ADVANCING KNOWLEDGE AND PROMOTING BEST PRACTICE IN MITIGATING THE IMPACT OF DUAL PUBLIC-PRIVATE PRACTICE AMONG HEALTH PROVIDERS

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ACRONYMS

ART	Antiretroviral Therapy
ARV	Antiretroviral Medication
DEPS	*Département des Établissements et Professions de Santé (Ivory Coast)*
HRH	Human Resources for Health
LMIC	Low and Middle Income Country
MNH	Muhimbili National Hospital (Tanzania)
MOI	Muhimbili Orthopedic Institute (Tanzania)
MOHSW	Ministry of Health and Social Welfare (Tanzania)
NCDs	Non-communicable diseases
ONMCI	*Ordre National des Médecins de Côte d'Ivoire*
PEPFAR	President's Emergency Plan for AIDS Relief
PSP-*One*	Private Sector Partnerships-*One* Project (USAID-funded: 2005- 2009)
USAID	United States Agency for International Development
WHO	World Health Organization

I. INTRODUCTION

I.I BACKGROUND

Over the past decade, sustained progress in scaling up access to HIV testing, treatment, and chronic care services has significantly improved the chances of reaching the Joint United Nations Programme on HIV/AIDS (UNAIDS') global target of 15 million people on treatment by 2015. With governments in high-prevalence countries building the capacity of their national HIV programs, there has been a shift in the global AIDS response from a focus on emergency response to a focus on efforts to strengthen health systems to ensure their long-term sustainability. Health system reform addressing expanded access to and improved quality, coverage, and efficiency of health services has been at the top of the agenda of many low- and middle-income countries (LMIC), particularly those with strengthened Antiretroviral therapy (ART) programs that now serve a growing population of patients who depend on a health system that delivers life-long care. In addition, most LMICs face an increase in the prevalence of non-communicable diseases (NCDs) and therefore require a sustainable, well-resourced, and high-quality health system to meet long-term public health needs.

The health workforce plays a central role in health system strengthening efforts. In fact, in recognizing the importance of human resources for health (HRH) in delivering HIV and other health services, the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) set a goal to support partner governments in the production of 140,000 new health care workers by the end of 2013 (WHO, 2009). Reaching such an ambitious target requires an understanding of the country-specific issues related to the training and retention of new health workers. Just as important, efforts to develop effective HRH strategies for HIV and other health services must identify and address barriers to the effective and efficient use of existing health workforce resources. To that end, this primer explores the manifestations, impact(s), and considerations for best practice management of the dual-practice phenomenon.

Defining Dual Practice

Dual practice refers to physicians, nurses, pharmacists, and other health practitioners who hold concurrent employment in both public and private sector clinical spaces.

Anecdotal evidence suggests that some manifestation of dual practice exists in almost all health systems struggling to address HIV and AIDS. To design health system interventions that maximize, retain, and make efficient use of the health sector's available human capital, it is imperative to understand if and how dual practice affects national HRH and service provision objectives. The design and implementation of interventions that effectively address both the positive and negative consequences of dual practice necessarily require a focus on the unique health market and institutional arrangements of a specific national health system. For example, given that international donors largely subsidize HIV and AIDS treatment inputs in several high-prevalence countries, the private sector's provision of HIV care may be less lucrative than its treatment of other infectious diseases or general medical conditions that require expensive or lengthy inpatient treatment. For this reason, dual practice may adversely affect general medical or outpatient department services more than HIV or other vertically funded disease programs that benefit from greater administrative or donor oversight.

However, the available literature highlights how dual practice may influence—either positively or negatively—the overall quality of public sector health services, thereby affecting HIV patients seeking general or specialized care in the public sector. In some settings, high-priority/high-transparency discussions about the impacts of dual-practice have minimized conflicts of interest and decreased the sense of unfairness among colleagues who adhere to different principles of ethical practice (Macq et al., 2001). In other settings, government stewardship that has integrated dual practice into public objectives has provided the opportunity to deliver cohesive and integrated multi-sectoral health care. While some countries have decided not to address the issue of dual practice in view of its political sensitivities, some authors have suggested that currently unregulated physicians, nurses, and other health cadres engaged in dual practice may welcome appropriate policies, regulations, and guidelines that would formalize their practice (Ferrinho et al., 2004). Is concurrent private-public employment the source of serious health system performance issues in LMICs? Is it a factor in quality-of-care concerns? Is dual practice something to be encouraged, limited, or banned? This primer explores such issues, highlighting how dual practice commonly manifests itself and positively and negatively affects health systems, HIV service provision, and the deliberations of governments and facility managers who have attempted to address it.

I.2 PURPOSE OF THE PRIMER

The intent of this primer is to provide policymakers, program managers, and private sector providers with comprehensive background knowledge on the phenomenon of dual practice. The primer addresses the following:

- External conditions as contributing factors to dual practice
- Motivations for dual practice and its manifestations
- The impact of dual practice on health systems and patients
- Management strategies and the role of policies, guidelines, and incentives as mechanisms for reconciling collective interests in dual-practice scenarios
- Designing and implementing dual-practice interventions and considerations in selecting an intervention

This primer examines different perspectives on the issue of dual practice, with the objective of ensuring a broad view of the subject. It seeks to provide policymakers and program managers with general information regarding the manifestation of dual practice in such settings, to discuss potential implications for care, and to suggest tools and advice on how to deal with dual practice to the benefit of HIV clients and care providers. It bridges the gap between existing research and current practice in order to inform on the issue of dual practice as part of supporting and sustaining national HIV responses as part of overall strengthened health systems.

2. THE DUAL-PRACTICE PHENOMENON

In several countries across the globe, concurrent (or dual) employment is common among civil servants in the public health sector. Dual employment may take different forms, such as clinical practice in both public and private settings, service provision and research, or teaching and management. It may even combine health practice with an economic activity unrelated to health, such as commerce or agriculture. This primer focuses on dual practice among physicians, nurses, and pharmacists who hold two jobs concurrently in the public and private (commercial or not-for-profit) health sectors.

Differences between and within countries are highly relevant in the context of dual practice. Observations and descriptions of dual practice in different settings define the range and scope of private provider services within the context of a national health system and reveal the emergence of private sector niches within the full range of health services. For instance, in response to demand and competition, small-scale private providers may prioritize the provision of general medical and ambulatory care to the extent that they circumvent the training and infrastructure requirements associated with the treatment of communicable diseases such as HIV or TB and/or the delivery of complex care and/or inpatient care. The result might be dual-practice manifestations that favor the delivery of general medical or primary health care relative to the treatment of "specialist" diseases such as HIV. Nonetheless, several settings report HIV commodity "slippage" (such as test kits and antiretroviral medications) from the public to the private sector, suggesting that some dual practitioners may skim commodities or illegally treat HIV and AIDS patients in private practices.

Private commercial providers typically concentrate in urban areas while not-for-profit and faith-based providers often extend the reach of government services to rural and underserved areas. The various manifestations of dual practice in these settings is therefore influenced by each region's private health sector landscape, the availability and quality of the national health workforce, and financial considerations such as civil service salaries or the private health sector's access to finance. Regardless of its dual practice's manifestation, the primer's predominant question is whether dual practice advances or impedes the provision of HIV and other important national health services and whether its negative impacts on health systems, health providers, and patients lend themselves to mitigation.

2.1 MANIFESTATIONS OF DUAL PRACTICE

As stated, dual practice can manifest itself in several ways. Some of the more common forms of dual practice among physicians, nurses, and pharmacists include the following:

- Holding a full- or part-time salaried position in the public sector as well as a part-time position in the private sector and, in the latter case, providing fee-for-service care after public hours. For example, some physicians, nurse practitioners, and pharmacists own and manage their own private clinics that are staffed by junior health personnel during the day.

- Providing contractually agreed public sector services on behalf of the government while in full-time private practice. Such an arrangement is considered dual practice if a provider delivers services under government contract.
- Holding a full- or part-time position as a private practitioner working out of public facilities under either official or unofficial agreements (Lewis et al., 1991). For instance, rather than investing in operating theater infrastructure, a private sector surgical specialist may rent public sector surgical facilities and, in return, provide either a financial contribution to the institution or deliver pro-bono clinical services.
- Holding a full-time salaried post in the public sector and a position as a subcontracted consultant with private corporations, insurance companies, nongovernmental organizations, or hospitals.
- Holding a full-time salaried post in the public sector and receiving informal payments from patients as an "under-the-table" gratuity (Bir and Eggleston, 2013). Such an arrangement involves the illicit operation of a private practice in a public sector setting.

2.2 PRACTITIONER MOTIVATIONS

As with the various manifestations of dual practice described above, the motivations of individual practitioners engaged in concurrent public and private sector employment are influenced by the health system landscape, the prevalence and scope of private sector services, and the financial and regulatory environment. In the large share of LMICs, bridging the gap between public health sector needs and practitioner motivation remains a significant challenge in developing effective dual-practice mitigation strategies.

According to existing literature, the most commonly documented motivations for dual practice are as follows:

- In what the literature and anecdotal accounts describe as the greatest motivating factor, income supplementation through private practice in response to low public sector salaries
- The prospect of private income combined with often generous civil service benefit packages (i.e., social security, pension and retirement, vacation time) that are perceived as "secure"
- Access to opportunities for income progression and career advancement
- Private sector autonomy of practice, particularly among specialist physicians and nurses seeking to put special skills to full use
- Access to updated technology
- Opportunities to develop additional skills and treat a variety of patients given that public settings are often demanding under-resourced settings which limit opportunities for professional growth
- Opportunities to an enhance status and/or gain access to public sector patients for eventual referral to private practices
- Opportunities to gain access to publicly procured equipment and drugs for use at a private sector point of care (i.e., commodity "slippage" from the public to private sector)
- Commitment to the public good, incentivizing providers to remain at least partly employed in the public sector

- The benefits from various forms of social prestige or status that accrue to a dual public and private role

2.3 HEALTH SYSTEM IMPACTS OF DUAL PRACTICE

A balanced perspective on dual practice will demonstrate both positive and negative consequences depending on the dual practice manifestation, the existing regulatory environment, and government stewardship. A comprehensive review of the literature suggests that dual practice can potentially induce positive health system impacts by:

- Retaining skilled physicians within LMICs and (depending on the regulatory approach) within public health systems.
- Improving patient access to health care in terms of both geographic reach and daily operational hours. Despite concerns about dual-practice physicians' and nurses' long working hours (and a consequent reduction in quality of care), a recent study in Denmark concluded that dual-practice physicians performed at least as well as their counterparts in public hospitals who did not hold a second position (Socha and Bech, 2011).
- Shifting wealthy patients to private practice and therefore ensuring that public funds target the poor or underserved.
- Reducing wait times for treatment in the public sector by reducing patient volumes.
- Reducing physicians' requests for unofficial payments for free services delivered in the public sector.
- Increasing the availability of medicines and diagnostic services that are often unavailable because of public sector "stock-outs."
- Increasing the quality of public sector service provision as physicians pursue prestige and reputation in the public sector in order to promote their private practices.

On the other hand, potential negative impacts of dual practice include the following:

- Absenteeism and dereliction of duty by public sector physicians who abandon their public posts for private practice.
- Malpractice and/or provision of substandard care by physicians in regions characterized by poor enforcement or oversight of private sector regulations.
- Theft and/or abuse of public medical supplies and commodities for private provision of health care.
- The creation of two-tiered health care systems in which the wealthy receive preferential care from high-quality medical staff who shift to private practice.
- Induction of demand" for private practice through purposeful neglect of patients, slowed services, and increased wait times in public settings.
- Physicians' referral of easy-to-treat patients to their private practice (a phenomenon termed self-referral), adversely affecting poor patients who could benefit from free public sector services. A study in Indonesia demonstrated how physicians' self-referral led to the urban poor's disproportionate use of private providers (Bir and Eggleston, 2013).
- The solicitation of informal payments for fee-for-service care by physicians operating illegal private practices out of their public consultation space. Several publications have

documented the problem of illicit economic activities linked to dual practice (Vian, 2002).

Regardless of the scope of illicit or questionable activities, reports of the above manifestations demonstrate potential dual practice–induced vulnerabilities for HIV patients in some settings while exposing potential gaps in national surveillance of HIV care and the tracking of HIV commodities.

The Positive and Negative Consequences of Dual Practice in Tanzania

Among physicians, nurses, and pharmacists in Tanzania, dual practice is reported as "quite common but extremely difficult to quantify." Nothing in Tanzania's medical, nursing, or pharmacy regulations prohibit government physicians, nurses, or pharmacists from owning and/or working in a private practice as long as such activities do not interfere with their public sector responsibilities. In the case of physicians, dual practice became prevalent in the early 1990s when "many physicians stopped coming to their public posts at all because there really was nothing much available in the public sector." Among nurses and pharmacists, dual practice is common but, given the typical workload and clinical nature of their professional duties, it occurs more often as "moon-lighting"; that is, practitioners engage in private sector employment during their public sector off-time or vacation hours. Such conduct is not restricted to dual practice in the medical sector. Indeed, several medical professionals work in second jobs in "nonprofessional or nonmedical businesses."

Manifestations of dual practice in Tanzania vary, giving rise to both positive and negative effects on the health system, on patient outcomes, and on the providers themselves. By expanding the total number of private sector service delivery points, dual practice can offer patients an alternative to often overstretched public sector services. As one interviewee stated, "Dual practitioners can increase accessibility to health services and relieve public congestion." In addition, dual-practice providers in Tanzania are expanding the overall coverage of facilities offering essential health services in the areas of family planning, maternal and child health, malaria, HIV and AIDS prevention and treatment, and access to medications. In particular, pharmacists have "built trust in their home communities" by reinforcing the public-private (and community) connections fostered by their dual-sector employment. In all cadres, informal links that have evolved as a result of dual practice have led to the creation of effective informal referral networks between public and private points of care.

Nonetheless, dual practice in Tanzania has led to several concerns. Of primary importance, the strong motivation to supplement public sector incomes has caused many practitioners to "abscond from their public posts whenever possible." As one interviewee stated, the "lost time of their service in the public sector is the issue in Tanzania." In addition, physicians "self-refer" public sector patients to their evening private practices, although the volume of referrals is extremely difficult to quantify. Interviewees also confirmed reports of illicit payments and drug thefts in the public sector to fuel private sector practice. It is imperative to note that such occurrences are not widespread but are nonetheless a problem in an environment with a strong financial incentive for providers to engage in forms of dual practice that undercut their public obligations. Some nurses arrange for "a night-day switch" whereby they work up to an additional full-time shift in the private sector upon the conclusion of their shift in the public sector. While such scheduling does not interfere with nurses' time commitments to the public sector, it creates quality-of-care concerns when nurses are "overworked." The negative outcomes outlined above have obvious impacts on the quality of public sector care, particularly among those who cannot afford private sector health services or find themselves paying illicit fees solicited by public personnel.

Tanzania's Colocation of Public-Private Services as a Dual-Practice Mitigation Strategy

The provision of private or fast-track care alongside a public option can be an effective way to retain health providers within the public health system without depriving them of the financial and clinical benefits of private practice. Tanzania's Muhimbili National Hospital (MNH) and Muhimbili Orthopaedic Institute (MOI) have implemented intramural private practice (IPP) strategies designed to (1) relieve constraints on the hospital's/institute's constrained operating budget by increasing discretionary revenue through private practice; (2) address resource and commodity gaps in the provision of public services; (3) incentivize employees to improve service quality; and (4) retain health providers and mitigate the adverse impacts of dual-practice physicians, surgeons, and specialists who would otherwise provide services off site. Hospital managers say that the IPP strategies have enhanced provider skills, competencies, and morale by permitting the procurement of complex equipment and technology intended for both public and private sector patients. Some have argued, however, that public-private colocation efforts represent health care privatization by another name, potentially creating a two-tiered health system that inevitably leads to an uneven standard of care and special privileges for doctors and nurses. The design features of the MNH/MOI intervention sought to minimize these potentially negative consequences, but experience demonstrates that, while colocation can be an effective dual-practice mitigation strategy, it can create additional barriers to care.

The MOHSW developed the idea of the IPP strategies at the end of 1996 and put the strategies into operation at MNH and MOI in October 1998. When approached with the idea of the strategies, Muhimbili's management was searching for a strategy to incentivize super-specialist providers, some of whom had started leaving for 'greener pastures' in private hospitals or even for other countries. The initial meetings on the IPP strategies involved the MOHSW and a broad range of MNH directors, including, the director of medical services, director of surgical services, director of nursing and quality services, director of finance and planning, director of clinical support services, and director of information communication and telecommunication. The initial planning also involved consultations with nursing personnel, support staff, and lower-level cadres, including nontechnical staff, to ensure that all MNH personnel were informed of potential changes.

The MNH IPP plan was approved for implementation in October 1998 based on a shared MOHSW/MNH commitment to ensuring the provision of high-quality public and private services. Stakeholders agreed that the IPP strategy would not compromise the quality of existing services received by public sector patients while maximizing the benefits of additional revenue generated through private practice. The following design features supported the IPP strategy's overarching objectives:

1. IPP services are available only after normal working hours, on weekends, and on public holidays. This arrangement ensures the delivery of private sector health services after the normal eight-hour work day and thus prevents any interference with public service provision.

2. From the outset, individual department heads, nurses in charge, and block managers have been managing IPP services as part of MNH's regular management, reporting, and supervisory system. Each department identifies the services it wants to provide as part of IPP and suggests appropriate fees. MNH senior managers regularly review the services and fees.

3. All service providers seeking to participate in IPP had to commit to an equity principle (as part of their MNH employment) in which they pledged the equitable provision of medical and nursing care regardless of public or private patient status.

4. Although the IPP strategy offers "add-ons" and improved care options (i.e., brand-name pharmaceuticals), all providers must commit to providing care according to "the evidence-based intervention standards associated with the given disease or condition, regardless of whether" patients are seen as private or public sector patients.

5. Choice of IPP services is completely voluntary and involves an element of informed consent. All patients receive the price list per the IPP strategy and are informed of the free options provided by MNH. They then make their own decision regarding public or private sector care.

6. The IPP strategy excludes emergency cases, with the exception of emergent cases related to women and children, deliveries, and traffic accidents where an IPP option is offered. Owing to ethical concerns, general emergent care is provided as a public- only option.

7. MNH hired an IPP business manager who coordinates and oversees the operation of IPP services. An IPP Advisory Committee made up of providers, managers, and other health cadre representatives assists the business manager. The business manager convenes monthly meetings with the IPP Advisory Committee to discuss, review, and evaluate the operation of IPP services and issues that might arise regarding IPP revenue, management, or services.

Revenue Utilization

From the outset, MNH sought to clarify how providers would share discretionary funds. It directed the hospital budget in order to reduce conflict or confusion once it operationalized services.

1. In general, MNH retains between 25 and 60 percent of revenues generated by IPP services, including 25 percent for inpatient consultations to 40 to 50 percent for the majority of services such as normal deliveries, radiology or laboratory services, or physiotherapy. MNH retains 60 percent for EEG, ECG, echocardiogram, and other specialized diagnostic services.

2. MNH's discretionary revenue generated through IPP services is earmarked for the hospital's budget and contributes to MNH's and MOI's general operating funds. MNH estimates that IPP revenue covers as much as 60 percent of its daily operating budget. IPP revenue has been critical in MNH's efforts to procure medicines and commodities out of stock or not provided at the MOHSW Medical Stores Department (MSD).

3. Senior medical providers (i.e., the professionals directly providing services) typically retain the remainder of service revenue after MNH absorbs its portion. The remainder ranges from 40 percent for specialized diagnostic services to 75 percent for inpatient services. Providers then allocate between 10 and 15 percent of their share to nursing, midwifery, or other support personnel.

4. Lack of detailed guidelines on revenue sharing among medical teams has caused conflict necessitating consultation with IPP medical providers. For example, some nurses do not receive compensation from providers' revenue, and many lower-level health cadres complain of complete exclusion from revenue sharing.

a) 5. Recently, a portion of IPP revenue was earmarked to finance treatment costs for MNH employees and their families not covered at all or only partially by the National Health Insurance Fund. In addition, a portion of IPP revenue provides employees with emergency financing for burial and bereavement allowances and pays for overtime, night shifts, and housing allowances.

b) 6. The IPP business manager tracks and manages all revenue generated by IPP services and is bound by the same financial regulations and audit requirements as those governing any public fund.

MNH and MOI Intramural Practice At a Glance

- MNH is Tanzania's national referral and university teaching hospital with 900 beds, serving over 1,000 outpatients and 1,000 to 1,200 inpatients per day
- 64 of the beds are private (32 male and 32 female)
- Private outpatient services are located in the same block as general wards, but in private outpatient areas and designated inpatient wards
- In 2012, the total number of MOI outpatients was 53,426, of whom 21,078 were private patients and 8,893 were emergency patients
- 558 of MOI's 5,183 inpatients in 2012 were private clients (10.76 percent)
- Private care inclusions:
  - Shorter wait times for consultation and surgery
  - Choice of physician
  - Prime appointment slots, including afternoons, weekend, and evenings
  - Choice of brand-name drugs over generics

Challenges and Ethical Considerations in the MNH/MOI IPP

- Failure to stipulate revenue-sharing terms among all health cadres (i.e., nurses and other staff performing private care functions) and intramural agreements' limited guidance regarding profit sharing have created tension among health personnel. As intramural practice interventions grow increasingly successful (and profitable to providers), all health cadres will need to develop a more equitable revenue-sharing plan. If human resources for health is to receive a larger percentage of revenue, facilities will have to determine if co-located private facilities sufficiently subsidize public care.
- Employees who exclusively provide only public sector care resent their lack of access to private revenue. One way to overcome resentment is to earmark a small share of private revenues for public employees or provide equitable opportunities for private care participation among all staff.
- While there are no reports of nefarious activity at MNH or MOI, global experience demonstrates that colocation can result in the public sector's subsidization of private care. In addition, locating private care within the same clinical space as public care does not necessarily avert ethical concerns such as physicians' self-referrals of patients to private practice (i.e., "this public equipment is broken, but the one on the private side is working") or deliberate over-diagnosing as a means of generating private revenue. To date, the strong internal controls and equity principles built into IPP services at MNH and MOI have prevented ethical breaches.
- It is not known if the intramural practice provides value for money in terms of the management time required to operate it. IPP agreements (and indeed those at MNH and MOI) require the commitment of moderate to significant public health management time to conduct frequent and ongoing discussions with providers and HRH representatives to ensure the success of colocation.
- The fundamentally different missions of the public and private sectors can come into conflict if, for instance, an available brand-name drug is withheld from a public client in the case of public stock-out of generics or a public sector client dies while awaiting emergency surgery as a private sector client was attended to.

Lessons from the MNH/MOI Experience

- Intramural practice has motivated doctors to return to public practice after the salary-related strikes of the late 1990s.
- Practice co-location affects all human resources at a facility—both dual-practice providers and public sector–only providers. Intramural practice works best when it is part of a larger HRH efficiency, recruitment, retention, and compensation strategy aimed at retaining private sector talent within the public health system.
- Nurses and other staff who participate in private sector care should participate in revenue-sharing arrangements that are clearly outlined as part of the negotiated agreement between providers and management. Such arrangements can reduce resentment on the part of support staff or physicians' claims that increased funds are needed to compensate support personnel.
- Effective dialogue between/among the MOHSW, public sector managers, and private sector providers has been essential to the success of the IPP strategy. Despite some areas of confusion and tension (i.e., with respect to revenue sharing), the dialogue has continued to focus on achieving an effective public-private balance in order to limit dual practice and retain clinical talent within the public health sector.

Overall, the MNH's and MOI's experiences with colocation of public-private practice have been "overwhelmingly positive." The IPP strategy has retained physicians, specialists, and other health personnel within Tanzania's national hospital. Efforts to raise funds for the expansion of intramural services are underway; some of the funds will be directed to expanding private care when new public spaces are opened. During the expansion process, hospital managers have committed to ensuring that the standard of public sector care is strengthened rather than weakened by colocated private sector services and that expansion of intramural practice is accompanied by a commensurate strengthening or growth of public sector care. They recognize that intramural public-private practice can induce many of the same adverse health system consequences as dual practice and that such efforts are critical to ensure that colocation of care serves to retain providers and strengthen services, rather than simply relocating private care without addressing the incentives for unethical provider practice as seen in many manifestations of dual practice.

2.4 HEALTH AUTHORITY CONCERNS ABOUT DUAL PRACTICE

Regardless of its manifestation, health authorities in many countries and health systems share common concerns about the consequences of dual practice. Most of these concerns may be grouped into three impact areas: (1) health workforce and labor supply, (2) health care quality, and (3) health care costs.

(a) Impact on Health Workforce and Labor Supply

The existing literature does not provide sufficient empirical evidence to draw conclusions about the impact of dual practice on the retention of the health workforce and labor supply. Some studies suggest that dual practitioners holding full- or part-time positions in the private sector tend to increase the overall labor supply; other studies suggest that health workers simply split their labor contribution (Berman and Cuizon, 2004; Pauly and McGuire Eds, 2012). Allowing public sector physicians, nurses, and pharmacists to supplement their income by working in private sector practices may retain health workers in-country, preventing a brain drain to other regions or international settings. However, optimizing the opportunities for dual practice as a method of health workforce retention demands focused government stewardship of the private sector in order to maximize opportunities to address health workforce motivations while meeting the needs of the public health system. Effective regulation that prioritizes multisectoral collaboration and communication must clearly specify the health workforce's scope of practice and codes of professional conduct and rationalize human resource capacity and quantity in both the public and private sectors, thereby positively influencing the availability and motivation of the national health workforce.

(b) Impact on Health Care Quality

The overall quality of health care services is determined by a number of diverse systems factors; not limited to the quality of the workforce and medical education, infrastructure, commodity access and supply chain, health leadership and regulation, and supportive

supervision focused on the improvement of services. Where dual practice is the result of low public sector salaries and limited incentives, difficult work conditions, poor quality of care in the public sector, and/or where it is long-entrenched behavior among various health cadres, a ban on dual practice is unlikely to change the conduct of healthcare professionals. Similarly, if dual practice is the result of limited continual professional development opportunities in the public sector (often a requirement for professional registration) then regulation without expanded clinical practice opportunities would not sufficiently meet the needs of practitioners. Just as poor patient care is the consequence of multiple factors, the mechanisms to improve health care quality must acknowledge the wide-ranging motivations for dual practice in order to mitigate its potentially negative impacts on patient care.

(c) Impact on Health Care Costs

As noted earlier, many of the potentially negative consequences related to dual practice pertain to the increased health care costs borne by public health systems and often incurred directly by patients. For example, dual practice can increase the public sector's health care costs as a consequence of (1) absenteeism and lost productivity among the public sector workforce; (2) exploitation or theft of public resources; (3) use of public space for illicit private sector practice (reducing the effect of public sector investments); and (4) the necessity of prioritizing increased health worker salaries over other essential health system needs in order to retain the health workforce.

Higher costs incurred by patients can include those related to (1) the payment of illicit fees or gratuities to public providers for otherwise free public sector services in order to avoid treatment refusal; (2) private physicians' self-referrals and overtreatment in private practice (increasing the costs borne by patients and reducing patient welfare); (3) purposeful misdiagnosis whereby a physician orders expensive private sector services. (one author has referred to this as "cream-skimming of public patients" (Socha and Bech, 2011)) ; and (4) the required purchase of brand-name or unneeded medications unavailable in the public sector.

The above concerns regarding the potentially negative impacts of dual practice are by no means exhaustive; however, they underscore the need for effective interventions that appropriately balance the financial needs and incentives of practitioners against the need for high-quality care and the health care cost concerns of patients and public sector health systems.

3. INTERVENTIONS TO MANAGE DUAL PRACTICE

Using rigorous criteria related to methodology and effective study design, a recent literature review conducted by Kiwanuka et al. (2011) found no well-designed, eligible studies that effectively assessed the long-term impacts associated with dual-practice interventions. The authors deemed the majority of existing case studies flawed by bias and confounding elements, thus highlighting the need for research that employs carefully designed frameworks, such as randomized control trials, to assess dual-practice impacts before and after specific interventions. Additional research argues that regulation has encouraged positive behavior, which cannot be replicated or achieved spontaneously through cooperation between individuals (Jumpa, 2007; Jan et al., 2005). In short, where the opportunity exists, health care professionals will always seek to maximize their earnings in both sectors, and no assessment to date has adequately addressed interventions that address such behavior (Oliveira, 2005).

Developing a Dual-Practice Policy Response in Cote d'Ivoire

In Cote d'Ivoire, as in many other LMICs, the issue of dual practice among physicians, nurses, and pharmacists remains a sensitive topic. Despite wide recognition that a number of publicly employed physicians and other health staff work simultaneously in private practice, no systematic efforts have tracked or quantified the extent of the phenomenon. Informal interviews with physicians and health system stakeholders carried out by the SHOPS project in Abidjan and Yamoussoukro disclosed several motivating factors that drive dual practice in Cote d'Ivoire and that lead to several potentially detrimental consequences for the health system.

The SHOPS project's interviews revealed that physicians in Cote d'Ivoire most commonly cited the opportunity to supplement perceived low public sector salaries with private sector income as the prime motivation for engaging in dual practice. Two degrees of dual practice apparently occur: some physicians abandon or neglect their public sector posts to work in the private sector during publicly obligated hours, and other physicians work in the private health sector during their weekly off-time or vacation periods. Even though the World Health Organization (WHO) reports only 1.4 physicians for every 10,000 patients in Cote d'Ivoire (WHO 2013), widespread reports point to a physician surplus in Abidjan, providing an incentive and opportunity for physicians to abscond from public sector obligations. As in the Tanzania example, reports in Cote d'Ivoire discuss physician self-referral, overtreatment, referral of profitable diseases to private sector points of care, and purposeful reductions in the quality of public sector care as factors behind private sector demand. In addition, the potential slippage of co-trimoxazole and other key medications from the public to the private sector is drawing attention, along with concerns that ART medications procured via public channels are dispensed at private sector points of care. Lack of rigorous analysis regarding these practices prevents a clear assessment of the severity of dual-practice impacts on the Ivoirian health system, although anecdotal reports and facility-level experiences have mobilized the Government of Cote d'Ivoire to address dual practice as part of its ongoing HRH policy reform.

Three bodies oversee the professional practice of physicians in Cote d'Ivoire. The Département des Établissements et Professions de Santé regulates public and private health facilities, the Ordre National des Médecins de CI regulates physician professional practice in the public and private sectors, and the Department of Human Resources (within the Ministry of Health) is responsible for planning and managing public sector health workforce resources and for monitoring dual practice among public sector health personnel. The Department of Human Resources, however, relies on complaints filed by individual public sector facility managers before acting on instances of dereliction of duty or professional negligence. Lack of clear regulations on dual practice at the national level and facility managers' rare enforcement of facility contractual obligations have contributed to physicians', nurses', and pharmacists' engagement in dual practice. In response, dual practice is a major topic of debate as part of the Réforme Hospitalière, a health sector policy reform process scheduled for draft submission by the end of 2013.

The reform process calls for strengthening the three axes that guide the document for health policy change in Cote d'Ivoire: the statute governing hospitals, the statute governing human resources for health, and the reform of health care. Although policy and health sector stakeholders are still debating the precise interventions required to mitigate the negative impacts of dual practice, discussions support the regulation (rather than the elimination) of dual practice among Ivoirian health workers. One suggestion is for separate part- and full-time designations for public staff. Those electing full-time public employment would receive financial incentives; those electing part-time public employment would engage in approved part-time dual practice. Another suggestion calls for the colocation of public and private services, including the leasing of public space to private practitioners, to permit dual practice while retaining specialist services within the physical space of public care. In addition, the reform process will most certainly seek to address the skewed geographic distribution of public sector physicians, potentially providing a financial or nonmonetary incentive for rural practice and thereby reducing the urban surplus of physicians and ideally limiting opportunities for nefarious dual-practice behaviors.

The Cote d'Ivoire case highlights the complex and interrelated considerations that governments must face in determining the most appropriate way to address the dual-practice phenomenon. Policies must meet the demands of dual practitioners without reducing the quality of public sector care. Policies must also motivate health workers to meet their public obligations without depriving them of opportunities for private practice or encouraging their relocation to other countries. As it embarks on the reform process, the Government of Cote d'Ivoire could provide useful lessons as the Réforme Hospitalière is debated, ratified and implemented and as it works to mitigate the negative impacts of dual practice.

3.I POTENTIAL REGULATORY MECHANISMS

3.I.I REGULATING THE PRIVATE SECTOR

The effective regulation of dual practice requires the development of comprehensive employment policies and codes of conduct. It also involves the regular monitoring and consistent enforcement of employment policies, practice guidelines, and service contracts that define the rights and responsibilities of public and private practitioners. Without a regulatory base, it will be difficult to track or manage dual practice. Regulatory efforts have included, for instance, restricting the scope and type of services offered in the private health sector to those not offered in the public sector, limiting private sector fees, and/or restricting insurable services to those not covered by national or universal health insurance. Canada implemented these measures, which led to fewer financial incentives to engage in dual practice. The success of Canada's policy and regulatory approach was attributed to its robust monitoring system, broad national health insurance coverage, and a generally well-established public health system (Kiwanuka et al., 2011).

3.I.2 PROHIBITION OF CIVIL SERVANT OWNERSHIP OF HEALTH FACILITIES

Some countries have enacted laws that prevent public servants from owning or managing private health establishments, citing such arrangements as a conflict of interest with the obligations of public service. Examples include Spanish law no. 53/1984; Brazilian Constitution article 37, inclusion XVI alínea; and Brazilian law no.8112/ 1990 article, inclusion 117.

3.I.3 BANNING DUAL PRACTICE

The literature demonstrates that an outright ban on dual practice may lead to negative consequences more damaging to the health system than the potentially negative impacts of dual practice itself. For example, a ban on dual practice can translate into increased demand for higher public sector salaries, incentivized growth in informal or "underground" provision of private health care services, or increased solicitation of informal payments and illicit financial

activity within the public sector. In addition, countries already facing a shortage of health care workers may experience “brain drain” as health workers, particularly specialists, leave LMICs for countries offering higher salaries. Moreover, the enforcement of bans is costly and difficult; even where bans are enforceable, some authors have argued that they are never desirable (Gonzalez and Macho-Stadler, 2011). China, Greece, and Portugal have all introduced policies banning dual practice (Mossialos, Allin, and Davaki, 2005; Gonzalez and Macho-Stadler, 2011). In China, evidence suggests that dual practice still occurs on a large scale despite its prohibition. In Greece, despite a prohibition against dual practice between 1983 and 2002, physicians continued to work illegally in the private health sector. Many senior physicians resigned from public practice, leaving behind a proliferation of specialists. Illicit payments made by patients to public sector physicians during the ban ultimately led to legislative reform in 2002. In Portugal, pilot projects attempting to ban dual practice failed such that the country never even introduced a national policy governing dual practice (Kiwanuka et al., 2010). Conversely, a theoretical model has suggested that a ban can be effective in settings where the private sector is underdeveloped, weak, and an unattractive option to patients (Brekke and Sorgard, 2011). However, a ban under such circumstances promotes a health care environment in which public and private services are competitive rather than complementary and does not address either the risk of an international brain drain or the weak motivation of the health workforce.

3.1.4 EXCLUSIVE CONTRACTS

Exclusive contract refers to differential payment schemes (perhaps at the facility level) whereby the health professional agrees not to engage in external practice. The governments of Spain, Portugal, Italy, and Thailand and some states in India have turned to exclusive contracts (Garcia-Prado and Gonzalez, 2007). Spain offered a fixed monthly bonus to physicians who agreed to work full-time for the government without engaging in any form of private practice. The salary scale in Portugal’s public health sector offers four options: part-time, full-time, extended full-time, or exclusive to the national health system. Salaries are adjusted upward as the exclusive commitment to the public system increases; in this case, however, only a few physicians chose to work exclusively in the public sector—presumably because the incremental increase did not equate to the potential financial gains offered in the private health sector. Thailand’s experience with the same strategy created resentment among health workers who were not offered incremental options. While an attractive option, exclusive contracts can be extremely costly in countries where the private sector is well developed and offers attractive financial incentives to providers, and, as demonstrated by Thailand, can tender contracts to a wide range of health cadres. As such, the literature recognizes exclusive contracts as a second-choice policy option when governments are unable to provide other incentives or contractual options to health professionals.

3.1.5 LICENSURE RESTRICTION

Overseen by professional bodies, licensure restriction involves the development of barriers to entry and the specification of quality control measures to which private and public health practitioners must adhere. The role of professional bodies is to link accreditation, certification, and other means of performance assessment with the defined core competencies of professionals engaged in medical, nursing, or pharmaceutical practice. Examples of licensure restrictions include mandatory licensure to engage in dual practice or the restriction of dual practice to junior physicians after a period of mandatory exclusive public service. However, especially when junior health personnel work under the supervision of senior medical staff, they are likely to violate the restrictions. Malawi (Berman, 2004), Kenya, and Zambia (Garcia-Prado and Gonzalez, 2007) have experienced varying levels of success with licensure restrictions largely as a consequence of contextual factors. In Indonesia, after three years of exclusive

public service, physicians may engage in dual practice after completing their daily, full-time public sector duties. Lessons from these settings demonstrate that successful implementation of licensure restrictions requires well-established regulatory bodies, comprehensive employment policies, and effective monitoring and enforcement of licensure requirements.

3.1.6 SELF-REGULATION

In most high-income countries, such as the United Kingdom (UK), Canada, and the United States, quality of care is a matter of professional reputation and self-regulation. In addition to punitive measures such as revocation of hospital privileges or licensure restriction, peer pressure and personal accountability influence the individual provider's reputation as a physician, nurse, or other health care professional. In countries with weak professional bodies and an unregulated private sector, professionals engaged in dual practice have little incentive to self-regulate and, as such, may engage in malpractice or infringe on patient welfare. Mechanisms that allow for input from health consumers or third parties within civil society can, however, enrich the regulatory process. They rely on well-developed professional associations and regulatory bodies, outlets for complaint, and health consumer protection bodies (Jan et al., 2005). The UK and Bangladesh have partially implemented such mechanisms.

3.2 MONETARY INCENTIVE OR RESTRICTION

An assessment of the effect of monetary and nonmonetary incentives on provider performance and motivation found that "specific behavioral responses cannot accurately be predicted without knowledge of the context in which the incentive exists. A complex set of health care objectives and policies may result in many incentives, some of which act in opposite directions" (Hicks and Adams, 2001).

3.2.1 LIMITING PRIVATE EARNINGS

France limits the income of dual-practice physicians, specifying that they may not exceed 30 percent of their gross annual salary. The UK limits the income of full-time public physicians, specifying that they may not exceed 10 percent of their gross annual salary. If UK physicians decide to work part-time in the public sector, they forfeit one-eleventh of their public sector salary in exchange for not complying with the restrictions on private practice. The efficacy of income restrictions on mitigating the negative impacts of dual practice is open to debate. One study concluded that limits on private practice earnings could increase the public sector's quality of care, assuming that a dual-practice physician or other health worker seeks to maintain a high standard of care in the public sector in order to build the reputation of his or her private practice (Gonzalez, 2003). A second study concluded that ceilings on private earnings increase the quality of public sector services by reducing the demotivation of public sector–dedicated physicians who would otherwise resent their dual-practice peers.

3.2.2 LIMITING SCOPE OF PRIVATE PRACTICE

As demonstrated by Austria, Spain, Portugal, Italy, and Thailand (Bir and Eggleston, 2013), an effective way to limit (or, at minimum, to attempt to control dual-practice) activities is to limit the types of clinical or related health care services available in the private sector. Experience demonstrates, however, that limiting the scope of services can be extremely costly, particularly with respect to enforcement. When feasible, limits on the private sector's scope of practice may be preferable to exclusive contracts. An appropriate policy response, which could limit enforcement costs, is the promotion of transparent contractual or purchasing relationships between public and private practices. Contracts could provide for the subleasing of facilities and/or the subcontracting for specific services (Bir and Eggleston, 2013). The implementation of such interventions requires an environment conducive to public-private dialogue and

collaboration. In addition, a centralized system that monitors private practitioner earnings and hours spent delivering private services in public settings is crucial.

3.2.3 MONETARY INCENTIVES

Despite the significant constraints on LMIC health budgets that limit monetary incentives' role in mitigating dual practice, recent experience has shown that an increase in public sector salaries and incentives can directly increase the work hours that physicians, nurses, pharmacists, and other dual-practice practitioners devote to the public sector. In fact, the majority of dual practitioners in Bangladesh said that they would reduce private practice if the public sector paid higher salaries (Garcia-Prado and Gonzalez, 2007). Other monetary incentive mechanisms, such as performance-based incentives, reward effort and high-level performance and may offset public practice absenteeism. Such mechanisms, however, require consistent and transparent application in order to reward public sector dedication. Monetary incentive mechanisms used by various governments have included government subcontracting of private practitioners to deliver services to rural areas on a part-time or fee-linked basis; the development of public sector "output-related pay" systems rather than fixed salaries (similar to private sector payment schemes); and payment of private sector primary care providers with funds from social health insurance institutions, an approach successfully implemented in Austria. Public sector pay-for-performance mechanisms may spur competition among providers and trigger improvements in quality of care. In Portugal, individual hospitals showed an increase in physicians' motivation after the implementation of performance-linked incentives (Barros et al., 2000).

Different Compensation Mechanisms with Different Effects

Fee-for-Service. May increase the number of individual cases seen and the intensity of services provided, therefore making it an expensive option.

Case Payment. May increase the number of cases seen, but often decreases the intensity of services and results in the provision of less expensive and less time-consuming treatments.

Provider Daily Rate. Increases the number of inpatient bed days and therefore increases the average length of hospital stay and daily payments to providers.

Capitation. Attracts more patients to register while minimizing the number of patient-provider contacts and reducing the intensity of services.

Salary. Reduces both the number of patients seen and the intensity of services provided.

3.3 NON-MONETARY INCENTIVES

As observed in the context of informal private providers, interventions structured around monetary incentives and performance/accountability mechanisms are more likely than nonmonetary incentives to change providers' behavior (Shah et al., 2010). Increased provider accountability through regular performance reviews and easy- to-monitor regulatory approaches seems to increase physicians' awareness of the importance of following norms and delivering high-quality care.

Nonetheless, some nonmonetary motivations, such as social or spiritual incentives, have drawn the attention of health practitioners. Data from Thailand showed that a national prize awarded to the best doctor, particularly in rural areas, led to increased motivation (Hicks and Adams, 2001). Despite often uncomfortable and under resourced working conditions, physicians were deemed happier and more efficient. In Italy, only physicians who do not engage in any form of private

practice are eligible for promotion to higher public sector positions. Anecdotal evidence suggests that nonmonetary incentives such as access to professional development opportunities, the award of quality rankings and/or other commendations, or incentives that increase a provider's earning potential could reduce the negative impact of dual practice. However, financial gain remains the primary motivating factor for engaging in dual practice. Therefore, further research is needed on nonmonetary incentives to address or counteract the motivation for dual practice.

3.4 INFLUENCING HEALTH CONSUMERS

Seriously adverse impacts on quality of care arise when dual practice manifests itself through public providers' dereliction of public duty, theft of public commodities, or maltreatment of public patients as a means to fuel demand for private sector services. In particular, LMICs face significant information asymmetry between patients and providers. Patients may base their choice of provider on several factors, including proximity to care, provider interpersonal skills, or the comfort of the environment where treatment is delivered, none of which is directly related to clinical competence. Similarly, patients may elect to visit unqualified providers in the informal sector as a function of proximity or lower cost. In addition to information asymmetry, patients may experience power asymmetry, whereby they take a passive role in their care, thereby avoiding the label of "difficult" or the possible refusal of treatment. Broadening health consumers' knowledge through direct education on standards and quality of care, reasonable prices, accreditation, regulation, and patient rights could improve quality of care in both the public and private sectors, especially where dual practice undercuts quality of care in the public sector.

Arming health consumers with information and creating institutions that give patients greater authority over their care (such as compliance and patient protection boards) can help consumers challenge poor quality of care. For instance, the incorporation of private medical practice into the Indian Consumer Protection Act of 1986 led to improvements in the quality of private care (Mills et al., 2002). Patient education makes patients aware of their rights, the norms and standards of care, and providers' illicit demands or inducements. Regulation and monitoring by a third party such as a patient protection unit or insurance agency can also prevent provider-induced demands. An emerging trend in LMICs is community participation on health boards. In Honduras, municipal law mandates regular town hall meetings as part of the nation's decentralization of health care management and budgets (Fiedler et al., 2000). Ensuring that patients are empowered with a voice in their care is an effective way of increasing the self-regulation of dual-practice providers.

3.5 ALLOWING DUAL PRACTICE IN PUBLIC FACILITIES

Since the 1960s, many European governments have been trying to attract doctors to public service by allowing them to treat their private patients in public facilities. One such arrangement designates clinical spaces inside public hospitals for fee-for-service care, with a fraction of the fee withheld by the facility and the remainder given to the provider. In Germany, physicians reimburse hospitals for any public resources used during the treatment of private patients. With over 90 percent of physicians engaged in private practice in public hospitals, Ireland protects public patients' access to services by limiting to 20 percent the share of beds allocated to private patients. Austria allocates 25 percent of beds to private practice, and Italy allocates 6 to 12 percent.

The positive aspects of dual practice in public facilities are assurances that the public sector will retain scarce clinical specialists and that specialists will be available for public consultation under the supervision of the public health system. On the other hand, dual practice in public

facilities can give rise to private practices' abuse of public sector assets and an inherent conflict of interest when determining patient priorities relative to often-limited resources. It may be possible to minimize conflicts by executing a clear contract between the public sector and dual-practice practitioners that outlines the proper use of public resources, specifies lease terms for facilities, and defines approved private sector services (Garcia-Prado and Gonzalez, 2007).

3.6 LAISSEZ-FAIRE OR NO RESTRICTION

Only a few countries, including Brazil, Indonesia, and Egypt, have acknowledged and approved dual practice without restriction. All three countries possess a surplus of physicians so great that the public sector would be greatly challenged to employ all such practitioners. In the majority of LMICs facing human resource shortages, dual practice without restriction is likely unadvisable.

4. DESIGNING AND IMPLEMENTING INTERVENTIONS

A comprehensive approach to understanding dual practice in a given country or setting can increase the chances of selecting the appropriate management tool for intervention. The several building blocks needed to determine the structure of a dual-practice intervention include the following: recognizing stakeholder motivations and incentives, identifying stakeholder capacity to block attempts at reform, understanding the role of reforms in establishing a new balance of power between stakeholders, the speed of implementing reforms during a “window of opportunity” to deliver change, building consensus and legitimizing reforms, and analyzing organizational capacity and contextual factors (Soderland et al., 2003).

Though not exhaustive, the actions, questions, and considerations outlined below are suggested starting points for any stakeholder attempting to develop or implement a dual-practice strategy or intervention. Any intervention must carefully address local context and the unique features of any health system.

4.1 MOBILIZING A MULTISECTORAL TASK FORCE

Dual practice is a complex phenomenon involving several actors representing several sectors, a wide array of health system components, a large complement of professional cadres, and a host of public sector agencies. Therefore, it is imperative that any intervention take into account the motivations, incentives, and perspectives of all parties. One effective way to initiate reform involves the mobilization of a multisectoral task force to align the process and expected outcomes with national objectives and provider needs. Such a task force must include stakeholders with ownership of planning, implementation, monitoring, and enforcement activities, such as medical councils or regulatory bodies. The inclusion of private sector, civil society, and government leaders is also critical. Moreover, given that dual practice extends beyond the realm of health care, the Ministry of Health and related ministries with jurisdiction over finance, planning, education, and human resources must all cooperate in developing, implementing, and monitoring the appropriate intervention.

4.2 UNDERSTANDING THE CONTEXT

Understanding the context of dual practice is critical to designing an effective intervention that satisfies all parties. Some contextual considerations follow:

(a) Political Factors. Political stability, current internal or external conflict, changes in leadership or ministry alignment, degree and efficacy of taxation for health financing, government attitudes and behavior toward the private health sector.

(b) Governance. Maturity of government institutions; existence and strength of civil society organizations, consumer protection laws, organizations.

(c) Policy Environment. The Ministry of Health's perspective on dual practice; the regulatory environment for the licensing, monitoring, and ongoing supervision of private sector facilities; the strength of professional regulatory bodies and the degree of medical professionals' adherence to and monitoring of codes of conduct; the degree of health stakeholder representation in the national regulatory framework; health legislation governing dual practice; MOH guidelines, codes of conduct, and professional licensing requirements.

(d) Geopolitical Factors. Health system structure and strength in neighboring countries (related to brain drain); internal access to remote areas; natural disasters or other factors limiting effective service delivery.

(e) Social Factors. Population size and degree of urbanization; education and literacy levels; inequality (i.e., GINI index); evolution and distribution of wages; existence of social health insurance.

4.3 ASSESSING HEALTH SECTOR DATA

In addition to understanding the political and social context of dual practice, it is essential to aggregate and analyze available health sector data as the basis for determining appropriate dual-practice interventions. Data collected by national health management information systems, facility-level data, and information from provider associations can be useful in discerning health sector patterns and trends that could indicate areas for dual-practice reform or mitigation. Health sector data can help clarify the scope, size, and distribution of the national health workforce, describe the health market, and reveal patterns in patient or provider movement and health sector decision making. Of major importance, health sector utilization and data on out-of-pocket expenditures can help assess the private sector's attractiveness to both patients and providers. In contexts where the private sector is a highly attractive option for patients and favorable regulatory environments make it attractive to providers, dual practice is likely to manifest.

Illustrative Questions for Inclusion in a Dual-Practice Health Sector Assessment

(a) Workforce Demographic Questions

The quality of health care provision depends on the skills and effective utilization of the health workforce. Therefore, a review of demographic data on the scope, size, and distribution of various health cadres is critical to understanding the motivations for dual practice. An assessment of the size of physician, nurse, and pharmacist cadres; the composition of health cadres (age, sex, and average years of practice); the scope and quality of medical training; geographic distribution of health workers; differentiation of general and specialist practitioners; and the availability of the primary and tertiary workforce is essential to the intervention planning process. Other considerations may include the following:

- Is there evidence of coordination between the national health strategy and medical and nursing education institutions?
- Does the government sponsor medical education? Could sponsorship be part of a retention or compensation strategy?
- In which sector do medical professionals value their social mission above other benefits?
- What drives the popularity of particular specialties, hospitals, or regional employment?
- Is there a shortage of physicians, nurses, or pharmacists in a particular specialty area?
- What percentages of physicians, nurses, and pharmacists currently account for dual practice?
- Are there several manifestations of dual practice, and what are the motivations?

(b) Workforce Management Questions

An accurate forecast of the short- and long-term supply of and demand for health workers involves consideration of a country's overall economic growth; its expected productivity; the likely introduction of new treatment protocols, guidelines, and advances in technology; and the potential for the changing roles of physicians and/or nurse practitioners. The following considerations relate to the role of workforce management in addressing dual practice:

- How is the workforce managed and monitored? What body is responsible for oversight of various health cadres?
- Are there metrics of health system capacity and health care needs and demands?
- To what extent is the country's epidemiological profile aligned with the qualifications and availability of various health cadres?
- When planning health workforce utilization, does the government consider dual practitioners (physicians, nurses, and pharmacists) as well as full-time, dedicated government personnel?
- How can workforce distribution between sectors be improved or managed?
- Are both public and private providers included in public sector training and continuing professional development?
- Do health workforce policies encourage retention and/or appropriate dual practice, such as selective admission or scholarships for medical and nursing students who commit to a period of public service; medical curricula adapted to country-specific needs; public subsidy of medical or nursing education for purposes of national retention; mandatory contributions of health workers to either the public or private sector?
- Are standardized treatment protocols and guidelines, use of technology, and adherence to practice geared to reduce the discretion of physicians and other health cadres?
- Does the public health sector depend primarily on the overall number of public physicians and less so on their individual characteristics?

(c) Health System Dynamics Questions

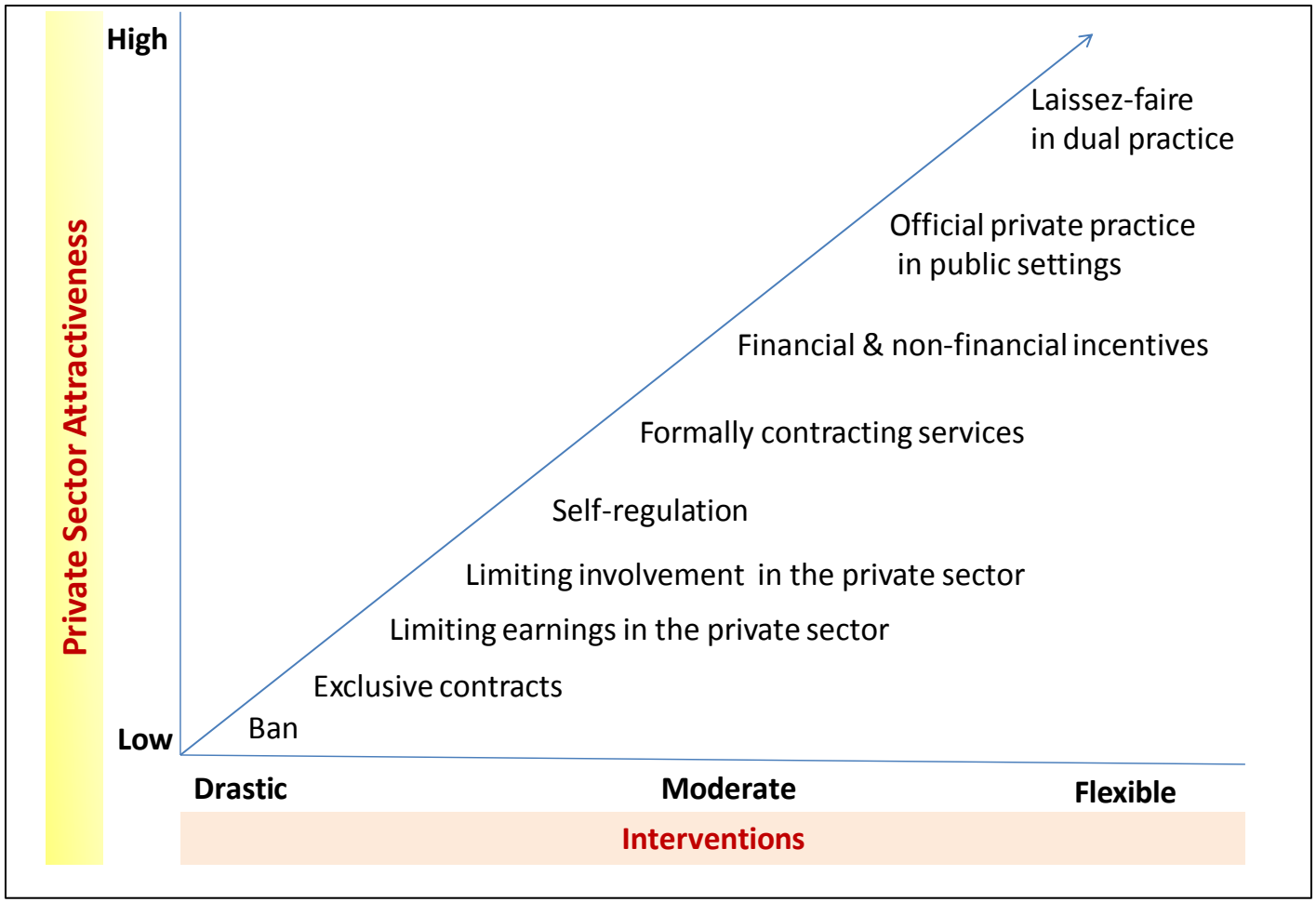
- Does the government consider a total market approach and acknowledge private sector contributions to health service delivery?
- Are the private and public sectors competitive or complementary?
- Is the private sector monopolist, or does it encourage adequate market competition to reduce and stabilize prices?
- What are the amounts of the public sector's average pay and other monetary benefits (i.e., pension, allowances, life insurance, subsidized transport, meals, child care)?
- What are the public and private sectors' nonmonetary incentives (i.e., access to education, professional development, and support for training; career planning; vacation and flexible hours; sabbaticals and planned career breaks; counseling; recreational facilities (Hicks and Adams, 2001))?

(d) Attractiveness of the Private Sector

Understanding how the attractiveness of the private sector draws dual practitioners from the public sector is essential for determining the appropriate intervention to incentivize their retention in or their contribution to the public system. A private sector attractiveness analysis (Figure1) is useful.

FIGURE 1. A SUMMARY OF MANAGEMENT TOOLS TO BE IMPLEMEN

TED DEPENDING ON THE ATTRACTIVENESS OF THE PRIVATE HEALTH SECTOR TO PROVIDERS AND PATIENTS



4.4 CONSIDERATIONS BEFORE IMPLEMENTING A DUAL-PRACTICE MANAGEMENT TOOL

4.4.1 PROTECTING PATIENTS FROM UNREGULATED PRIVATE AND/OR DUAL PRACTICE

Before investing in the management or regulation of dual practice, a country must endorse and strengthen the effective delivery of private sector health services. A strong health care system engages in appropriate monitoring and planning to ensure that both the public and private health sectors work toward national health objectives. Moreover, effective private-public collaboration, appropriate use of contracts or purchasing agreements, and consistent and supportive regulation can all drive down the human and financial costs of dual practice. A government may enact and enforce regulations governing dual practice or, if a comprehensive monitoring system is in place that ensures effective private sector provision of services, may rely instead on a less formal approach to oversight. By acknowledging dual practice and health worker motivations for engaging in such practice, a government can set forth codes of conduct and standards, monitor and enforce such codes/standards, and thereby ensure proper demarcation between activities in the public and private sectors.

4.4.2 IMPROVING ETHICS RELATED TO DUAL PRACTICE

Effective policies and regulatory frameworks governing dual practice ideally seek to reconcile the interests of the health system with the short-term motivations of providers. However, in reality, professional self-regulation is probably the most effective mechanism for limiting the negative impacts of dual practice. Strong professional councils and societies, patient protection organizations, and other civil society groups promoting patient interests can achieve self-regulation among health professionals. Indeed, medical professionals dislike external control, although effective oversight and licensure monitoring can instill a sense of professional pride and personal accountability. Collectively, medical professionals may have an interest in regulation if it ensures quality and prevents an oversupply of practitioners, thereby increasing the value of their professional standing (Jumpa et al., 2007).

4.4.3 CHOOSING DUAL-PRACTICE INTERVENTIONS

In all likelihood, a combination of interventions rather than a single mechanism is the preferred approach to the management of dual practice; a combination approach reflects the complexity of the dual-practice phenomenon. For each proposed strategy, some authors have suggested the conduct of a “human resources impact assessment.” The aim of such an assessment is to minimize the unexpected impacts of dual practice and to guarantee a positive cost-benefit outcome for the target population (Ferrinho et al., 2007). Transparent and clearly communicated criteria for the award of incentives need to preempt any monetary compensation to work in deprived areas; to achieve output or performance targets; to demonstrate loyalty; or for any other award, recognition, or prize. If not clearly communicated in advance, incentivizing only a small group or failing to meet incentive expectations can demotivate rather than inspire. Prohibitions or outright bans have driven dual practice underground, making it even more difficult to prevent or remedy adverse outcomes (Ferrinho et al., 2007).

Limits on private sector earnings can breed deep resentments that reduce providers’ motivation to practice in the private sector. Yet, if the objective is to curb health system productivity losses, the regulation of practitioners’ private sector involvement addresses only the intensity of dual practice and the public sector’s potential losses (Gonzalez and Macho-Stadler, 2011). With respect to self-referral by physicians or other health cadres, it leads to induced demand if the patient does not require higher-quality private sector services or the needed service does not

justify the increased cost of care. In this regard, clearly specifying guidelines for referral and service costs and implementing measures to improve quality in both sectors can help prevent surprisingly high treatment costs. Defining specific practice areas (i.e., a junior physician must engage in two years of exclusive public practice after graduation, or private services are limited to specific diseases) as a condition of professional licensing may help balance the public and private sector relationship and motivate junior physicians (Ferrinho et al., 2007). In addition, formally contracting out specific services and after-hours private practice in public institutions may mitigate dual practice and ensure that private practice remains closely aligned to public regulatory systems.

4.4.4 MONITORING, MEASURING, AND ENFORCING DUAL-PRACTICE INTERVENTIONS

The success of planning and implementing interventions depends on the government's capacity for ongoing and consistent monitoring, evaluation, and, most important, enforcement. While some countries base their policies and regulations on their monitoring and enforcement capabilities, such an approach may not be the most appropriate or effective intervention. Some interventions permit physicians to deliver private services in public facilities; in fact, it might be more beneficial to leverage additional clinical space by allowing external private practice. Particularly among LMICs facing budget constraints, it is essential to strike a balance between what is most appropriate and what is most feasible to implement, monitor, and enforce.

4.4.5 EMPOWERING CIVIL SOCIETY AND PATIENT ADVOCACY GROUPS

As outlined above, well-organized health consumer and patient advocacy groups capable of making their needs known are significant stakeholders and must participate in the effective management of dual practice. Furthermore, clearly outlined patients' rights, easy and accessible channels for complaints, regulatory agencies that have earned the public's trust, explicit complaint processes, and a transparent professional judiciary system all contribute to a strong environment for the successful involvement of patients in promoting high-quality care, limiting providers' illicit behavior, and, ultimately, implementing an effective dual-practice management tool.

5. CONCLUSION

Manifestations of dual public-private practice among health providers are highly contextual and may be either an asset or impediment in the provision of national health services. The scope and quality of a country's private health sector and public health services, the capacity and distribution of the health workforce, and the government's regulatory capacity all contribute to a given dual-practice manifestation and determine the nature of its impacts—positive, negative, or neutral. Manifestations range from "moonlighting" in private practice during vacation or public off-hours, to abandoning public posts, to engaging in other unethical activities such as a purposeful reduction in the quality of public sector care. The impact of dual practice on health systems, patients, and providers depends on both the characteristics of dual practice and the political and facility-level response in a given health market.

Health care providers, policymakers, and donors in most high HIV-prevalence countries provide anecdotal evidence of dual practice and voice concern about dual practice's potentially adverse impact on HIV care and the health system as a whole. HIV and AIDS care is often less lucrative than the care associated with other diseases and may reduce providers' motivation to engage in dual practice versus general medicine or expensive out-patient specialist services. At the same time, reports point to HIV commodity slippage from the public to private sector, HRH staff shortages in public HIV care and treatment programs as a consequence of recruitment by the private sector and nongovernmental organizations, and the delivery of unregulated HIV care in some private or informal care settings. Yet, the private health sector is increasingly seen as a critical partner in turning the tide against HIV transmission and extending treatment to those who need it. In some settings, dual practice may be an asset to HIV care and may lead to increased multisectoral knowledge of HIV care, the involvement of private sector HIV specialists in public care, and the expansion of options for HIV care. Whether dual practice helps or hinders the strengthening of HIV services in a particular setting depends on country-specific characteristics such as available HRH, the salary and benefit scales in both the public and private sectors, HIV prevalence, the availability of national insurance, and other factors that determine the relative dual-practice vulnerabilities of people living with HIV and AIDS.

In some settings, a country's human resource strategies have effectively integrated dual practice into national HRH strategies, retaining specialist knowledge within the public system. In other settings, an absent or inefficient response to dual practice has either further motivated illicit activities or led to a brain drain as practitioners shift to solo private practice or seek out-of-country employment. Health authorities therefore must consider the current balance in the national labor supply, the impact of dual practice on the quality and cost of health care, and the status of other country-specific health market indicators as they consider the interventions in this primer. Even though the literature provides examples of interventions, each health market demands a unique response. Whether pursuing incentive-based approaches (such as exclusive contracts, monetary/nonmonetary rewards, or part-time employment options) or punitive approaches (such as licensure restrictions, termination, or outright bans), health authorities need to recognize that income supplementation remains the single strongest motivating factor for dual-practice providers. If interventions do not address that primary motivation, dual-practice behaviors will continue and perhaps go even further "underground." For this reason, the importance of multisectoral dialogue (through a task force or otherwise) cannot be overstated. When countries address dual practice, they must identify the full range of motivations,

incentives, and stakeholder perspectives as they craft a contextually appropriate intervention that mitigates the adverse impacts and amplifies the potentially beneficial aspects of dual practice.

TABLE 1. HEALTH AUTHORITIES' CONSIDERATIONS IN THE STRATEGIC MANAGEMENT OF DUAL PRACTICE

Manifestation of Dual Practice	Impact on the Health System	Intervention Objective	Intervention Alternatives	Necessary Conditions	Expected Results
1. Job in the public sector, salaried, full- or part-time, combined with job in private clinic, charging fee-for-service in a different location after hours. In the profile above, some physicians may be specialists motivated by putting their skills to full use; they appreciate updated technology, career progression, and social prestige.	(+) If physicians are motivated by increased income associated with dual practice, are dedicated to the delivery of care, and provide the same effort in public and private settings, they then increase access to health care. (+) If physicians serve wealthy patients in their private offices, they may reduce wait times for less wealthy patients, thus improving access to health services. (-) If high-quality personnel and specialists are drawn exclusively to private practice, they contribute to the creation of a two-tiered system in which the poor receive substandard care as compared to the rich. (+) Professionals may improve their public performance in order to build their reputation in the public sector, thereby optimizing their image in the private sector.	- To increase access to patients' care and satisfaction. -To guarantee supply of motivated physicians.	- Government to sponsor higher education and continuing training. - Formally contracting out specific services, paying for performance. - Acknowledgement of (through incentives) dedicated physicians who can serve as role models to their peers. - Seniority award in the private sector. - After-hours practice in public institutions. - Services in defined areas as a condition of licensing or specialty training.	- Collective appreciation of the link between rewards and payment for performance (Hicks and Adams, 2001). - Transparency and clear selection process to build trust.	- Improves physician's loyalty. - Improves quality of care and benefits to the poor.

Manifestation of Dual Practice	Impact on the Health System	Intervention Objective	Intervention Alternatives	Necessary Conditions	Expected Results
2. Job in the private sector, with a contract to provide a specific service to the government (e.g., TB control in India) (de Costa et al., 2008).	(+) May reduce wait times for treatment, improving access to health services. (+) Improves communication between public and private sectors.	- To accelerate deployment of important health programs. - MOH stewardship to increase standardized access to health care.	- Ensure clarity of performance and enforce it. - Provide professional development and continuing training.	- Strong and mature institutional environment.	- Increases retention in rural areas; builds trust among patients seeking care at a private clinic for stigmatized diseases such as TB, HIV and AIDS, and other sexually transmitted diseases.
3. Job in the public sector only, receiving informal payments as under-the-table gratuity (Bir and Eggleston, 2013).	(-) If informal payments are required from patients for services that should be free, the result is an increased out-of-pocket burden on poor patients. (-) Exploits patients' information asymmetry. (-) Reinforces bribery mentality.	- To prevent patients' out-of-pocket, unnecessary, and illegal expenditures. - To halt unethical behavior among public providers. - To acknowledge dual practice.	- Clear policy, including all related aspects of dual practice, what is legal and illegal. - Stakeholders' dialogue on strategic, technical, and managerial skills to implement what is needed; sense of urgency. - Enforcement. - Professional organizations' and civil society's leadership role.	- Strong and mature institutional environment. HR management systems, performance appraisal, clear and well-communicated mission and vision, long-term strategic planning, well-established guidelines for behavior of physicians in dual practice.	- To guarantee provision of good- quality, universal health care. - To prevent exploitation of poor people by unethical physicians.

Manifestation of Dual Practice	Impact on the Health System	Intervention Objective	Intervention Alternatives	Necessary Conditions	Expected Results
4. Salaried job in the public sector and a position in a private corporation or subcontracted to a health insurance–owned clinic.	(-) Patients requiring expensive treatments may be skimmed from the public waiting list without a real need. (-) Physicians work fewer hours than contracted for in the public sector.	- To reduce the power of physicians to self-refer patients to their private practice.	- Based on a task force of stakeholders, the design of a referral policy across public-private sectors, prioritized according to wait time, severity, and other eligibility thresholds (Socha and Bech, 2011).	- Strong and mature institutional environment. HR management systems, performance appraisal, clear and well-communicated mission and vision, long-term strategic planning, well-established guidelines for physicians in dual practice.	- Improved access, physicians honoring their public sector contract.
5. Part- or full-time job in the public sector and position as private practitioner using public facilities officially or unofficially.	(-) By using government equipment to treat private patients, dual practitioners realize cost advantage over physicians exclusively in private practice, potentially impeding the development of a strong private sector delivery system. (-) Misappropriation of drugs and other supplies, resale of drugs, not paying for use of government facilities (Ferrinho et al, 2004). (-) May reinforce rural-to- urban	- To guarantee quality of care. To prevent unexpected costs, averting any misappropriation of public commodities	- To establish a clear policy, ruling on all the details about the use of public facilities to treat private patients.	- Strong and mature institutional environment. HR management systems, performance appraisal, clear and well-communicated mission and vision, long-term strategic planning, well-	- Increased access to and quality of health care, less wait time, loyal physicians, disciplined dual practice, optimization of public settings.

Manifestation of Dual Practice	Impact on the Health System	Intervention Objective	Intervention Alternatives	Necessary Conditions	Expected Results
	(internal) brain drain. (+) May facilitate physicians' retention in the public sector. (+) May improve communication across private and public sectors.			established guidelines for physicians in dual practice.	

TABLE 2. LITERATURE: COUNTRY EXAMPLES AND MODELS RELATED TO DUAL PRACTICE

Country	Management Tool Description	Impact			Lessons Learned
		Physician Supply	Quality of Care	Cost	
Albania	**Ban:** Legislation does not allow dual practice, except for professors from University of Tirana	●			In the absence of monitoring activity, physicians continued working in dual practice despite passage of legislation.
Canada (Kiwanuka, 2010)	**Regulating the private sector:** Regulations restrict the private sector to the provision of specialized services; place mandatory ceilings on earnings to prevent access to public financing; restrict the provision of services insurable in the private sector	●	●	●	The interventions demand information intelligent systems to monitor private sector earnings. The private sector did not flourish in Canada with the effective implementation of these instruments.

Country	Management Tool Description	Impact			Lessons Learned
Iran (Palesh, Tishelman et al., 2010)	**Health technology assessment** and guidelines to control dual- practice costs		●	●	Study in Iran showed wide scope of problems related to selection, distribution, and use of health technologies (HT). Authors strongly suggest that unregulated dual practice, added to the lack of guidelines on the adoption of new HT, led to the vulnerability to adopt new HT, without proper scientific and cost-benefit judgment.
Malawi (Kiwanuka, 2010)	**Self-regulation:** Private practice licensure is restricted to junior physicians; only senior physicians may operate private practices.	●			Monitoring of instruments was not effective. Senior physicians hired junior professionals to work in their private practices.
Peru (Jumpa, Jan, and Mills, 2007)	**Control of medical supply and quality control monitoring**	●	●	●	Research showed uncontrolled, unregulated dual practice in Peru. Conclusion suggests policy needed to control number and quality of physicians in public and private sectors.
Portugal and Greece (Kiwanuka, 2010)	**Ban**	●			Brain drain in both sectors; violation of ban; lack of specialists in the less wealthy sector.

Country	Management Tool Description	Impact			Lessons Learned
South Africa	**Contracting out:** Government contracts out to private practitioners to provide part-time services in rural towns		●		
Thailand	**Exclusive contracts**		●		Created resentment among other professional groups.
United States of America (Johnson and Bookman, 2011)	**Collaborative redesign** of health care workplace	●	●	●	In sharing responsibility for culture change, the workplace was positively transformed. Good example of nonfinancial incentives in the workplace.

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