Namibia

A Public Health Approach to Quality Management: How a Disease-Specific Improvement Program Propelled a National Health-Systems-Wide Quality Program in Namibia

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Background

With a population of approximately 2.4 million, Namibia is an expansive country located in southwestern Africa bordering the Atlantic coast. Independence from South Africa was achieved in 1990, preceded by a formal constitution adopted in that same year. Namibia’s HIV epidemic is generalized: transmission primarily occurs through heterosexual and mother-to-child transmission. The HIV prevalence rate in adults aged 15–49 is 13.3% (12.2–14.5%) and the number of people living with HIV in Namibia is 210,000 (200,000–230,000) (Joint United Nations Programme on HIV/AIDS [UNAIDS], 2015).

Distinguished by a decentralized model of healthcare delivery, the Ministry of Health and Social Services (MoHSS) in Namibia is organized into four levels. In 1999, the National AIDS Coordination Program (NACOP) was established to oversee the different sectors responding to HIV. In 2002, the Directorate of Special Programs (DSP) was established within NACOP. Access to antiretroviral therapy (ART) and mainstreaming of HIV programs have occurred in all sectors with the coordination of government offices, ministries/agencies, regions, non-governmental organizations, and faith-based organizations through MoHSS. The private sector and various development partners also play a distinct role in addressing the causes and reducing the burden of HIV/AIDS.

ART was rapidly rolled out at the beginning of 2003 and was available in all state hospitals by 2006. By 2006, Namibia had reached its World Health Organization “3 by 5” targets, and by 2009, more than 70,000 adults and children were treated, with 135,000 patients enrolled in HIV care in the public sector.

In 2003, the Namibia MoHSS established a quality assurance (QA) unit (see Figure 11.1) as a subunit under the Undersecretary for Health and Social Welfare Policy. The QA unit was mainly focused on audit, accountability, and setting standards. Initially, this unit primarily oversaw infection, prevention, and control (IPC) activities, including the implementation of the medical injection safety project.

Introduction of Quality Improvement in Namibia

The principles of quality improvement (QI) and quality management (QM) in Namibia were not formally introduced until 2007, within the context of a
A disease-specific program focusing on HIV, when the MoHSS, with support from the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), piloted a HIV-specific QM program, HIVQUAL-Namibia. Independent of the QA unit and overseen by the HIV unit in the DSP, HIVQUAL-Namibia was designed to build capacity and systems for HIV care and treatment to scale-up ART and accelerate quality of care for people living with HIV (PLHIV) using modern improvement methods.

Development and Implementation of a Disease-Specific QI Program

HIVQUAL-Namibia was initiated in 16 clinics, with performance measurement (PM) data collection and QI project implementation expanding to 38 HIV care and treatment facilities in all 34 districts. Ten consecutive rounds of performance data collection were submitted between July 2007 and March 2013, representing more than 37,000 individual patient charts sampled across review periods. During this period, aggregate mean improvement was achieved in 10 of 11 performance measures between the first reported review period and the most recent. Core areas of HIV care and treatment demonstrating improvement included ART to eligible patients ($p < .00008$), ART adherence assessment ($p < .01$), CD4 monitoring ($p < .03$),
and cotrimoxazole preventive therapy \((p < .01)\), among others (Bardfield, 2015; HEALTHQUAL International, 2015).

Leadership engagement and support for planning were critical first steps and remain a fundamental component of continued success. The HIVQUAL-Namibia team established an implementation plan for each component of the HEALTHQUAL model: PM, QI, and QM (HEALTHQUAL International, 2016). This included consensus on the prioritization of performance measures, systems for data collection, the selection of participating facilities and training in improvement methods, and steps for data collection and analysis.

Facility-level QI committees were formed, given available resources. These teams were composed of multidisciplinary teams of doctors, nurses, pharmacists, pharmacy assistants, data clerks, community counselors, and consumer representatives in some facilities. At smaller health facilities, HIV clinical staff integrated QI into routine team discussions.

A process for PM was instituted. Measures based on national guidelines and globally accepted standards of care were adapted to the existing health information technology (IT) platform and electronic patient-monitoring systems (ePMS). Data collection and reporting occur biannually, with results used to drive future improvement activities at both facility and national levels. The MoHSS uses aggregated data to produce national benchmarking reports. Performance scores are reported as mean clinic rates and trended longitudinally to determine national priorities for HIV care and treatment.

To build and sustain the national program, coaching and mentoring visits are routinely conducted by national and regional program managers. Facility teams apply skills and knowledge gained from a cadre of national improvement coaches to adapt methods and strategies to address local and national priorities for HIV care, including skills building for data collection, reporting, and analysis.

The MoHSS has committed leadership and resources in support of peer learning strategies to spread improvement knowledge and skills to achieve scale-up. The national program convenes regional QM groups and improvement workshops at the end of each performance review period as an approach to share both data and improvement strategies, while building capacity at facility level for improvement skills. These peer exchange sessions bolster local improvement knowledge and the dissemination of successful implementation strategies. Improvement workshops include expert plenaries, peer learning through group work, presentation of performance data, writing and updating of improvement work plans, and dedicated time for formal QM planning. The MoHSS leadership is present at these meetings as a demonstration of support for the national quality program, where they also have an opportunity to respond to emergent policy issues.
Evolution from a Disease-Specific Model to a National, Health-Sector-Wide Quality Program

Realization of Namibia’s national quality program evolved from a commitment to establish systems for routine improvement in the national HIV care and treatment program. In 2011, this, in turn, catalyzed a focus on expanding the (HIV-specific) HIVQUAL model to a generalized public health approach to quality (HEALTHQUAL) across the public health system through the creation of key formal administrative structures. Principles from this disease-specific model were successfully integrated into the larger system. This transition was further driven by a 2012 assessment of national QM systems undertaken by the MoHSS (MoHSS [Namibia], 2014). Components not present in the national QM system that were identified as important included:

- A national quality management policy and strategic plan to guide QM activities
- A systematic approach to quality improvement activities
- QM focal people at all levels of healthcare to support QI initiatives
- A unified understanding of what quality means in most of the healthcare facilities
- A culture of quality care embraced by all healthcare workers
- Systems for appraisal and reward of healthcare workers who excel in their daily activities
- Meaningful consumer engagement in QI activities
- Quality indicators for most of the services in the MoHSS

These findings led directly to the following developments:

- A QA technical working group (TWG) composed of a multidisciplinary team, including the MoHSS and stakeholders, was established to provide expert guidance to the QA unit.
- The MoHSS drafted a national QM policy and strategic plan, which, when approved, will be administered through the QM directorate.
- To support scale-up and spread, a QM training curriculum for health workers was developed targeting core components of QM, including QI methods, principles of PM, QI project implementation, improvement tools and resources, and consumer involvement, among others.
- The curriculum has been used since 2013 to train healthcare managers. A total of 180 healthcare managers have been trained in all 14 regions. In addition, 250 healthcare workers at the implementation level have been trained. The curriculum is accredited by the Health
Professionals Council of Namibia (HPCNA) with 28 continuous education units, which is an incentive for healthcare workers to participate.

- A QM coaches’ curriculum has been developed and will be deployed to train health workers as regional QM coaches to support the peer learning model described previously.

The MoHSS established the Medical Doctors and Dentists Annual Forum, an annual meeting of clinical providers, to exchange knowledge about clinical care in the health system with important opportunities to integrate quality as a thematic area of focus. One example of the aforementioned public health approach is the initiation of an ongoing national maternal and child health (MCH) QI project designed to develop concise, written standard operating procedures (SOPs) and audit tools to ensure consistent management of obstetrics and gynecology conditions. In addition, the project will establish an improvement process to measure performance and ensure that QI efforts focus on reducing maternal mortality, targeting its most common causes. To date, nine MCH SOPs have been developed, each with audit tools and training materials to address the common causes of maternal mortality and morbidity. The MoHSS has also developed key guidelines to ensure the provision of quality healthcare services. Four essential guidelines were identified in 2012 (MoHSS [Namibia], 2015). All four guidelines were launched by the Minister of Health in August 2015 and disseminated to all healthcare facilities.

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**Achievement of a National Quality Program in Namibia**

Applying the HIV QM program as the model, the Namibia MoHSS has successfully built a national QM program using HIV as the platform to spread quality throughout the public health system. Notably, this includes the development of a national QM policy and strategic plan through the establishment of a formal QM directorate (see Figure 11.2).

The QM directorate will be responsible for developing a national QM framework that covers each level of healthcare services in the MoHSS to ensure that the highest quality of care levels are achieved and maintained. The QM directorate structure was carefully designed to ensure major components required for a successful QM program are incorporated, including PM, QI, and QM. The overall goal of the program is to strengthen QM systems at all health administration levels in which the QM directorate will oversee quality of care at multiple levels.
To develop and implement quality assurance and control systems in all health facilities through establishing standards, regulations, guides processes and procedures.

Subdivision: Quality assurance and control
To conduct inspections and clinical audits to ensure compliance with national set standards. To establish QM forums. To ensure mechanisms for accreditation of healthcare facilities are established. To develop and maintain a master register and catalogue of all the various published key national policies, guidelines, Standard Operating Procedures and circulars. To promote operational Research activities related to QM.

Subdivision: Standard setting (quality planning)
To coordinate the development and implementation of national Quality Management (QM) policies, guidelines and strategic plans. To ensure minimum standards are set for all public and private healthcare facilities. To set performance indicators and ensure appropriate performance data are collected, analyzed and reported regularly.

Division: Continuous quality improvement
To ensure establishment of sustainable quality management systems and structures to continuously improve the quality of healthcare services with the ultimate goal of improving health outcomes. To establish systems that actively engages patients and community members in QM activities at all levels of healthcare.

Subdivision: Patient and community engagement
To establish mechanisms for active involvement of patients in their care so as to improve the effectiveness of care as well as patient satisfaction with the care provided. Coordinating efforts to ensure continuity of care, reduction in delays and access to package of services. Provide technical support to public relations and customer care offices on coordinating and disseminating information related to patient care; patient safety and community engagement.

Subdivision: Patient safety
To develop and implement a national policy and guidelines for patient safety. To ensure improved knowledge and learning in patient safety and raise awareness regarding patient safety. To promote Infection Prevention and Control practices. To promote Safe Surgery Saves Lives World Health Organization initiative through monitoring the activities of operation theatres and sterile services department.

Subdivision: Resource management
To provide administrative and logistical support to the functional units in the Directorate, including financing and budgeting; procurement; transport; documentation and record keeping; organization of events and functions; stock control; support human resources management activities.

Subdivision: Capacity building
To ensure leadership support for the QM program at all levels. To establish national QM steering committee. To coordinate the establishment of regional, district and facility quality committees. To establish systems to ensure provision of coaching and mentoring on Quality Improvement (QI). To conduct national Quality Improvement (QI) projects to improve population health and quality of care. To establish mechanisms to systematically collect evidence linked to improvement implementation. To establish peer learning platforms including Regional QM groups. To coordinate efforts to establish initiation of incentives and rewards based on performance. To evaluate all the training materials and courses to ensure they are up to the required standard. To establish linkages with all relevant stakeholders and training institutions.

Subdivision: Patient safety
To develop and implement a national policy and guidelines for patient safety. To ensure improved knowledge and learning in patient safety and raise awareness regarding patient safety. To promote Infection Prevention and Control practices. To promote Safe Surgery Saves Lives World Health Organization initiative through monitoring the activities of operation theatres and sterile services department.

Subdivision: Resource management
To provide administrative and logistical support to the functional units in the Directorate, including financing and budgeting; procurement; transport; documentation and record keeping; organization of events and functions; stock control; support human resources management activities.
Leadership continues to be a core contributing element to Namibia’s success in building a truly national QM program in the public health arena. Specifically, this has included resource support to implement the work and visible participation in key quality events, such as healthcare worker training and the annual Doctors and Dentists Forum. Promotion of quality at the highest levels of the MoHSS has enabled the development/adaption of systems for measurement, technical working groups, and regional QM groups, all of which are vital to long-term programmatic success and the spread of knowledge for improvement. Fundamentally, MoHSS has promoted institutionalization of the national quality program, which has led to the successful spread of QM across the public health system. Systems are now in place to train healthcare workers to apply modern improvement methods, including a structure to scale-up QI coaching at the regional level, as well as plans to integrate quality into curricula at Namibia’s new health and medical professional schools.

Namibia provides a potentially translatable example of how dedicated resources for a disease-specific QI program can be leveraged to build a national quality program. The current process of formalizing this national quality structure also offers important evidence of programmatic expansion from a compartmentalized, disease-specific model to a national public health approach to quality—applying already tested strategies to achieve acceleration of MoHSS objectives.

Prospects for Further Success and Next Steps

Human resources for health are essential, and additional resources will be needed to support this critical component of the national QM program. The current QA unit is understaffed and requires additional personnel at all administrative levels. Further, high staff turnover at health facilities threatens local success and sustained implementation knowledge. The proposed QM directorate is designed to address these structural issues through its focus on integrating quality into public health administrative infrastructure with QM focal people staffed at the regional, district, and health facility levels.

Documentation of improvement work and platforms to share successful strategies will be critical to bridging the gaps between knowledge and implementation at all levels. The development of a formal knowledge management plan—systematically documenting improvement work, synthesizing findings, and disseminating lessons learned locally and throughout the global improvement community—would facilitate this process.
Conclusion

The case of Namibia offers valuable insight into how a disease-specific QI program can evolve into a national quality program supported by key systems, administrative structures, and functions. The imminent launch of the QM directorate should allow the MoHSS to accelerate quality of care across the public health system by ensuring the systematic and coordinated implementation of national efforts across diseases and health conditions under one national agency, driven by a “vision of shared values, attitudes, and beliefs, comprising a ‘culture’ of QI throughout the MoHSS” (MoHSS, [Namibia], n.d.).