

Strengthening Infection Prevention and Control Systems in Resource-Limited Settings by using a Self-Assessment and Continuous Quality Improvement Approach

Goredema W¹, Ntengu M², Briggs J¹, Alemayehu W³, Claassens L⁴, Gordon C⁵, Mabuza L², Pharasi B², Sagwa E³, Green T⁶, Joshi MP¹

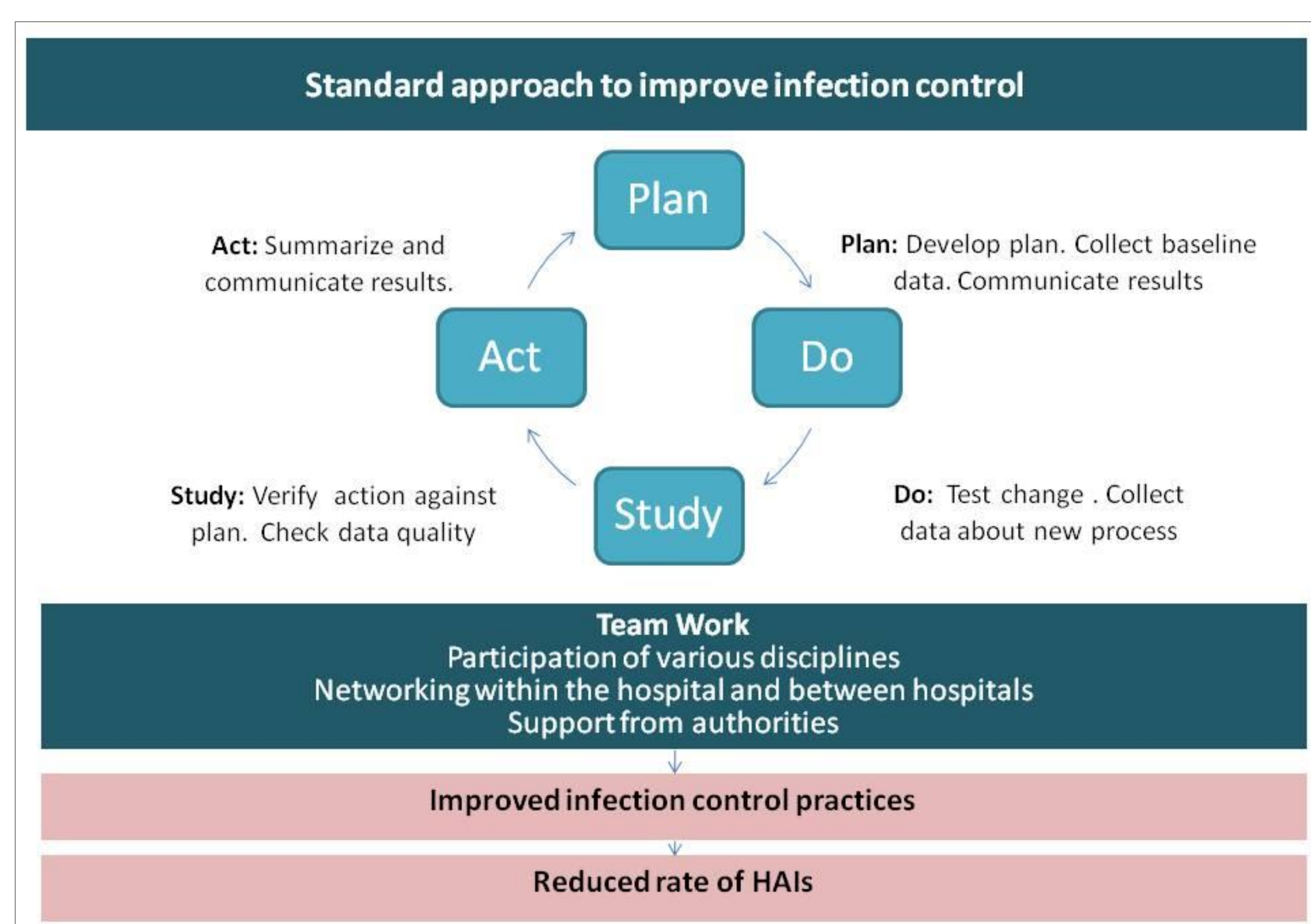
¹SIAPS, USA; ²SIAPS, South Africa; ³SIAPS, Namibia; ⁴National Department of Health, South Africa; ⁵Ministry of Health and Social Services, Namibia; ⁶Formerly SIAPS, USA

BACKGROUND

Antimicrobial resistance (AMR) is a rapidly increasing problem that is making many first-line antimicrobial medicines ineffective, thereby threatening the major gains in the treatment of major infectious diseases, such as HIV and AIDS, tuberculosis, and malaria. The WHO Global Strategy for Containment of AMR¹ recommended infection prevention and control (IPC) as a key intervention to support AMR containment. However, establishing an effective and resilient IPC system is a challenge in resource-limited countries. The goal of this intervention was to strengthen national IPC systems and contribute to reducing the development and spread of nosocomial infections and AMR in resource-limited settings by implementing a health systems strengthening (HSS) approach.

METHODOLOGY

The USAID-funded Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program collaborates with national counterparts to support IPC programs using an Infection Control Self-Assessment Tool (ICAT) and a continuous quality improvement (CQI) approach. It is a collaborative systems strengthening approach, combining diagnostic self-assessment using the 21-module ICAT (to detect and prioritize deficiencies in IPC practices) with CQI cycles (to design, implement, and monitor appropriate, affordable IPC solutions) to close the prioritized gaps (see figure).

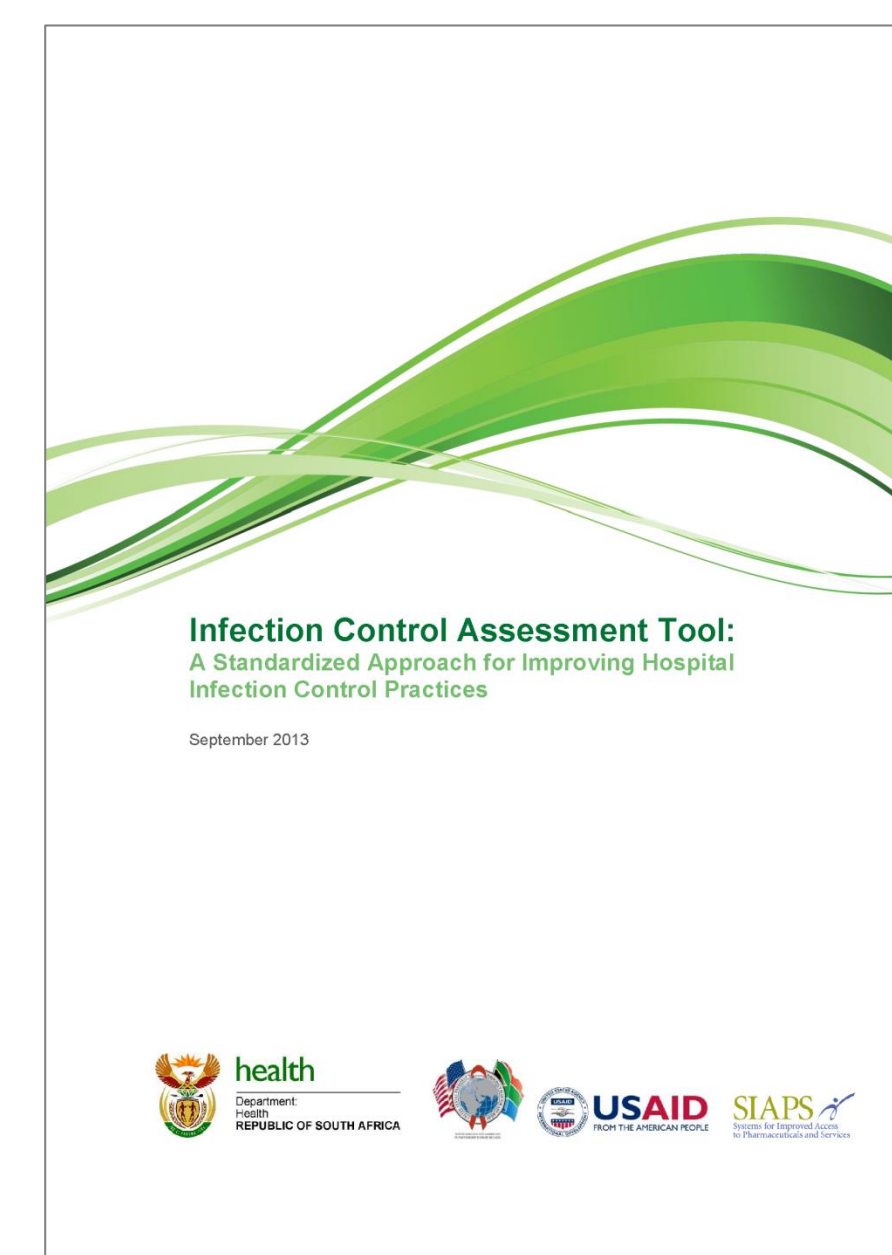


Courtesy: South Africa National Department of Health; adapted from Massoud, R., K. Askov, J. Reinke, et al. 2001. *A Modern Paradigm for Improving Healthcare*. Quality QA Monograph Series 1(1). Bethesda, MD: Published for the US Agency for International Development by the Quality Assurance Project.

Under SIAPS' predecessor programs, the ICAT/CQI approach was initially implemented in collaboration with ministries of health, local stakeholders, and partners in Guatemala, Namibia, South Africa, and Swaziland. Building on incremental progress achieved under these predecessor programs, SIAPS provided follow-up technical assistance to scale up, integrate, and institutionalize the ICAT/CQI approach in South Africa and Namibia.

RESULTS SUPPORTING HEALTH SYSTEMS STRENGTHENING

The approach is in line with HSS principles. It helped promote teamwork and yielded significant measurable improvements in key health facility IPC practices, such as adherence to IPC standards and practices and availability of IPC supplies. Countries institutionalized the approach into ongoing, routine, budgeted activities. In South Africa, the ICAT was adapted and adopted as the national IPC tool. It complemented the development of the National AMR Strategy Framework, National Core Standards for Health Establishments, and the implementation of the National Infection Prevention and Control Policy and Strategy. Hand hygiene posters were also reprinted and widely disseminated.



In Namibia, the MOH adopted the ICAT as the official tool for IC and implemented it to improve national IPC policies and guidelines, resulting in capacitated and improved district hospital IPC structures and improved health-facility medical waste management. Health facility IPC teams felt empowered using the tool. They used the implementation results to advocate for further support of the hospital management and staff.

CONCLUSIONS AND POLICY IMPLICATIONS

The institutionalization of ICAT/CQI in South Africa and Namibia illustrates how an HSS approach that fosters teamwork and strengthens existing systems promotes country ownership and results in strong and sustainable IPC systems. This approach showed that simple self-assessment tools, supplemented by CQI methods, enabled national stakeholders in resource-limited countries to implement low-cost IPC interventions and achieve quantifiable and sustainable results and improved quality of care. Stakeholders, including international development partners and donors interested in AMR containment, should consider prioritizing support for IPC systems-strengthening interventions.



SIAPS supports countries in the development and use of IPC guidelines, tools, and job aids, such as this hand hygiene poster from South Africa.

¹WHO (World Health Organization). 2001. *WHO Global Strategy for Containment of Antimicrobial Resistance*. WHO/CDS/CSR/DRS/2001.2a. Geneva: WHO