

# NURSES & MIDWIVES: THE FRONTLINE AGAINST HIV/AIDS

HOW ICAP IS BUILDING NURSING AND MIDWIFERY CAPACITY  
AND STRENGTHENING HEALTH SYSTEMS



**ICAP**

Global. Health. Action.  
COLUMBIA UNIVERSITY  
Mailman School of Public Health

This work has been supported by the President's Emergency Plan for AIDS Relief (PEPFAR) through the Health Resources and Services Administration (HRSA) under the terms of the Global Nurse Capacity Building Program, cooperative agreement #U92HA127. The contents are the responsibility of ICAP and do not necessarily reflect the views of the United States Government.

**For more information about ICAP's Global Nursing Capacity Building Program or to partner with ICAP, contact: [icap@columbia.edu](mailto:icap@columbia.edu).**

© 2013 ICAP

All rights reserved. No part of this report may be reprinted or reproduced or utilized in any form or by any electronic, mechanical, or other means, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from ICAP.

Design by Jennifer Geib.

# NURSES & MIDWIVES: THE FRONTLINE AGAINST HIV/AIDS

HOW ICAP IS BUILDING NURSING AND MIDWIFERY  
CAPACITY AND STRENGTHENING HEALTH SYSTEMS



## ICAP

Global. Health. Action.

COLUMBIA UNIVERSITY

Mailman School of Public Health

# CONTENTS

Preface	
The Health Workforce Crisis in Sub-Saharan Africa	1
ICAP Builds Capacity in Nurse-Led HIV Services	4
ICAP Supports National Priorities for Improving Health Systems and Health Outcomes	6
Sustaining the Nursing Workforce	7
Empowering Nurses as Agents of Change	9
Strengthening Regulatory Frameworks	11
Educators Hold the Key	13
Bridging the Nursing Education Gap	15
Linking Campus and Clinic in South Africa	17
Sustainable, Equitable Scale-Up of Nursing Education in Malawi	19
Rapid Strides in Swaziland and Rwanda	21
Fostering Pan-African Nursing Leadership	23
References	26

# PREFACE

photo by Michael Dames



The number of people enrolled in HIV care and treatment programs in sub-Saharan Africa has increased almost a hundredfold in the past 10 years. This remarkable advance has been achieved against a backdrop of persistent, critical challenges related to health facilities, the health workforce, and overall health systems. Despite the progress that has been made, tens of millions of people living with and affected by HIV in the region still depend on under-resourced health systems for their care and well-being. What has been learned so far can and should inform the path forward.

No health system is able to meet the needs of populations without its most critical component: healthcare providers. As nurses provide the majority of health services in sub-Saharan Africa, they are particularly critical to population health outcomes. They are essential for addressing the HIV epidemic, as well as the other health threats facing many countries, including malaria, tuberculosis, maternal and infant mortality, and a looming crisis in non-communicable chronic diseases.

To achieve the goals of the global HIV response, many more nurses and midwives—who are equitably distributed and have appropriate skills—are needed to deliver essential services. This effort also requires a re-positioning of the nursing profession, so that nurses are situated at the center of both health services and the health system, where they rightfully belong. High quality services depend on nurse-based models of prevention and care that are implemented within the context of multidisciplinary teams of providers.

The HIV epidemic has forced a critical re-appraisal of how health systems and teams can deliver the best standard of care. We now have the opportunity to forge a legacy of this epidemic that is positive and lasting—efficient, needs-driven, sustainable models of healthcare that effectively serve individuals, families, and communities. ICAP at Columbia University is honored to be a contributor to this effort, strengthening nursing and midwifery programs throughout Africa.

## **Wafaa El-Sadr, MD, MPH, MPA**

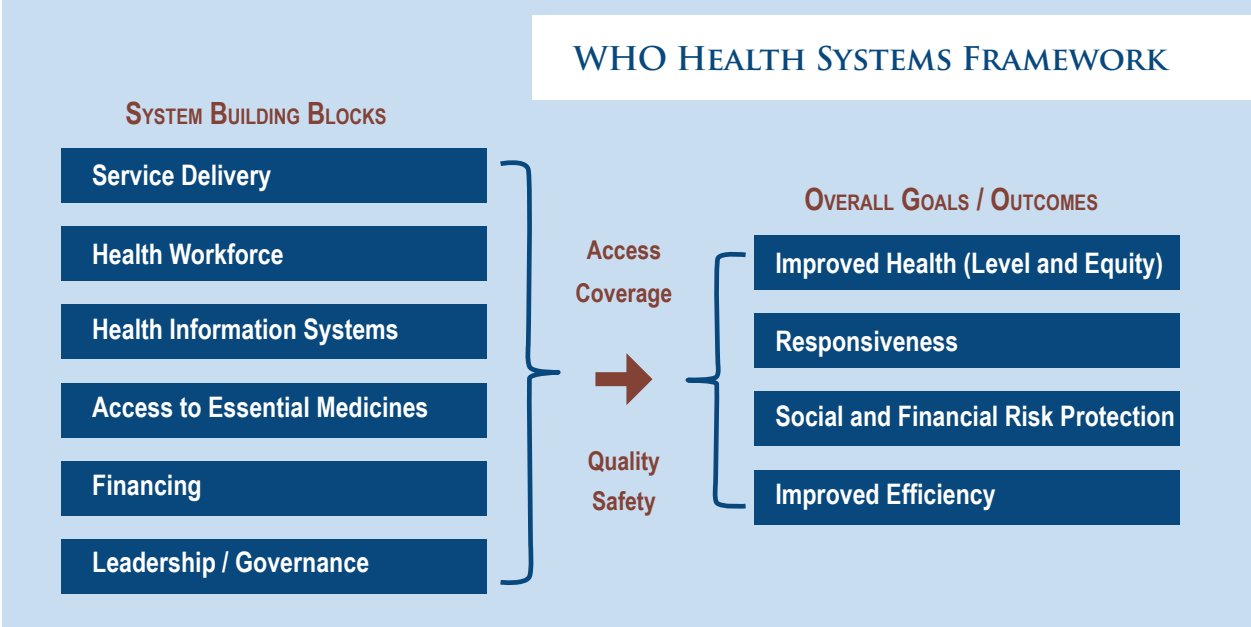
Director, ICAP  
Professor of Epidemiology and Medicine  
Mailman School of Public Health  
College of Physicians and Surgeons  
Columbia University

# THE HEALTH WORKFORCE CRISIS IN SUB-SAHARAN AFRICA

Addressing health worker shortages is critical to improving access to quality health services and reducing disease and premature death. Of the health system building blocks identified by the World Health Organization (WHO), the healthcare workforce is among the most critical.

Globally, there is a stark, inverse correlation between the burden of disease and the availability of human resources for health. In 2006, WHO reported that 25% of the global disease burden was concentrated in sub-Saharan Africa—among just 11% of the world’s population. In addition, the region accounted for only 3% of the world’s total health workforce and a mere 1% of global health expenditure.<sup>1</sup>

International support for universal HIV care and treatment has gained momentum in recent years, and the numbers of patients enrolled in care and treatment in sub-Saharan Africa has increased exponentially. Although more people now have access to life-saving HIV treatment, critical shortages of nurses, midwives, and physicians continue to be the norm. At present, only 40% of people in sub-Saharan Africa who need treatment have access to it and an estimated 1.9 million new infections occur annually, adding to the strain on overall health services and HIV service capacity.<sup>2</sup>



	Need For and Availability of Health Providers*				Millennium Development Goal Indicators		
	Data year	Total population	Nurses, midwives & physicians per 10,000 people	Nurses & midwives per physician	Infant mortality per 1,000 live births (2010) **	Maternal mortality per 100,000 live births (2010) **	HIV prevalence in adults aged 15-49 (2009) ***
Cameroon	2010	19,406,100	8.9	7.2	84	690	5.3%
Côte d'Ivoire	2007	20,581,770	6.1	3.6	86	400	3.4%
DR Congo	2004	55,755,000 †	6.2 ‡	4.9 ‡	112	540	1.2-1.6%
Ethiopia	2009	77,800,000	3.0	10.0	68	139	2.0% §
Kenya	2010	36,287,423	4.6	8.2	55	116	6.3%
Lesotho	2005	1,802,000	6.7	12.6	65	141	23.6%
Malawi	2008	13,077,160	3.2	15.2	58	460	11.0%
Mali	2008	12,769,000	5.8	6.8	99	540	1.0%
Mozambique	2008	22,332,900 †	3.4 ‡	13.0 ‡	92	490	11.5%
Nigeria	2008	151,320,000	18.5	4.1	88	630	3.6%
Rwanda	2010	10,117,029	7.5	12.3	44	340	2.9%
South Sudan††	2010	8,260,000	2.5	9.8	66	730	1.1%
Swaziland	2009	1,123,913	16.0	9.4	55	320	25.9%
South Africa	2005	45,214,001	48.5	5.3	41	300	17.8%
Tanzania	2007	39,384,000	3.2	2.7	50	460	5.6%
Uganda	2005	26,699,000	8.1	8.7	63	310	6.5%
Zambia	2010	12,956,412	8.3	11.9	69	440	13.5%
USA	2009	306,771,529 †	120 ‡	3.9 ‡	7	21	0.6%

†† South Sudan data

\*Population & health workforce data  
 †For DR Congo, Mozambique, USA  
 ‡For DR Congo, Mozambique, USA  
 \*\*Infant and maternal mortality rates  
 \*\*\*HIV prevalence  
 §For Ethiopia

Population data from National Bureau of Statistics, ssnbs.org  
 Workforce data accessed at [http://apps.who.int/workforcealliance/countries/ssd\\_hrhdensity.pdf](http://apps.who.int/workforcealliance/countries/ssd_hrhdensity.pdf)  
 Infant mortality, maternal mortality and HIV data is for Sudan and South Sudan combined  
 Africa Health Workforce Observatory <http://www.hrh-observatory.afro.who.int/en/country-monitoring>  
 Accessed at <http://data.worldbank.org/indicator/SP.POP.TOTL?page=1>, Aug 2012  
 Accessed at <http://apps.who.int/globalatlas/DataQuery/default.asp>, Aug 2012  
 WHO World Health Statistics Report 2012 [http://www.who.int/healthinfo/EN\\_WHS2012\\_Full.pdf](http://www.who.int/healthinfo/EN_WHS2012_Full.pdf)  
 WHO Global Health Observatory Data Repository <http://apps.who.int/ghodata/>  
 USAID Country Health Statistical Report, Ethiopia, 2010 [http://pdf.usaid.gov/pdf\\_docs/PNADU689.pdf](http://pdf.usaid.gov/pdf_docs/PNADU689.pdf)

WHO estimates that countries with fewer than 23 physicians, nurses, and midwives per 10,000 inhabitants will generally fail to achieve adequate coverage of essential primary healthcare services.<sup>3</sup> In the 16 African countries where ICAP works, only South Africa meets this minimum standard of coverage. The table above illustrates the severity of the health workforce crisis and the gravity of disease burden in these countries, in comparison with the United States.

“Creating an HIV-free generation will not be possible if we don't train nurses and also retain them. Without nurses, we cannot achieve any of the Millennium Development Goals.”

– Address Malata,  
 Principal, Kamuzu School of Nursing,  
 University of Malawi

Exacerbating the scarcity of health workers is the highly inequitable distribution of those that do exist. Health systems often prioritize urban areas and tertiary hospitals; as a result, primary healthcare centers, rural areas, and slums rely almost entirely on the service of nurses—even though these are the places where most adults and children in sub-Saharan Africa access health services. Shortages in the number and limitations in the capacity of nurses disproportionately affect these often overlooked clinics and communities.

Increasing the number and capacity of trained nurses and midwives is an essential priority, but equal effort must be made to retain them. High rates of attrition deepen the health workforce crisis in most countries where ICAP works. Migration of skilled nurses and midwives to developed countries that offer better pay, working conditions, and professional opportunities has increased sharply in recent decades. Of those who remain, too many fall through gaps in human resource management systems, including weak recruitment, placement, retention, and motivation practices, and a paucity of workplace health and occupational protection programs.

The HIV epidemic poses serious and complex challenges to the retention of nurses—challenges that increase in proportion to the severity of the epidemic itself. The expansion of HIV prevention, care, and treatment services translates into larger numbers of patients and tasks for every nurse. Sickness, family illness, and funeral attendance all contribute to the problem of absenteeism. The psychological toll of providing chronic and, in some cases, terminal care while losing colleagues and loved ones to HIV/AIDS, combined with increasing workloads, leads inevitably to fatigue and burnout. In addition, fear of occupational exposure to HIV may cause nurses and midwives to leave the profession and may also deter further entrants.

## Grace Under Fire

Thousands of patients depend on ‘Grace,’ a nurse at a health facility in the Eastern Cape province of South Africa, for their healthcare. Hundreds of families rely on her knowledge, skills, and confidence. However, there are critical gaps in her HIV-related knowledge and clinical abilities.

At Grace’s nursing school, faculty were inadequately trained in HIV/AIDS care and treatment and over-reliant on didactic methods of teaching. In addition, since Grace graduated from nursing school, there have been advances in HIV care and treatment each year, and guidelines are being updated on a continual basis. Task-shifting, decentralization, service integration, and new models of working all require skills that Grace does not have.

Grace relies mainly on her superiors for knowledge updates. Although occasionally there are resources for her to attend a training workshop, Grace is reluctant to leave her post for training, as she fears that her patients will not be cared for in her absence. She also struggles to translate new information into skills that she can perform confidently once she is back on the job.





# ICAP BUILDS CAPACITY IN NURSE-LED HIV SERVICES

**I**CAP, a global health center based at Columbia University's Mailman School of Public Health, launched the MTCT-Plus Initiative in 2002, at a time when prevention of mother-to-child transmission services in low and middle-income countries were limited and access to HIV care and treatment for women and families was rare. The MTCT-Plus Initiative demonstrated that comprehensive HIV care and treatment in resource-limited settings was feasible, and that multidisciplinary teams of providers were critical to the success of such programs. Nurses and midwives were of central importance to the initiative, leading efforts to enroll HIV-infected pregnant women and their families in care and providing them with comprehensive services.

Building on this early success, ICAP has continued to be a major technical assistance partner in the effort to expand HIV/AIDS prevention, care, and treatment services and in the development of human resources for health in sub-Saharan Africa. Through its collaboration with in-country governmental and non-governmental partners, ICAP has supported more than 3,800 health facilities across 17 African countries and, to date, more than 1.5 million people have received HIV services through ICAP-supported programs. ICAP has focused on building workforce capacity and strengthening health systems, while also enhancing the infrastructure of health facilities, laboratories, and procurement systems.

In the countries where ICAP works, nurses provide upwards of 90% of all health services and constitute most patients' point of access to the healthcare system. Nurses are at the frontline, shouldering responsibility for the survival of communities. This is why, from the outset, ICAP support to national HIV prevention and control strategies focused on enhancing nursing capacity at all levels of the health system, from tertiary hospitals to health centers and community outreach programs.

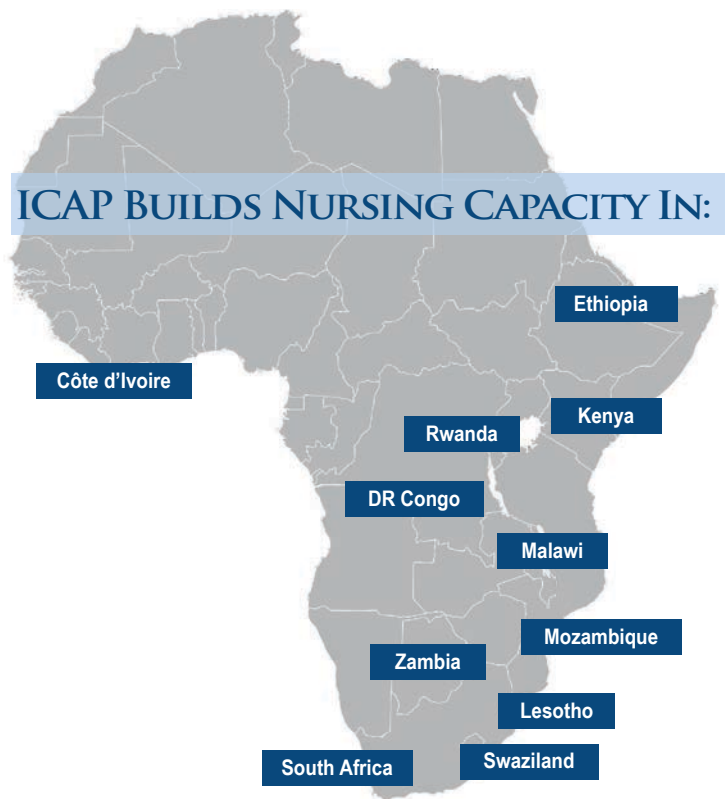
## Essential Components of ICAP's Initiatives to Strengthen Nursing Capacity

ICAP supports ministries of health through strategies to expand nursing and midwifery capacity with packages of technical assistance that:

- Update and expand national nursing strategies
- Support expanded scopes of nursing practice
- Strengthen regulation of nursing education and practice
- Create and test innovative educational and mentorship models
- Link nursing education with health services
- Increase retention of nurses where they are most needed
- Develop recognized career paths for nurses and tutors
- Cultivate and empower nurse leaders
- Develop continuing education programs to engage, inform and retain nurses

In 2006-2007, ICAP piloted the Nurse Mentorship Training Program (NMTP) in the Eastern Cape province of South Africa. Through its competency-based curriculum and on-site mentorship program, NMTP increased nurses' knowledge, clinical abilities, and system skills. The program enabled nurses to play a larger role in HIV care and to serve as mentors to colleagues. NMTP created an effective, replicable model of nurse mentorship, which was subsequently adopted in other countries where ICAP works.

The success of NMTP both inspired and established a strong foundation for the Global Nurse Capacity Building Program (GNCBP), which ICAP launched in 2009 with funding from the United States Government Health Resources and Services Administration (HRSA). That same year, ICAP was selected as the official Coordinating Center for the United States President's Emergency Plan for AIDS Relief (PEPFAR) Nurse Education Partnership Initiative (NEPI). In furtherance of PEPFAR's commitment to train 140,000 new health workers, NEPI's purpose is to build capacity and quality in pre-service nursing education.



“ Through the Nursing Education Partnership Initiative (NEPI), the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), partner governments, and educational institutions are working together to better equip nurses and midwives to improve the health and wellbeing of the people they serve. Through its targeted investments, NEPI is supporting countries to increase and retain more skilled health professionals, rationalize their distribution, and raise the overall standard of health care in their communities.”

— Deborah Von Zinkernagel,  
Office of the U.S. Global AIDS Coordinator



# ICAP SUPPORTS NATIONAL PRIORITIES FOR IMPROVING HEALTH SYSTEMS AND HEALTH OUTCOMES

Since ICAP's inception, it has endeavored to achieve positive health outcomes through the provision of technical expertise, working hand in hand with ministries of health and other partners. ICAP technical assistance is embedded in national strategic plans for nursing and the range and focus of support provided in each country is guided by the local ministry of health. ICAP's broad-based, multi-level packages of technical

support promote both progress in the nursing profession and stronger health systems, and nursing capacity support is designed holistically to improve pre-service and in-service education and training, regulation, policy, and retention. Close strategic and implementing partnerships with ministries of health also position ICAP to advocate for policy and operational change, and to facilitate coordination between stakeholders.

## Upgrading the Number and Competency of Nursing Faculty and Graduates in Zambia

Vacancy rates for nurse and midwife posts in Zambia are high: 23-32% in urban areas and 43-50% in rural areas. To increase production of nurses and to upgrade the competency of new graduates in the country, PEPFAR's Nurse Education Partnership Initiative (NEPI) is supporting a plan to transform pre-service nursing education.

The baseline assessment estimated that 360 additional educators would be needed to increase student intake by 195%—to 3,700—within five years. ICAP is now supporting Zambia's Ministry of Health to implement strategies to ensure that investment in educator numbers results in higher workforce capacity. These strategies include:

➤ **Upgrading learning methods:** ICAP has helped to establish competency-based skills laboratories to improve the clinical learning process at all three partner institutions in Zambia: the Department of Nursing Sciences at the University of Zambia, Lusaka School of Nursing, and Monze School of Nursing. At the University of Zambia, ICAP also assisted in the revision of the Bachelor of Science in Nursing curriculum and the clinical practice methods utilized by students.

- **Staff development and support:** ICAP supports faculty to increase their knowledge and skills, delivering workshops and seminars to faculty at all three partner schools. In addition, a fellowship program at the University of Zambia is training staff to teach basic science and nursing subjects in which there remains a shortage of instructors. At Lusaka School of Nursing, ICAP is also helping to develop and implement a Clinical Instructor Training Program.
- **Combined nursing-midwifery degrees:** The paucity of midwives in Zambia is a barrier to integrating HIV services with primary healthcare. One reason for this shortage is that nurses are required to have two years of work experience before they can return to school to train as midwives. To shorten the path to higher competency, the Ministry of Health requested that ICAP work with the Lusaka and Monze Schools of Nursing to develop a combined Bachelor's Nursing and Midwifery Degree curriculum. As a result of this new curriculum, both schools are now enrolling students in this combined degree program.

# SUSTAINING THE NURSING WORKFORCE

**D**espite the intense physical and psychological toll of nursing at the frontlines, individual nurses who feel competent, confident, safe, motivated, and supported in their work are likely to be retained and to contribute to the communities where they are needed most. To ensure that trained nurses remain in practice, retention must be sufficiently emphasized in human resources for health plans, and occupational support strategies must focus on meeting the needs of nurses and midwives themselves.

ICAP's range of health systems support initiatives improve nurses' everyday working environment, promoting greater recognition of nurses, empowering them with skills and confidence, and creating opportunities for their continuing professional development.

## Wellness Centers

ICAP works in partnership with the Wellness Center Initiative, a program of the International Council of Nurses, to strengthen access to HIV-related services for health workers and their families.

In addition to offering HIV positive nurses confidential, comprehensive HIV care and treatment services away from their own places of work, Wellness Centers promote self-care and psychological and emotional well-being in order to enhance job satisfaction and reduce attrition.

## CARING FOR CAREGIVERS IN SWAZILAND

Promoting nurses' health and well-being ensures their continuing ability to deliver services, reduces their psychological stress, and prevents attrition due to ill health. In Swaziland, ICAP supports a range of nurse wellness initiatives, including:

- Working with the Swaziland Nurses Association to train Wellness Center staff and improve service quality
- Helping Wellness Centers develop a patient information system
- Supporting the Ministry of Health with health worker-targeted education, service, and referral campaigns on stigma, access to treatment, and adherence
- Promoting referrals to Wellness Centers at nurses' places of work
- Reinforcing infection prevention and control practices
- Providing post-exposure prophylaxis kits to nurses in rural clinics

## IMPROVING WORKING CONDITIONS

Poor working conditions are a major barrier to retention of practicing nurses and midwives. ICAP support at all levels within the health system promotes retention by creating more conducive working conditions.

- Physical comfort and safety is enhanced through renovation and rehabilitation of health facilities. Such upgrades create increased privacy, light, and ventilation, and improve spatial organization and patient flow.
- Infection prevention and control measures, which are vital to protect health care providers, are a basic element of facility upgrades, provider training, and site supervision.
- Services are integrated, allowing nurses to be more efficient, to build relationships with their patients, and to provide them with more personal care. This also enables nurses to take extra pride in their work.
- Patient records are consolidated, streamlining nurses' administrative workload and giving them more time for nursing. Data quality training is provided, benefiting individual providers, their colleagues, and patients.
- HIV data processing units within ICAP-supported health facilities produce automated reports. Nurses are trained to use aggregated service data and linear patient data to improve service quality and to resolve problems.
- Supportive supervision models are implemented, using patient data to empower nurses to manage their own performance and appreciate the impact of their work on patient outcomes.



# EMPOWERING NURSES AS AGENTS OF CHANGE

The goal of transforming nursing education and practice at scale—with the aim of improving health and quality of life at the population level—is an ambitious one. It can only be achieved if there is a common purpose among stakeholders and cohesion in policy, strategy, planning, and action. It is critical that nurses and midwives themselves play a prominent role in policy development, strategic and operational planning, management, outcome evaluation, problem solving, and dissemination of best practices.

ICAP promotes the advancement of nurse leaders and the nursing profession as a whole, advocating nationally, regionally, and globally for:

- Broadened scopes of nursing practice
- Task-sharing between physicians and nurses, and between nurses and paraprofessionals
- Comprehensive, unified nursing protocols
- Regulation of nursing education and practice
- Enhanced pre-service and in-service education and mentorship
- Decentralization of HIV services to the primary healthcare level

“ICAP has given nurses and midwives a meaningful voice. We are not just represented, but really listened to—at all levels. Now nurses are shaping the HIV care agenda in hospitals, universities, and national policy debates. This is how we become a force for positive change, by giving us influence and responsibility.”

— Nonhlanhla Dlamini,  
Nurse Mentor Project Officer, ICAP Swaziland

## COMPREHENSIVE, NURSE-LED HIV SERVICES

Task-shifting, task-sharing, and service decentralization have dramatically increased coverage and uptake of HIV services. Nurses' clinical role has been transformed from one that is task-oriented to one that is focused on the management of patient care. For example, nurses are now empowered with the skills and confidence to offer:

- Voluntary and provider-initiated HIV counseling and testing, including opt-out testing for pregnant women
- Prevention of mother-to-child transmission during pregnancy, delivery, and breast-feeding
- Diagnosis of HIV in infants through DNA PCR testing of dry blood spots
- Initiation and management of adult and pediatric patients on antiretroviral therapy (ART)
- Enrollment and monitoring of HIV patients in HIV care
- Adherence counseling and psychosocial support

ICAP-supported nurses also lead treatment units and are members of facility- and district-level health management teams. Nurses supervise lay counselors and peer educators, facilitate referral linkages, and facilitate partnerships with community based organizations, outreach services, and initiatives to engage local leaders and communities in HIV care.



## Placing Nurses at the Heart of Multi-Disciplinary Teams

The multi-disciplinary team (MDT) approach has enabled nurses to play a central role in managing and delivering care at ICAP-supported health facilities. The MDT is a mechanism for coordinating services, managing task-shifting, and sharing responsibility for adherence to quality standards. The roles and responsibilities of physicians, nurses, technicians, and paraprofessionals within the MDT are defined, with nurses typically possessing the overarching responsibility for care coordination. This approach ensures that the multiple needs of individuals and families are met, while creating a supportive and empowering environment for nurses. Nurses play a central role in decision-making, planning, and management, which also promotes greater recognition and respect for their contributions.

The ICAP site-support model includes the provision of training, mentorship, and supportive supervision to equip nurses with the clinical and systems skills to carry out their full scope of responsibilities within the MDT.

# STRENGTHENING REGULATORY FRAMEWORKS

**A**s scopes of nursing practice expand, the importance of strong national regulatory frameworks for the profession becomes paramount. The advent in recent years of nurse initiated and managed antiretroviral therapy has radically altered the landscape of nursing practice and regulatory bodies have requested support to respond to these new realities.

A critical element of many ICAP-supported nursing programs is building the capacity of nursing and midwifery councils to protect both patients and the profession as a whole. ICAP is currently leveraging its regulatory expertise and experience to support the development of a regional network of nursing registrars and to facilitate exchange of experience and cross-country technical support in the area of regulation.

## Changing the Nursing Landscape in Ethiopia

### Repositioning Nursing

In Ethiopia, the Federal Ministry of Health (FMOH) requested that ICAP conduct the country's first national nursing and midwifery assessment and develop recommendations for upgrading the position of nurses and midwives within the Ethiopian health system. When the assessment report was disseminated in late 2011, the FMOH acted immediately to advance the nursing profession by, for the first time, appointing a nurse to the national human resources for health committee and requiring all district health leadership boards to include at least one nurse.

### Creating a Nursing Council

While Ethiopia has recently succeeded in increasing the number of new nurses, the government recognized the need to strengthen the nursing regulatory framework to guarantee the capacity of new graduates. Thus, a priority for the FMOH under NEPI was to establish a nursing council. In establishing its first nursing council, Ethiopia is drawing on the expertise of the International Council of Nurses, PEPFAR, and ICAP, as well as the experience of the Nurses and Midwives Council of Malawi, which has regulated nursing and midwifery education, training, and practice in the country since 1966.





# EDUCATORS HOLD THE KEY

**N**urse educators are pivotal to the creation and maintenance of a nursing workforce that possesses the necessary knowledge and skills to deliver comprehensive HIV prevention, care, and treatment services. The operating principles that underpin ICAP's work to transform and scale up nursing education include:

- Recognizing deans, principals, faculty, trainers, and mentors as leaders within their profession
- Promoting inclusion of nurse educators in health policy and planning
- Leveraging the capacity of the existing nurse education workforce
- Developing advanced degree programs in nursing and midwifery that increase competency and promote retention
- Creating opportunities for educators' professional growth by sharing experience between institutions and countries
- Advocating for professional development strategies designed to attract and retain senior nurses as educators
- Identifying knowledge and skills gaps within educational institutions
- Designing skills building programs tailored to the needs of schools, faculty, students, and communities
- Using site-based, one-to-one mentorship to develop tutors as the mentors of the future

## Retention Begins at the Beginning

Nursing students must be confident that they will receive respect within their future workplaces and communities. In addition, the nurse who sees a career path and support network ahead is more likely to stay in the profession.

To support the long-term retention of nurses, ICAP provides mentorship to nurse tutors, emphasizing their important role in the professional development and empowerment of a new generation of nurses. This mentorship helps ensure that there is a focus on retention from day one of nursing school.





# BRIDGING THE NURSING EDUCATION GAP

**E**ffective models of care that integrate HIV prevention, care, and treatment and the broader healthcare system, and that decentralize HIV services to the primary healthcare level, place nurses and midwives on the frontline. At the same time, continuous advances in HIV prevention, care, and treatment mean that practicing nurses' knowledge and skills need to be updated on a continual basis. Therefore, new approaches to nurse education related to HIV care and treatment must bridge

the gap between pre-service and in-service training. To address this need, ICAP builds productive partnerships with ministries of health, ministries of education, nursing councils and associations, and nursing education institutions. Experience has demonstrated that, by connecting nursing schools with health services and linking tutors with practicing nurses, accredited in-service training can be delivered at scale without disrupting patient care.





“ This is a model for the integration of HIV/AIDS into nursing curricula within our institutions. The outcomes of this initiative have the potential to live on and make an impact in our health systems well into the future.”

— Bongi Nzama, Director,  
Department of Nursing Sciences,  
University of Fort Hare, South Africa

# LINKING CAMPUS AND CLINIC IN SOUTH AFRICA

In 2009, ICAP collaborated with the Departments of Health in the Eastern Cape and Free State provinces of South Africa to establish long-term working partnerships with universities, nursing schools, and regional training centers. The objective of creating these linkages was to ensure that graduate nurses possessed the clinical competencies so urgently needed at the community level.

South Africa's introduction of nurse initiated and managed ART in early 2010 underscored the need to upgrade nurse education and mentorship. To address this need, ICAP worked with its partners to create a ground-breaking Campus to Clinic (CTC) Mentorship Program, which builds nursing and midwifery tutors' capacity to teach HIV prevention, care, and treatment and to fully integrate HIV/AIDS into pre-service training curricula.

Built on the foundation and success of ICAP's Nurse Mentorship Training Program (NMTP) (see "Building on Success")<sup>4</sup>, CTC is an intensive, one-year capacity building program focused on mentoring nurse tutors. While NMTP built in-service nursing capacity, CTC goes straight to the source—the educators providing pre-service training to nursing students. First implemented in 2010-2011, a total of 62 nurse tutors from nursing colleges across the Eastern Cape and Free State provinces of South Africa participated

in the program, expanding their knowledge of HIV/AIDS and tuberculosis (TB), enhancing their clinical, teaching, and mentoring skills, and developing a greater understanding of how health systems affect patient care. The program's success prompted the two provincial departments of health to fully assume the program in early 2012.

## Building on Success

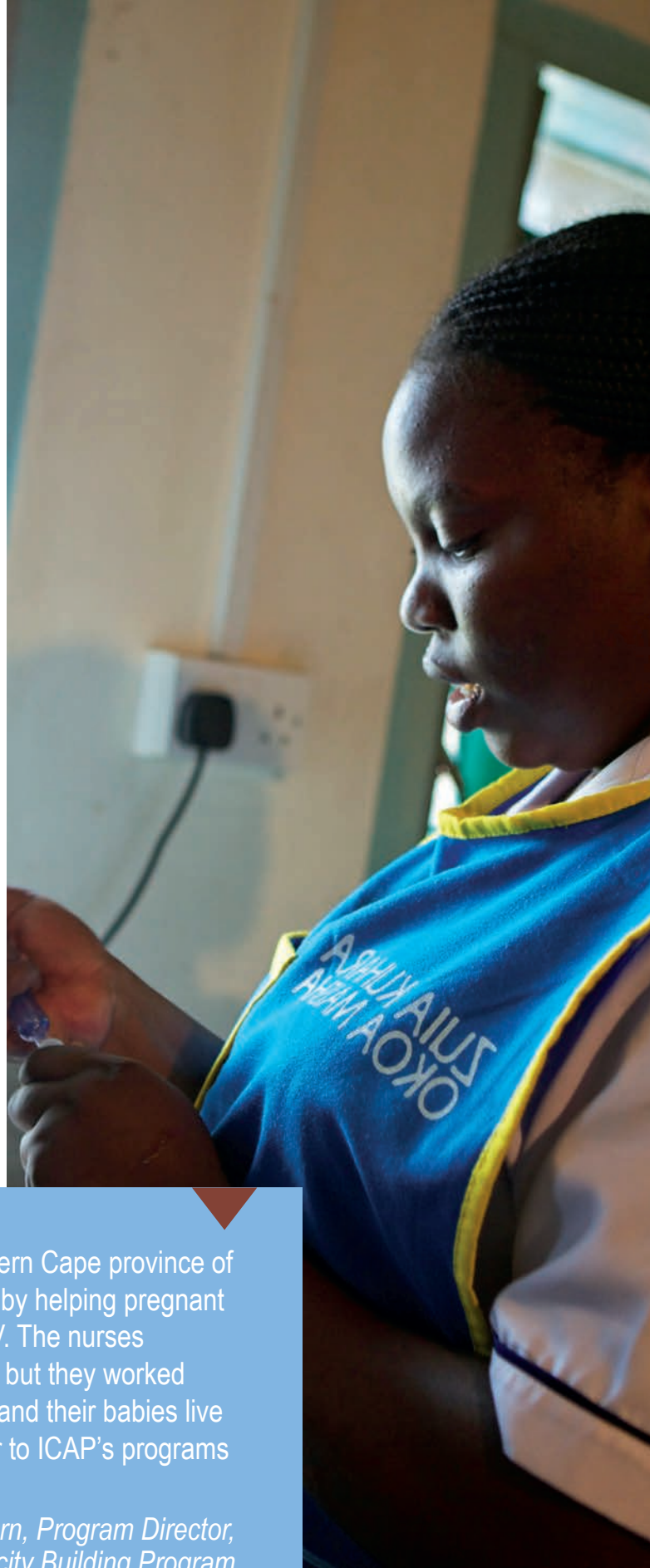
Through its 2006-2007 Nurse Mentorship Training Program (NMTP), ICAP trained 10 professional nurse mentors in the rural Eastern Cape province of South Africa in comprehensive HIV care and mentorship. The program taught practicing nurses the skills needed to train and mentor others to provide desperately needed care and treatment services to their patients.

An evaluation of the pilot confirmed the effectiveness of the mentorship model. Measured by self-report and observation at three, six, and 10 months following initiation of the program, trainees demonstrated improved competencies in mentoring, HIV care and treatment, and physical examination skills.

## THE CAMPUS TO CLINIC TRAINING MODEL

The CTC curriculum consists of nine modules covering a range of topics, including nurse mentoring and adult learning; HIV transmission, counseling, and testing; clinical care for people living with HIV; and TB. The CTC model integrates:

- Interactive adult learning approaches, including skills-based self-study modules and hands-on training workshops
- A case study approach, whereby learners solve increasingly challenging clinical and systems problems in the care and treatment of fictional HIV/AIDS and TB patients, and meet to discuss actual cases in order to enhance the ability of nurses to manage patient care
- The guidance of skilled site coordinators who provide training, one-to-one mentorship, and informed responses to clinical questions
- Pre- and post-module competency assessments to ensure that learning objectives have been met before participants progress or graduate
- Job aids and training tools for tutors to take away
- Evaluation of learning materials by the nursing tutors themselves, for the purpose of refining the materials for future use



“ In the early years, nurses and midwives in the Eastern Cape province of South Africa believed they could make a difference by helping pregnant women break through stigma and get tested for HIV. The nurses themselves and their families were affected by HIV, but they worked around the clock to help other HIV positive women and their babies live healthily. They are the heroes who opened the door to ICAP’s programs of today.”

— Jennifer Dohrn, Program Director,  
ICAP Global Nurse Capacity Building Program

# SUSTAINABLE, EQUITABLE SCALE-UP OF NURSING EDUCATION IN MALAWI

Malawi has a 65% vacancy rate for nursing and midwifery positions in the public sector, and it is estimated that the country needs between 50 and 100 more educators and 227 additional clinical nurse instructors in order to significantly improve the quality and responsiveness of the nation's nursing and midwifery clinical and classroom education and supervision.<sup>5</sup>

## CREATING OPPORTUNITIES FOR PROFESSIONAL DEVELOPMENT

### **Master's Degree in Nursing and Midwifery Education**

To increase the number and capacity of nurses, a larger number of skilled nursing tutors is essential. In Malawi, the Kamuzu College of Nursing (KCN) is the only institution that produces these much-needed nurse tutors.

To enhance the teaching skills of existing tutors with Bachelor of Science degrees in nursing, ICAP collaborated with KCN to develop a curriculum for a new two-year Master's Degree in Nursing and Midwifery Education, which was launched in 2012. The collaboratively developed curriculum integrates face-to-face teaching, e-learning, and mentored teaching practice. Students first come together to study intensively at the KCN campus and then return to their

often rurally-located teaching schools to continue their studies in decentralized learning groups. This approach minimizes the period of absence from the nurses' worksites. As rural communities are disproportionately affected by nurse shortages, scholarship opportunities provided by the Ministries of Health and Education give preference to tutors from rural colleges.

### **Upgrading Nurse-Midwife Technicians**

In 2004, Malawi created a cadre of nurse-midwife technicians as a short-term strategy to reduce maternal and infant mortality. Technicians with basic obstetric skills have been critical to the improvement in survival rates, but they previously had no subsequent means of advancing within the nursing profession. To address this challenge, ICAP supported the Ministry of Health and KCN to develop a bridge program for nurse-midwife technicians to obtain a Bachelor's degree in nursing. This program has been an effective way of both broadening the knowledge and clinical skills of nurse-midwife technicians and providing a means of professional growth for this cadre of health workers.





## ENHANCING GRADUATE CAPACITY

A critical nursing education gap identified by Malawi's Ministry of Health was that graduating nurses without midwifery skills were unable to perform well when posted to rural hospitals and health centers where they needed to provide both nursing and midwifery services. To address this need, ICAP supported KCN, Mzuzu University, and the Malawi College of Health Sciences in creating and implementing an integrated Bachelor's degree program that trains students in both nursing and midwifery.

ICAP has also supported the following measures to enhance the capacity of graduating nurses and midwives:

- Upgrading teaching methods and facilities, including computers, internet connectivity, teaching and learning aids, and journal subscriptions
- Establishing a clinical skills laboratory and curricula at Mzuzu University that foster competency-based learning and assessment in an environment that can simulate the problems and decisions of a health facility
- Working with the Ministry of Health to develop and implement a national preceptorship curriculum

# RAPID STRIDES IN SWAZILAND AND RWANDA

The predominantly rural populations of Swaziland and Rwanda have urgent, unmet health needs and depend almost entirely on nurses for healthcare—there are 12 nurses per physician in Swaziland and nine per physician in Rwanda. Faced with major staffing shortages and skills gaps, both countries identified transformative scale-up of nursing education as essential to building sustainable, effective health systems. In less than three years, both countries have, with support from ICAP, significantly enhanced the local nursing infrastructure.

## UNIFYING SWAZILAND'S PRE-SERVICE HIV/AIDS CURRICULUM FOR NURSES

In Swaziland, a key Ministry of Health priority was to create a single, pre-service HIV/AIDS curriculum. In response to this need, ICAP collaborated with the Columbia University School of Nursing to bring the University of Swaziland and the country's two faith-sector nursing schools together with the aim of unifying their curricula. The process resulted in the 2012 launch of a standardized, competency-based curriculum that meets global standards.

Since 2009, ICAP has also worked with the Ministry of Health to address the following priorities:

- Production of national preceptorship and mentorship curricula
- Creation of a Continued Nursing Education framework for training and trainer accreditation
- Development of a Continued Professional Development (CPD) framework within the Nursing Council, the basis for a system to promote, record, and track CPD for all nurses
- Implementation and evaluation of a pilot program that trained nurses to initiate and manage patients on ART. During the pilot, 65% of ART patients were successfully initiated by nurses
- Training of nurse educators from all three nursing schools on integrated management of adolescent and adult illness

## STRENGTHENING THE FOUNDATIONS OF NURSING EDUCATION IN RWANDA

When the Global Nurse Capacity Building Program began in Rwanda, the Ministry of Health prioritized a gap analysis of the nursing system. ICAP subsequently worked with the Ministry's Nursing Unit to complete the study and to disseminate results and recommendations.

Since 2010, ICAP has also worked with the Ministry of Health to address the following priorities:

- Production and implementation of a new national task-shifting policy
- Implementation of a practicum training program at all five nursing schools in the country
- Establishment of a central nursing library that nurses can access for professional development and research, and an e-learning system for nursing schools
- Support to the nursing council for the creation of a national database for registration of nurses and midwives
- Development of a strategic plan for the Rwandan Nurses and Midwives Association
- Provision of mentorship training to nurses and midwives from the Ministry of Health and faculty from the five nursing schools
- Training of over 900 nurses in the initiation and management of patients on ART



# FOSTERING PAN-AFRICAN NURSING LEADERSHIP

## REGIONAL LEADERSHIP NETWORKS

ICAP has given renewed momentum to the long-standing efforts of the World Health Organization Regional Office for Africa (WHO-AFRO) to create a regional network of Chief Nursing Officers (CNOs) able to influence nursing policy debates both regionally and at the country level.

In 2011, ICAP supported Kenya's CNO to convene a meeting with counterparts from five other countries in the region. At the meeting, delegates discussed regulatory and retention issues, human resource strategies, and the role of the CNO. They also mapped out a plan for the growth of the network. At the next planned meeting, CNOs will identify common challenges to expanding the role of nurses at the policy level and will develop a shared approach to overcoming identified barriers. The CNO network will also advocate for the creation of a CNO post in countries where it does not currently exist, as a key national-level strategy to advance the nursing profession.

### ICAP is at the forefront of providing technical assistance for:

- Nurse/midwife leadership cultivation
- Policy formulation and advocacy
- Pre-service and in-service curriculum development
- Nurse and midwifery education and mentorship
- Clinical, training, and strategic information
- Distance learning
- Implementation, evaluation, and adaptation of nursing education programs
- Nursing and midwifery regulation



## ICAP-supported nursing and midwifery initiatives have access to expertise from international leaders in the fields of nursing and midwifery education and HIV/AIDS care and treatment, including:

- The Columbia University School of Nursing
- The International Council of Nurses
- The International Confederation of Midwives
- World Health Organization Regional Office for Africa (WHO-AFRO)
- Regional forums in sub-Saharan Africa, such as the Forum of University Nursing Deans of South Africa (FUNDISA)



## SHAPERS OF OPINION, POLICY, AND PRACTICE

ICAP works to give nurses and midwives a voice in international forums—highlighting their achievements, struggles, and priorities—and to ensure their presence among global health leaders and decision-makers. ICAP also leverages international stakeholder meetings and platforms, such as the Association of Nurses in AIDS Care and the Global Alliance for Leadership in Nursing Education and Science, to highlight best practices and disseminate innovations. The International Council of Nurses, a partner in ICAP's Global Nurse Capacity Building Program, frequently showcases successes and lessons learned from ICAP-supported nursing programs. In addition, ICAP participates in the development, dissemination, and implementation of WHO policy guidelines for transformative scale-up of medical, nursing, and midwifery education.

At the 2012 International AIDS Conference in Washington, D.C, ICAP hosted a satellite session on Nursing and Midwifery: Strengthening a Critical Component of the Health Workforce. During the session, nurse leaders from around the world heard the reflections of the U.S. Deputy Global AIDS Coordinator, the HRSA Associate Administrator for HIV/AIDS, ICAP's

Director, the head of the ICAP Global Nurse Capacity Building Program, and the Principal of the University of Malawi Kamuzu School of Nursing. The session also provided a space for participants to share their own experiences and to discuss the present and future role of nurses and midwives in the global HIV response.

## REGIONALLY CONNECTED, INTERNATIONALLY SUPPORTED

The south-to-south collaborations nurtured by ICAP enable the programs it supports to collaborate with and learn from one another as they respond to specific national priorities. For example, ICAP staff in Rwanda working on the national nurse mentoring curriculum were supported by their colleagues in South Africa, and lessons learned from Swaziland's success creating a Wellness Center (see p. 7) have been applied in both Ethiopia and Lesotho. Best practices are shared in a systematic way among the network of ICAP country coordinators and program stakeholders throughout the region. In addition, ICAP nursing leadership conferences that foster enduring professional linkages are held on an annual basis, and colleagues stay connected throughout the year via an online platform and newsletter updates.



“ We, the nurses and midwives of Africa, are the biggest untapped resource our countries have to fight HIV/AIDS and to ensure that every person’s human right to health is met.

Our ability to provide more and better services—given adequate training and support—can no longer be questioned. Numerous studies have demonstrated that patients initiated and managed on ART by well-trained nurses receive the same quality of care as patients treated by doctors. When nurses have the opportunity to upgrade our professional skills, whole communities benefit.

Investing in nurses is the only realistic strategy for making sure that there are sufficient healthcare workers with essential knowledge and skills in all of our communities. When we invest resources in strengthening the nursing profession, we will be repaid many times over in the number of lives saved.”

— Eleanor Msidi, Regional Nursing Advisor,  
ICAP in Zambia

## REFERENCES

- 1 WHO Global Health Observatory [http://www.who.int/gho/health\\_workforce/en/index.html](http://www.who.int/gho/health_workforce/en/index.html)
- 2 UNAIDS World AIDS Day Report 2011, [http://www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2011/JC2216\\_WorldAIDSday\\_report\\_2011\\_en.pdf](http://www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2011/JC2216_WorldAIDSday_report_2011_en.pdf)
- 3 Monitoring the Building Blocks of Health Systems: A Handbook of Indicators and their Measurement Strategies, WHO 2010, [http://www.who.int/healthinfo/systems/WHO\\_MBHSS\\_2010\\_full\\_web.pdf](http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf)
- 4 LaRock, W. (2009). Evaluation of a nurse-mentor training program in HIV care and treatment in Eastern Cape, South Africa. (Doctoral dissertation). Columbia University.
- 5 <http://www.pepfar.gov/partnerships/initiatives/nepi/programs/malawi/index.htm>

