



ORIGINAL ARTICLE

Development and implementation of clinical mentorship in Rwanda: successes and challenges

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Abstract

Rwanda has prioritized the decentralization and integration of HIV services over the past decade to ensure universal access to HIV services throughout the nation. Improving the capacity of healthcare providers to provide high-quality HIV prevention and treatment services was a crucial component of this process. In partnership with the authors, Rwanda's national health implementation agency developed a national clinical mentorship program from 2011 to 2017 to facilitate this transition. The Rwanda Clinical Mentorship Model aims to effectively manage HIV-infected patients across all levels of healthcare delivery, implement task shifting, and adhere to national guidelines. The clinical care of HIV-positive individuals was transferred from HIV specialists to family physicians and nurses. The facility team was trained, supervised, and mentored by a multidisciplinary team. Mentorship consisted of routine site visits during which clinical case reviews, clinical supervision teaching, and data reviews were conducted to assess the facility's performance and identify obstacles. Between 2012 and 2020, 5,774 healthcare professionals across the country received HIV testing and treatment training. This clinical mentoring has demonstrated a pragmatic, data-driven, and enduring strategy for enhancing clinical practice at all levels of care. A dedicated cadre of mentors is required to ensure the coordination and sustainability of this approach, according to one finding. The authors participated in accelerating the geographic and scope expansion of clinical mentoring in Rwanda. Developing a sustainable HIV clinical mentorship program in Rwanda requires long-term partnerships and evolving technical assistance.

Keywords: Clinical mentorship, quality improvement, HIV, Rwanda.

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INTRODUCTION

The number of people receiving lifelong antiretroviral treatment (ART) for HIV infection in low- and middle-income countries is expected to increase to 29 million by 2025.¹ Scaling up and delivering high-quality ART throughout a country requires a trained and skilled workforce, particularly in Sub-Saharan Africa, where 70% of all global persons living with HIV (PLHIV) reside.^{2–4} Rwanda continues to make great strides towards the UNAIDS 95-95-95 targets. According to the 2019 Rwanda Population-based HIV Impact Assessment (PHIA) survey, 98% of those diagnosed are on treatment, and, among them, 90% are virally suppressed; however, gaps persist in HIV testing as 17% are unaware of their status.⁵ As part of its ART scale-up, Rwanda established a national clinical mentorship program to optimize task-shifting and to address the need for on-going training and mentorship of healthcare providers.

Clinical mentorship is defined as the engagement of expert clinicians to provide clinical teaching, guidance, decision support, assistance with skill development, guidance through ethical analysis, and lead professionally-focused self-evaluation⁶ to other clinical and non-clinical healthcare providers. This definition encompasses all types of healthcare providers, including those working in clinical settings. The development of mentor-mentee relationships, in addition to responsive coaching and the modeling of effective procedures, are essential to its success.⁶ Clinical mentoring has been linked to an increase in provider knowledge as well as an improvement in clinical practice. This is in addition to an increased rate of employee retention in a particular professional field.⁶ Training HIV/AIDS service providers to practice in accordance with the most recent national and international standards of care and the ever-evolving practices in HIV prevention, treatment, and adherence requires clinical mentorship as an essential component of the training.

As a component of the President's Emergency Plan for Aids Relief (PEPFAR) program, the University of Maryland, Baltimore (UMB) has been offering its assistance to the Rwanda's Ministry of Health

(MOH) since 2009 in order to develop and implement clinical mentorship. The purpose of this article is to discuss the development and evolution of Rwanda's clinical mentorship program, as well as its challenges and potential future directions.

Rwanda clinical mentorship evolution

The Rwanda Clinical Mentorship model has evolved considerably over the years (**Figure 1**). In the first phase (2007-2011), clinical mentorship was focused on operationalizing task shifting to rapidly scale up ART coverage nationwide. The clinical management of PLHIV was transferred from a few national HIV specialists based in Kigali to decentralized general practitioners (GP) and nurses. Periodic group trainings were held to increase the knowledge and skills of new practitioners, and these trainings were reinforced with on-going clinical mentorship.

During the second phase (2012-2017), a team at the national level provided on-site mentoring and supervision to decentralized sites. This model included UMB's multi-disciplinary mentoring team composed of specialists in infectious diseases, pediatric HIV, and quality improvement who conducted at least one weeklong mentorship visit per quarter per hospital. The UMB team trained district hospital-based mentors to ensure future sustainability of the mentorship program. Through the use of mentor observation checklists, logbooks, and review meetings, the mentoring team identified and addressed challenges in management of pediatric HIV, disclosure, adherence, treatment failure, and switching treatment options. Mentors complemented the face-to-face visits with e-consults, follow-up phone calls, and targeted continuous medical education sessions. A total of 3,833 healthcare workers were trained from 230 health facilities.

Despite the expansion of HIV services throughout Rwanda, a centralized clinical mentorship model

Supplementary information The online version of this article ([Figures/Tables](#)) contains supplementary material, which is available to authorized users.

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was unable to sustain on-going support of providers countrywide. To overcome this situation, during the third phase (2017-2020), the UMB team supported Rwanda's MOH to develop and implement a district-based, decentralized clinical mentorship. In this phase, UMB, in collaboration with the Rwanda Biomedical Center (RBC) team, trained a doctor and nurse for each district to provide higher-level mentorship in a hub-and-spoke type model. Each doctor/nurse pair mentored providers within a single district. Through this collaboration, 1,941 healthcare workers have been trained across the country to assist in strengthening HIV testing, ART initiation, and retention.

Across the years, the Rwanda MOH and RBC have engaged implementing partners in the development and update of national care and treatment guidelines and training materials. District-based mentors participated in this process either by contributing to consultations or training health providers on new materials across affiliated facilities. This participation across the different levels have contributed to the adoption and acceptance of the clinical mentorship.

In 2017, the clinical mentorship was transferred to the MOH. Mentors were initially hired under the PEPFAR grant funds, and by 2018 the Government of Rwanda assumed leadership in recruiting, hiring, and covering the cost of the clinical mentors effectively transitioning the program. Currently, all mentors are paid under civil service payrolls by the government. The gradual and coordinated transition, combined with leadership from RBC, has contributed to the long-term sustainability of the program.

Lessons learned and challenges

Following the successful rollout of clinical mentorship, RBC has increasingly recognized the importance of integrating continuous quality improvement (CQI) to routinely evaluate whether services offered by the multi-disciplinary team are following established guidelines to achieve intended goals. The 2019 integrated clinical mentorship guidelines have incorporated CQI into routine mentorship and have established a list of quality indicators to ensure standardized reporting. The clinical mentorship program fortified the scale-up and decentralization of

Rwanda's ART program by taking the trainings to non-expert clinicians (i.e. task shifting). This could not have been done as well without the mentorship.

Challenges encountered during the implementation of clinical mentorship include district hospital-based mentor attrition (e.g. nine mentors of 32 left their positions between 2014 and 2015 for other jobs), maintaining mentor competencies, limited allocated time to provide mentorship, and distance to cover to deliver on-site mentorships. To respond to some of these challenges, under the leadership of the MOH, RBC, in partnership with UMB, is developing an e-learning training program, through Moodle, for ART clinic staff. Across some district hospitals, the monitoring and evaluation team visits are combined with mentorship and support visits to reduce travel costs.

Considerations for the future

Given improving ART outcomes in Rwanda, how can clinical mentorship be optimized?

First, clinical mentorship in Rwanda focuses on providing optimal care for unstable patients who are at high risk for poor HIV outcomes. For example, adolescents and young men are at higher risk of unsuppressed viral load than any other age group.⁵ Adolescent-specific health provider training and tools may improve the quality of care they receive and, hence, their engagement and retention in care. Other groups at high risk for loss to follow-up include key populations (e.g., men who have sex with men and female sex workers). Key populations consistently report stigma and discrimination as barriers they encounter to accessing HIV care.^{7,8} Second, the use of technology such as virtual community of practices, online training, and electronic decision support applications, offers an opportunity to reach more providers and reduce geographical barriers impeding the delivery of high-quality mentorship. Third, a data-driven approach to clinical mentorship can inform the training and mentorship needed by healthcare workers. The use of new tools like an integrated CQI reporting system may enable mentors to visualize trends over time, take timely remedial actions, and track progress.

CONCLUSION

Quality clinical mentorship to maintain and update health provider skills and knowledge is a sustainable and scalable strategy to deliver HIV care. Reducing HIV disparities will require a trained workforce able to deliver care sensitive to the needs of the served population combined with a data driven approach. Utilization of clinical mentorship clearly has a place in the on-going fight to end the HIV epidemic.

INFORMATION

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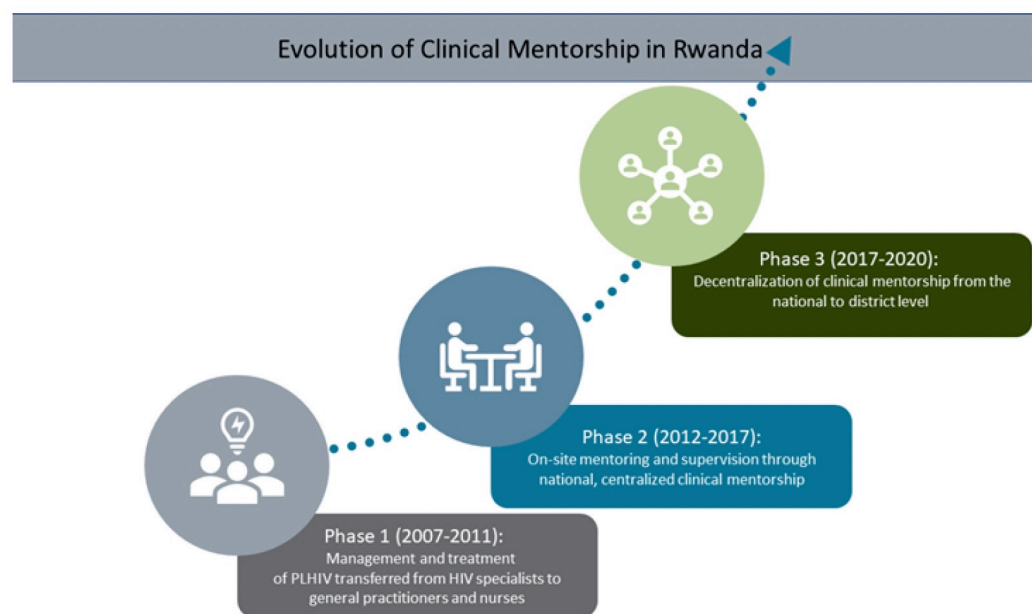


FIGURE 1: Phases of the Rwanda Clinical Mentorship Model.

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