

A Model for Advancing Professional Nursing Regulation: The African Health Profession Regulatory Collaborative

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The African Health Profession Regulatory Collaborative (ARC) was launched in 2011 to help countries develop or strengthen nursing regulations to ensure safe and sustainable nurse-initiated and nurse-managed HIV treatment. ARC supports teams of national nursing leaders from 17 countries to engage in rapid regulatory strengthening through regional meetings, regulation improvement grants, and in-country technical assistance. The ARC initiative has awarded 33 regulation improvement grants on topics such as continuing professional development, scopes of practice, nurse practice acts, and entry-to-practice examinations. Progress is measured by a novel tool that captures meaningful advancements in national regulations. The ARC initiative facilitates rapid improvements in professional nursing regulation. The model and evaluation framework are highly transferable to other health care cadres and offer a platform for regulators, policy makers, professional bodies, and educators to collaborate on prioritized regulation issues.

Countries in sub-Saharan Africa account for 70% of the global HIV burden, including an estimated 1.6 million new HIV infections and 1.2 million AIDS-related deaths in 2012 (AVERT, 2014). Given the dire shortages of health care workers in the region (Institute of Medicine, 2011; Joint Learning Initiative, 2004; World Health Organization [WHO], 2006), many countries are increasingly utilizing “task sharing” between physicians and other cadres, such as nurses and midwives, to ensure access to HIV prevention, care, and treatment services necessary to achieve an AIDS-free generation (President’s Emergency Plan for AIDS Relief [PEPFAR], 2012; WHO, PEPFAR, Joint United Nations Programme on HIV/AIDS, 2008).

Nurse-initiated and nurse-managed antiretroviral therapy (NIMART) is a form of task sharing in which nurses provide advanced HIV services, such as diagnosis and clinical staging of HIV, prescription of antiretroviral therapy, and clinical management of treatment-related conditions and opportunistic infections. Several studies have rigorously evaluated NIMART in Africa and found that when compared with therapy provided by physicians, the quality of care is equal or better, patient mortality is the same, and retention in treatment is better (Callaghan, Ford, & Schneider, 2010; Emdin, Chong, & Millson, 2013; Iwu & Holzemer, 2014). Studies have demonstrated that nurses feel empowered by providing NIMART, and patients trust the HIV care provided by nurses (Assefa et al., 2012; Cohen et al., 2009; Georgeu et al., 2012).

Global policy supports task sharing, specifically NIMART (WHO, 2013), yet professional regulation to sup-

port this advanced role for nurses has consistently lagged behind (Lehmann, Van Damme, Barten, & Sanders, 2009; Munga, Kilima, Mutalemwa, Kisoka, & Malecela, 2012). In practice, at least 11 countries in sub-Saharan Africa utilize NIMART to provide HIV services (Zuber, McCarthy, Verani, Msidi, & Johnson, 2014). The World Health Organization recommends that task sharing of HIV services occur within a framework that aligns policy, regulation, education, and practice (WHO, 2013). However, of the 11 countries practicing NIMART in sub-Saharan Africa, most still lack a comprehensive framework to support their clinical practice (McCarthy et al., 2013). Only five countries taught NIMART competencies in preservice education; six had national policies authorizing NIMART; five had scopes of practice authorizing nurse prescribing; and two had accredited in-service NIMART training programs (Zuber et al., 2014).

The absence of adequate education and professional regulation needed to support the safe practice of NIMART prompted the creation of the African Health Profession Regulatory Collaborative (ARC). The purpose is to provide support to countries in sub-Saharan Africa where high HIV burdens and health worker shortages have resulted in widespread task sharing without the commensurate updates in education or professional regulation to protect nurses providing and patients receiving NIMART and other HIV services. ARC works with 17 countries in the east, central, and southern Africa (ECSA) region to strengthen their nursing regulations and professional standards, thereby aligning policy and practice for safe and sustainable nursing care (McCarthy & Riley, 2012). (See Figure 1.)

FIGURE 1

Countries in ARC

This map of Africa highlights the 17 countries in the African Health Profession Regulatory Collaborative (ARC), which are primarily in the east and south of the continent.

- Botswana
- Ethiopia
- Kenya
- Lesotho
- Malawi
- Mauritius
- Mozambique
- Namibia
- Rwanda
- Seychelles
- South Africa
- South Sudan
- Swaziland
- Tanzania
- Uganda
- Zambia
- Zimbabwe



ARC Initiative

The ARC initiative is supported by the U.S. President's Emergency Plan for AIDS Relief, the U.S. Centers for Disease Control and Prevention (CDC), Emory University's Nell Hodgson Woodruff School of Nursing, the Commonwealth Nurses and Midwives Federation, and the ECSA College of Nursing (ECSACON) to achieve the following objectives:

- Sustain the scale-up of HIV services through strengthened nursing and midwifery regulatory frameworks
- Align accreditation, licensing, continuing education, and scopes of practice among other key regulatory functions with global guidelines and regional standards
- Review legislation and regulation to strengthen the alignment of policy and practice for nurses and midwives
- Strengthen the capacity and collaboration of national organizations to perform key regulatory functions and mobilize resources
- Foster a sustained regional network of nursing and midwifery regulatory leaders to facilitate the exchange of best practices.

Implementation Approach

ARC uses a three-pronged approach to strengthen nursing regulation in the ECSA region: regional learning sessions, regulatory improvement grants, and targeted technical assistance. Every year, ARC convenes three meetings in Africa. Attendees are four-person nursing leadership teams from each of the 17 countries. The team consists of the chief nursing officer from the national government, the registrar from the national nursing council, the president of the national nurses association or union, and a leader from nursing academia. Each team identifies a priority regulatory function and develops a proposal to strengthen that regulation over a 1-year period. After an objective review process, ARC awards \$10,000 to selected country teams to implement their project; each grantee team receives in-country technical assistance from nursing regulation experts over the course of the year.

To facilitate rapid regulatory advancements, ARC utilizes the Institute for Healthcare Improvement's model for breakthrough change, which is built on alternating "action periods" and "learning sessions" (Institute for Healthcare Improvement, 2003). Over the course of the year, country teams implement their projects for 3 to 4 months, convene for a learning session, return to their projects for 3 to 4 months, and convene again. (Gross, McCarthy, & Kelley, 2011). The learning sessions involve global leaders in nursing practice and regulation who provide technical sessions and panel presentations on topics of relevance to country teams. The learning sessions provide an opportunity for teams to discuss common challenges in advancing regulation and learn from each other about addressing project implementation barriers. Each year culminates with a summative congress meeting, involving all ARC countries, where grantees present their projects and achievements and share lessons learned with their colleagues.

ARC also provides countries with various regulatory resources. The Continuing Professional Development (CPD) Toolkit is a step-by-step guide for countries working to establish national CPD programs (Iliffe & McCarthy, 2013). ARC established a Web-based Knowledge Gateway with a discussion board that enables real-time sharing among countries regarding their projects and other issues. For instance, at the outset of their CPD-focused project, the Tanzania team requested examples of CPD needs assessment tools. The Swaziland team, having already conducted a needs assessment in their project, shared their tool with Tanzania, who adapted it to their setting. The Knowledge Gateway has a library with over 90 reference documents and resources, including each country's national nursing act, CPD frameworks, scopes of practice, and global and regional regulatory guidelines. ARC supported ECSACON to develop and launch a Web-based CPD library to enhance access to continuing education content accepted by nursing councils in the ECSA region for credit towards relicensure. ARC also posts all the technical presentations and resources shared at the regional meetings on its website (www.africanregulatorycollaborative.com).

Regulatory Improvements

Since ARC began, the initiative has awarded 33 regulatory improvement grants to 17 ECSA countries. (See Table 1.) In the first 2 years of ARC, country teams prioritized CPD regulation and revisions to national nursing legislation. During the second 2 years, some countries continued to advance CPD regulation, while others shifted their focus to developing or updating nursing scopes of practice and developing entry-to-practice examinations (McCarthy, Zuber, Kelley, Verani, & Riley, 2014). The high number of countries focusing on CPD and scope of practice allowed the countries to consult one another as they addressed similar regulatory issues and share developments and insights to accelerate the improvement process.

Evaluation Framework

For the purpose of evaluating ARC's impact on nursing and midwifery regulatory advancement in the ECSA region, a tool was developed to capture countries' baseline capacity in regulation and progress towards more advanced models of regulation. The evaluation tool, the Regulatory Function Framework (RFF), is based on a capability maturity model first designed by Carnegie Mellon University Software Engineering Institute (McCarthy, Kelley, Verani, St. Louis, & Riley, 2014). The RFF highlights seven regulatory functions central to successful professional regulation: development or revision of nursing legislation, registration, licensure, scope of practice, CPD, accreditation, and discipline. Each key function has five stages, which describe advancement from an early, basic form of the regulatory function to a more advanced, sophisticated version. Advancement from one stage to the next requires that all characteristics in the stage be met. Table 2 presents the five stages of advancement for the CPD function, using Lesotho's progress as a case study (for the full RFF, see McCarthy, Kelley, et al., 2014).

Case Study: Lesotho

The Kingdom of Lesotho is a small, landlocked country in southern Africa with high rates of HIV infection. Nurses and midwives provide many of the HIV services. When the four-person leadership team from Lesotho attended the first ARC meeting in 2011, the government had recently stated that all health professionals should be required to complete CPD for relicensure (Moetsana-Poka, Lehana, Lebaka, & McCarthy, 2014). At the time, no formal CPD system existed in Lesotho and the responsibility to create, implement, and enforce national CPD programs was placed on the various health professional councils. The Lesotho team realized CPD could be a vehicle for delivering urgently needed HIV in-service training to nurses and midwives who had not received adequate training on HIV in their preservice education. The Lesotho Nursing Council led the team in writing a winning proposal to be the first health care cadre in Lesotho to develop a CPD framework linking mandatory continuing education to relicensure.

TABLE 1

Regulatory Improvement Grants by Topic Area and Country

Grant Topic	Countries
<i>Continuing professional development programs</i>	Botswana*, Ethiopia, Kenya, Lesotho†, Namibia, Malawi, Rwanda, Swaziland*, South Africa*, Tanzania*, Zambia*, Zimbabwe*
<i>Scopes of practice</i>	Botswana, Rwanda, Seychelles*, South Sudan, Uganda*
<i>National nursing acts or regulations</i>	Mauritius, Mozambique‡, Seychelles
<i>Decentralizing the National Nursing Council</i>	Kenya
<i>National entry-to-practice licensure and clinical examinations</i>	Mozambique*, Swaziland

* Indicates countries that received two grants.
 † Indicates countries that received three grants.
 ‡ Indicates countries that received only technical assistance to advance.

Lesotho began its project in Stage 1 on the RFF's function for CPD. (See Table 2.) During ARC Year 1, the Lesotho team drafted a national CPD framework and a monitoring and implementation plan and vetted both with national stakeholders. Because the CPD program was not piloted in Year 1, Lesotho did not achieve all three characteristics in Stage 2; thus, they did not advance from Stage 1 to Stage 2 in the first year.

In ARC Year 2, Lesotho's proposal was not funded, but the team continued to collaborate on CPD regulation. With in-kind technical assistance from ARC faculty and others, the team finalized the CPD framework and logbook used by nurses to track CPD activities. In addition, the team disseminated the new CPD framework nationally in advance of the forthcoming requirements for relicensure and piloted the CPD program, thereby moving into Stage 2.

During ARC Year 3, Lesotho was awarded its second ARC grant, which allowed the team to implement the CPD program and the compliance monitoring strategy, making CPD an official requirement for relicensure (thereby accomplishing all criteria in Stage 3).

In ARC Year 4, Lesotho won another ARC grant and is continuing to strengthen its CPD program. The CPD program is monitored with a basic electronic system (Excel); penalties are in place for noncompliance; and there is a CPD module on HIV. Lesotho successfully moved into Stage 4, marking impressive regulatory advancement in less than 4 years.

TABLE 2

Lesotho's Progress Measured by the Regulatory Function Framework

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Criteria	CPD is voluntary. CPD framework for nursing and midwifery may be in planning stages.	National CPD framework for nursing and midwifery is developed. CPD is not yet mandatory for relicensure. Implementation of CPD requirement is in pilot or early stages.	CPD program for nurses and midwives is finalized and nationally disseminated. CPD is officially required for relicensure. Compliance monitoring strategy is under development.	Electronic system is in place to monitor CPD compliance. Penalties for non-compliance with CPD exist. Available CPD includes content on national HIV service delivery guidelines for nurses and midwives.	Multiple types of CPD are available, including Web-based and mobile-based models. CPD content aligns with regional standards or global guidelines. Regular evaluations of CPD program are conducted.
Lesotho's progress	Baseline (2011)	End of ARC Year 1 (2012)	End of ARC Year 3 (2014)	End of ARC Year 4 (2015, expected)	
<i>Note.</i> CPD = continuing professional development; ARC = African Health Profession Regulatory Collaborative.					

Discussion

ARC has supported the idea that rapid and sustainable improvements in regulations, such as CPD, scopes of practice, and entry-to-practice, are achievable. The initiative was conceived and implemented with nurses and midwives from ECSA countries; however, the ARC model could be successfully applied in other countries and regions with any health care cadre wanting to advance their professional regulations.

ARC has seen an increase in collaboration among the key nursing leadership institutions at the country level. When the ministry of health, regulatory council, professional body, and academic institutions aligned in their pursuit of new regulatory improvements, change happened quickly. They relied on each other to address challenges, gain stakeholder support, and roll out new reforms. The ARC regional meetings provided a platform for professional exchange and networking among national nursing leadership teams and their colleagues in similar positions in the region.

The ARC grants afforded local nursing and midwifery institutions the opportunity to serve as the lead partner on an international, donor-funded project. For many countries, the ARC grant was their first direct funding, having previously received technical assistance through nongovernmental organizations. The successful management of grant funds and the achievement of project deliverables demonstrated the institutions' capability to handle development resources. Several countries, including Malawi, Seychelles, South Africa, and Swaziland, leveraged the successful implementation of their ARC grants to garner additional funds to support continued regulatory reforms, an added benefit of receiving ARC funding (Agricole, Hoarau, Suzette, & Sinon, 2014; Chilomo, Mondywa, & Wasili, 2014).

The RFF served as an effective tool to measure regulatory improvements, objectively documenting countries' advancements in core regulatory functions. The RFF could be utilized and adapted by other regulatory bodies seeking to measure progress in specific regulatory functions. The RFF, or an adapted framework, enables regulators to measure regulatory improvement in targeted areas of intervention.

The ARC initiative demonstrates the feasibility of advancing national regulatory frameworks by supporting collaborative work on identified priorities, using a quality-improvement, peer-to-peer approach. The cooperation of national leaders on the reform agenda promoted timely progress, fostered novel partnerships, and removed barriers to change. The peer-to-peer approach allowed countries to learn from one another, share insights and resources, and eliminate redundancies. Utilization of the ARC model could assist leaders looking to promote rapid regulatory advancements that require engagement and harmonization across multiple institutions.

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