according to plan and what influence this work has had beyond improving the quality of the performance standards. The main emphasis is that the key indicators help answer the question “So what?” Data collection and analysis for key performance indicators should be discussed and planned from the beginning, assigned to team members and included in reports that update on progress toward achieving the standards.

**Challenge:** When conducting direct observations and collecting data, realize that you may not see the same teachers, coaches or preceptors. This is okay. This is a performance improvement process and not a scientific comparison. After some standardization and repeated assessments, results should become more consistent.

**RECOGNIZING ACHIEVEMENT**

- Certificates of Participation
- Recognition Events
- Relationship to Accreditation

There is a range of options for recognizing achievement. Which option or options will be chosen will be determined by the NWG and should be established as early in the process as possible. There is also a range of options for how recognition can be provided. Below are some examples.

**Certificates of Participation**

Offering certificates is a process for recognizing achievements. Certificates of Participation are given after a specific intervention toward achieving a standard is attained. For example, if a number of faculty attend a technical update, certificates are offered at the end of the workshop. Full participation in the entire workshop is expected for a certificate to be awarded. These certificates are not associated with certification from a professional council or part of a licensure process, but are given in recognition of completing a course that will assist the individual stakeholders to have additional tools and competencies to make progress on the standards.
Recognition Events
In some countries, the Ministry of Health or Education, in collaboration with the NWG, organizes a public recognition ceremony for participating institutions that have achieved their goals and/or demonstrated progress.

Relationship to Accreditation
SBM-R is a locally driven process that can be taken up by any motivated institution—even with minimal technical support, as we saw in some of the schools in Afghanistan. Recognition of educational institutions that are achieving educational standards can be used to motivate governments and professional associations to implement a broader system of accreditation. SBM-R offers a flexible and lower-cost alternative for ensuring the maintenance of high academic standards where accreditation systems are not in place. SBM-R also complements existing accreditation systems by empowering educators to work toward achieving quality.

This has been the experience in Ethiopia, where SBM-R was introduced in 2006 when Jhpiego began the process of strengthening PSE specifically to ensure the integration of HIV/AIDS training into selected pre-service programs. This experience is detailed in the case study below.

Ethiopia Case Study: Supporting an Existing System

Along with other government partners, Jhpiego Ethiopia has been a key partner in providing technical assistance to the Ministry of Health (MOH) and Ministry of Education (MOE) on quality and performance improvement for prevention, care and support activities under the President’s Emergency Plan for HIV/AIDS Relief (PEPFAR). In 2006, Jhpiego began the process of strengthening pre-service education (PSE) specifically to ensure the integration of HIV/AIDS training into the system, initially with doctors, nurses and midwives, and expanding to pre-service programs for laboratory technologists and pharmacists.

The program to improve the education and training programs commenced with the establishment of the National and University Technical Working Groups acting as the “umbrella” for all activities. A needs assessment was conducted to identify the strengths and weaknesses of the existing HIV/AIDS education. Based on the results of the needs assessment, targeted interventions to improve the content and quality of pre-service HIV/AIDS education were implemented. One of the crucial steps was defining HIV/AIDS-related core competencies for pre-service medical, nursing and midwifery, pharmacy and laboratory technologist education. HIV/AIDS knowledge and skills standardization training was also provided for faculty and preceptors. HIV content integration workshops and subsequent curriculum revision initiatives at national level facilitated standardized allotment of classroom and practical time for HIV teaching and learning.

These revised curricula called for substantial upgrading of the skills of teachers in classroom, practical and clinical teaching methodologies. Working with the MOH/MOE, Jhpiego provided technical and other support for courses in teaching and assessment methods.
Performance improvement of education began in 2007 using the SBM-R model in three universities to integrate more effective teaching in HIV care. The target cadres were medical, nursing and midwifery students. A year later, the support expanded to two government colleges and two private colleges. The cadre type also broadened to include pharmacy and laboratory technology education. Through a participatory process, standards similar to those used in Afghanistan were adapted to the Ethiopian context for each cadre of health worker and focused on HIV/AIDS. A guiding principle of the program is that each participating school has to understand that participation requires substantial effort from staff and leaders within the institutions. Complementary activities to the SBM-R process include establishing Educational Development Centers, and integration of e-learning approaches.

There was substantial improvement in the HIV/AIDS teaching as well as the quality of education overall. Curricula and syllabi were standardized. Content and time for HIV teaching expanded. Student clinical attachment included placement in HIV/AIDS clinics (VCT, PMTCT and ART). Instructors plan their sessions and use more effective and interactive methods. Skills learning labs are established and utilized for development of competencies. Demonstration and coaching in the skills lab and clinical site has improved. More effective and competency-based assessment mechanisms (like Objective Structured Clinical Examination [OSCE] and logbook) are implemented. Below is a graph showing measured improvement in the SBM-R assessment result in one of the best performing schools.
Lessons learned

- The SBM-R enthused and empowered faculty members to improve quality of education.
- SBM-R helped to objectively identify gaps and suggest solutions in pre-service HIV/AIDS education as well as in education overall.
- SBM-R fared better when it was matched with gap-filling support.
- SBM-R has the potential to help the Government of Ethiopia to improve (or at least maintain) quality while dramatically expanding the number of universities and student enrollment.

Ultimately, accreditation is viewed as the highest form of recognition. Accreditation is an organized approach used by governments or delegated bodies to ensure educational quality against a meaningful set of standards. Most accreditation systems contain mechanisms for systematic self-assessment and external peer review, which helps the SBM-R for PSE process and standards to be complementary to any accreditation process.

**Accreditation usually consists of a thorough review of the capabilities of an organization to consistently deliver reliable quality outputs or achieve desired results.** Accreditation is required for the proper recognition of the outputs of an organization (health care delivery, health graduates and certification) by purchasers of these goods and services. Often this recognition of organizational outputs is a prerequisite for getting access to financial reimbursement or payment for the provision of goods or services. Accreditation can be used for health facilities, health education institutions and programs, and certifying bodies. Accreditation of health services and PSE institutions has been recommended as a way...
to improve the quality of care. To be effective, an accreditation system should be linked to clear national or regional standards-based on measurable performance.

Accreditation, licensure/registration and certification are quality assurance mechanisms used to ensure the quality of health services, including their human resources component. Depending on the national needs and resources, SBM-R may be used for large-scale accreditation such as in Afghanistan, or national or regional level initiatives, as in Ethiopia and Ghana.

Although recognition and reward is the fourth and final stage of the SBM-R process, consideration must be given from the very beginning to ensure that plans are in place for this vital component. To recognize a training institution for significant performance improvement typically requires setting minimum criteria, the achievement of which is validated by external verification. This kind of recognition also serves as an incentive when there is feedback, social recognition and or material recognition. Guidelines may be prepared to illustrate the procedures for external verification and recognition of an institution and should be used in conjunction with the SBM-R standards.

**SUMMARY**

**SBM-R PROCESS SUPPORTS PSE PERFORMANCE IMPROVEMENT**

The following is a quick job aid for easy reference and reminders. Once key stakeholders are oriented and consensus is achieved on utilizing the SBM-R approach, this four-step process of SBM-R may be applied in PSE.

1. Setting the standards:
   a. International and Regional Education Bodies provide benchmarks for standards in PSE.
   b. Various countries’ educational institutions that are implementing PSE standards also provide experience and lessons learned for standards and verification criteria realistic in low-resource settings.
   c. Reviewing these with country professional organizations and the MOH and MOE creates a stakeholder base for setting measurable and attainable standards.
   d. National and international stakeholders decide how success would be recognized and set percentage change requirements for the educational institutions that are participating in the process.
   e. An assessment tool of standards is created, reviewed and piloted before finalizing.
2. Implementing the standards:
   a. A baseline of actual performance, which can be compared with desired performance, is measured by use of the standards assessment tool.
   b. Identifying gaps, keeping in mind the strengths and resources available, assists instructors and administrators to create solutions to filling those gaps.
   c. Educational institutions attempt to implement the standards by identifying performance gaps, analyzing root causes, selecting causes to address, and developing and implementing plans to address those causes.
   d. Action plans are used to guide interventions. Assist instructors and administrators to create action plans focused on interventions that will help to fill the gaps (utilizing existing resources and identifying potential resources and support).
   e. Support educational institutions through coaching and guidance. Encourage them to start with small changes, “low hanging fruit.” Routine coaching and support should be provided to guide the change process, recognizing and verbalizing strengths to motivate instructors and administrators.

3. Measure progress:
   a. The Quality Improvement Team should conduct internal assessments and document progress. Just as with SBM-R in clinical settings, individual instructors may use the assessment tool to improve their individual performance as well as make system improvements.
   b. When educational institutions feel ready, they may request an external assessment. Many institutions see SBM-R as a process that gets them closer to being prepared for accreditation standards or translate the SBM-R standards into accreditation standards for the country.

4. Recognize achievements:
   a. National and international stakeholders select educational institutions that were able to make significant improvements (percentage change established at Step 1) from their baseline status; these institutions are then recognized publicly for their efforts and successes.

Setting standards for faculty, clinical instructors and clinical teaching experiences can assist in maintaining proficiency in the area that is being taught. These standards may help PSE programs ensure that they have proficient instructors and everything else they require to produce competent graduates who are learning for needed and desired performance. Getting students involved from the level of the EDC will motivate them to take more ownership and also advocate for support to fill gaps that exist.

SBM-R for PSE is a practical approach to quality improvement that may be used to structure full-scale accreditation, support ongoing accreditation efforts or target priority issues through a certification program.
Programmatic Implementation
While the process described in this document is an overview of how to apply SBM-R to PSE, the program steps needed to implement SBM-R are outlined in the SBM-R Facilitator’s Handbook on CD-ROM. Tools for SBM-R are also located on this CD-ROM.

SBM-R for PSE is a practical approach to quality improvement that may be used to structure full-scale accreditation, support ongoing accreditation efforts, or target national or regional priorities through a certification program.

For further assistance with implementing SBM-R for PSE, please contact Jhpiego's Global Learning Office (GLO) at glo@jhpiego.net.
REFERENCES


RESOURCES

A. NATIONAL WORKING GROUP SAMPLE TERMS OF REFERENCE

Pre-Service Education (PSE) Strengthening

Outline of TOR:

- Background
- PSE Program Goals
- PSE Program Objectives
- PSE Program Activities
- PSE Program Outcomes
- PSE Strengthening Management System

I. Background Introduction

In many resource-poor countries, shortage of trained human power has been rate limiting for adequately addressing the health needs of the population. In response to the prevailing trained human power shortage, there have been various initiatives mainly through providing in-service trainings for related service providers. However, in-service training alone could not be a sufficient solution. Consequently, the need to strengthen pre-service education is an area of focus for a sustainable solution.

Strengthening the pre-service environment has three phases. Creating or Building onto a PSE National Working Group is the first step in Phase One. There are several activities that may lead up to this group’s getting established. All pre-service stakeholders need to meet and orient themselves to the process for strengthening the pre-service environment. Needs assessment reports should be shared and discussed so that a framework for moving forward may be selected. The next step in the process would be conducting a needs assessment, taking into account any that have been conducted in the past two years as long as there have not been any drastic changes (building destruction, massive staff turnover, etc.). A subcommittee may be formed in order to carry out the needs assessment. Once findings are presented, creation of a national action plan, orientation of opinion leaders and creation or strengthening of a curriculum-strengthening group (or subcommittee) will need to occur.

The following principles and factors are recognized by the partners undertaking this PSE initiative:

- Learning, behavior change and improvement in practices are a gradual and continuous process that requires comprehensive efforts in pre-service, in-service and re-training/re-education;

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3 Please refer to the Preservice Implementation Guide: A Process for Strengthening Preservice Education (Jhpiego 2002) for all three phases and steps within each phase.
Though currently focused on a limited subset of the health human resource (H) framework, this PSE initiative recognizes the needs and contributions of all categories of H partners and efforts by the governmental, civil society and private sectors, including all categories of conventional and traditional health providers;

The same H players are simultaneously challenged with competing demands on their time/efforts from various health initiatives as well as other national priority services;

The integral link between prevention and the treatment/care continuum requires that this PSE initiative address not just clinical education but also the full range of public health roles expected of personnel responding to reproductive health (RH) concerns; including curative, preventative, rehabilitative, promotional and palliative services; and

PSE strategies should be centered upon and responsive to the evolving national situations and priorities as well as resource availability and other factors affecting the national health system.

II. PSE Program Goals

- Strengthen pre-service clinical education of physician assistants (PAs), nurses, nurse midwives and environmental health (EH) students on RH prevention, care and treatment.
- Improve the sustainability of maternal and neonatal health services at health care facilities through producing new graduates capable of providing quality RH prevention, care and treatment services upon graduation.

III. PSE Program Objectives

- Introduce/integrate evidence-based prevention, care and treatment related core competencies into curriculum and course content.
- Build the capacity of faculty and service delivery sites by providing them with teaching materials and aids to improve the quality of student practical attachments.
- Enhance teaching skills of faculty members for effective and quality skill training of PA, nursing, nurse midwifery and EH students.
- Introduce competency-based student assessment approaches to ensure that PA, nursing, midwifery and EH graduates have the required competencies prior to graduation.

IV. PSE Program Strategies

- Building of faculties’ institutional capacity through faculty development and training.
- Active participation and ownership by all key stakeholders and implementing partners in the design, implementation, and monitoring and evaluation of PSE strengthening process.
- Program interventions based on needs of key stakeholders and targeting of improvement of course content, teaching and assessment methodology within the existing curriculum and PSE system.
Continuous quality improvement through standards-based education management and recognition (SBEM-R) principles.

Partnership and networking among key stakeholders and implementing partners for PSE strengthening efforts.

V. PSE Program Activities

Phase I Preparation Phase

- Conduct consultative meetings with individual local universities and other key stakeholders for orientation to the PSE program and to identify champions as local training institution focal persons.
- Meet with the focal persons of the local universities and other stakeholders to jointly plan a national stakeholders’ meeting.
- Conduct the stakeholders’ meeting to create consensus at national level and to establish a national working group (NWG) and national technical working group (NTWG).
- Develop/adapt existing needs assessment tools and conduct a needs assessment with methods including: surveys, interviews, focus groups, visits to teaching institutions and clinical practice sites.
- Define desired performance in order to ensure that both the needs assessment and program activity lead toward appropriate outcomes.
- Develop a National Pre-service Education Action Plan and implementation process SBEM-R (based on findings of needs assessment by NTWG).
- Develop M&E plan and tools.

Phase II Design and Implementation Phase

- Conduct training for the curriculum technical working group and key teachers of local universities on effective teaching skills (ETS) and update their knowledge on RH prevention, care and treatment related core competencies.
- Design course content and integrate/introduce the core competencies in the course content (Basic Emergency Obstetric and Neonatal Care [BEmONC], Family Planning [FP], Malaria, Infection Prevention, Integrated Management of Childhood Illness [IMCI], HIV Counseling and Testing [HIV CT], and the cross-cutting areas of Adolescent Reproductive Health [ARH] and Gender Issues).
- Develop/adapt teaching and assessment materials and methodologies.
- Fill critical gaps that exist at local institutions and service delivery sites (equip with teaching aids and equipment) for effective teaching/learning.
- Develop program implementation plan for teaching PA, nursing, midwifery and EH students the updated RH prevention, care and treatment related course contents in each institution.
- Orient faculty and staff on the revised curriculum, course content or delivery method.
Phase III Monitoring and Evaluation Phase

- Conduct regular internal monitoring by implementing team on site.
- Conduct regular visits quarterly by designated liaison.
- Review and revise the training materials and methods, service delivery, quality of teaching and/or methods of teaching after six months of implementation and revise the institutional and national plan of action as needed.
- Arrange biannual review meetings for the members of the training institution/school EDC for sharing experiences and performance appraisal.
- Evaluate the impact of the PSE program on students’ knowledge and skills after two years of implementation and dissemination of results to all stakeholders.

VI. PSE Project Outcomes

The overall outcome is the production of health care providers trained to provide RH prevention, care and treatment services. As a result, students will graduate with a higher level of competency and in turn health care services in the country will improve. Updating the teaching skills of professors and teachers in the public training institution system will improve the overall quality of the teaching and learning processes of universities.

Core competencies to be strengthened and updated in the PA, nursing, midwifery, and EH pre-service education:

- Basic Emergency Obstetric and Neonatal Care (BEmONC)
- Infection Prevention (IP)
- HIV Counseling and Testing (HIV CT)
- Family Planning (FP)
- Malaria Case Management
- Integrated Management of Childhood Illness (IMCI)
- Adolescent Reproductive Health (ARH)
- Gender Issues
- Others to be included based on assessment findings

VII. Pre-Service Education Strengthening Management System

USAID has given this project the responsibility to facilitate the activities of strengthening the PA, nursing, midwifery and EH students’ pre-service education concerning RH core competencies. However, any initiative aimed at strengthening pre-service education needs active involvement and ownership by all key stakeholders at institutional and national levels. Strengthening the pre-service education also requires coordinated technical and managerial inputs of faculty members, Ministries and professional associations as well as international technical and donor agencies. Therefore, for effective coordination of planning, implementation, and monitoring and evaluation of this program, SBEM-R will be
used. The following program management system outlines the ad-hoc faculty and national level institutional arrangements with their key managerial and technical responsibilities.

**Diagrammatic Presentation of Pre-Service Education Strengthening Management System**

Note: This diagrammatic presentation shows only the working relationship of the different ad-hoc structures in this program and it cannot replace the official autonomy and authority of the organizations involved.

**National PSE Working Group**
The national PSE working group will have the following 16 members and major responsibilities:

a) **Members (total # members)**
   - MOHSW representative (2)—Chair
   - MOE representative (1)—Co-chair
   - PROJECT X representative (1)—Secretary
   - Professional associations representative (4)
   - Academic Vice President’s of the three universities (3)—Member
   - WHO representative (1)—Member
   - USAID (1)—Member
   - American College of Nurse-Midwives (ACNM), BASICS, other partners (2)—Member
   - The Carter Center (1)—Member
   - The Clinton Foundation (1)—Member
b) **Major Responsibilities**

- Oversee overall PSE program implementation.
- Establish and maintain an effective information exchange link between the PSE initiative and all other initiatives, programs and efforts relevant to H, including MOH’s emerging national H strategy/framework, in-service training efforts/approaches, primary health care initiatives promoting health officers, health extension workers, etc.
- Review the needs assessment findings and the recommended education plan before dissemination and communication.
- Conduct advocacy and lobby for desired changes at curriculum and policy levels.
- Facilitate smooth implementation of the national PSE plan.
- Mobilize donors and partners for joint planning and integrated action.
- Mobilize and pool resources from donors and partners.
- Meet quarterly to review and monitor progress of PSE implementation in the three universities.
- Delegate the national technical working group for the national level technical tasks in the needs assessment, preparation of national PSE plan, refinement and standardization of the HIV/AIDS core competencies integration in the curriculum as well as other technical issues.

**National PSE Technical Working Group**

The national PSE technical working group, delegate of the national working group, will have the following major responsibilities and number of regular members. However, the national PSE technical working group can assign fewer technical members or additional experts who are not regular members whenever the need arises.

a) **Members (total # members)**

- Ministries of Education (1)—Chairman
- Ministries of Health and Social Welfare (1)—Co-chairman
- PROJECT X PSE advisor (1)—Secretary
- Heads/focal persons of schools/departments (7)—Member
- WHO representative (1)—Member
- Partners (2)

b) **Major Responsibilities**

- Define desired performance and program goals.
- Develop needs assessment implementation plan and schedule.
- Develop/adapt needs assessment tools.
- Develop needs assessment methodology and operational guideline.
- Collect policy-level data, organize and synthesize the findings and prepare reports.
- Consolidate needs assessment findings and reports at national level and communicate for the national working group for approval before dissemination of findings.
- Provide technical support for the EDCs at the training institution level that are implementing PSE strengthening activities.
- Refine and standardize integration of core competencies in the curriculum and preparation of training materials of the participating schools/institutions.
- Review implementation of the PSE working group at the training institution level through internal self-assessment using SBM-R as well as regular review meetings and monthly reports written by university PSE focal persons.

**Training Institution PSE Technical Working Group (this could be EDC members)**
The training institution PSE Technical Working Group, the operational arm of the overall PSE strengthening initiative, will have the following major responsibilities and eight regular members. However, the training institution PSE technical working group can assign fewer technical members or add additional faculty members or experts who are not regular members, whenever the need arises.

a) **Members**
   - Heads of medical, nursing and midwifery (2/3)—Chairman and Co-Chairman
   - PSE focal persons of medical, nursing and midwifery (2/3)—Secretary
   - Public health experts from the Training Institution (1)—Members
   - Clinical staffs (2)—Members
   - PROJECT X representative (1)—Members

b) **Major Responsibilities**
   - Arrange required instruments, equipment and needs assessment tools.
   - Coordinate and undertake needs assessment data collection at the training institution level based on the national guideline and schedule.
   - Analyze collected data, organize and synthesize the findings, prepare reports and communicate the reports to the national technical working group for consolidation at national level.
   - Prepare a draft institutional plan including core competencies and when and how to integrate them with the curriculum, based on the institutional findings, and present it to the national technical working group for further refinement and standardization at national level.
   - Prepare training institution-level implementation plan based on the national PSE plan.
   - Orient the training institution community about the institutional PSE strengthening plan.
   - Coordinate day-to-day implementation of the training institution PSE plan through the focal persons.
Monitor the implementation of the training institution PSE implementation.
- Conduct periodic internal assessment using SBM-R.
- Prepare a monthly written activity report and communicate through the focal persons to the secretary of the national working group and the chairman of the technical working group.
- Receive training on ETS and train fellow faculty through on-site trainings

**Training Institution PSE Focal Persons**
Training institution focal persons are faculty members of PA, nursing, midwifery or EH departments. The focal persons are identified by the faculty/school/department dean or head to serve as a coordinator and contact person in the planning and implementation of the training institution PSE strengthening activities. These activities will be conducted in collaboration with training institutions’ PSE working group, other faculty members, PROJECT X and partners.

**a) Objectives of Assigning a Focal Person**
- Foster ownership of the PSE program.
- Coordinate universities’ PSE activities such as planning, implementation, monitoring and evaluation.
- Facilitate successful mobilization of other faculty members for effective and efficient implementation of PSE.
- Ensure effective communication and partnership between the institutional staff and national working group as well as the national technical working group.

**b) Major Responsibilities**
- Serve as secretary of the training institution working group, and call the training institution PSE working group for regular review meetings.
- Conduct a preliminary assessment before the stakeholders’ meeting (discuss with relevant staff and students and do a desk review of the existing curriculum and course outline).
- Coordinate and monitor the day-to-day implementation of PSE activities at the training institution.
- Coordinate and participate actively in the needs assessment and preparation of the training institution-specific PSE action plan.
- Arrange the required needs assessment tools and guidelines in collaboration with the PROJECT X PSE advisor.
- Coordinate the integration of RH-related competencies in the curriculum and materials development/adaptation.
- Assign faculty members for individual and group tasks in the needs assessment, preparation of the training institution PSE plan and scheduled implementation of the plan.
- Plan for periodic internal assessments using SBM-R.
• Prepare monthly activity reports and regularly communicate with all stakeholders and partners.

**PROJECT X Role**

• PROJECT X, lead facilitator of the PSE program, will:

• Serve as the secretary of the National Working Group and National Technical Working Group; as secretary, the PROJECT X Education and Training Advisor will prepare the agenda and arrange regular meetings as needed.

• Provide technical and financial support for the planning, implementation, and monitoring and evaluation of the PSE program at national and institutional levels.

• Coordinate the overall PSE program implementation and act as a liaison from the National Working Group and National Technical Working Group to the Training Institution EDC groups.

• Actively participate and lead the preparation of draft PSE working documents and needs assessment tools for consolidation and endorsement by the National Working Group and National Technical Working Group.

• Assist efforts of all potential partners in the PSE implementation.

• Ensure implementation of the PSE program according to the national and institutional plan and schedule.

• Monitor and document the overall PSE program implementation.

• Communicate with U.S. Government (USG) partners on the USG meetings at the Centers for Disease Control and Prevention (CDC) on successes and challenges and universities’ areas of focus.

• Prepare a quarterly report to be presented for CDC Ethiopia with innovations, challenges and solutions.

• Provide technical assistance for the development of training assessment materials and methods.

**Other Partners’ Roles**

• Actively participate in the National Working Group and National Technical Working Group as well as the overall PSE program planning, implementation, and monitoring and evaluation.

• Provide technical support for the planning, implementation, and monitoring and evaluation of the PSE program at national and institutional levels.

• Mobilize resources for scale-up of the initiative to other universities and health science disciplines.
B. EDUCATIONAL DEVELOPMENT CENTER SAMPLE TERMS OF REFERENCE

Pre-Service Education (PSE) Strengthening Program

Terms of Reference
(Country X 2009)

Education Development Centers
PRE-SERVICE EDUCATION STRENGTHENING PROGRAM: EDUCATION DEVELOPMENT CENTERS
Terms of Reference

RATIONALE
A central focus of the Pre-Service Education Strengthening program is to facilitate and institutionalize continuous quality improvement of educational experiences facilitated by faculty members for students in a manner consistent with recognized and agreed upon standards and guidelines. Emphasis within the PSE program is placed upon identification of best “education” practices and their integration into medical and nursing education; adoption of effective teaching methods by faculty members needed to assure graduates able to perform to defined standards; and design, development and use of learning resources that support curriculum implementation objectives. The National Working Group whose members came from all the universities with health sciences teaching has put the following anticipated areas of work for Educational Development Centers (EDC):

1. GOAL OF EDC
The goal of the EDC is to facilitate and institutionalize continuous quality improvement of educational experiences in a manner consistent with recognized accreditation standards and Educational and service delivery guidelines.

2. ACTIVITIES OF EDC
- The EDC shall design and establish a mechanism for continuing curriculum appraisal, analysis and improvement, and shall own the process.
- The EDC shall work to improve the teaching-learning process by developing standards, guidelines, bylaws, etc.
- The EDC shall work to improve the quality of teachers through organizing and conducting appropriate and targeted trainings (pedagogical, academic medicine, evaluation of learning outcomes, etc.).
- The EDC shall participate in the selection and purchase of appropriate learning-teaching inputs such as books, teaching technologies, audiovisuals, equipment, etc.
- The EDC shall facilitate and encourage innovations and studies in academic medicine, and cultivate intra-institutional best educational practices.
- The EDC shall take any other duties and responsibilities bestowed upon it by the medical school which are related to the enhancement of quality and relevance of the teaching-learning process of medical education.
To complement what has been envisaged by the NWG, The PSE strengthening program conceives the Education Development Center (EDC) as a permanent academic center/unit intended to fulfill education development goals by providing a range of educational services and consultation to faculty members. EDCs will focus initially on strengthening educational experiences that occur within classroom, skills lab, and clinical and community practice sites. Moreover, the support will be focusing on disciplines such as Physician Assistants, Nursing, Midwifery, and Environmental Health at the beginning but with a long term plan to expand to all departments, schools in the health sciences, having representation for each department.

3. ROLE AND RESPONSIBILITIES

3.1 Advance Educational Reform by Promoting Knowledge, Skills and Behaviors Consistent with Quality Learning Environments, Including:

a) Introduce faculty members to the Mastery Approach to learning through workshops and training programs.

b) Custom design and implement second-generation activities that aim to improve the quality of classroom teaching skills of faculty members consistent with the Mastery Approach to learning.

c) Custom design and implement second-generation activities that aim to improve the quality of skills lab teaching skills of faculty members consistent with the Mastery Approach to learning.

d) Custom design and implement second-generation activities that aim to improve the quality of clinical and community practice site teaching skills of faculty members consistent with the Mastery Approach to learning.

e) Custom design and implement second-generation activities that aim to advance the use of objective student assessment in all phases of undergraduate clinical education.

f) Identify and design second-generation activities that advance knowledge, skills and behaviors of faculty members pertaining to high quality teaching environments.

g) Provide services to faculty members attempting to introduce new courses to ensure that proposed teaching approaches and learning resources are educationally sound and consistent with best practice.

h) Coordinate EDC activities with other faculty level committees and collaborate with other faculty level committees in activities that advance the quality educational experiences in medical and nursing faculties.

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4 EDC staff will participate in activities sponsored by the Jhpiego PSE program. Subsequently, EDC staff are expected to adapt these experiences and conduct replicate activities for faculty members. These replicate events are referred here to as “second-generation” activities.
3.2 Support the Introduction of the Revised Curricula by Facilitating the Development and Dissemination of Up-to-Date Learning Resources, Including:

a) Promote identification of essential learning resources, including e-learning, needed by faculty members to implement undergraduate teaching of curricula.

b) Create and maintain a reference library of resources for faculty members to support curriculum implementation.

c) Participate in institutional partnerships with international (U.S. universities and other supporting universities and organizations) to strengthen clinical education.

d) Provide services to faculty members with respect to the creation and implementation of standardized syllabi, session plans, learning guides and checklists for implementation of revised curricula.

e) Provide a point of access for faculty and students to virtual resources related to the implementation of curricula.

3.3 Identify and Disseminate Exceptional Faculty Achievements in Teaching and Educational Research

SBM-R offers a flexible and lower-cost alternative to accreditation for ensuring the maintenance of high academic standards, and complements existing accreditation systems by empowering educators to work toward achieving quality.

SBM-R can complement the accreditation process (if it exists) by offering a more continuous process of performance improvement with greater involvement of the organization’s members, and goes beyond periodic external assessments. When achievements are made, they are publicly recognized.
C. SBM-R FOR PSE ORIENTATION WORKSHOP, SYLLABUS, SAMPLE SCHEDULE AND SAMPLE EVALUATION FORM

Workshop Title: Orientation to Pre-service Education (PSE) with the Standards-Based Management and Recognition (SBM-R) Approach

Workshop Goal: The goal of this workshop is to orient PSE stakeholders to a global framework for approaching, managing and sustaining improvement of the PSE environment.

Workshop Description: This workshop will provide PSE stakeholders with a framework for strengthening the PSE environment. With the information they gather and share here at this workshop, stakeholders will be able to see where their contributions will fit together with others to move PSE forward.

Day One will focus on an orientation to concepts, frameworks, standards, and roles and responsibilities of various PSE stakeholders. Day Two will focus on the technical working group that will adapt standards to the country context. If buy-in has not already been obtained, it may be done on Day One of this meeting, but there is an assumption that a stakeholders’ meeting or meetings have taken place. Day Two is optional for this orientation and may also be conducted at another time, but prior to SBMR Module One.

Participant Selection Criteria: Any stakeholder that may effect change in the PSE arena. Examples include: Ministry counterparts for education and or training, relevant Boards of practice, School administrators, representative sample of faculty in the subject areas being addressed, student leaders, representative of relevant professional associations, and clinical preceptors.

Workshop Outputs: Draft implementing partners’ TOR, draft EDC TOR (if time permits), draft PSE standards, and draft framework for clinical standards

Workshop Objectives: Day One

1. Introduce an evidence-based framework for Global PSE
   Enabling Objectives:
   a) Describe common PSE challenges (and opportunities)
   b) Define PSE education and guiding principles
   c) Describe a framework for PSE education
   d) Review existing assessment information available
   e) Outline strategies for strengthening PSE

2. Review existing international and national standards
   Enabling Objectives:
   a) Review PSE educational standards as set by internationally recognized agencies
   b) Review core competencies
   c) Review current national standards
3. Discuss the roles and responsibilities of a National Working Group (NWG)
   Enabling Objectives:
   a) Describe NWG
   b) Discuss options for implementing or strengthening NWG
   c) Review sample implementing partners’ TOR
   d) Adapt sample implementing partners’ TOR to country context

4. Introduce Educational Development Centers (EDCs)
   Enabling Objectives:
   a) Describe EDCs and options for implementation
   b) Review Terms of Reference (TOR)
   c) Adapt TOR to Liberian context

5. Review potential or planned interventions

**Workshop Day Two**

1. Introduce SBM-R
   Enabling Objectives:
   a) Describe overview of SBM-R process
   b) Review sample standards
   c) Describe how the management tool may be used to reveal the baseline status, design needed interventions, and sustain improvements to the system

2. Set draft standards for PSE
   Enabling Objectives:
   a) Review sample PSE tools by area
   b) Adapt tools to country context

3. Set draft standards for clinical sites
   Enabling Objectives:
   a) Review sample clinical tools by area
   b) Adapt tools to country context or prioritize which sets of standards will be adapted

**Workshop Materials:**

**Handouts:** Current assessment information, sample Implementing Partners TOR and EDC TOR for adaptation to country context, sample standards for PSE, sample standards for clinical sites

**Sample Tools:** Sample standards

**Presentation Graphics:** See folder

**Workshop Evaluation**
## Workshop Schedule

<table>
<thead>
<tr>
<th>DAY 1: INTRODUCTION/REVIEW/DISCUSSION</th>
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<tbody>
<tr>
<td>8:00 Registration of attendees</td>
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<tr>
<td>8:30 Welcome and introductions</td>
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<tr>
<td>9:00 Introduction to Global PSE</td>
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<tr>
<td>10:30 Tea break</td>
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<tr>
<td>10:45 Review existing international and national standards</td>
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<tr>
<td>12:00 Lunch</td>
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<tr>
<td>1:00 Creating or strengthening a NWG</td>
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<td>1:30 Group exercise on National Working Group R&amp;R</td>
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<td>2:00 Introduction to Educational Development Centers</td>
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<td>2:45 Group exercise on components of EDC</td>
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<td>3:30 Coffee break</td>
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<td>3:45 Review potential or planned interventions</td>
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<td>4:00 Group Discussion on sustaining PSE Initiatives</td>
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<tr>
<td>4:30 Closing and final remarks, distribute workshop CD and Evaluation</td>
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<tr>
<th>DAY 2: SETTING THE STANDARDS</th>
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<tr>
<td>8:30 Welcome and warm-up</td>
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<tr>
<td>9:00 Review SBM-R</td>
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<tr>
<td>9:30 Reviewing sample PSE tools</td>
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<tr>
<td>10:00 Tea break</td>
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<tr>
<td>10:15 Group exercise on Setting PSE Standards</td>
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<tr>
<td>12:00 Lunch</td>
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<tr>
<td>1:00 Setting clinical standards</td>
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<tr>
<td>2:00 Review sample clinical tools and Group Prioritization Exercise</td>
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<tr>
<td>3:00 Tea break (during activity)</td>
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<td>4:30 Action items and close for the day</td>
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Workshop Evaluation Form

This evaluation is confidential. Please do not write your name here. Please give your most honest feedback so that we can conduct the most effective course. Please score each workshop component, circling the number that best reflects your opinion about that workshop component, with 1 being the least effective and 5 being the most effective. Additional space is allotted for other comments below. Mark N/A next to the session title if there were any that you did not attend.

<table>
<thead>
<tr>
<th>Workshop Component</th>
<th>Score</th>
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<tbody>
<tr>
<td>1. General organization</td>
<td>1 2 3 4 5</td>
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<tr>
<td>2. Content</td>
<td>1 2 3 4 5</td>
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<tr>
<td>3. Sequence of content and activities</td>
<td>1 2 3 4 5</td>
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<tr>
<td>4. Global PSE presentation</td>
<td>1 2 3 4 5</td>
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<tr>
<td>5. International and national standards presentation</td>
<td>1 2 3 4 5</td>
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<tr>
<td>6. Creating or strengthening a NWG presentation</td>
<td>1 2 3 4 5</td>
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<tr>
<td>7. EDC presentation</td>
<td>1 2 3 4 5</td>
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<tr>
<td>8. Planned interventions presentation</td>
<td>1 2 3 4 5</td>
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<tr>
<td>9. SBM-R presentation</td>
<td>1 2 3 4 5</td>
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<tr>
<td>10. Setting PSE standards</td>
<td>1 2 3 4 5</td>
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<tr>
<td>11. Setting clinical standards</td>
<td>1 2 3 4 5</td>
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<tr>
<td>12. Time dedicated to each subject</td>
<td>1 2 3 4 5</td>
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<tr>
<td>13. Activities</td>
<td>1 2 3 4 5</td>
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<tr>
<td>14. Course materials (standards, handouts)</td>
<td>1 2 3 4 5</td>
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<tr>
<td>15. Group participation</td>
<td>1 2 3 4 5</td>
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<tr>
<td>16. Logistics (space, refreshments)</td>
<td>1 2 3 4 5</td>
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Any other comments:

Thanks for your feedback!
D. SAMPLE STANDARDS MAPPED TO GLOBAL BENCHMARKS

Guidance: The following are evidence-based pre-service standards that may be adapted to your country pre-service program. The verification criteria may be determined through interviews, document review, and ideally observation. All verification criteria under a standard must be met in order to count the standard as met. These verification criteria are illustrative and may or may not be used by your country program. They are to give you an idea of what has been used before and what relates to an international benchmark. Your local stakeholders will need to agree on what is feasible in your setting, given your local resources. If any verification criteria are attainable but not present, please include them.

The numbers behind each standard are the reference showing from where this standard is mapped. Each standard has been mapped to either or both WHO’s global standards in basic medical education (denoted as WFME) and WHO’s global standards for the initial education of professional nurses and midwives (denoted as WHO NM). Although these are standards for medicine, nursing and midwifery, they are applicable to other health worker educational programs.

Donors are interested in outcomes. In our clinical standards we track service statistics in addition to the standards. This assists us to report on the improvement of certain outcomes which may be partially attributable to improvement in the standards (e.g., increased ANC attendance). Of course we cannot ignore other contributing forces (e.g., other programs, increased funding, etc.), but donors want to see a change that is reportable beyond a quality aspect. What are our outcomes for PSE? How will we track those? Think over these as you review the guidance for these standards. Some examples might be: Increased pass rate on the national exams (WHO NM 1.1.1), lower tutor-to-student ratio, lower preceptor-to-student ratio, number of courses documenting update in evidence based-content, etc. Use these examples along with the conceptual framework provided on page 4 and your programs’ required indicators.

Area One: Governance and Administration

Standard One (WHO NM 5.1.1, 5.1.3, 5.1.4, WFME 4.1, 4.2)

Progressive admission process

Verification Criteria:

- Meets national criteria for higher education institutions
- Selection committee meets to review applicants and process
- Includes minimum acceptance criteria
- Non-discriminatory selection process
- Allows for recognition of prior experience to be applied to entry point in the program
- Student recruitment and admission is aligned with governing MOH or MOE policy
- Admission brochure is available
**Standard Two (WHO NM 5.2; WFME 4.2)**
Student size and nature of intake are appropriate

*Verification Criteria:*
- Reviewed and adapted periodically to meet national needs of the society
- Defined and related to capacity of school
- Consistent with national HR policy
- Faculty and preceptor ratios are considered in adjusting the intake size

**Standard Three (WHO NM 2.4.1, WFME 2.7, 4.2)**
Stakeholders input is integrated

*Verification Criteria:*
- Regular meetings with relevant professional association
- Input from relevant Ministry on curricula and teaching
- Curriculum committee has representation from staff, students, and other stakeholders (e.g., preceptors, ministry representative, council)
- Clinical sites are involved with clinical rotation planning
- The size and nature of student intake are reviewed periodically to meet national needs of the society
- Students have an opportunity to give feedback to administration

**Standard Four (WHO NM 2.1.1, 2.1.3)**
Mission and vision

*Verification Criteria:*
- Mission and vision are posted or accessible
- Education and clinical outcomes are clear

**Standard Five (WHO NM 2.1.6)**
Job descriptions are available for all staff (teaching and non-teaching staff)

*Verification Criteria:*
- Job descriptions are given at the time of hire
- Job descriptions are updated with supervisor if roles evolve
**Standard Six (WHO NM 2.3.4)**
The school has a budget allocation and budget control system that meets staff, faculty, and student needs

*Verification Criteria:*

- A salary structure exists to pay school staff
- Staff are paid on time
- Transportation for students to required clinical practice sites is made available to all students
- Skills lab and/or practice areas are funded and monitored for replenishment of supplies on a periodic basis
- Libraries are funded and monitored for upgrading of resources on a periodic basis
- Computer labs are funded and monitored for repairs and updates

**Standard Seven (WHO NM 2.2.1, 2.2.2)**
Program follows a nationally or internationally recognized set of educational standards

*Verification Criteria:*

- Internal standards are set and known to all
- Criteria exist for sites to be deemed clinical sites
- A copy of the criteria from the relevant professional boards are available
- Core competencies for each cadre are established
- Academic policies are set and known to all

**Standard Eight (no reference but seems to be important across countries)**
The school has an academic calendar

*Verification Criteria:*

- Start and end dates of the program
- Dates of exams
- Student breaks

**Standard Nine (WHO 2.3.3)**
The school has a shared organogram

*Verification Criteria:*

- Organogram is displayed on notice board
- Students have been oriented to the organogram
Area Two: Resources

**Standard One: (WHO NM 2.3.1; WFME 6.1)**
The school has the basic infrastructure to function effectively
Verification Criteria:
- Classrooms
- Clinical simulation lab/s
- Applied sciences lab/s
- Library
- Computer lab with Internet connectivity
- Recreational area (space for students to gather and socialize)
- Toilet facilities
- Communication facilities (telephone, fax)

**Standard Two: (WHO NM 2.3.2)**
The school facilities are a safe physical environment
Verification Criteria:
- Teaching and learning environments are cleaned daily
- A cleaner is on duty during hours of operation
- Toilets are cleaned per schedule daily
- There are physical barriers to the school (e.g., locked doors, gates or fence)
- There is a security person assigned to each active entrance/exit

**Standard Three: (WFME 6.1)**
Teaching and Learning spaces are comfortable and properly equipped for teaching
Verification Criteria:
- Adequate lighting, either natural or electric
- Adequate ventilation (open windows or fans, air conditioner)
- Chairs in sufficient number for the largest class size
- Desks in sufficient number of for the largest class size
- Adequate and flexible space for group learning activities
- Blackboard, whiteboard, or flipchart in each teaching space
- Chalk or relevant markers (whiteboard or permanent)
- Source of power (electric or other)
- Waste bin
- LCD or overhead projector with voltage stabilizer
- Functioning clock
**Standard Four: (WFME 6.2)**  
Clinical simulation lab is functional for practical learning sessions  
**Verification Criteria:**

- Adequate lighting, either natural or electric
- Adequate ventilation (open windows or fans, air conditioner)
- Tables to place models
- Instrument kits
- Consumable clinical supplies
- Infection prevention supplies and equipment for hand washing (e.g., running water into sinks or buckets)
- Plastic buckets for decontamination, soiled linen, and waste
- Educational posters and charts
- Stations organized by core competencies
- Checklists and procedure manuals
- Electronic learning materials (e.g., CD-ROMs, videos, DVDs)
- TV and video/DVD player
- Blackboard, whiteboard, or flipchart in each teaching space
- Chalk or relevant markers (whiteboard or permanent)
- Source of power (electric or other)
- Waste bin
- LCD or overhead projector with voltage stabilizer
- Functioning clock
- Cabinets with locks for supplies
- Staff or senior student assigned to manage lab materials

**Standard Five: (WHO NM 3.1.5)**  
Clinical simulation lab is functional for independent practice  
**Verification Criteria:**

- Students are able to access lab outside of required lab time
- A system of accountability exists for ensuring security of materials
- A log in and out sheet is available to demonstrate independent practice and assist teachers in monitoring student practice time
- Models are draped and stored according to maintenance guide
- Maintenance booklets/videos are available to review if needed
Area Three: Educational Program

**Standard One (WHO NM 3.1.3, WFME 2.6)**
The school provides classroom and clinical learning that delivers the knowledge and skills required to meet the needs of their respective populations.

*Verification Criteria:*
- Basic sciences are integrated into the program
- Course content is mapped to one or more core competencies
- Discussion is encouraged to foster critical thinking skills

**Standard Two (WHO NM 3.1.4)**
The school establishes and demonstrates balance between the theory and practice components of the curriculum.

*Verification Criteria:*
- Group activities are incorporated into the lesson plans
- Simulated practice is scheduled closely in time to the theoretical component

**Standard Three (WHO NM 3.1.5)**
The school demonstrates recognized approaches to teaching and learning in their programs, including but not limited to adult education, self-directed learning, e-learning, and clinical simulation.

*Verification Criteria:*
- Students are given options in assignments
- E-learning materials are made available
- Opportunities for independent projects or writing are integrated into the courses

**Standard Three (WHO NM 3.1.7)**
The school enables the development of clinical reasoning, problem solving, and critical thinking in their programs.

*Verification Criteria:*
- Problem-based activities using case studies, role plays, or clinical simulations are integrated into the courses
- Assessment methods are varied and include case scenario with multiple choice questions, and matching

**Standard Four (WHO NM 3.2.4)**
Clinical practice sites are prepared to accept students for learning.

*Verification Criteria:*
- There are a variety of clinical sites to address all the core competencies
- The sites has been inspected for safety and clinical practice rotation criteria
- A room for conferencing and practice when client load is low is available
Clinical preceptors have or have contributed to creation of student feedback forms

Clinical preceptors monitor students and document on student feedback forms

Clinical preceptors monitor students and document tasks completed on student log books/schedule books

**Standard Four (WHO NM 3.4.1)**
Assessment of students involves the use of reliable evaluation methods

**Verification Criteria:**
- Inter-rater reliability is conducted for standardized practical exams using multiple stations
- Assessments are planned according to core competencies
- Checklists are evidence-based and tested
- Standardized checklists are utilized by the teachers/evaluators for assessment
- Written exams are peer-reviewed for content reliability and validity
- Written assignments are minimal and evaluated with a standardized key
- Assessments are weighted by their reliability and validity of assessing core competencies (e.g., MCQ tests weigh greater than written assignments)

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**Area Four: Faculty**

**Standard One (WHO NM 4.1.2; WFME 2.1)**
Teaching faculty is competent educators

**Verification Criteria:**
- Relates lesson to previously covered or related topics
- Uses a lesson plan with learning objectives
- Learning objectives are linked to core competencies
- Uses prepared and appropriate audiovisual or instructional tools
- Refers to evidence-based references
- Uses critical thinking and clinical decision making (e.g., case studies, role plays)
- Uses clinical simulation prior to clinical practice (e.g., practice with a model, role play)
- Utilizes guest lecturers or other means of learning for areas in which they are not experts
- Have received staff development on teaching/training methodology
**Standard Two (WHO NM 4.1.2)**
Faculty is clinically competent in the area that they teach

*Verification Criteria:*

- Works one day per week in the area that they are teaching
- Updates themselves through at least one staff development activity per year (e.g., online course, conference, class, peer observation)

**Standard Three (WHO NM 4.2.1)**
Clinical faculty (clinical preceptors) have been appropriately selected

*Verification Criteria:*

- Evidence of training (degree, diploma, or licensure)
- Experienced clinicians (at least 2 years)
- Chooses (versus assigned) to become preceptors

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**Area 5: Students**

**Standard One (WHO NM 2.3.5; WFME 4.3)**
Student support services are available

*Verification Criteria:*

- Remediation for coursework is available
- Counseling or counseling referral is available
- Legal referral is available for students who may be assaulted
- Food and drinks are accessible to students
- Transportation to and from clinical site is planned

**Standard One (WFME 4.4)**
Student representation in school proceedings is evident

*Verification Criteria:*

- Student activities or organizations are encouraged and facilitated
- There is at least one student per program on curriculum committee (could be non-voting)
- Students evaluate teachers and course content in a confidential manner after each course is over
- Student responsibility is included in the syllabi for each course
E. NOTES


F. SBM-R FOR PSE SUMMARY JOB AID FOR TRAINERS AND PROGRAMMERS

The following resource may be printed separately (front and back of a single page) and used as a job aid.
How to Use the SBM-R Process to Support PSE Performance Improvement

The four-step process of SBM-R has proven to be applicable in PSE. The following is a quick job aid for easy reference and reminders.

1. Setting the standards:

   a) International and Regional Education Bodies provide benchmarks for standards in PSE.

   b) Various countries’ educational institutions that are implementing PSE standards also provide experience and lessons learned for standards and verification criteria realistic in low resource settings.

   c) Reviewing these with country professional organizations and the MOH and MOE creates a stakeholder base for setting measurable and attainable standards.

   d) National and international stakeholders decide how success would be recognized and set percentage change requirements the educational institutions that are participating in the process.

   e) An assessment tool of standards is created, reviewed and piloted before finalizing.

2. Implementing the standards:

   a) A baseline of actual performance, which can be compared with desired performance, is measured by use of the standards assessment tool.

   b) Identifying gaps, keeping in mind the strengths and resources available, assists instructors and administrators to create solutions to filling those gaps.

   c) Educational institutions attempt to implement the standards by identifying performance gaps, analyzing root causes, selecting causes to address, and developing and implementing plans to address those causes.

   d) Action plans are used to guide interventions. Assist instructors and administrators to create action plans focused on interventions that will help to fill the gaps (utilizing existing resource and identifying potential resources and support.

   e) Support educational institutions through coaching and guidance. Encourage them to start with small changes, “low hanging fruit.” Routine coaching and support should be provided to guide the change process, recognizing and verbalizing strengths to motivate instructors and administrators.
3. Measuring progress:
   a) The Quality Improvement Team should conduct internal assessments and document progress. Just as with SBM-R in clinical settings, individual instructors may use the assessment tool to improve their individual performance as well as make system improvement.
   b) When educational institutions feel ready, they may request an external assessment. Many institutions see SBM-R as a process that gets them closer to being prepared for accreditation standards or translate the SBM-R standards into accreditation standards for the country.

4. Recognize achievements:
   a) National and international stakeholders select educational institutions that were able to make significant improvements (percentage change established at Step 1) from their baseline status; these institutions are then recognized publicly for their efforts and successes.