# South Africa EOP Summary & Results



# South Africa

# Background

In 2014, construction began on Johannesburg's Nelson Mandela Children's Hospital, a legacy project of the former president, who advocated strongly for better, more accessible health care for children in South Africa and throughout the Southern Africa region. In 2015, MCSP started working with the Nelson Mandela Children's Hospital Trust to plan for the development of a pediatric specialty nursing workforce at the hospital, in partnership with Johns Hopkins Medicine International. The hospital occupies a unique position as one of only two dedicated children's hospitals in South Africa and one of only four in sub-Saharan Africa. It has a mission to help the sickest children in the region receive high-quality, state-of-the-art health care while advancing a teaching and learning program designed to build a wider nursing workforce for pediatric specialties.

Since the opening of the hospital in 2017, MCSP has led a series of exchanges and educational programming, enabling nurses from Nelson Mandela Children's Hospital to access world-class, hands-on training from the Johns Hopkins hospitals, enabling them to improve their skills, grow their leadership abilities, deepen their knowledge in processes of care, and build stronger interdisciplinary teams. South African pediatric nurse managers took part in observership visits to Johns Hopkins All Children's Hospital in St. Petersburg, Florida, and the Johns Hopkins Children's Center in Baltimore, Maryland, where they worked directly with their nursing counterparts. Nurses and clinical staff participated in trainings led by Johns Hopkins nurses and specialists at Nelson Mandela Children's Hospital to assist the hospital to launch new services as it scaled up operations. These efforts contributed to a stronger pediatric health care workforce at Nelson Mandela Children's Hospital and better health outcomes for children with critical needs.

# Key Accomplishments

#### Supported the Development of Nursing Teams

When MCSP began supporting Nelson Mandela Children's Hospital, the hospital had not yet finished construction. By partnering at the start of the hospital's planning, MCSP was able to conduct assessment visits and establish support networks through routine video/teleconferencing while the hospital's nursing leadership team was formed and before patients were first admitted in June 2017. Technical assistance was provided to develop job descriptions, define key competencies, and develop standard operating procedures, building on experience and examples from the Johns Hopkins hospitals. The hospital took a step-wise approach to opening service units, starting with outpatient radiology services in June 2017, before expanding to the renal ward, day ward, and neonatal and pediatric intensive care, followed by cardiac and surgical services. MCSP assisted with the opening of each ward by sharing unit-specific plans, policies, and tools, and identifying competency areas requiring support. This work has provided the hospital with a solid foundation in policy and quality management, and a framework for establishing potential new wards in the future.

#### Built Skills through Exchanges and Hands-On Training for Hospital Staff

South Africa, like many countries in the region, does not provide extensive training for nurses in pediatric subspecialties. Many of the nurses hired at Nelson Mandela Children's Hospital came from adult specialties, and none had worked at a standalone pediatric hospital that aspired to the standards for quality and patient satisfaction that Nelson Mandela Children's Hospital does. MCSP and Johns Hopkins Medicine International provided hands-on support through onsite trainings and exchanges to build skills in critical areas. For example, MCSP provided extensive support to the nephrology team, recognizing that dialysis services for children are sufficiently lacking in South Africa and that many of the nurses had never provided care to pediatric clients before. A unit readiness assessment was conducted with the renal nursing team, and a hands-on training was provided by pediatric dialysis nurses from Johns Hopkins All Children's Hospital. This was followed by an exchange visit to Johns Hopkins All Children's Hospital so the South African nursing team could learn more about the setup, systems, and organization of a pediatric dialysis unit. To promote an interdisciplinary team, MCSP included the nephrologist in the exchange. Similarly, in July 2018, MCSP responded to a request for skills building around extracorporeal membrane oxygenation, a service on which staff had not previously been trained but was becoming more critical as the cardiac and surgical units

expanded. MCSP and Johns Hopkins Medicine International organized a hands-on training by extracorporeal membrane oxygenation specialists from the Johns Hopkins Hospital, which was so popular that it drew doctors from surrounding hospitals in addition to Nelson Mandela Children's Hospital's pediatric and neonatal intensive care unit nurses. MCSP also facilitated exchanges for nurse managers in cardiac, surgical, and occupational health units to the Johns Hopkins hospitals to spend in-depth time with their counterparts, observing the setup and systems of their units, with a focus on building the role of nurses within an interdisciplinary care team.

## Developed a Strong Platform for Nursing Leadership

Figure 2. Extracorporeal membrane oxygenation training for pediatric and neonatal intensive care unit nurses



In addition to building the clinical skills of the nursing teams, MCSP and Johns Hopkins Medicine International assisted Nelson Mandela Children's Hospital to develop its leadership and management systems, with a focus on incorporating ongoing learning and sharing lessons from the Johns Hopkins pediatric hospitals. To support Nelson Mandela Children's Hospital's central focuses on quality and safety, MCSP supported the participation of the nursing leadership team in the Johns Hopkins Armstrong Institute for Patient Safety and Quality's quality and safety certificate course. During leadership visits, the CEO and nursing director of Nelson Mandela Children's Hospital met with senior leaders within the Johns Hopkins medical systems to share experiences and practices to help Nelson Mandela Children's Hospital toward its goal to become a teaching and learning institution. MCSP facilitated a series of webinars with Nelson Mandela Children's Hospital nurses to continue discussions around topics such as managing transition and change, the science of patient safety, pediatric early warning signs, RISE (resiliency), and Second Victims initiatives, and more broadly how Johns Hopkins systems incorporate learning and evidence-based practice in their systems of care. This learning has cultivated a culture of leadership, which has left Nelson Mandela Children's Hospital staff empowered to share their skills with others in the region.

#### Positioned Nelson Mandela Children's Hospital to Grow as a Leader in Specialty Pediatric Care

Given MCSP supported Nelson Mandela Children's Hospital during its early days as a hospital, much of the project was focused on meeting the immediate needs of the nursing team as it worked toward opening service units. However, Nelson Mandela Children's Hospital has forward-thinking goals for the type of hospital it wants to be and the space it wants to occupy in the health system in South Africa and the region. MCSP worked with nursing leadership to help them explore and develop their goals for ongoing teaching and learning platforms, research plans, and quality and patient satisfaction systems. MCSP assisted Nelson Mandela Children's Hospital to incorporate online tools for sentinel event monitoring and patient satisfaction surveys, for example. It collaborated with the hospital to host its first pediatric nursing conference in May 2019, bringing together clinical experts, nurse leaders, and educators to share information and build networks around development of nursing pediatric specialties.

# Recommendations for the Future

MCSP was able to support Nelson Mandela Children's Hospital throughout its planning, opening, and scale-up phases, allowing for a seamless transition during its start-up phase and leaving a legacy of high-quality care upon which to build. As of the end of March 2019, Nelson Mandela Children's Hospital had served 425 cardiac patients,



546 radiology patients, 176 neonatal intensive care unit patients, and 171 pediatric intensive care unit patients, and conducted 12 extracorporeal membrane oxygenation procedures. The hospital had received referrals

from public hospitals in four provinces, including Gauteng, and a variety of private hospitals. The hospital has come a long way since it opened but is not yet operating at full capacity and has not opened all of its planned services; oncology, for example, is not yet open as the hospital continues to discuss plans for the purchase of drugs. Due to the evolution of plans during implementation, the transition in management from the Nelson Mandela Children's Hospital Trust to the hospital executive team, and the delays in opening the hospital, MCSP did not achieve two of the goals from its initial design, specifically around developing the continuing education system for nurses at the hospital and supporting the development of a regional referral network for critical pediatric cases from other Southern African Development Community countries.

- **Develop a system for nursing clinical facilitators.** MCSP continued to work with Nelson Mandela Children's Hospital up to the end of the project to develop plans for building personnel capacity and developing a system for the nursing clinical facilitators (who are responsible for continued professional development), who unfortunately were not yet hired by the end of the project. Given the lack of preservice training for pediatric nursing specialties (and the general need for additional qualified nurses), this is a critical focus area for the future.
- Build the hospital's capacity for professional development and establish it as a teaching hospital for nursing specialties. In discussion with Nelson Mandela Children's Hospital, MCSP recommends that this pre-service training include a two-track approach that focuses both on building the system at the hospital for learning and professional development and on developing networks with academic institutions (Witwatersrand University and University of Cape Town, for example) to include Nelson Mandela Children's Hospital as a teaching hospital for nursing specialty courses.
- **Define clinical facilitators' roles and equip them to promote ongoing learning.** For the in-service learning portion, MCSP recommends that Nelson Mandela Children's Hospital adopt and learn from the best practices developed in other specialty hospitals to ensure that clinical facilitators have well-defined roles and are mandated and equipped to assist teams at the hospital to incorporate ongoing learning.
- **Continue to incorporate structured simulation in clinical practice.** One recommendation based on the trainings that have been conducted to date and learning exchanges at the Johns Hopkins hospitals is to continue to incorporate structured simulation in clinical practice, including both competency-based learning for individual staff members and team practice. Nelson Mandela Children's Hospital has a skills lab that, although not designed with nursing teams in mind, provides a platform from which to grow a simulation program.
- Improve use of data for decision-making, learning, and research. Nelson Mandela Children's Hospital also displayed a strong interest in building its use of data for decision-making, learning, and research, and in developing its capacity to take part in research opportunities. Given its unique positon as a specialty pediatric hospital, Nelson Mandela Children's Hospital will have a great opportunity to contribute to building further knowledge of clinical practices for children in resource-poor settings.

Selected Performance Indicators	
Global or Country Performance Monitoring Plan Indicators	Achievement*
Number of Nelson Mandela Children's Hospital nurses participating in nurse mentorship exchange visits	12
Number of remote mentoring and skills-building sessions held (e.g., webinars, tele-learning)	6

\*Targets were not included in this work plan.

For a list of technical products developed by MCSP related to this country, please click here.