

Task Shifting for a Strategic Skill Mix

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In countries with critical shortages of physicians and nurses, the skill mix and distribution of available health care workers are often out of sync with national health care needs (WHO, 2006). Task shifting is increasingly considered a promising intervention for strengthening national health coverage by improving the strategic skill mix in the country's health care system. In this technical brief, task shifting refers to two processes: 1) shifting tasks from one cadre of health care worker to an existing, lower-level cadre and 2) shifting tasks to a new cadre developed to meet specific health care goals. Based on a review of the literature and country examples, the brief describes why task shifting is important and highlights some key steps in planning for, developing and supporting cadres involved in task shifting.

Why Task Shifting?

The World Health Organization's 2006 report, *Working Together for Health*, notes that 57 countries are considered to have a critical shortage of health care workers and an estimated 2.4 million physicians and nurses are needed to meet the Millennium Development Goals. The bulk of the shortfalls occur in Southeast Asia and sub-Saharan Africa. In sub-Saharan Africa, the HIV pandemic, resurgence of tuberculosis and malaria, out-migration of trained professionals, difficult working conditions and low motivation of health workers all contribute to a human resources crisis (Dovlo, 2004). For a variety of reasons, many countries have been unable to reallocate funds from specialized services to basic health services, contributing to a maldistribution of staff and poor rural and primary health care coverage (Beaglehole, 2003). The severe shortage and maldistribution of health care workers are leading many countries to consider a more strategic skill mix, and task shifting is one important tool that can be used to achieve such a mix.

Strategic skill mix is usually defined as the mix of posts, grades, tasks and skills needed within an organization, or in this case, a health care system (Buchan and Dal Poz, 2002). While the terms "task shifting" and "task delegation" (WHO, 2006) are commonly used, the literature typically refers to this concept as either "skill delegation to

mid-level health workers" or "skills substitution" (Buchan, 1999; Buchan and Dal Poz, 2002; Dovlo, 2004; Sibbald, 2004). Mid-level health workers are described as: "health cadres who have been trained for shorter periods and required lower entry education qualifications, to whom are delegated functions and tasks normally performed by more established health professionals with higher qualifications" (Dovlo, 2004). In this brief the term "mid-level providers" refers to health cadres that have assumed delegated functions and tasks due to task shifting. These providers—especially cadres other than physicians, nurses and midwives—have skills specific to the needs of their country and are not as likely to emigrate to other countries. Typically, they are better retained in rural areas and in primary health services (Beaglehole, 2003). The literature confirms that mid-level providers with adequate training have been able to deliver a range of very useful health care services, including emergency care and life-saving skills in underserved areas (Beaglehole, 2003; Dovlo, 2004; Thairu and Schmidt, 2003; Vaz et al., 1999).

Planning for Task Shifting

Each country needs to determine the skill mix of health care workers that will best meet their national health priorities. The goal is simply "to get the right workers with the right skills in the right places doing the right things" (WHO, 2006). Identifying which tasks are currently completed by which type of worker, comparing this skill mix to the national priorities and determining if any needed tasks can be shifted, are necessary in planning for a strategic skill mix. Added tasks must be evidence-based to ensure the resulting services will improve health outcomes (Sibbald, 2004). In planning for task shifting, all aspects of human resources for health should be addressed: leadership, policy, finance, partnerships, human resources management (HRM) and education and training (WHO, 2006). The following steps are important in planning for task shifting.

1. Gather and analyze available human resources data to make decisions related to task shifting. Country-level planners must be able to analyze their context and situation, identify appropriate solutions and manage the change

Reasons to consider task shifting:

- Skill shortages
- Controlling or reducing labor costs
- Quality improvement
- New medical interventions (e.g., scaling-up antiretroviral therapy)
- Health sector reform (e.g., decentralization)
- New health programs (e.g., President's Malaria Initiative)
- Changes in legislation (e.g., revised scopes of work for various cadres of worker)

(Adapted from Buchan and Dal Poz, 2002)

Developing a new cadre: Medical Assistants in Mozambique

After Mozambique's independence in 1975, civil war and mass emigration of Portuguese nationals eventually resulted in the loss of 85% of the country's doctors, creating a national need for providers of emergency life-saving procedures, especially in rural areas. Training programs began in 1984 to develop Medical Assistants, a new cadre with the appropriate skill set to provide emergency services in three priority areas: pregnancy-related conditions, trauma-related complications and emergency inflammatory conditions. An evaluation of their performance found it to be "remarkably good" given the country's difficult logistical situation (Vaz et al., 1999).

Shifting tasks to an existing cadre: Mid-Level Providers in Kenya

In 2000, 84% of Kenya's physicians were located in urban areas, in which only 16% of the country's population lived. In order to improve access to emergency obstetric services such as prevention and treatment of hemorrhage, resuscitation and manual vacuum aspiration, these tasks were added to the skill set of mid-level providers (nurses and clinical officers) through in-service training. This intervention decreased neonatal deaths, and key stakeholders are supporting adding these skills to pre-service education for mid-level providers (Thairu and Schmidt, 2003).

within their existing health care system (Buchan and Dal Poz, 2002).¹ Dr. Delanyo Dovlo, who has had multiple experiences with national task shifting interventions in Ghana and other countries, recommends asking these key questions:

- "What tasks are needed to provide our basic package of services?"
- "Who is doing these tasks now?"
- "How many workers in each cadre are produced annually?"
- "What is the attrition rate and where do the health care workers go?"
- "Who could complete these tasks instead?"

2. Establish strategic partnerships in order to provide the leadership and policy changes needed to implement task shifting. Regulatory bodies in government (such as the Ministries of Health, Education and Finance) and professional associations are key stakeholders in decisions regarding task shifting to improve skill mix (Sibbald, 2004). As these groups are involved in creating or revising scopes of practice, job descriptions, entrance, licensing and certification requirements and addressing policy and legal issues, developing strategic partnerships with them at the very beginning of the process is essential. Other key stakeholders—e.g., donors, national task forces—should also be involved from the start. Strategic partnerships can help facilitate any necessary legislative and policy revisions to address changes in scope of practice for specific cadres. The related policies must be consistent and support any changes in education and training.

3. Gather client and community perspectives to ensure that skill mix changes will be

accepted by those they are meant to serve. The selection criteria for task shifting should include a focus on improving compatibility between health care workers and clients in such areas as gender, language, ethnicity and geography (WHO, 2006). Before shifting tasks to other providers, it is important to determine if clients will find value in the tasks added and accept the services from that type of cadre. While the literature contains few data on this issue, societal and cultural values are noted to be important considerations in any skill mix changes (Buchan and O'May, 2000). In some cultures, for example, women do not want to see a male provider for reproductive health services, so a shortage of female providers can create a problem (Creel et al., 2002). Age may also present a barrier; in the Community-based Health Programming and Services (CHPS) program in Ghana, young women posted in very traditional communities had some difficulty obtaining respect from elders.

4. Plan carefully for human resources implications, as this component of task shifting is very complex and challenging. Any change in responsibilities among health care providers presents a major system challenge, and strong HRM is needed to help ensure success (Sibbald, 2004). New cadres and mid-level providers are thought to be less costly to train and to charge less for services, but few data on costing exist. Most data do not "count" mid-level provider cadres created to serve specific country needs; such cadres often vary among countries and may not be recognized in international forums or surveys. Whether existing cadres have new tasks assigned or new cadres are developed, these mid-level providers will need to be recruited, deployed, tracked and integrated into the existing health care system. A strong Human Resources Information System (HRIS) is particularly useful for managing these data. Factors such as salaries, incentives, retention and supportive supervision need to be considered when planning to shift or add tasks to an existing or new cadre. A payment structure will need to be developed for any new cadres, and workers who take on new skills should receive a financial incentive (Sibbald, 2004).

5. When planning, ensure that recruitment strategies and selection criteria will help meet deployment goals. Often task shifting interventions are part of an attempt to provide better coverage in rural or underserved areas. However, job selection criteria frequently favor higher social classes and dominant ethnic groups, even for mid-level providers (WHO, 2006). Such applicants tend to prefer an urban post, whereas applicants from rural areas may be more likely to be retained in a rural setting. Evidence points to the effectiveness of training

people to serve in their own communities (WHO, 2006). However, a post-graduation survey of a cadre of private-sector community midwives developed in India found that their communities felt a “daughter of the village” should not receive funds for services (IntraHealth International and Population Services International, 2005). Selection criteria that pull applicants from similar but not their home communities may be a useful intervention (Dovlo, 2006).

Developing Cadres for Task Shifting

Once a country has determined that task shifting is appropriate for achieving a more strategic skill mix and planning has addressed key HRM and professional issues, workforce development through education or training can begin. Due to the complexity of human resources systems, related policy and legislative changes may need to continue alongside development. Interventions to support task shifting may include both pre-service education and in-service training. For example, the CHPS program in Ghana began by offering community health nurses an 11-day in-service training in Integrated Management of Childhood Illnesses, and then revised the pre-service education curriculum to reach greater numbers of future health care workers (WHO, 2006). The following are some important steps in health care worker development for task shifting.

1. Involve related professional associations immediately. Professional associations and councils, pre-service institution leaders and related ministry officials need to be a part of any pre-service intervention from the very beginning (Schaefer, 2002). Whether the scope of practice is expanding an existing cadre or developing a new cadre, the professional association will be needed for ongoing support, continuing education and supervision. In addition, new or revised curricula must meet accreditation, licensing and educational quality standards (WHO, 2006), and all of these require professional associations’ and councils’ involvement and approval.

Medical and nursing councils are often resistant to delegation of tasks to other cadres. Objective HRIS data are useful for demonstrating the need for task shifting and generating consensus among these groups. Despite worker shortages and out-migration, associations of registered nurses prevented the preparation of “enrolled nurses” in Ghana, Kenya, Malawi and Zambia; on the other hand, the support of obstetrician-gynecologists was influential in adding new skills to the role of midwives in Ghana (Dovlo, 2004). When developing a new cadre of private-sector community midwives in India, the early involvement and partnership with regulatory bodies responsible for the curriculum, such as the state

nursing council, proved essential for success (IntraHealth International, 2004).

2. Determine core competencies needed for new tasks. Once new tasks have been defined, the core competencies needed to be able to perform them must be determined. The cadre’s job description will need to be created or revised, and this process can be used to help determine the core competencies needed to complete the assigned tasks. Identifying core competencies is essential for determining any needed changes to pre-service education or in-service training (Schaefer, 2002; Sibbald, 2004; WHO, 2006).

3. If changes in pre-service education are indicated, use a systematic process for curriculum revision. A recommended four-phase approach is outlined in the Preservice Implementation Guide produced by JHPIEGO: 1) plan and orient, 2) prepare and conduct teaching, 3) review and revise teaching and 4) evaluate teaching. This approach ensures that content, clinical practice and teaching methods are all addressed to support core competency development. The most challenging aspect of pre-service curriculum revision or development for task shifting may be changes needed in the supporting infrastructure, such as scope of practice, entrance and exit requirements and clinical practice sites. When task shifting is part of an attempt to increase access to services in rural or underserved areas, identifying and improving rural clinical practice opportunities can be very challenging.

4. Document and track health care worker education and training interventions. Human Resources Information Systems and tools are available for tracking workers produced, education and training provided, deployment posted and retention and attrition rates. These tools are essential for identifying the current status of the health care workforce in a given country, making skill mix decisions and then justifying them to legal and regulatory bodies.

Supporting Workers in Task Shifting

Whether task shifting has resulted in new tasks being assigned to existing cadres or a new cadre, adequate support is vital to ensure quality of care, worker morale and staff retention. Here are some key steps for supporting workers impacted by task-shifting interventions.

1. Ensure that workers receive adequate supervision and peer support. Supporting new cadres or cadres that have undertaken new tasks is especially important when they do not have their own professional associations or specific regulations (Dovlo, 2004). Establishing networks for providers to meet and learn from each other

When planning skill-mix solutions, consider the following questions:

- *Are the new cadres able to provide the desired treatment or service?* Appropriate education and training must be available.
- *What regulations or scopes of practice need to be revised so workers can perform the new skill or role?* Involve stakeholders who can institute change and lift related restrictions.
- *Will the payment structure reward workers who take on new skills?* If not, revise the reward system accordingly.
- *How will the tasks shifted change other services or areas?* Plan for how new skill mix may impact other services.
- *How will the change affect other staff working with the new cadre?* Apply good human resources management skills to ease the transition process.

(Adapted from Sibbald, 2004)

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is an important support mechanism (WHO, 2006) and may be particularly beneficial in more remote areas where external supervisory visits are limited. Job aids and simple tools may be useful to support certain key tasks or skills, especially for new providers. Health system managers should also look for creative ways to provide support from a distance, using cell phone technology or local radio systems. There may also be ways in which representatives of cadres from whom tasks have been shifted can be assigned to check on progress and provide support, either directly or from a distance.

2. Provide opportunities for professional growth and career advancement. Offering mechanisms to advance professionally may be a motivator for mid-level providers (Sibbald, 2004). In Tanzania and Mozambique, for example, “medical substitutes” can undertake further training to move up the career ladder (Dovlo, 2004). In-service training for additional information or refreshers is important for the success of community health workers (Lehmann et al., 2004).

¹ An excellent resource for planning related to skill mix is Buchan J, O'May F. Determining skill mix: practical guidelines for managers and health professionals. *Human Resources for Health Development Journal*. 2000;4(2):111-118. Available: http://www.who.int/hrh/en/HRDJ_4_2_07.pdf

References

Banham L, Connelly J. Skill-mix, doctors and nurses: substitution or diversification? *Journal of Management in Medicine*. 2002;16(4-5):259-270.
 Beaglehole R. *Global public health: a new era*. Oxford, England: Oxford University Press, 2005.
 Bryant R. Regulation, roles and competency development. Geneva, Switzerland: The Global Nursing Review Initiative, International Council of Nurses, 2005.
 Buchan J. Determining skill mix: lessons from an international review. *Human Resources for Health Development*. 1999;3:2.
 Buchan J, Calman L. Skill-mix and policy change in the health workforce: nurses in advanced roles. OECD Health Working Papers. Paris, France: Organization for Economic Cooperation and Development, 2005.
 Buchan J, Dal Poz MR. Skill mix in the health care workforce: reviewing the evidence. *Bulletin of the World Health Organization*. 2002;80(7):575-580. Available: https://www.who.int/hrh/documents/skill_mix.pdf
 Buchan J, O'May F. Determining skill mix: practical guidelines for managers and health professionals. *Human Resources for Health Development Journal*. 2000;4(2):111-118. Available: <http://www.moph.go.th/ops/hrdj/hrdj10/pdf10/buchanm.pdf>
 Creel L, Sassi J, Yinger N. Client centered quality: client perspectives and barriers to receiving care. New Perspectives on Quality of Care No. 2. Washington, DC: The Population Council and Population Reference Bureau, 2002. Available: <http://popcouncil.org/pdfs/frontiers/QOC/QOC-clients.pdf>
 Dovlo D. Using mid-level cadres as substitutes for internationally mobile health professionals in Africa: a desk review. *Human Resources for Health* 2004;2:7. Available: <http://www.human-resources-health.com/content/2/1/7>
 IntraHealth International. Community midwives (CMWs) program. Unpublished report, 2004.

Continuing education can also help motivate workers as well as enhance skills.

Conclusions

When carefully planned for, task shifting is a viable solution for improving health care coverage—particularly in underserved or rural areas. Some studies have shown that the quality of care of mid-level providers can equal that of physicians (Vaz et al., 1999, Dovlo, 2004). Country-specific cadres tend to emigrate less, provide better rural coverage and have increased rates of retention. While task shifting is seen a promising intervention, there is a scarcity of objective data surrounding it—for example, data on how best to manage the broader health system implications, global human resources data on cadres affected by task shifting and cost-efficiency studies. Given the pressing health care shortages, gathering data in these areas is important for identifying better practices to ensure successful task shifting interventions in the future.

IntraHealth International and Population Services International. Study of CMWs private practice to develop experience-based CMW franchise model. Unpublished report, 2005.

Lehman U, Friedman I, Sanders D. Review of the utilisation and effectiveness of community-based health workers in Africa. Joint Learning Initiative Working Paper 4-1, 2004. Available: <http://www.global-healthtrust.org/doc/JLI%20WG%20Paper%204-1.pdf>

Nyontor F et al. The Ghana Community-Based Health Planning and Services Initiative: fostering evidence-based organizational change and development in a resource-constrained setting. Working paper. The Population Council, 2005. Available: <http://www.popcouncil.org/pdfs/wp/180.pdf>

Schaefer L, ed. Preservice implementation guide: a process for strengthening preservice education. Baltimore, MD: JHPIEGO, 2002. Available: <http://www.jhpiego.org/resources/pubs/psguide/psimpdgen.pdf>

Sibbald B, Chen J, McBride A. Changing the skill-mix of the health care workforce. *Journal of Health Services Research and Policy*. 2004;9(Suppl 1):28-38.

Thairu A, Schmidt K. Training and authorizing mid-level providers in life-saving skills in Kenya: case study no. 8. In: Crump S, ed. *Shaping policy for newborn and maternal health*. Baltimore, MD: JHPIEGO, 2003;69-75.

Vaz F et al. Training medical assistants for surgery. *Bulletin of the World Health Organization*. 1999;77(8):688-691. Available: [http://whqlibdoc.who.int/bulletin/1999/Vol77-No8/bulletin_1999_77\(8\)_688-691.pdf](http://whqlibdoc.who.int/bulletin/1999/Vol77-No8/bulletin_1999_77(8)_688-691.pdf)

World Health Organization (WHO). Working together for health: the World Health Report 2006. Geneva, Switzerland: World Health Organization, 2006. Available: http://www.who.int/whr/2006/whr06_en.pdf

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