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TASK SHIFTING IN UGANDA: CASE STUDY

FEBRUARY 2010

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EXECUTIVE SUMMARY

Countries in the East, Central, and Southern Africa (ECSA) region realize that making progress toward universal access to HIV prevention, treatment, care, and support by 2010 and achieving the Millennium Development Goals by 2015 require radical changes in human resource policies, including manpower development and retention strategies. At the same time, country health officials must use effective task shifting to help alleviate shortages of skilled personnel. Task shifting is already being implemented in the ECSA region to varying degrees. Administrators at the ECSA College of Nurses (ECSACON) realize the importance of understanding country-specific policies, regulations on task shifting, health worker attitudes and preferences, and required skills. The potential for mobilizing new types of workers to help reduce human resource shortages, as well as the budgetary implications of task shifting policies, must also be considered. All of these factors will affect the scale-up of task shifting.

In response, in 2009, USAID | Health Policy Initiative, Task Order 1, the ECSA Health Community (ECSA-HC), and ECSACON collaborated to assess the policy and programmatic implications of task shifting in Uganda. The objectives of the case study were to (1) understand the policy and programmatic implications of task shifting in relation to the current roles, responsibilities, and workloads of health workers (especially nurses) within the context of providing high-quality HIV prevention, treatment, care, and support services; and (2) explore the policy and programmatic implications of task shifting in the utilization of community health workers (CHWs) and/or people living with HIV (PLHIV) to provide peer counseling and related services; and (3) assess the attitudes and perceptions of health workers regarding task shifting. The case study garnered a range of views from various stakeholders, including policymakers, healthcare managers, frontline health workers, and health students in training. It employed a qualitative methodology through 34 in-depth interviews with key informants and eight focus group discussions (FGDs) with a total of 80 participants. The facilities sampled were from the central region (Kampala and Masaka), western region (Ibanda), and eastern region (Jinja, Mbale, and Budaka).

Key Findings

Policymakers and health facility managers clearly understood the concept of task shifting, but many frontline health workers had misconceptions on the exact meaning and intention of task shifting. Outside of the Ministry of Health (MOH) headquarters, and even at MOH headquarters, few health officials were familiar with the global recommendations and guidelines on task shifting by the World Health Organization, U.S. President's Emergency Plan for AIDS Relief, and Joint United Nations Program on HIV/AIDS (WHO/PEPFAR/UNAIDS, 2008).

Participants provided many examples of task shifting within the Ugandan health system, such as medical doctors conducting surgical procedures that are typically handled by specialist surgeons, nurses and clinical officers taking on the clinical duties of medical doctors, and CHWs treating malaria cases. Task shifting is primarily driven by a shortage of human resources for health (HRH), as well as the high demand for healthcare services. In many cases, task shifting occurs informally; it takes place through internal institutional arrangements—due to leniency in the enforcement of professional scopes of practice—or simply out of necessity. As such, the majority of task shifting in Uganda takes place without an enabling policy, regulations, or legal protection to those who undertake the additional tasks. In the field of HIV and AIDS, task shifting has been widely accepted, with the involvement of CHWs and patients or PLHIV in various aspects of care and support.

Participants held varied views on task shifting. Those in favor of task shifting saw it as a potential solution to Uganda's dual problem of lack of skilled personnel and high demand for services. Those

opposed to task shifting saw it as a quick fix and an approach that could dilute the quality of care and compromise the health system in the long term.

Most participants readily accepted task shifting as a strategy to scale up HIV services, except for HIV testing and the initiation of treatment, which many believed should be handled only by trained medical professionals. Even those opposed to task shifting in other settings believed that the use of other cadres of health workers and even PLHIV themselves could help to scale up selected HIV services.

Participants cited many enabling factors that could support task shifting, as well as examples of current task shifting. The policy environment in Uganda is conducive for task shifting, and there is political support at the highest level in the MOH. The government plans to prepare a policy, guidelines, and regulations for task shifting that will be consultative and inclusive of many stakeholders.

However, participants also identified numerous barriers to task shifting, including the reluctance of some health professionals to change their views on which cadres should perform which services, protection of professional turf, professional boundaries and regulations, heavy workload and high disease burden, poor planning, the lack of task shifting champions, the possibility of task shifting undermining certain professions, the lack of guidelines, lack of recognition and reward for those who take on additional tasks, the name "task shifting" itself, inadequate health worker remuneration and poor conditions of service, and unemployment among qualified health professionals.

Summary

The following findings were learned about informal task shifting activities in the Ugandan health sector:

- To date, task shifting is taking place on a wide scale, at various levels of care, and in many forms.
- Task shifting is driven by HRH shortages and the high demand for healthcare services.
- The majority of task shifting takes place without an enabling policy, regulations, or legal protection to those who carry out the additional tasks or to ensure quality of care.
- The policy environment in Uganda is supportive of task shifting, with political support and commitment of the Minister of Health. The process is already underway to develop a policy and guidelines for task shifting in Uganda.

Recommendations

Consideration of the following points could further the task shifting process in Uganda:

- An assessment should be conducted of existing capacity in trained professionals currently not employed to determine how they can effectively be engaged to fill in the gaps in the health sector.
- In developing a task shifting policy and guidelines, the MOH should pay attention to potential barriers, such as resistance from health professionals, low salaries, and poor working conditions.
- The MOH should also collaborate with a range of stakeholders to ensure that the task shifting policy and operational guidelines establish quality of care and supervision mechanisms.
- A sector-wide approach should be used to strengthen the entire health system, including management capacity, and be focused enough to ensure that task shifting happens in specific circumstances for only specific tasks.
- Task shifting should be presented as just one solution to the challenges in the health sector and should be used as an opportunity to address other systemic problems within the health sector.
- Successful examples of task shifting within Uganda should be documented and disseminated to the health workforce and health facilities across the country and in the region.

ABBREVIATIONS

AIDS	acquired immune deficiency syndrome
ACT	Artemisimin-based combination therapy
ART	antiretroviral treatment
CHW	community health worker
CMD	community medicine distributor
DHO	district health officer
DJCC	Directors Joint Consultative Committee
ECSA	East, Central, and Southern Africa
ECSACON	East, Central, and Southern Africa College of Nursing
ECSA-HC	East, Central, and Southern Africa Health Community
FGD	focus group discussion
HBMF	home-based management of fever
HC	health center
HIV	human immunodeficiency virus
HRH	human resources for health
IDI	Infectious Disease Institute
IMAI	integrated management of adult and adolescent illness
ITN	insecticide-treated net
MDG	Millennium Development Goal
MMC	medical male circumcision
MOH	Ministry of Health
PCO	psychiatric clinical officer
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
PLHIV	people living with HIV
PMTCT	prevention of mother-to-child-transmission
PPP	purchasing power parity
RBM	Roll Back Malaria
STI	sexually transmitted infection
TASO	The AIDS Support Organization
TB	tuberculosis
TWG	technical working group
UBOS	Uganda Bureau of Statistics
UMCSP	Uganda Malaria Control Strategic Plan
UNAIDS	Joint United Nations Program on HIV/AIDS
UPDF	Uganda People's Defense Force
UNFPA	United Nations Population Fund
USAID	U.S. Agency for International Development
WHO	World Health Organization

I. INTRODUCTION

The severe shortage of human resources for health (HRH) has affected many countries in the sub-Saharan Africa region and has attracted much attention from the global community through high-level forums of heads of state, numerous resolutions at the World Health Assembly, and a Global Forum on HRH held in Kampala, Uganda, in March 2008. The HRH crisis in the East, Central, and Southern Africa (ECSA) region is made worse by an increased disease burden attributed to HIV, diseases related to poverty (e.g., diarrhea and malnutrition), and an emerging epidemic of chronic diseases (e.g., hypertension and diabetes). HRH constraints have been recognized as impeding progress toward realization of the Millennium Development Goals (MDGs) to reduce child mortality (Goal 4), improve maternal health (Goal 5), and combat HIV/AIDS, malaria, and other diseases (Goal 6) by 2015; and toward the goal of achieving universal access to HIV services by 2010.

HIV management is labor intensive as it involves prevention, care, treatment, and support across the life of the patient. With a growing number of people living with HIV (PLHIV), health professionals of all categories are overstretched, which compromises quality of care. In response, donors and governments are exploring the possibility of utilizing other cadres of workers within the community to take up appropriate tasks and, thus, lessen the burden on the limited number of available medical professionals.

Box 1. Definition of Task Shifting

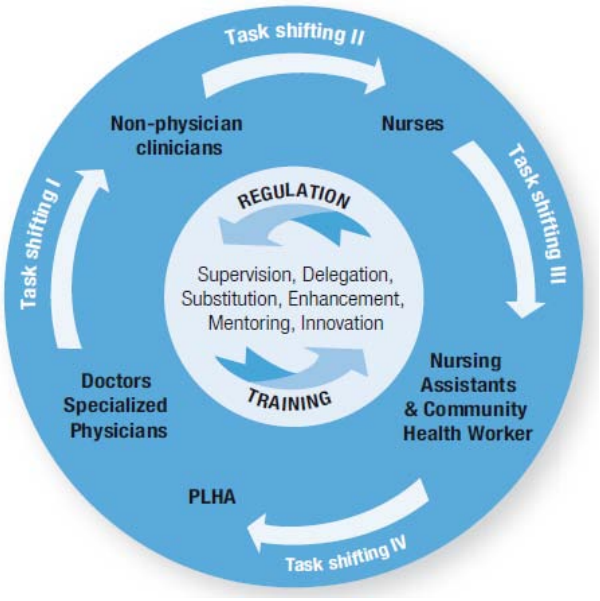
Task shifting refers to the rational distribution of tasks among health workforce teams, with specific tasks moved from highly qualified health workers to health workers with shorter training and fewer qualifications in order to make efficient use of the available human resources. Through task shifting, the impact of health worker shortfalls may be mitigated and countries have the opportunity to build equitable and sustainable health systems.

Source: Lehmann et al., 2009

An initiative to effectively use available health workers is "task shifting" (see Box 1). Task shifting can expand the human resource pool, strengthen linkages between the health facility and the community, and create local jobs and new opportunities for PLHIV (WHO, 2007). The four levels of task shifting are summarized below (WHO/PEPFAR/UNAIDS, 2008) and depicted in Figure 1:

- **Task shifting I:** The extension of the scope of practice of non-physician clinical officers to enable them to assume some tasks previously undertaken by more senior cadres (e.g., medical doctors or specialists).
- **Task shifting II:** The extension of the scope of practice of nurses and midwives to enable them to assume some tasks previously undertaken by senior cadres (e.g., non-physician clinical officers and medical doctors).
- **Task shifting III:** The extension of the scope of practice of community health workers (CHWs), including PLHIV, to enable them to assume some tasks previously undertaken by senior cadres (e.g., nurses and midwives, non-physician clinical officers, and medical doctors).
- **Task shifting IV:** Patients, including PLHIV, trained in self-management, to assume some tasks related to their own care that would previously have been undertaken by health workers.

Figure 1. Task Shifting Framework



Source: WHO, 2007.

To support countries to adapt and implement task shifting as one of the strategies to alleviate HRH constraints, the World Health Organization (WHO), U.S. President's Emergency Plan for AIDS Relief (PEPFAR), World Bank, and Joint United Nations Program on HIV/AIDS (UNAIDS) developed global guidelines and recommendations on task shifting. The *Treat, Train, and Retain: Task Shifting—Global Recommendations and Guidelines* were adopted by representatives of governments, multilateral agencies, development partners, civil society, professional associations, education and training centers, research institutions, care and support organizations, and PLHIV at the International Conference on Task Shifting held in Addis Ababa, Ethiopia, January 8–10, 2008 (WHO/PEPFAR/UNAIDS, 2008).

At a meeting of ECSA Health Ministers at the 46th Health Ministers Conference in the Seychelles, in February 2008, delegates expressed several concerns on task shifting. In response, the ministers committed themselves under Resolution ECSA/HMC46/R4 to the following (ECSA-HC, 2008):

Urged member states to

"Develop and implement policies, guidelines, and training curricula on task shifting among healthcare providers that will allow mid-level cadres to carry out specifically identified activities such as caesarean section, manual removal of the placenta, manual vacuum aspiration, and insertion of Norplant and intrauterine devices; and, in turn, shift non/less technical duties from mid-level to lower-level cadre staff such as community-based distributors of contraceptives and patient attendants by 2011."

Directed the Secretariat to

"Support countries to develop and implement policies and guidelines on task shifting among healthcare providers by 2010."

At the ECSA Directors Joint Consultative Committee (DJCC) meeting in September 2008, it was observed that, in spite of the above resolution and the launch of the WHO/PEPFAR/UNAIDS task shifting guidelines, the concept of task shifting remained highly controversial, even among health professionals. The DJCC then recommended member states to "use a consultative and inclusive process to adapt the task shifting guidelines to country contexts, ensuring that neither the health professionals nor

the populations they serve are disadvantaged." The ECSA Health Community (ECSA-HC) Secretariat, for its part, was to "offer technical assistance to Member States to adapt task shifting guidelines" (ECSA-HC and DJCC, 2008).

Country Selection

In light of the resolutions and recommendations from the ECSA Health Ministers Conference and DJCC, the USAID | Health Policy Initiative, Task Order 1, the ECSA-HC, and ECSA College of Nursing (ECSACON) collaborated to conduct case studies on task shifting in Swaziland[1] and Uganda. Uganda was selected because of its high HIV prevalence rate but demonstrated declining HIV prevalence—from 30 percent among pregnant women in urban areas in the early 1990s (MOH, 2003) to less than 5 percent by 2004 (MOH and ORC Macro, 2006). In addition, one study that informed development of the WHO/PEPFAR/UNAIDS global recommendations for task shifting was conducted in Uganda. The country has also hosted several activities supported by USAID related to human resources—including the human resource information system through the Capacity Project and the national health workforce observatory—which are relevant to task shifting.

II. BACKGROUND

Uganda is a land-locked country in Eastern Africa bordered by Kenya to the east, the Democratic Republic of Congo (Zaire) to the west, the Sudan to the north, and Tanzania and Rwanda to the south (see Figure 2). The country is divided into 80 districts across four administrative regions: Central, East, North, and Western. Table 1 presents key demographic details about Uganda.

Figure 2. Map of Uganda

Table 1: Demographic Profile of Uganda

Total population	28.8 million
Population density	121km^2
Annual population growth rate	3.2%
Total fertility rate	6.7 children per woman
Contraceptive prevalence rate	22.8%
Gross national income (per capita)	1520 purchasing power parity Dollars (PPP $)
Total expenditure on health (per capita)	US$18 ($75 PPP)
Government expenditure on health	30.4% of total expenditure on health
Population below poverty line	84.9%
Life expectancy at birth	49 years
Adult literacy	68.9%

Sources: UBOS and Macro International, 2007; UNAIDS et al., 2008; United Nations Statistics Division, 2009.

[1] See East, Central, and Southern African Health Community (ECSA-HC). 2010. *Task Shifting in Swaziland*: *Case Study*. Washington, DC: Futures Group, Health Policy Initiative, Task Order 1.

Uganda has poor health indicators, with a disease burden that is typical of transitional states. Diseases related to poverty, such as malnutrition and diarrhea, are common; and chronic diseases, such as diabetes and hypertension, are on the rise. In addition, Uganda has a generalized HIV epidemic. Although adult national HIV prevalence has declined significantly from 30 percent in the early 1990s, it remains quite high—currently at about 6 percent—and is the most common cause of death among all age groups (MOH and ORC Macro, 2006). The 10 most common causes of death in Uganda in 2002 were AIDS-related illnesses, malaria, lower respiratory infections, diarrheal diseases, peri-natal conditions, tuberculosis (TB), cerebrovascular disease, ischemic heart disease, measles, and tetanus (UNAIDS et al., 2008). Key health indicators are shown in Table 2.

Table 2: Key Health Indicators in Uganda

Maternal mortality ratio	435 per 100,000 live births
Births delivered by a skilled birth attendant	42.1 per 1,000 live births
Infant mortality rate	76 per 1,000 live births
Under-five mortality rate	132 per 1,000 live births
Adult national HIV prevalence rate	4.1% (2003); 6.0% (2007)
Percentage of PLHIV on antiretroviral treatment (ART)	60%
Percentage of HIV-positive children on ART	26%
Antenatal care—at least four visits	40%
TB prevalence	646 cases per 100,000 population
Immunization coverage (measles)	69.8%
Physician density	0.08 per 1,000 population
Nurse/midwife density	0.61 per 1,000 population
Skilled health workforce density	1.328 per 1,000 population

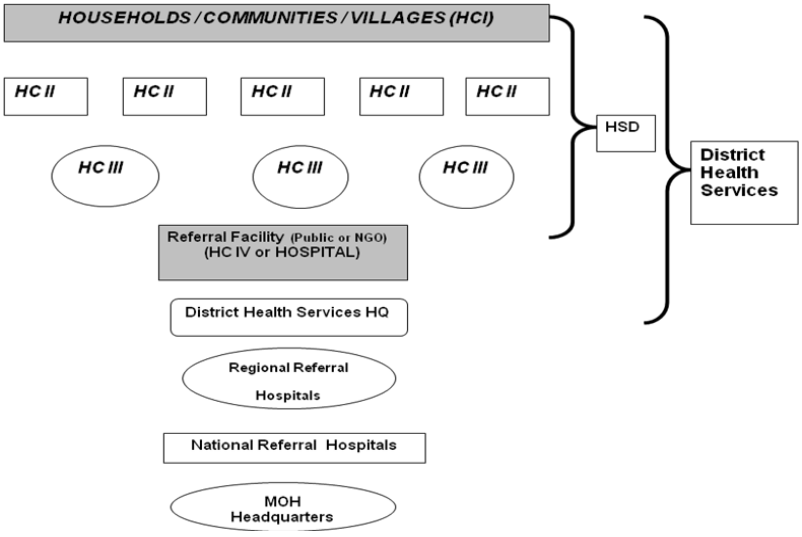
Sources: UBOS and Macro International, 2006; UNAIDS et al., 2008; and Government of Uganda, 2007.

Uganda's Health System

The Ugandan health system includes both public and private healthcare providers. The private sector comprises non-profit (e.g., faith-based) and for-profit private medical providers, traditional and complementary medicine providers (e.g., herbal medicine providers, traditional birth attendants, bone setters, spiritual healers), CHWs/community health promoters, and drug peddlers (formal and informal).

Public healthcare delivery is provided through a decentralized network and at different levels: local, district, regional, and national. The district health service is responsible for all structures in the district, except for the national and regional referral hospitals. The lowest level of the system is the Health Center I (HC I), which is the Village Health Team (e.g., a center without walls). The Health Center II (HC II) is the first physical center at which a patient can be seen. Patients are referred from the HC II to Health Center III (HC III), which can then refer patients to the Health Center IV (HC IV). The communities and facilities served by the HC IV make up a health sub-district. The fifth level of care is the district or general hospital, which refers patients to regional hospitals, which then refer patients to the national referral hospitals. The Ministry of Health (MOH) provides overall policy direction and managerial oversight for health services. The system is illustrated in Figure 3.

Figure 3. Structure of the Ugandan Health System



Source: Runumi, 2007.

Study Objectives

Against this backdrop, the objectives of the task shifting case study were to

- Understand the policy and programmatic implications of task shifting in relation to the current roles, responsibilities, and workloads of health workers (especially nurses) within the context of providing high-quality HIV prevention, treatment, care, and support services;
- Explore the policy and programmatic implications of task shifting in the utilization of CHWs and/or PLHIV to provide peer counseling and related services; and
- Assess the attitudes and perceptions of health workers regarding task shifting.

Methodology

At the start of this case study, the researcher collected relevant documents in Uganda. While no specific policy document on task shifting existed, a few documents, namely the National HIV/AIDS Treatment Guidelines and the Health Sector Strategic Plan II, provided useful information to understand the Ugandan health system.

Study sample

Table 3 presents the facilities and institutions selected for inclusion in the study. These sites were selected using convenience sampling so as to be inclusive of various levels of the health system and different regions of the country.

Table 3: Selected Sites in Uganda

Type of Facility	Name(s) of Facilities
Administrative/Policy-level establishments	▪ MOH Headquarters, Kampala ▪ Health Service Commission, Kampala ▪ Uganda Peoples Defense Forces (UPDF) Medical Services, Bombo ▪ Nurses and Midwifery Council ▪ Allied Health Professions Council
National referral hospitals	▪ National Referral Hospital, Mulago, Kampala ▪ National Referral Psychiatric Hospital, Butabika, Kampala
Specialized research and clinical facility	▪ Infectious Diseases Institute (IDI), Mulago, Kampala
Regional referral hospitals	▪ Jinja Regional Referral Hospital, Jinja ▪ Masaka Regional Referral Hospital, Masaka ▪ Mbale Regional Referral Hospital, Mbale
District health services	▪ Ibanda District (Western Uganda) ▪ Budaka District (Eastern Uganda)
Nursing school	▪ Masaka School of Comprehensive Nursing, Masaka
Faith-based organization	▪ Abayudaya of Uganda Medical Services
Health centers	▪ Budaka Health Center IV ▪ Kaderuna Health Center III
International (partner) organization	▪ United Nations Population Fund (UNFPA)

The researcher conducted 34 key informant interviews and eight focus group discussions (FGDs) with 80 participants in total. Interviews were conducted from August 6–22, 2009. Key informants included policymakers, senior health officials, health program managers, and representatives of the Uganda People's Defense Forces (UPDF), regulatory boards, and research institutes. FGDs were conducted with health workers (predominantly nurses) and medical/nursing students in six health facilities (see Table 4).

Table 4: Focus Group Discussion Participants

Facility/Institution	Participant Profile	Number of Participants
Masaka Comprehensive School of Nursing	Nursing students	23 (2 FGDs)
Masaka Regional Referral Hospital	Nurses	7
Butabika National Referral Hospital	Various health workers	7
Jinja Regional Referral Hospital	Nurses	24 (2 FGDs)
Budaka Health Center IV	Various health workers	9
Mbale Regional Referral Hospital	Various health workers	10
		Total 80

Limitations

The study sample represents only health facilities along the East-West axis of the country, through Kampala. Due to time and financial constraints, it was not possible to include informants from northern Uganda. In addition, the case study did not gather the views of CHWs, as permission to interview them could not be obtained. Another limitation is that this assessment focuses mainly on the public healthcare system. While the private sector and civil society (including religiously-affiliated services) provide a

significant share of healthcare services in Uganda, representation of these sectors is limited due to their lack of availability. Due to logistics issues, the case study did not fully examine the conceptions and realities of task shifting in rural, less-equipped, and under-staffed health facilities. Only one partner organization was interviewed, and it was not possible to obtain feedback from the Uganda Nurses and Midwives Association—thus, the case study only includes perspectives from the Nurses and Midwifery Council.

III. FINDINGS

Understanding of Task Shifting

In general, respondents stated that task shifting is taking place in Uganda—at various levels of the health system, in various forms, and for various reasons. Most key informants had heard about task shifting, and most had strong opinions about it. Senior policymakers and decisionmakers were familiar with task shifting as defined in the WHO/PEPFAR/UNAIDS global guidelines; however, others at lower levels of the health system hierarchy had less accurate knowledge of task shifting.

Those supporting task shifting noted that it helped with the delegation of tasks where necessary and appropriate.

"Task shifting is a good thing that can work with proper regulation and legal protection. The framework already exists, but there is no supporting policy and implementing law as yet."
— Senior Policymaker, Health Services

"Task shifting is real and it is safe when well managed. Even the doctors have come to accept that clinical officers can do many tasks. Let the regulations change to allow easier task shifting with protection of the health professionals."
— Clinical Officer

"Task shifting should not worry any professionals; it is what is happening everyday, and now we have a chance to do it properly. Even if clinical officers are allowed to do more surgery than they are doing now, it will not make the doctors any less important."
— Key Informant, MOH

"Task shifting is happening but should be followed by protection of the nurses when they go beyond their scope through documentation; and when they delegate to lower cadres, there should be proper supervision."
— Policymaker, Health Services

"Task shifting should be encouraged—to lower workload and to improve health service delivery and the quality of [services by] nurses as they will be [better] able to deliver."
— Senior Nursing Officer

"Task shifting is a good concept, but there is no one pushing for it. We all appreciate it because of the shortage of skilled health workers, but it has to be done properly. My worry is the lack of legal protection for those who undertake higher tasks."
— Senior Medical Officer

Those against task shifting raised concerns about compromised quality of care.[2]

"Not anybody can be a nurse. We need to look holistically at patient care and the best interests of the patient must always be borne in mind. Lawyers never let anyone but lawyers take on cases in court, why should we let nursing duties be handled by anyone else?"

— Policymaker, Health Services

"Task shifting has been adopted by rural facilities as a necessity; but without proper guidelines, it is a ticking time bomb."

— Principal Nursing Officer

"Task shifting can only be justified when a new structure of the health service is in place, the remuneration of the health workers is much better, and we still see gaps. Then we can talk of task shifting but within very limited confines. Otherwise, we are undermining the health system by going for short-sighted solutions such as task shifting."

— Senior Consultant

"It would be unwise to shift cesarean sections to clinical officers or midwives in Uganda; it is not that it should be only for doctors, but the level of clinical skills that are required to make the decision to operate should not be taken lightly. It would jeopardize patient safety if everyone were allowed to do cesarean sections."

— Senior Consultant

"Task shifting is symptomatic treatment; a mechanism for the poor who are condemned to receiving treatment from substandard cadres; the rich are never for task-shifted services. Success stories of task shifting in Mozambique and Malawi are exaggerated."

— Senior Policymaker, Health Services

Several misconceptions concerning task shifting were also identified. Some respondents viewed it as dumping tasks to others, neglecting one's duties, and making unauthorized delegation of duties. Once definitions of task shifting were provided, the informants stated that task shifting was neither new nor uncommon in the Ugandan context.

Although most informants and FGD participants were not aware of the four levels of task shifting as suggested by the global guidelines, they were able to cite many instances of tasks being shifted. Examples included the following:

- Medical doctors conducting surgical procedures that are typically handled by specialist surgeons;
- Medical doctors, instead of specialized physicians, taking full charge of the care of patients with AIDS-related illnesses;
- Nurses and clinical officers taking on the clinical duties of medical doctors; and
- CHWs treating malaria cases.

The concept of "horizontal task shifting" came up repeatedly (e.g., general surgeons undertaking procedures, such as hysterectomies, that are done by specialists and dental surgeons doing the work of a general practitioner). Horizontal task shifting was believed to be especially common in private practice and at the managerial level, where medical doctors or consultants are called on to manage health facilities,

[2] The Ugandan physician hierarchy includes junior house officer (intern), medical officer, medical officer special grade (specialist with a few years experience), consultant (specialist with at least five years post-specialization experience), and senior consultant (consultant with many years experience as a consultant). Appointment to consultant and senior consultant positions depends on the availability of posts.

in some cases, without proper management training. Nurses were also reported to undertake horizontal task shifting by taking on dispensing duties within the health facility.

Background of Task Shifting in Uganda

There is a long history of task shifting in Uganda. In 1918, the Ugandan health service pioneered use of a cadre of medical professionals between the physician (e.g., medical officer, or general practitioner) and the nurse (Mullan and Frehywot, 2007). These cadres were originally referred to as licentiates, later medical assistants, and are currently known as clinical officers, a full professional cadre in their own right. The clinical officers take on a full range of clinical services, including diagnostic and prescribing duties at HC III and HC IV levels. At hospitals, clinical officers typically work in the outpatient departments, referring only the more complex cases to medical doctors and admitting patients for doctors to oversee on the wards. Due to the lack of pharmacists, the pharmaceuticals service relies heavily on pharmaceutical technicians (or dispensers) who staff most of the hospitals.

The HC IVs are supposed to have doctors and working operating rooms, including rooms for emergency obstetric care. However, most HC IVs do not have any doctors; thus, clinical officers provide both outpatient and inpatient services at these centers, except for major surgery. Some key informants felt that clinical officers were no longer confined to only providing outpatient care, even at hospitals with doctors.

Within the Ugandan health system, nurses can be: registered nurses, midwives, nurse/midwives (i.e., those with a diploma or degree in nursing); enrolled nurses, midwives, or nurse/midwives (i.e., who have completed a certificate program); and comprehensive enrolled nurses (i.e., those who have completed both midwifery and nursing training). With time, nurses at the registered and enrolled level have taken on increasingly more roles of a clinical nature—beyond the scope of work of a traditional nurse—due to human resource shortages. Nurses insert intravenous lines, "clerk" patients (e.g., taking patient history, performing examinations, and formulating a diagnosis), prescribe medications, and proceed to treat patients. As such, they are performing the tasks of doctors and clinical officers. The enrolled comprehensive nurse cadre was developed so that these nurses remain the primary health professionals at HC IIs, with clinical roles as part of their scope of practice.

Key informants also identified tasks being shifted outside of the health facility. They cited the involvement of "attendants" (e.g., patients' relatives or family members) in the care of patients by feeding and bathing the patient, collecting medicines, taking specimens to the laboratory, and collecting laboratory results. In the case of stockouts, these attendants are sometimes required to obtain drugs and supplies from outside the hospital.

Examples of Task Shifting Related to HIV in Uganda

The HIV epidemic has made task shifting a necessity for HIV- and AIDS-related services. At first, when patients were seen for the management of AIDS-related illnesses, it was thought that treatment and care could only be managed at facilities with specialists (e.g., immunologists and physicians). However, with time, doctors without specialization have taken over the routine care of AIDS patients. As the numbers of people living with HIV and AIDS increased and more treatment modalities were developed, clinical officers and nurses took on more clinical roles. In addition, lay service providers, such as counselors, treatment supporters, and PLHIV, have taken on greater roles in all aspects of prevention, treatment, care, and support of those infected and affected by HIV. Some respondents strongly opposed to task shifting softened their opposition when asked about scenarios that involve PLHIV serving as treatment supporters or as peer counselors. The National STI and AIDS Control Program has developed treatment guidelines that various levels of health cadres are using to roll out antiretroviral treatment (ART).

Most respondents had no objection to CHWs taking on roles such as nutritional support, prevention of HIV transmission (including promoting the prevention of mother-to-child-transmission [PMTCT][3]), HIV treatment literacy (including drug interactions), counseling of PLHIV in family planning and sexual and reproductive health, advocacy for access to community treatment, stigma reduction and women's empowerment, advising of PLHIV on income generation, and first aid in emergencies. However, most respondents felt that HIV testing, monitoring of treatment side effects, and re-filling of prescriptions should remain with trained, licensed health professionals to provide such services.

Some specific examples of current task shifting in the HIV field include the following:

- The shifting of clinical care from specialized physicians to clinical officers. Sometimes these tasks are shifted deliberately and formally. For example, ART and PMTCT are now offered at HC IIIs, where the highest qualified professional is the clinical officer; and guidelines specify that clinical officers can provide these services. In other cases, task shifting occurs in circumstances when there is no doctor available and the clinical officer steps in. Where there are no clinical officers, the nurses may take on the clinical roles traditionally reserved for doctors. The latter tends to occur informally, with no written guidelines or procedures.
- At the Infectious Disease Institute (IDI) in Mulago Hospital, nurses have been trained and offered guidelines to manage AIDS patients who come for check-ups (see Box 2).

[3] Examples include making the community aware of PMTCT services, encouraging pregnant women to get tested for HIV, explaining the benefits of PMTCT, and facilitating community acceptance for and supporting mothers undergoing PMTCT who might not be breastfeeding and who might be experiencing cultural challenges.

Box 2. Task Shifting at the Infectious Disease Institute

The Infectious Disease Institute (IDI) has highly structured programs, including a separate TB clinic and two pharmacies (one for PEPFAR-supported supplies and one for MOH-supplied drugs). IDI handles a large volume of patients, and task shifting has been central to expanding access to care to more than 300 clients seen daily.

In response to the high volume of patients, IDI developed several approaches that include greater clinical roles for nurses, and roles for community members and patients as volunteers. The initiatives faced no resistance because they were properly and carefully designed with guidelines on roles and responsibilities. The initiatives were also supported by multi-disciplinary training programs to provide nurses with the skills to assess patients and prescribe medicines according to standard protocols.

Although nurses in Uganda currently cannot write prescriptions, the IDI's standard protocols for nurses allow them to examine patients and write prescriptions for medicines. These additional prescription responsibilities are not covered by the Nursing and Midwifery Council, as nursing policies and laws have not yet changed. However, the IDI's standard protocols and guidelines include clear referral criteria allowing nurses this prescription duty. Ultimately, the IDI takes full responsibility for the care of all patients, which offers the nurses a sense of protection. All prescriptions by nurses are countersigned by a doctor, but in many cases, it is not possible for the few available doctors to scrutinize all prescriptions. In recent months, IDI is moving to an electronic prescribing system, which will allow doctors and nurses to submit prescriptions electronically directly to the pharmacy. This electronic system has not yet started but is intended to quicken the process and allow for nurses to send prescriptions directly to the pharmacy without requiring a doctor's countersigning.

HIV-positive client volunteers are referred to as "friends." They perform various services at the IDI and at six allied clinics within Kampala on a voluntary basis, except for a stipend of UGX 10,000 (~US$5) per day to cover transportation and lunch. These "friends" are involved in various aspects of care and support (except HIV testing and initiation of treatment), including the following:

Peer counseling and support	Treatment support	Patient registration
Health education talks	Nutrition adherence	Taking files to the pharmacy
Palliative home care visits		

The role of "friends" is recognized through IDI management structures. The Friends Council includes representatives from the six Kampala City Council clinics that are part of the IDI outreach, as well as four representatives from IDI clientele.

IDI encourages team building through continuing medical education. Fridays are reserved for case presentations, when any member of the team may present his/her perspectives (e.g., counselors can speak about their challenges, pharmacists about the need to ensure treatment adherence in light of side effects, etc). Through these types of discussions, health professionals have become less defensive and protective of professional turf. As such, the health professionals believe they can focus on better client outcomes.

For staff, IDI's success has been due to a combination of innovation, teamwork, strict adherence to standard guidelines and procedures, and the involvement of "friends" in activities. As one Clinical Manager explains, *"If we offered a strictly doctor-based service, we would see only a fraction of the numbers we are able to handle today."*

Effective task shifting approaches to HIV services can have benefits for the rest of the health system, including lessons in increasing the use of patients to deliver services such as peer counseling.

Other Examples of Task Shifting in Uganda

Key informant interviews and FGDs provided many examples of task shifting. These are summarized using the framework suggested by the WHO/PEPFAR/UNAIDS task shifting global recommendations and guidelines along the four levels of tasks shifting:

Task shifting I: Shifting tasks from more senior cadres (e.g., medical doctors or specialists) to non-physician clinical officers.

- The psychiatric clinical officer (PCO) cadre in the mental health service was developed in response to the shortage of psychiatrists and has helped to expand mental health services in Uganda. PCOs cover the same scope as psychiatrists but are more community-oriented than psychiatrists, who tend to be primarily based at hospitals (see Box 3).

Box 3. Task Shifting for Mental Health Services: Psychiatric Clinical Officers and Nurses

Uganda has few psychiatrists, currently only 26, including those in management and those who are full-time academics at medical schools. In response to the severe shortage of mental health professionals, an initiative was undertaken to develop a cadre between the psychiatrist and psychiatric nurse, the PCO. The Mental Health Act was amended to provide for the PCO cadre and its scope of practice.

PCOs were originally psychiatric nurses who undertook an additional two-year diploma course in mental health. Currently, clinical officers can also be trained as PCOs. The PCOs are able to independently provide psychiatric services, with a scope of practice that covers full recognition of symptoms and diseases, and treatment, without limitation on what treatment they can offer.

PCOs are more community-oriented than psychiatrists and tend to be based at the district level. Due to the limited number of PCOs, psychiatric nurses take care of mental health at the HC IV level and below. Psychiatric nurses at HC IVs make psychiatric assessments and, while they should ideally not prescribe, they are allowed to use drugs on the Essential Drug List at HC IVs and can refer patients for further care to hospitals with specialized services.

Mental health services are centered around task shifting to PCOs and psychiatric nurses, backed by formal supervision mechanisms from the national referral hospital that supervises PCOs through regular visits and manages administrative issues such as allocating PCOs to various units/hospitals. In turn, PCOs supervise the facilities in their areas.

- The development of ophthalmic clinical officers (e.g., clinical officers who undertake additional training in ophthalmology after which they render care such as cataract surgery) has resulted in these officers taking on tasks previously reserved for ophthalmologists.
- In some cases, projects are designed with the role of the clinical officer in mind. For example, the FEASTS project in Mbale Hospital Pediatric Unit involves clinical officers in the routine management of children admitted for rehydration therapy.
- The prescription of morphine has been delegated to clinical officers and registered nurses—the palliative care practitioners—who receive additional training from Hospice Africa (the course is not accredited by the MOH as higher qualification, since the course runs for fewer than nine months). These practitioners provide treatment, including prescription of oral morphine to those who require it. Previously, morphine (and other opioids at that level of potency) could only be given to in-patients, under a doctor's prescription.

Task shifting II: Shifting tasks from non-physician clinical officers and medical doctors to nurses and midwives.

- Procedures that were previously the domain of doctors (e.g., manual vacuum extraction and manual removal of the placenta) are now being carried out by midwives after adequate training and changes to the laws governing the scope of practice of a midwife.

- Following changes to the pre-service curriculum and introduction of in-service training for practicing midwives, these midwives now perform manual vacuum aspiration for incomplete abortions (i.e., the partial expulsion of conception products before the 20th week of gestation).
- Nurses, who never used to insert intravenous lines, now insert them routinely, especially in up-country or rural facilities.
- Due to staffing shortages, many hospital wards only have a nursing assistant on duty. Occasionally, there is one nurse and one nursing aide to look after more than 100 patients. In such cases, the duties may be split between the two staffers, with each carrying out the same tasks.
- Comprehensive nurses run HC IIs. They perform all the clinical duties, in addition to the duties of nurses and midwives.
- In Uganda, many nurses receive only midwifery or only nursing training and, yet, when they are posted to health facilities, they are expected to offer both types of services. Nurses use their experience and observations within the facilities to perform deliveries.
- Nursing aides have been upgraded to nursing assistants through short training courses to increase their skills and competencies. With the additional training they receive a higher salary, but regulation remains difficult because the Nursing and Midwifery Council refuses to recognize them. The Nursing and Midwifery Council was not involved in initiatives to develop the nursing assistant cadre and has not been a part of their training and, as such, has refused to recognize this cadre.

Task shifting III: Shifting tasks to CHWs, including PLHIV, from more senior cadres (e.g., nurses and midwives).

- The home-based management of fever (HBMF) program relies on CHWs as community medicine distributors (CMDs). This is further explored in the next section (see Box 7).
- CHWs and community members have been involved in the expanded program on immunization services since 1978.
- The TB Control Program has a cadre of staff trained in microscopy. These microscopists do sputum smear microscopy, which is crucial for the laboratory diagnosis of TB. Due to the lack of laboratory technologists, microscopists play an important role.

Task shifting IV: Involving patients, including PLHIV, to assume tasks related to their own care that would previously have been undertaken by health workers.

- The use of family members of relatives to care for patients at the Mulago National Referral Hospital Burn Unit (see Box 4).
- Typically, all in-patients at Ugandan hospitals have a family member or relative to care for them alongside the nursing team. This family member or relative performs such tasks as bathing and feeding the patient, and assisting the patient to stand and move about (i.e., ambulate) to promote health.
- HIV care and support has been extended to the community and homes through support groups such as The AIDS Support Organization (TASO), which runs home-based care using peer counselors and PLHIV. Recently, the TASO network has helped ART to be delivered in patients' homes.

Box 4. Use of Patient Attendants at Mulago National Referral Hospital Burn Unit

Mulago National Referral Hospital's Burn Unit is a high dependency area (i.e., a unit or area that is labor intensive, such as intensive care units, post-operative wards, and burn units). With a shortage of nurses, it has become increasingly difficult to provide round-the-clock nursing care. As such, the Burn Unit now uses relatives of patients (attendants) in the care of patients admitted to the unit.

Prior to admission, each patient must have an attendant who will be able to remain at the hospital for the duration of the patient's admission. Once identified, the attendant is then trained on using standard care protocols for intensive care and on issues such as cleanliness and infection control. Attendants then participate in several care activities, including feeding the patient (food is prepared by the nurses), preparing dressings (that are applied by the nurses), and supervising the patient to take medicines. Attendants dress in hospital-provided gowns, leave their shoes outside the unit, and observe basics of sterility and infection control. They stay for as long as possible with their patient and are often used to teach new attendants how to deal with issues in the unit.

The decision to involve attendants in the formal care of their relatives at the Burn Unit was an administrative one taken by the Nursing Division at the hospital, with endorsement from top management. The initiative has been successful because of buy-in from patients and their families.

The use of attendants in a structured way has eased patient care demands on nurses, who are freed to perform other nursing duties. Patients are more comfortable during their stay, and the unit has good patient outcomes. The relationship between staff, patients, and their relatives is also reportedly better than in most other units in the hospital.

- The tasks of managing information systems, accompanying referred patients to various departments, and distributing medicines on the ward are often shifted to non-professionals due to staff shortages. CMDs are also involved in the distribution of medicines at the community level.

Policy Environment for Task Shifting in Uganda

As previously stated, Uganda's experience with task shifting is unique. The country pioneered the Integrated Management of Adult and Adolescent Illness (IMAI) program (see Box 5)—of which a major strategy is task shifting. Also, Uganda participated in the WHO/PEPFAR/UNAIDS studies that informed the development of the task shifting global recommendations and guidelines. In addition, the UPDF is currently developing a new cadre, the Company Medic, to help alleviate the shortage of skilled health providers (see Box 6).

Box 5. The Integrated Management of Adult and Adolescent Illness (IMAI) Program

IMAI was a WHO initiative envisioned to promote training, monitoring, and development of the comprehensive delivery of medical and social services for PLHIV, while building up and strengthening vital capacity to continue delivering such services in the health sector and communities. It was based on standardized guidelines and algorithms for the management of patients at different levels of care.

As of the end of 2005, Uganda has successfully trained 1,570 healthcare providers—13 percent doctors, 13 percent clinical officers, 29 percent nurses, 27 percent counselors, and 18 percent expert patients (i.e., patients who are enrolled in and have shown good adherence to treatment and care services)—in the comprehensive management of HIV and expanded the number of sites delivering ART across the country (from only 3 in 2001 to more than 150 in 2005). The number of patients receiving ART rose from fewer than 20,000 in 2000 to approximately 68,000 by 2005, which was close to the UNAIDS/WHO 3 by 5 target.

Uganda adopted the IMAI in 2003, with the development of training materials, training of trainers, and roll-out of the training to regional and district levels. Throughout the process, key stakeholders (including PLHIV and district coordinating teams) were involved and attempts were made to integrate HIV services into the broader health system. The training was reinforced by mentoring.

Source: WHO, 2006.

Box 6. Creation of Company Medic Cadre in the UPDF

The UPDF is facing challenges in recruiting and retaining health professionals, with only 10–20 percent of health professionals in post. A number of factors contribute to this situation, including poor pay, low motivation, lack of structures to recognize seniority, no prospect for career advancement, high attrition, and poor HRH retention. As such, UPDF medical service units rely on nursing assistants who prescribe and dispense medicines and carry out surgical procedures (e.g., suture, incision, and drainage of abscesses).

In response to the staff shortages, the UPDF training division developed a course for a new cadre of health worker—the "Company Medic"—who has basic nursing and clinical skills. The process obtained support from the Chief of Defense Forces, who issued a training directive to that effect and has ensured a budget line to support training of this new cadre in the next financial year and approved the use of funds from other departments for this year. The course development involved consultations with various stakeholders, including the Uganda Nurses and Midwifery Council, on the type of training and skills for this new cadre, the number of trainers needed, and the type of training facilities needed. The MOH and Jinja Regional Referral Hospital were also consulted to provide the training facilities, and the National Curriculum Development Center and Ministry of Education provided input on the curriculum.

The Company Medic cadre will be selected from among new recruits undergoing basic military training (e.g., A-Level certificate holders with an interest in health services). The medics will receive skills training in the areas of first aid, HIV prevention, mental health, reproductive health, and midwifery. They will undergo nine months of training (three months of classroom-based theory and six months of ward rotations on major disciplines). Advantages for joining the Company Medic cadre include recognition within the forces as a professional cadre, the opportunity to progress as part of the medical corps, and the opportunity for further training as a registered nurse or clinical officer. The first intake for the cadre is scheduled for January 2010.

Despite these previous experiences, Uganda still has no written policy on task shifting. Although there are no legal instruments, written policies, or guidelines to support sector-wide task shifting, existing practice is permissive of task shifting within various health facilities. Many FGD respondents stated that task shifting would not require new laws but rather explicit policies and guidelines at the operational level for

implementation and monitoring. However, key informants from regulatory councils said that task shifting may require changes to some laws, especially in cases where the scope of practice for certain cadres of health workers will be expanded (e.g., for clinical officers to be able to perform cesarean sections).

Toward a task shifting policy

With UNFPA support, a process is underway to develop a task shifting policy. The process involves the development of a concept paper by a focal person within the MOH, which will be discussed by the Technical Working Group on HRH (TWG). The TWG will present the concept paper to senior management within the MOH and then to the Health Policy Advisory Committee, which is a wider stakeholder forum that includes professional associations and international partners. The Advisory Committee will then brief the relevant ministers. Once the ministers accept the concept, a position paper is developed and submitted to the Cabinet for discussion, after which it becomes a Cabinet paper. If there are no legal changes required, it becomes policy, which can then be implemented. If legal changes are required, the Attorney General will prepare enabling laws for consideration by Parliament.

Key informants at the MOH were clear that the policy direction will be toward task shifting that does not compromise quality of care and that allows some tasks to be shifted down or up the health system hierarchy, as appropriate. Above all, the policy under development will need to ensure that no particular cadre is overwhelmed by the shifted tasks.

> "Task shifting should not be task piling; and there should be no dumping of tasks. We need to ensure that task shifting happens in a team, based on which cadres are available, which tasks need to be undertaken, and who has which competencies. It shall not be arbitrary or cast in stone."
>
> — Senior Policymaker, MOH

There is political commitment at the highest level for task shifting, with the Minister of Health being highly supportive of task shifting. There are also plans to have a consultative meeting with key stakeholders, including regulatory councils and professional associations. Members of the regulatory councils expressed eagerness to be involved early in the process, to ensure that professional standards and patient safety are maintained, and to ensure that all shifted tasks are regulated. The council members also said that they should be empowered to investigate and handle cases of negligence.

The plan is to involve training institutions at a later stage, as well as to gather their inputs on implementation of the policy. At the moment, because health training institutions fall outside of the MOH (i.e., under the Ministry of Education), it is difficult to engage them in policy development discussions taking place at the MOH. However, some institutions (e.g., medical schools) may be included in the Health Policy Advisory Committee that falls within the MOH. The training institutions are key stakeholders in the process as they will need to plan for their capacity to teach new skills and plan for curriculum development to support shifting of tasks to different cadres.

A few respondents stressed the need to move slowly in the development of task shifting policies and guidelines—to first obtain endorsement and support from professionals and the public. They felt that task shifting should be limited to specific cases, for example in the use of clinical officers—backed by proper guidelines—trained by the AIDS control program to provide HIV-related care and administer drugs.

Factors that Facilitate and Challenge Task Shifting in Uganda

The facilitating and challenging factors related to task shifting in Uganda are summarized in Table 5. The challenge for the development of a policy and guidelines on task shifting will be to capitalize on the facilitating factors, while appreciating the potential barriers, so that the policy is home-grown and accounts for all the concerns of the various stakeholders.

Table 5: Summary of Identified Factors that Support and Challenge Task Shifting

Enabling Factors	Barriers
▪ Policy on task shifting ▪ Institutional guidelines and standard operating procedures ▪ International commitments ▪ Initiatives with a focus ▪ Functioning referral chain ▪ Demand for health services ▪ Scarcity of skills, necessitating task shifting ▪ Lax regulatory environment and limited enforcement, leading to task shifting in practice ▪ Evidence of successful task shifting ▪ Better candidates entering the professions	▪ Reluctance to change views on which cadres should perform which services based on training ▪ Professional boundaries and regulations ▪ Professional protectionism ▪ Limited knowledge and skills ▪ Corruption ▪ Poor planning ▪ Lack of task shifting champions ▪ Attraction to new tasks, depleting other tasks ▪ Heavy workload and high disease burden ▪ Lack of guidelines ▪ Lack of legal protection ▪ Community attitudes ▪ Perceived focus on HIV ▪ Lack of awareness ▪ The word "task shifting" ▪ Lack of recognition and reward ▪ Poor health worker pay and conditions of service ▪ Unregulated task shifting initiatives ▪ Unemployment or lack of job opportunities for health professionals

Enabling factors

Respondents provided many examples on factors that do or could enable task shifting in Uganda:

Policy on task shifting: Respondents felt that for task shifting to be accepted and widely practiced, there should be a clear policy with guidelines and enabling laws to protect those professionals who undertake the shifted tasks. While task shifting can still occur in the absence of such a legal environment, it occurs in an unregulated and unreported manner. For example, nurses reportedly do not document the fact that they start intravenous drips or initiate treatment, preferring to hide under subsequent prescriptions by doctors.

Institutional guidelines and standard operating procedures: Institutional guidelines and procedures were seen as essential for effective task shifting. For example, the IDI in Mulago, Kampala, has standard procedures that are well laid out, with criteria for handling patients (see Box 2). As a result, nurses have been able to take on more roles, and some nursing activities have been shifted to PLHIV or "friends." A similar approach was used in the development of IMAI, with clear guidelines on what should be done, by whom, and when (see Box 5). Another example of effective guidelines is in the syndromic management of sexually transmitted infections (STIs), whereby the staffer at the clinic can use a standard algorithm to treat the patient based on the presenting complaints and symptoms.

International commitments and initiatives: Initiatives such as the MDGs and Roll Back Malaria (RBM) were suggested as some of the possible drivers for task shifting.

> "Without the involvement of international agencies like WHO and PEPFAR, we wouldn't be having this conversation about task shifting, would we?"
>
> — Key Informant

Initiatives with a definite focus: Initiatives that have a clear goal can facilitate task shifting by bringing together professionals with different competencies to work as a team around that particular goal.

The Uganda Malaria Control Strategic Plan (UMCSP) includes a home-based treatment program for combating malaria, also known as home-based management of fever (HBMF) (see Box 7). The program was originally based on the community distribution of Chloroquine plus Fansidar by CMDs; however, due to development of drug resistance, the first-line treatment policy for malaria was changed to Artemisimin-based combination therapy (ACT), such as Artemether/Lumefantrin (Coartem).

Box 7. Home-based Management of Fever

To handle the increasing cases of malaria, especially among children, the MOH developed the HBMF program, which deploys CMDs. These village-level volunteers are trained to recognize and treat uncomplicated fevers and to recognize symptoms of severe or complicated malaria (e.g., diarrhea, vomiting, failure to eat, and not passing urine). Initially, treatment was Homapak, a combination of Chloroquine and Fansidar that was distributed in two age-specific color packages. Children with fever could access this free treatment from CMDs within 24 hours of the onset of fever.

CMDs are required to keep records of everyone they treat as well as outcomes. They are also required to make monthly trips to the nearest HC II or III, which supervises the CMDs and supplies them with medicines. On average, CMDs treat 10–15 children each month, and reportedly the number of children admitted with severe malaria has been reduced, as have childhood deaths from malaria.

With the development of resistance to the Homapak regimen, it has been discontinued and plans are underway to re-start HBMF with ACT. The new program has been successfully piloted in two districts (Kiboga in the Central region and Kabale in the South West). It was expanded to six other districts and was rolled out country-wide at the end of September 2009.

Proper referral/backup procedures: Key informants stated that for task shifting to work well, there must be a functional referral chain. The success of HBMF was partly attributed to the fact that the CMDs could refer any complicated malaria cases to the HC, and the HCs were equipped with diagnostic facilities and second-line drugs for further management of the referred cases.

Demand for services: One of the most common facilitating factors for task shifting is the demand for the health services and the commitment of the medical professionals to serve their patients.

Scarcity of skills: A scarcity of skills necessitates task shifting. For example, there are few pharmacists in Uganda, and only the national and regional referral hospitals have pharmacists. Pharmacist technicians (popularly known as "dispensers" in Uganda) staff most of the hospital pharmacies, while at lower facilities that do not even have dispensers, nurses or nursing assistants run the pharmaceutical services.

A lax regulatory environment and lack of law enforcement: When asked about facilitators of task shifting, respondents admitted that, in practice, the lack of enforcement of scopes of practice

facilitates informal task shifting across the range of health professionals. Ideally, policies should be adjusted accordingly to enable task shifting where appropriate, and supervision and enforcement of policies and standards should be enhanced to protect both patients and providers.

Evidence of successful task shifting: For many respondents, the most effective facilitating factor was evidence, preferably from a similar environment, that task shifting was successful. The point was made that it was easier to accept HBMF because it was Ugandan-grown. There was a preference for pilot programs that could then be scaled up.

Caliber of candidates enrolling for the health professional courses: The better preparation, and the changing curricula of various professionals, makes it easier for cadres to clerk patients and initiate treatment. Some key informants expressed confidence that the kind of people who are accepted into clinical officer training—who have A-Level science passes—makes it easier for them to acquire additional information and skills.

Barriers to task shifting

The discussions revealed numerous possible impediments to task shifting, including the following.

Reluctance to change was seen as stumbling block.

> "Why should people spend many years in medical school if anyone can do a doctor's job? There are things that have always been done by doctors, and we better keep it that way."
>
> — Senior Doctor

Opinions were divided as to which professionals were most reluctant to embrace change: for some respondents, it is the doctors who fear losing their status, yet for others, it is the nurses who see their profession invaded from all sides, especially by the nursing assistants.

Professional boundaries and regulation could pose as a barrier. Much of current task shifting falls outside of the scope of practice of certain cadres. It was felt that while the regulatory environment appears permissive of task shifting, problems that arise can backfire on the concerned health worker who does not have legal protection for the additional tasks being done. Many nurses stated that they hope nothing goes wrong when they admit patients, as the Nursing and Midwifery Council cannot protect them. This impedes nurses from taking on more responsibilities.

Professional protectionism is also an issue. Many professionals are reluctant to cede any tasks to others for fear of being undermined. For instance, radiologists do not want radiographers to interpret X-ray films, preferring to denote what the radiographers do as "pattern recognition."

> "The only honest objection to task shifting you will hear should be from someone who tells you he is afraid his profession will suffer when others start doing stuff from his domain. All talk about quality of care, even from those who do not work, by the way, is mere sophistry."
>
> — Key Informant

A general observation was that doctors were reluctant to have clinical officers perform any type of surgery. One key informant stated that as far as the public is concerned, this was the one major difference between clinical officers and medical officers.

Limited knowledge and skills in certain areas of care would make it difficult to have tasks shifted. For some health providers (e.g., medical doctors), other professions are perceived to have less knowledge and skills, which makes them reluctant to shift tasks, such as cesarean sections, to clinical officers.

Corruption was seen as a barrier to the extent that it blocks health workers who take on additional tasks from receiving the benefits of task shifting. One view expressed was that there would be no need for task shifting in Uganda if all the resources allocated for health were channeled to the health sector and used appropriately—facilities would be well staffed and workers would be highly motivated and doing what they are supposed to do, hence there would no need for task shifting. Corruption and the perception of corruption are barriers that will need to be overcome for the initiative to be accepted and implemented.

Poor planning—especially of the top-down planning processes in which health workers hear of initiatives only when they are at the implementation stage—would undermine task shifting as there would be no buy-in. A few respondents believed that the government had not yet fully analyzed the HRH situation but was accepting guidelines developed by international agencies and donors. As such, the MOH's process to prepare a task shifting policy must be widely shared to ensure that the entire approach is accepted and owned in-country.

The lack of task shifting champions was identified by both key informants and FGD participants as a major constraint to task shifting. Respondents felt the need for a person dedicated to championing task shifting.

> "Since January 2008, the WHO guidelines have not been rolled out, let alone explained to us, partly because there is no one pushing for it."
>
> — FGD Participant

Attraction to the new tasks at the expense of one's core role has been observed especially in programs that are better funded and more attractive. Examples cited were of nurses who undertake clinical roles and prefer them to nursing duties. Some nurses and nurse educators then resent such task shifting because it effectively depletes the ranks of nurses. Other examples cited were horizontal task shifting, for instance a cardiologist (physician) taking on HIV epidemiological work at the expense of cardiology. The problem is that it is easier to interest other physicians in HIV work, than to train them in cardiology, so that type of task shifting can undermine capacity in the health system. Thus, there is a need for rational approaches, so that no part of the system suffers.

The heavy workload and high disease burden make the health workers overworked and reluctant to take on tasks of other cadres. Indeed, a frequently asked question by nurses was "If they want us to do the doctors' work, who will do ours? And what will the doctors then do?" Some respondents also had the impression that even in the presence of heavy workloads, there are some cadres that are simply not working, preferring instead to moan about the lack of resources and poor working conditions.

Lack of guidelines for most of the areas in which task shifting could occur limits how much can be done. In those instances where proper guidelines have been developed (e.g., in the mental health services), task shifting happens more efficiently.

Lack of legal protection for those who take on additional tasks—with regulations and laws that restrict the scope of practice and job descriptions that confine certain professionals only to certain areas—make it difficult for some to take on delegated tasks.

Community attitudes toward certain cadres (e.g., elitist attitudes) are a barrier to shifting certain tasks that some patients see as doctors' duties. That was an issue at the IDI, when it started having nurses see

patients; some patients would insist on being seen by a doctor. Although no longer an issue at the IDI, this attitude originally discouraged some nurses from taking on the preparation/training for the additional tasks.

The perceived focus on HIV and AIDS makes some people view task shifting as another initiative for and about HIV. Many people categorically stated that if task shifting was promoted only for HIV and AIDS, they would not support it as it would weaken the overall health workforce.

> "Why are we focusing on HIV again? The international community must realize that we have many other problems. What task shifting will do is move even more people away from other services to HIV services. What shall we benefit as a country if we save all those with HIV/AIDS but lose people due to all the other conditions?"
>
> — Policymaker

Lack of awareness of what task shifting is and why it is important undermines initiatives, as it then becomes subject to personal interpretation, innuendo, and "bad mouthing."

The name "task shifting" is for some people a major barrier.

> "We have been doing many things outside our professional scope of practice, but we didn't mind because no one said anything about tasks being shifted from one to another. Moreover, you WHO people define it as being from a more qualified to a less qualified cadre with shorter training, which is offensive to those of us who have done nurse training for more years than some people spent in medical school."
>
> — FGD Participant

Some other informants associated task shifting with having to perform tasks that no one else wants to do, which would then make it less attractive.

Lack of recognition and reward for those with extra skills/knowledge to take on additional tasks is a potential barrier. Health workers ask why they should bother to take on additional studies/training only to end up earning the same amount in the same position.

Poor health worker salaries and working conditions are barriers to task shifting because the latter could be seen as coming at the expense of improving the health workers' lot. As an FGD participant asked, "Why does government not improve our salaries and improve the conditions under which we work before thinking of task shifting?" From this perspective, task shifting is seen as a ploy by the government to avoid paying the right people to do their rightful jobs, by using cheaper options.

Unregulated task shifting initiatives, such as the introduction of the nursing assistant cadre, could be a barrier to the widespread adoption of the strategy. The MOH introduced the nursing assistants, but without proper consultation with the Nursing and Midwifery Council. The Council then refused to have anything to do with the nursing assistants, who practice virtually unregulated, without professional oversight. Many nurses believe that the nursing assistant cadre undermines nurses; hence, there is resistance. Also, many groups offer HIV courses but have not obtained input from the MOH. Thus, those trained do not get any recognition for their additional skills, which may discourage others from doing the same courses.

Unemployment among health professionals is an issue in the wake of the structural adjustment program that Uganda went through and the freeze on the recruitment of health professionals. This has been relaxed now, but there are still some health professionals who are unemployed and actively looking for work. During the time this study was conducted (August 2009), the Health Services Commission was

interviewing for various posts. In one instance, the advertisement for three psychiatric nurses attracted 26 applicants—evidence that many are looking for public sector jobs. It was also the feeling that under the decentralized system, the district officials prefer to employ lower or cheaper health workers (e.g., nursing assistants instead of nurses, or clinical officers instead of medical officers). With such a perception, the medical officers will be reluctant to shift any tasks to the clinical officers, as that will then put them in direct competition; and the reluctance of the nursing profession to recognize nursing assistants is partly informed by similar sentiments.

Staffing and Human Resource Capacity Building

As noted previously, Uganda faces a severe HRH crisis, with only 1.38 skilled health workers per 1,000 population (UNAIDS et al., 2008), well below the WHO recommendation of 2.5 skilled workers per 1,000. From the late 1980s to the end of the 1990s, there was a freeze in employment in the public service, except under special circumstances (e.g., replacement of deceased health workers or when new facilities opened). In addition, with the decentralization of health services, districts determined the numbers and process for the recruitment of health professionals. This has led to some health professionals not being absorbed into the health system. Although most health professionals have been affected by this, the recruitment of medical doctors has resumed before that of other cadres.

There are some unemployed health professionals in Uganda at the moment, but the exact numbers are difficult to ascertain due to the decentralized nature of employment. Some healthcare workers reportedly tire from attending interviews in different parts of the country and, thus, opt to stop trying.

> "That is an anomaly Uganda cannot afford; as long as we need the professionals, and they are within the country, we should employ them. The only way that will happen is to re-centralize the recruitment and deployment of health workers so that the Health Service Commission can keep track of all those within the public sector."
>
> — Key Informant in the Health Workforce

According to some respondents, there are numerous unemployed health professionals in Uganda, which makes the idea of task shifting difficult to sell, for it begs the question about what happens to the unemployed "proper" professionals who could get a job in the new system.

Task shifting initiatives can build capacity when implemented in a formal manner, as some of the examples cited above have illustrated. When done informally, task shifting poses the challenge of certain cadres taking on roles for which they may not have had appropriate training or preparation.

> "During my training, I was never taught how to put up a drip, and for my first 20 years as a nurse, all I did was prepare the trolley for the doctor. When I got to Jinja, even the nursing assistants were laughing at me for not knowing how to put up a drip. That is demoralizing."
>
> — Nurse, Jinja Regional Referral Hospital

There have been elements of capacity building through task shifting—within the reproductive health domain, for example, midwives and clinical officers have received skills training (pre-service and in-service) for postabortion care, manual vacuum aspiration, and the use of long-term methods of family planning such as the insertion of Norplant. The midwives and clinical officers who complete additional training receive a certificate, but there is no additional compensation.

The caliber of candidates entering professions, such as nursing and clinical service, bodes well for capacity building, according to some respondents.

"There are brilliant nurses and clinical officers with good A-level background—most of whom met the requirements for university admission but did not get in due to limited university places. Such people can easily learn new skills or acquire new knowledge required for task shifting."

— Key Informant

The potential to build the capacity of the existing workforce for task shifting, from that perspective, exists and can be easily exploited.

Numerous issues were cited as constraints to HRH capacity building. Poor remuneration and working conditions make it difficult to retain skilled professionals within the health system. There are concerns that the staffing structure and distribution of the health system has not been updated for many years, and yet it was designed for a smaller population than the present 30 million. Even some of the existing posts are frozen due to expenditure ceilings, and the impression was that the National Treasury and Ministry of Finance do not want to open up more posts in the health system. From the task-shifting perspective, the shortage of personnel, high workload, and poor pay do not encourage the existing workers to take on more tasks.

An approach suggested in one FGD was to undertake long-term planning that considers the full needs of the health system, based on a thorough skills audit and attention to health worker concerns such as low pay, poor state of existing facilities, and lack of professional development prospects. Until this is done, for some respondents, task shifting is the wrong prescription for scarce skills and hard-to-staff areas.

"If government employed more skilled professionals, for instance doctors, it would be possible to enforce eight-hour shifts for doctors round-the-clock, and the need for task shifting during the night would not arise. At present, the doctor is expected to work 24 hours, everyday, for no additional compensation, and so does not show up in the night."

— Manager, Regional Referral Hospital

The approach undertaken by the mental health service shows that HRH capacity can improve through task shifting. As a result of the increase in the number of PCOs, specialized mental services have been extended beyond the national referral hospital to regional referral hospitals, which now have specialized psychiatric units; and from regional hospitals to the district hospitals, where the PCOs are in charge of psychiatric services. The PCOs are willing to be posted to districts where they become focal persons for mental health services. The psychiatric nurse is also equipped with more skills and is able to identify, initiate treatment for, or refer psychiatric patients. The scale-up of mental health services could not have happened if it depended on the availability of psychiatrists.

Many FGD participants identified the need to build management and leadership capacities within the health workforce. An instance was cited where doctors do not report for work or refuse to come when called after hours, and yet the hospital management fails to take any action. This leads to unnecessary, informal task shifting, since nurses have to take on the work. One suggestion offered was that hospital managers should be properly equipped to manage the hospitals and the staff.

Proponents of task shifting suggested that capacity could be built through professional structures (i.e., recognition, opportunity for continuing education, etc.) and mentoring. For those managing services in up-country or rural areas, the distinction between the role of nurses and midwives must be addressed—for example, through training of comprehensive nurses (with midwifery skills) who are more suited to the demands of poorly staffed facilities.

As part of the human resource development policy, there are plans to develop sub-specialties (e.g., neurosurgery, cardiothoracic surgery) within the health sector, which will enable the country to respond to

emerging health issues, including the non-communicable diseases. These sub-specialists will then strengthen the skills base throughout the system through input at the pre-service level for many professions and through a stronger referral system. For most of the sub-specialties, local capacity exists at universities, especially the Makerere Medical School and the National Referral Hospital at Mulago. These institutions will be used to train sub-specialists, and the graduates will be deployed beyond the national referral hospital to other levels of care where posts have been created. In areas with no local training capacity for sub-specialties, the MOH will seek funding for students to acquire the training elsewhere in-country.

Opportunities for Scaling Up

There are many opportunities for scaling up best practices in task shifting and building on existing approaches within Uganda. The Malaria Control Program, for example, is rolling out the new HBMF, using ACT, based on the earlier experience with CHWs and the success of pilot programs within a few districts. Another intervention being explored is scaling up male circumcision for HIV prevention and the potential of task shifting to enhance the skills and capacity of selected cadres (see Box 8).

Box 8. Preventing HIV Transmission through Medical Male Circumcision

Medical male circumcision (MMC) is a strategy being explored for the prevention of HIV transmission. The MOH has established a task force on MMC to plan for scaling up and rolling out MMC. Given the shortage of surgical staff (surgeons and medical officers), and the numbers that must be circumcised to make MMC an effective prevention strategy, such a scale-up of MMC will require other cadres to conduct MMC.

A possibility being considered is for registered nurses, midwives, and clinical officers to be trained in MMC. A member of the task force on MMC sees this as an opportunity to build nurses' and clinical officers' surgical skills so that they can do more than MMC. Some skeptics dismiss the idea of training people to do only MMC, while others worry about the slippery slope that could lead to nurses doing other procedures as well.

There are apparently no objections to task shifting within HIV services, largely because, historically, much progress in the field has been through task shifting. Adaption of the global guidelines, from this perspective, should not meet much resistance. The challenge will be to make task shifting benefit the entire system instead of appearing as yet another initiative targeted only at HIV and AIDS. The involvement of a range of stakeholders in developing a task shifting policy could alleviate such concerns.

The successful task shifting initiatives for malaria control and HIV services have common features and standardized approaches that can be employed in other areas of the health sector. However, the situation at IDI illustrates one problem with successful task shifting. The institute has become so efficient at what it does that, at present, the clinical service is overwhelmed by the numbers.

> "We created the demand for our services, and now clients are abandoning other providers and coming to us. We simply cannot cope with all that would want to be under our care. As much as it breaks my heart every time I have to turn people away, I have to do it on a daily basis."
>
> — Clinical Manager, IDI

The opportunity for scaling up any of the initiatives or best practices must, therefore, be tempered with caution regarding their sustainability and ability to cope with expected increases in the number of clients seeking the services. Government facilities are reportedly already struggling to keep adequate ART supplies; indeed, even at IDI, the pharmacy that depends on government-supplied drugs often experiences stockouts. It is a balancing act—to scale up the initiatives that work and face

the possibility of overloading the system or to move cautiously within the resource constraints and risk not reaching many of those in need.

Task shifting presents opportunities for building the capacity of HRH and for improving staffing. The process proposed for the development of guidelines and regulation of task shifting in Uganda envisages a needs assessment and skills audit, which could provide evidence for the MOH to negotiate for an increase in staff numbers. There are examples of task shifting that have helped build the capacity of existing health workers and for the recruitment of CHWs to render essential care (as in the use of CHWs for malaria management). Lessons from such successful initiatives could benefit the rest of the healthcare system.

IV. DISCUSSION AND CONCLUSIONS

Task shifting is a taking place in Uganda—from type I to type IV along the task shifting continuum. Currently, there is no overarching policy on task shifting, but task shifting is happening within the existing regulatory framework. Task shifting seems to work best where there is a higher level professional to take responsibility or where effective supervision and referral mechanisms exist—protecting the health worker and ensuring that quality of care is not compromised. Many respondents emphasized the need for a proper policy and guidelines.

There are many success stories of task shifting in Uganda—related to reproductive health, HIV services, and psychiatry—but these are not well known, even within Uganda. Even the internationally known initiative, IMAI, is not known as such by those who are practicing it. To scale up task shifting initiatives, it will be helpful to document, disseminate, and publicize such successes. The common elements of most successful examples include formal guidelines and referral structures.

There is political support and commitment to task shifting, and the technical team within the MOH is convinced of the rationale for task shifting. This will facilitate the development of a policy and guidelines.

The issues of recruitment and retention and the use of unemployed health professionals must be addressed in the design of policies to scale up task shifting initiatives. The suggestion that a skills audit and restructuring of the health system be done to establish the gaps before task shifting is promoted is partly based on the perception that there are qualified professionals in need of jobs who could be utilized. Unless this issue is addressed, there will remain concerns and fears among health workers that task shifting is a substitute for hiring professionals.

It is seen as a constraint that the WHO/PEPFAR/UNAIDS guidelines have not been disseminated, and even the District Health Officers (DHOs) are not up-to-date with task shifting developments. Thus, any national programs that will require task shifting (such as the National STI and AIDS Control Program) should brief or update the DHOs, who can, in turn, sensitize those who work within the district. That process will help build capacity and also foster buy-in.

Bold and effective leadership will be required to make tough decisions that could involve shifting professional boundaries. For instance, should it be proposed that clinical officers or midwives perform cesarean sections—which seemed to be the least popular example of task shifting—the campaign would need leadership to oversee preparation of the case for that task shifting. It would also require the engagement of stakeholders such as obstetricians, doctors, and the communities. The other danger, as expressed in some FGDs, is that if task shifting is not done carefully, and in the absence of effective leadership, some professionals will simply abandon their work to others and go for private practice on government time.

The major issue appears to be what direction task shifting will take. The most plausible option seems to be one that will capitalize on team work—using the available skills in the team to address the tasks at hand—and be guided by existing successful examples of task shifting.

V. RECOMMENDATIONS

Task shifting is happening in Uganda on a wide scale, at various levels of care, and in many forms. The main driver for task shifting appears to be the low HRH density coupled with the high demand for healthcare services. Most of the task shifting is happening without an enabling policy, regulations, or legal protection for those who undertake additional tasks or to ensure quality of care. The policy environment is supportive of task shifting, with political support and commitment of the Minister of Health, and the process is already underway to develop a written policy and guidelines for task shifting in Uganda.

The following are recommendations to consider in furthering task shifting in Uganda:

- An assessment should be conducted of existing capacity in trained professionals currently not employed to determine how they can effectively be engaged to fill in the gaps in the health sector.
- In developing a task shifting policy and guidelines, the MOH should pay attention to potential barriers such as resistance from health professionals, low salaries, and poor working conditions.
- A sector-wide process should be used to strengthen the entire health system, including management capacity, and be focused enough to ensure that task shifting happens in specific circumstances for specific tasks only.
- The MOH should also collaborate with a range of stakeholders to ensure that the task shifting policy and operational guidelines establish quality of care and supervision mechanisms.
- Task shifting should be presented as just one of the solutions to the challenges in the health sector and should be used as an opportunity to address other systemic problems within the health sector.
- Successful examples of task shifting within Uganda should be documented and disseminated to the health workforce and health facilities across the country and in the region.

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