

Building a workforce for a child- and family-centred health service

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Over the past two decades the demographic profile of children and the epidemiology of child health have changed, and the Sustainable Development Goals¹ (SDGs) have succeeded the Millennium Development Goals (MDGs).² These changes have created a new focus for child health through a life course approach that addresses three broad concepts of “Survive”, “Thrive” and “Transform”.³ This focus, together with the renewed commitment to universal health coverage and primary health care (PHC), requires a new approach to child health.

The new focus needs to consider children throughout the first two decades of life, explore both neonatal and adolescent mortality, include child and adolescent development and well-being, and consider the quality and effectiveness of care. Whilst this life course approach does not require a new service delivery platform, it does require a workforce with a wider range of skills than those previously required to simply ensure the survival of the child.

Although South Africa did not achieve its MDG target of an under-five mortality rate below 20 deaths per 1,000 live births, the country has made great improvements in child survival and is on track to achieve the SDG target. As mortality rates decline, the country will need to place increasing emphasis on ensuring that every child not only survives but thrives as well.

Whilst support for thriving must maintain existing prevention and promotion activities, it also needs to promote the optimal growth and development of infants, young children and adolescents as well as support the functioning and integration of children and adolescents with disabilities and long-term health conditions into normal household and community life. To achieve these, a significant shift in services is needed to ensure easy access to quality, comprehensive and holistic care as close to home as possible.

Despite the adoption of a primary health-care model and the re-engineering of primary health care in South Africa, many health services remain specialised, hospital-centred, unequal

and inaccessible to children across the country, particularly those living in more rural provinces. To correct this will require reform at all levels of the health service. This includes improved governance and leadership at the provincial level; coordination, support and multi-disciplinary teams across each district; and a committed primary health-care workforce with appropriate clinical skills and an understanding of health systems and clinical governance issues.

A child-friendly health workforce at district level should comprise community health workers; registered nurses; allied health professionals; specialist children’s nurses; and generalist doctors able to deliver comprehensive, holistic and relevant care. Such a workforce needs to be trained in settings that are similar to the ones in which they will work, by clinically competent teachers who use a curriculum that includes a rich understanding of the local context and details of current child health programmes, delivers graduates with identified exit competencies, and expose them to multi-disciplinary care and teamwork within health and greater collaboration with other sectors.

At a policy level, the 2019 appointment of a Ministerial Task Team on Human Resources for Health (HRH) presents an opportunity to develop a 2030 strategy that responds to South Africa’s disease burden in general, and to the needs of children and their families in particular. The HRH strategy should be rooted in South Africa’s National Development Plan and committed to providing quality universal health coverage.

Community health workers

Ward-based primary health-care outreach teams (WBOTs) are considered an essential component of the delivery of PHC services in South Africa. In 2011, the National Health Council mandated the establishment of WBOTs as part of the primary health care re-engineering strategy.⁴ South Africa has a long history of community health worker (CHW)

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Case 33: Operation Sukuma Sakhe

Operation Sukuma Sakhe (OSS), which means “stand up and build” in isiZulu, is an initiative of the premier of KwaZulu-Natal to bring together government, municipalities, NGOs and communities to fight poverty. Building on the military metaphor, OSS acts as a united front that battles poverty from “war rooms” in municipal wards. These are bases for community development workers, community health workers, youth ambassadors and other field workers who can be called on to work towards the ideals of poverty alleviation and meet people’s most basic needs. The approach rests on the three pillars of political management, coordination, and oversight with a target to provide services to the most vulnerable groups at the household and community level.

OSS seeks to ensure accountability for service delivery that starts at the highest level with the premier and moves down the executive chain to the district OSS champion and then the local ward management. At ward level the coordinating body, the ward committee or the “war room”, is tasked to deliver a basket of services in five critical areas: community partnerships, behaviour change, integration of government services, economic activities, and environmental care. They coordinate the delivery of services and communication between communities and the various levels of local government.

The CHWs are employed and managed by the province and form part of a team of community providers. They are allocated a set number of households in their ward and undertake a profile of each household to identify needs.

The primary beneficiaries of OSS are the most vulnerable in poor households including women, children, youth, unemployed adults, unskilled and illiterate adults, the chronically ill, people with disabilities, and the elderly. The CHWs present the findings of their household profiles at the weekly “war room meetings” and cases are referred to the most suitable government department or community partner for action (e.g. education, social development, local policing, etc.) The data collected from these outreach activities at household level are linked to the provincial information system.⁵

Innovative solutions to social challenges are developed through community partnerships. Examples include the creation of senior citizen’s feeding schemes, sewing groups, and farming co-ops. In addition to bringing care and access to social services closer to households, OSS has also assisted with job creation and poverty reduction through the employment of youth ambassadors and CHWs who can become change agents for their households and communities

engagement in the health and social sectors, particularly in the 1970s and ‘80s, when non-governmental organisation (NGO) initiatives towards community-oriented primary health care were initiated. Consequently, many of the CHWs joining the new teams have a history of undertaking community development work.

The composition and scope of the teams are guided by the Policy Framework and Strategy for Ward Based Primary Healthcare Outreach Teams 2018/19 – 2023/24.⁶ The teams comprise six to ten CHWs, one outreach team leader and one data capturer who are responsible for the provision of preventative, promotive, curative, rehabilitative and palliative services to families/households.⁷ Ideally the teams should be led by a registered professional nurse but a shortage of this cadre has hampered the establishment and functioning of WBOTs in several provinces. In response, some provinces

have started employing enrolled nursesⁱ who should have received some additional training in community health nursing.ⁱⁱ

Scope of practice

While maternal, child and women’s health and nutrition are a focus for CHWs, these areas are only one aspect of their scope of practice which also includes HIV and TB, non-communicable diseases (NCDs) and household social support. Furthermore, CHWs’ role in maternal, newborn and child health is restricted to preventive and promotive activities with no curative functions. There is strong evidence that CHWs can effectively assess, classify and initiate treatment for suspected pneumonia and diarrhoea at household level⁸ and, given that these are two of the leading causes of under-five mortality in South Africa,⁹ consideration should be given

i The 2019 National Policy on Nurse Education and Training excludes this two-year certificate trained category of nurses and replaces this training with a three-year diploma. The new category of nurse will be referred to as a “registered general nurse”.

ii In response to the increasing demand for PHC-oriented training, a new undergraduate curriculum has been piloted and the first graduates of the three-year programme will qualify as registered nurses, replacing the category of enrolled nurses. While the training orientation will be different, it’s not clear to what extent these new competencies relate to children and child health.

to expanding their scope of practice so that they are able to initiate treatment for suspected pneumonia – especially in districts where access to health services is poor.¹⁰ This would require a change to the Medicines and Related Substances Act. A formal regulatory framework to govern CHWs' scope of practice and provide protection for this cadre of health worker is also required.

Numbers and ratios

At the end of 2017/18, there were a total of 3,323 WBOTs providing basic health services to children and adults in approximately 12.8 million households,¹¹ a ratio of roughly one team per 3,856 households. Given the quadruple burden of disease in South Africa, this ratio of CHWs to the population is unlikely to achieve the desired health improvements and compares unfavourably with Brazil (1 CHW to 800 people) and Rwanda (1 CHW to 255 people). A higher CHW-to-population ratio would increase the frequency of contact with community members and thus increase the potential impact on behaviour change and coverage of health interventions.

Implementation

Provinces have scaled up the ward-based teams differently, with some (North West and KwaZulu-Natal) allowing districts to directly employ CHWs and others (Western Cape) contracting NGOs to employ CHWs. Some provinces (Gauteng) have built structures (health posts) which can be used by teams to store paperwork and equipment and as a base from which to conduct home visits. In other provinces the teams are attached directly to health facilities overseeing their catchment areas.

However, many teams are poorly integrated into these facilities. Research on the early implementation of the programme in the North West has indicated that clinic managers were poorly briefed about the teams and therefore did not fully own the strategy. This has the potential to limit the effectiveness of referrals between CHWs and clinics.¹² Oversight and supervision of the teams are the primary responsibility of the team leader. However, the recent evaluation of the National Health Insurance (NHI) pilot sites found that many teams did not have a team leader, which led to poor supervision and unclear lines of reporting.¹³

Provinces are experiencing varying levels of success with the implementation of the ward-based teams. One implementation strategy which holds lessons for other provinces is the Operation Sukuma Sakhe programme in KwaZulu-Natal (see Case 33).

The ward-based teams have the potential to greatly

improve the coverage of PHC services and to strengthen the links between families and health facilities, particularly in rural and hard-to-reach areas; but only if they are implemented with optimal CHW-to-population ratios, and with a broader scope of practice and within a supportive infrastructure. Recent research in Gauteng found that 85% of CHW home visits were for TB, HIV or chronic NCDs, whilst less than 10% of visits were for maternal and child health or nutrition.¹⁴ With the quadruple disease burden and the urgency of ensuring a regular supply of chronic medication, far more CHWs are needed to ensure that the needs of mothers and children are not neglected.

Potential benefits

A recent investment case¹⁵ found that increasing the number of community health workers to 96,000 (from the current 60,000) and paying them a stipend of R3,500/month, including costs for training, equipment and supervision, would over 10 years avert deaths and save costs. The modelling assumed, conservatively, that a well-functioning CHW platform would increase the coverage of a selection of interventions by 10%. This would translate into 34,800 additional lives saved over 10 years and over one million disability-adjusted life years would be averted. Improvements to feeding practices would have the biggest impact.

The case detection and referral that CHWs could provide for pneumonia and diarrhoea would account for 28% of the deaths prevented. Preventive care (support for improved hygiene and sanitation practices) accounts for 14% of lives saved. Employing 96,000 mainly poor women would boost expenditure in the economy with broader positive impacts within households because the stipends paid will reduce poverty and are likely to be spent on the health, education and nutrition of children. Such employment of women would add an additional R13 billion to South Africa's gross domestic product over a period of three years.

The district level nursing workforce

While community-based health care in South Africa has been significantly strengthened by CHWs and lay-councillors, nurses remain at the core of health-care service delivery to children. Indeed, nurses are frequently the main – and sometimes the only – cadre of health professional at the frontline of child health-care provision in clinics and at district hospitals, where medical cover from doctors is often limited to daily ward rounds.

The National Policy on Nursing Education and Training¹⁶ aims to ensure that the nursing workforce is better aligned

to the needs of the health-care system and able to support the re-engineering of PHC at district level. The Nursing Act¹⁷ established three categories of nursing – professional nurses, general nurses (staff nurses), and auxiliary nurses – whose roles are regulated by the South African Nursing Council (SANC).

All three categories of nurses have had to date a broad-based training with no learning outcomes or competencies specifically focused on child health. But new scopes of practice for registered general and professional nurses have been developed by the SANC and will start being implemented in 2020. In 2013, the SANC recognised two further categories of specialist nurses:¹⁸

- **Nurse specialist:** These nurses have a postgraduate diploma, and in-depth knowledge and expertise in a specific practice area such as paediatric nursing.
- **Advanced nurse specialist:** These nurses have the equivalent of a master's degree that combines in-depth clinical specialisation with strategic leadership, health service management, research and policy-making.

These two levels of training and practice have the same foundation but differ in extent and scope of their roles and responsibilities. For example, a specialist paediatric nurse may be responsible for a clinic or ward, while advanced specialists work across levels of care with defined patient groups. The SANC describes the paediatric nurse specialist as “a change agent with advanced knowledge and skills to put into practice, as well as a researcher for evidence-based practice, and a nurse consultant for students, staff and the multidisciplinary team”.¹⁹ This definition highlights how the work of paediatric specialist nurses should not be directed primarily at illness and injury, but rather at supporting health and health care. For example, by managing stress; ensuring comfort; and maintaining adequate nutrition and hydration, skin integrity, hygiene and mobility.²⁰ Paediatric specialist nurses also work intentionally with children's parents, families and other nurses, equipping them with the knowledge and skills to provide care and support to children timeously.²¹

They also address – and coordinate – the complex care needs of children, drawing on their clinical expertise and complex decision-making skills with the aim of keeping time in hospital to a minimum in line with a PHC approach. The advanced role is well established in both North and South America and in European health-care settings, particularly in practice roles that span systems and provide care coordination for specific patient populations with often long-term care needs. The new SANC framework provides an opportunity to formalise these roles in South Africa.

However, despite the potential contribution of children's nurses, it is unclear to what extent the development of a specialised registered children's nursing workforce is being pursued as a deliberate policy objective in South Africa. Although the potential contribution of children's nurses is signalled in the SANC's competency frameworks and position statements, in reality their roles in clinical service provision remain unclear and most children's nurses are deployed in hospitals, particularly at higher tiers of service delivery and acuity.

The children's nursing workforce

The number of children's nurses currently in practice is extremely small in relation to South Africa's extensive child population. A recent survey suggests that there are approximately 3,115 specialist children's nurses registered nationwide – not all of whom are in practice.²² This represents a ratio of one child nurse to 5,136 children aged 0 – 15 years. Training output of children's nurses has grown steadily since 2006,²³ with seven training institutions offering 11 different programmes and producing approximately 180 children's nurses per year. The phasing out of “legacy qualifications” is likely to reduce the number of training providers as these programmes are realigned to the national qualification framework and offered as postgraduate diplomas by higher education institutions.

Ideally, there should be a sufficient number of children's nurses to respond to the demand for care in children's wards at district hospitals and other health facilities, but there are currently no accurate data available on which to base decision-making, and this undermines the potential contribution of these nurses within the nation's health system.

Specialist children's nurses in the PHC clinic

Specialist paediatric nurses are an essential resource for teams of nurses and CHWs in PHC clinics who have only broad training and limited input regarding child health. In this context the specialist paediatric nurse can coordinate clinical care and direct clinical nursing care (promotion, prevention, acute and chronic care) for individual children seen at clinics. Two additional roles in this setting include clinical governance and facilitating flow of children through the clinic.

Supporting referrals to higher levels of care and ensuring children's safe return home require a working knowledge of how the local health services work – both formal and community-based services. At clinic level, it requires activating referral networks to access resources and ensuring that children get the services they need as quickly as possible

and close to home. While clinical governance includes using safety and quality systems to manage and improve the quality of care provided to children and their families.

Specialist children's nurses in the district hospital

In district hospital settings, the non-rotating nursing staff form the backbone of clinical care and clinical governance in both the nursery and children's ward. In these settings, shifts of nurses are present 24 hours a day while medical officers are only present in the children's ward for 24% of the week. Clinical specialist nurses, therefore, have to provide clear clinical leadership roles in the coordination of care, ensuring that sick children receive care and prescribed treatment timeously, while coordinating interventions with care routines and essential activities like sleep and feeding in both the nursery and children's wards. As the severity of illness and need for care increase, so does the need for astute clinical competence to recognise deterioration in a child's condition and to respond and act quickly and appropriately.²⁴

In addition to clinical care, specialist children's nurses are also required to provide leadership based on a clear understanding of how local systems work, including the upstream and downstream factors that drive admissions and facilitate early discharge. While tools and measures may shift, clinical governance remains important to ensure quality and safety. Specialist children's nurses also play an essential role in ensuring a functional system paying attention to people, equipment, infection prevention and control, and work flow. And within district hospital settings, the specialist children's nurse is best placed to coordinate the care of sick children.

The district medical workforce

At the district level, the medical workforce is based primarily in the district hospital and community health centres where they serve a similar function.

Although some larger district hospitals have a dedicated paediatric staff, most have a single group of doctors who share responsibility for all clinical services including the newborn nursery, children's ward, outpatient department and primary health-care clinics. Staffing levels vary across district hospitals and in many instances one doctor is responsible for more than one ward or clinical component and most doctors need to cover both in- and outpatient services during normal hours as well as all services after hours. Responsibility for the medical care of children in hospital lies with the doctor allocated to the newborn nursery and/or children's ward during normal working hours and with the doctor on call after hours.

As the normal 40-hour work week only comprises 24% of the full week (which includes weekends and nights) this means that during the remaining 76% of the week children receive care from a doctor whose primary allocation is to an adult service within the hospital. The significance of this is that all doctors in district hospitals, not just those allocated to the newborn nursery or children's ward, need to be competent in the care of newborn babies and children. Such competence is derived from knowledge, exposure and appropriate mentoring which can best be achieved through spending time in the nursery and children's ward. This creates a tension between the need for doctors to rotate to gain experience and receive mentoring, and the benefits of non-rotation for clinical care,²⁵ health systems, governance and the development of institutional memory.

In light of the above it is reasonable to expect that doctors rotate through the newborn nursery and children's ward for a fixed period of about six months during which they are the dedicated doctor allocated to either or both of these two units. This will expose most doctors in the hospital to children and allow them the opportunity to gain experience with the support of an outreach paediatrician.

Most medical graduates have minimal exposure to district level services or the programmes and practices commonly encountered at this level.²⁶ It is therefore critical that all doctors receive ongoing in-service training on these programmes and orientation to clinical governance systems. These include health information systems; mortality audit tools; and priority programmes such as the World Health Organization's 10 steps for the management of acute severe malnutrition in infants and children; paediatric emergency triage, assessment and treatment (ETAT); helping babies breathe (HBB); and the management of small and sick newborns (MSSN). The undergraduate curriculum and training platform also need to be revised to include exposure to priority programmes, clinical governance principles and the health system – time in primary care facilities in particular.

Allied services workforce

Universal health coverage for children with temporary or permanent impairments and disabilities needs to extend beyond preventive, promotive and curative care and include access to rehabilitative care. To do this the child health team needs to extend beyond CHWs, nurses and medical officers to include a broader multi-disciplinary team.

Yet, it is uncommon for a standard district hospital to have a full cohort of allied health professionals including physiotherapists, occupational therapists, speech language

pathologists, audiologists, mid-level rehabilitation workers, dieticians, dentists and dental therapists, social workers and optometrists – and a psychologist is a near impossibility.²⁷ Yet this team is essential for the provision of unique preventative, promotive, psychosocial, adaptive and rehabilitative services.

Decentralisation of all health services is critical to ensure access to – and uptake of – services by children and their families; yet few districts have permanent allied health professionals or mid-level rehabilitation workers allocated to PHC clinics. Therefore, multi-disciplinary teams based at district hospitals also provide outreach services to PHC clinics, schools, and, where resources allow, to the home and community. Given that the team members are “scarce resources” and that hospitals rarely have the full team, it is understandable that chief executive officers at district hospitals may be reluctant to extend their services to include outreach services. For children’s services to be comprehensive, the following have to be reviewed and an appropriate plan of action developed to establish:

- Consistent multi-disciplinary teams that can operate at a district, district hospital, PHC and community level.
- Early identification systems for children at risk or with NCDs and/or disability.
- Effective and efficient use of multi-disciplinary resources, including peer supporters and mid-level disability and rehabilitation workers.
- Appropriate training of multi-disciplinary health professionals for district hospital and PHC level services.

Consistent multi-disciplinary teams

This requires the establishment of multi-disciplinary team organograms. Staffing norms and establishments for multi-disciplinary teams have never been adopted in South Africa and there are internationally cited challenges in developing methodologies to address the multi-disciplinary workforce needs.²⁸ Monitoring the levels and distribution of these cadre of health workers is impossible as there are no official organograms, district health information system data on staffing levels are not routinely collected across provinces, and data that are collected are not readily available.

Community service is one way to boost the multi-disciplinary team, particularly in rural areas. Whilst rural hospitals have benefitted from this system, there is still an uneven distribution of community service posts between urban and rural hospitals. Progressive austerity measures in the past decade have severely curtailed the availability of experienced – and often any – members of the multi-disciplinary team at district and PHC levels. The freezing

of posts has impacted on the recruitment and retention of community service officers, as well as the retention of experienced staff members which, together with the annual turnover of community service therapists, impacts significantly on the availability, accessibility, acceptability, quality and sustainability of early childhood development and intervention services. These retrogressive measures undermine the constitutional right to basic health-care services for children with disabilities and greater advocacy is needed to uphold their right to such services.

Early identification systems

Systems should be developed at the district hospital level to ensure that high-risk babies and children with malnutrition, NCDs or long hospital stays are referred to the multi-disciplinary team in addition to children with disabilities as these are the children who are “at risk of developing disabilities” and they need to be included in a disability prevention health promotion programme. Strong and sustained ties with the local Departments of Social Development and Basic Education, municipal and traditional authorities, amongst others, are also required.

CHWs provide a critical interface between health services and the community and form an integral part of early identification and referral services. However, there is little training or sensitisation to disability in the CHW curriculum and the referral letters that they issue do not include the identification of disability and referral to disability services. This could easily be solved within the CHW training programme. Presently the onus lies on allied health professionals to formalise and capacitate CHWs in disability awareness and referral systems.

Effective and efficient use of multi-disciplinary resources

A trans-disciplinary approach is preferred by families of children with additional needs.²⁹ This requires health professionals with skills in leadership (e.g. for hospital management), sufficient practical undergraduate exposure to multi-disciplinary practice and postgraduate experience.³⁰ In low-resource settings, cases are more complex; access to additional support is limited; and health professionals are often younger and with different socio-economic and cultural backgrounds to their patients. If the child is to thrive, collaborative goal setting and support to the primary caregiver are critical. Addressing their immediate environment through equipping them with adaptive parenting skills, empowering them to “take control” of the management of their child, and strengthening their support network further support the

Case 34: Malamulele Onward Carer-2-Carer Training Programme

The Malamulele Onward Carer-2-Carer Training Programme is a low-cost community-based initiative designed to support parents and families of children with cerebral palsy (CP) who are living in the deep rural areas of South Africa and Lesotho. With limited access to therapeutic services in these settings, we recognise that parents themselves are potential game changers in their own communities. Training parents as peer supporters therefore offers a meaningful and sustainable alternative that can help address parents' feelings of isolation and hopelessness about the future.

The programme aims to provide parents with accurate information about CP, and to develop the basic skills needed to care for their child as part of their everyday routine. This information is provided by other parents who draw on their own experiences of caring for a child with cerebral palsy.

Although there are a number of CP training packages available, they assume a high level of literacy and are typically designed for therapists working with parents. So, over a two-year period, members of Malamulele Onward worked with 20 parents and caregivers to develop a set of training materials. During this process, it was found that concepts and principles had to be simplified continually

and the parents themselves helped to identify the right words, examples and illustrations for the training materials.

The result is the Carer-2-Carer Training Programme. Over a three-week period, parents are trained as parent facilitators who are equipped to independently run workshops for other parents in their communities.

To date, 47 parent facilitators have reached over 1,000 families across 26 rural sites. Qualitative analysis of focus group discussions at five sites reveals that the programme is achieving far more than anticipated. It has gone beyond simply helping parents to understand their child's condition to helping them to accept their child's condition and to stop blaming themselves. Parents now feel empowered. Not only are they proud of their children, but they are finding their voices and can stand up and explain CP to family members and neighbours. They feel equipped with basic skills (including good positioning, healthy diet and how to handle their children, etc.) and now have a sense of control. This is liberating for parents in rural settings where ignorance and negative attitudes towards disability abound. Parents see their children with new eyes – as children with the potential to do things, no matter how severe their disability.

child. Without these, the child is not only unlikely to thrive, but uptake and compliance with services and interventions (including assistive devices) are unlikely to happen. Early childhood intervention, development and disability services must therefore be integrated into existing health services, programmes and systems.

Allied health professionals have also developed mid-level workers to increase access to rehabilitation and psychology services. These range from therapy technicians and counsellors to organisations working for people with disabilities and include:

- Profession specific mid-level rehabilitation workers: physiotherapy and occupational therapy technicians, orientation and mobility officers, and counsellors to augment psychology services;
- Peer supporters for specific conditions/disabilities, e.g. spinal cord injuries;
- Parent facilitators that work with families with children with disabilities;
- Advocacy NGOs; and

- Community developers working for organisations for people with disabilities.

All these workers strengthen the community support network for children with disabilities and their families.

Mid-level rehabilitation workers – especially generic, community-based rehabilitation workers – have the potential to greatly increase access to rehabilitation services, enhance upwards referral, and strengthen support to families in addressing the social determinants of health and disability. Unfortunately, there are very few mid-level rehabilitation workers in the country (just 46 physiotherapy technicians) and they are an ageing workforce. Peer supporters, parent facilitators and community developers in the NGO sector provide critical psychosocial support to others in similar situations through “lived experience”, as illustrated by the Malamulele Onward Carer-2-Carer Training Programme (Case 34). This kind of support, which cannot be offered by professional and mid-level worker categories, shows extremely promising functional and health outcomes.³¹

Appropriate training of multi-disciplinary health professionals

Due to limited funds and leadership, multi-disciplinary training across all disciplines at undergraduate level is largely limited to theoretical exercises or a few isolated clinical exercises.³² Meaningful exposure to disability is lacking in all undergraduate curricula, and training platforms for undergraduate therapists do not equip them to manage complex disabilities in a low-resource setting or to work with caregivers and mid-level workers effectively. With training platforms and curricula largely centred around the tertiary model of care, emphasis is placed on the acute management of conditions within an institutional setting, and with the onus on the client accessing further follow-up. The training silos and the lack of emphasis on health systems strengthening, especially with regards to the holistic management of long-term disabilities and retention in care, mean that existing services do not always operate effectively. This situation is made worse by a high turn-over of therapists which effects the quality of in-service training.

Training of generic mid-level disability and rehabilitation workers is limited to one initiative at UCT, and training of peer supporters to NGOs. Neither of these categories are currently registered with any regulating body and are employed solely by NGOs. The training of profession-specific technicians has completely stalled, although they are currently able to register with the HPCSA. There has been slow to no movement from the National Department of Health to address these issues.

Oversight, coordination and support

Although an individual child will receive health care at a single point, this care is delivered within a system that spans a range of service sites from the home, community-based services and clinics to the hospital and back home. Children and families need access to a continuum of services including prevention and promotion activities; the management of acute and long-term health conditions; and rehabilitation and palliative care. Furthermore, children with disabilities or long term health conditions need care that is integrated into their homes and communities.

Oversight and coordination structures are therefore required to limit unnecessary duplication, promote a uniform standard of care and ensure the optimal use of and equitable access to available services within a district. This need was recognised in the first triennial reports of the two ministerial mortality committees (the National Perinatal Morbidity and Mortality Committee³³ and Committee on Morbidity and Mortality Committee in Children Under 5 Years³⁴) which both recommended the creation of regional specialists to establish,

coordinate, support and monitor neonatal and child health services in each province. These recommendations formed the basis for the development of the District Clinical Specialist Teams (DCST) and the recommendation by a ministerial task team³⁵ that these teams should be accountable to a provincial specialist.

The following structures are suggested to ensure effective oversight, coordination, integration, support and monitoring of child health services within and between districts (Figure 59):

1. A **provincial specialist** responsible for the leadership and management of child health services throughout each province. This role includes:
 - Oversight of child health services throughout the province to ensure:
 - An appropriate continuum of care throughout the health service from the home to the central hospital;
 - Equity in the distribution of services and resources;
 - Integration of primary health care and hospital services;
 - Effective and appropriate access for each child to the required level of care;
 - Uniform systems, norms and standards at all levels and facilities in the province.
 - Mentorship and support of DCST members and the heads of hospital-based paediatric services.
 - Surveillance, monitoring and evaluation of paediatric and child health programmes and services in all facilities and districts in the province.

At the moment only two provinces, Free State and KwaZulu-Natal, have provincial paediatricians whilst the Western Cape has a lead paediatrician.

2. A **regional hospital paediatric outreach programme** to support services throughout the catchment area of the hospital and not merely to cater for those children able to access a regional hospital.³⁶ The purpose of this programme is to strengthen the quality of clinical care, support staff development, foster linkages between different components of the service, and promote access to the appropriate modality and level of care for each individual child. The purpose and components of the KwaZulu-Natal paediatric outreach programme are described in Case 35.
3. **District clinical specialist teams (DCSTs)** were established in 2012 to strengthen the district health system, in order to improve the quality of health care for mothers, newborns and children; reduce morbidity and mortality; and improve

health outcomes. Each team consists of three doctor–nurse dyads (an obstetrician and advanced midwife, a paediatrician and advanced paediatric nurse, and a family physician and primary health-care nurse) together with an anaesthetist. DCST members are tasked with the facilitation, integration and coordination of staff, services, programmes and packages of care as well as the surveillance and monitoring and evaluation of services across their health district – while implementation remains the responsibility of management, staff or structures within each health facility. In other words, the DCSTs provide supportive supervision and

clinical governance rather than the direct delivery of clinical care. There have been major challenges with recruitment to fill these teams. There are no functioning paediatric dyads in the Western Cape or Limpopo; most districts in Gauteng and the North West have a complete paediatric dyad; and the paediatric nurse is the mainstay of the DCST paediatric dyads in the remaining provinces. Limpopo province has disbanded all DCSTs due to an inability to fill specialist posts in regional hospitals and has transferred these specialists to regional hospitals with the expectation that they will also fulfil the responsibilities of the DCST paediatrician.

Case 35: KwaZulu-Natal paediatric outreach programme

A structured paediatric outreach programme was established in the western part of KwaZulu-Natal (KZN) in 2001 and was expanded to all districts in the province in 2014.

The aim of the programme is to link every district hospital to a general paediatrician to improve the quality of care that children receive, and to ensure that they have equitable access to the appropriate level of care that they may need. To achieve these goals, the outreach programme is a multifaceted model encompassing staff development, supervision and support; clinical care; monitoring and evaluation; and health systems strengthening. The clinical focus compliments the governance focus of the DCSTs and, in reviewing patient care, any weaknesses or failures in the service delivery platform can be identified and referred to the hospital management team or DCSTs for correction.

The objectives of the outreach programme are:

1. To support clinical care and provide a specialist service for the follow up of “old”, or the assessment of new, patients in the children’s ward, nursery or outpatient clinic.
2. To strengthen health systems in the children’s ward and neonatal nursery by ensuring that the infrastructure of the ward or nursery supports an appropriate standard of care; that appropriate child-friendly equipment is available; that consumables are appropriate for children; and that there is an equitable allocation of staff to services for newborns and other children.
3. To encourage quality improvement/assurance programmes, including mortality audits (PPIPⁱ and

Child PIPⁱⁱ); the use of standard treatment guidelines and clinical records; the implementation of clinical and document audits; and the strengthening of health information systems.

4. To support the maintenance of clinical skills and the ongoing development of staff working with neonates and children.
5. To facilitate implementation of priority programmes to reduce neonatal and child morbidity and mortality.

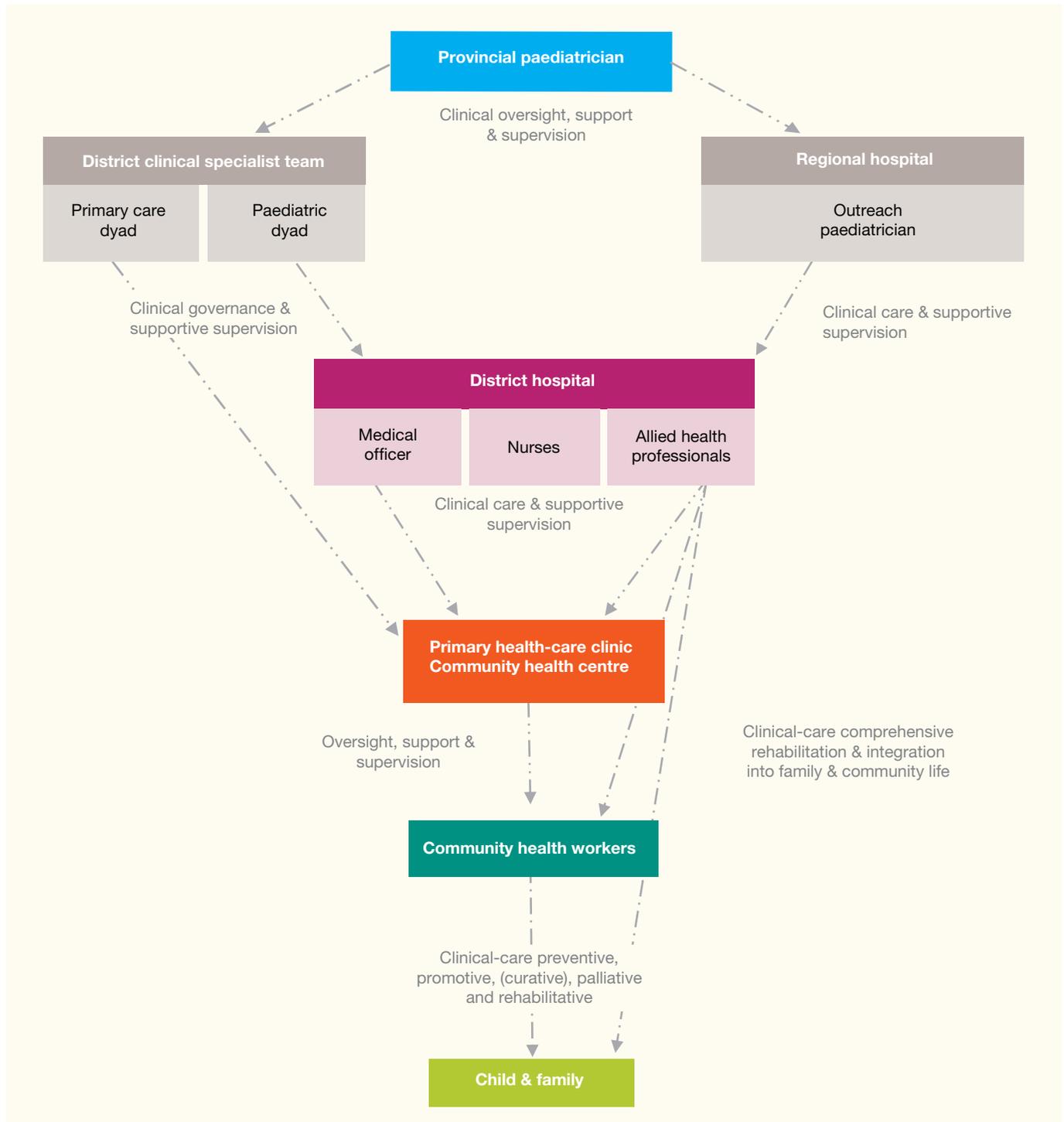
The programme consists of four core activities:

1. On-site support with scheduled monthly visits by each paediatrician to their district hospital. The visit provides an opportunity to monitor key interventions or activities and a standard report is submitted to the facility, district and provincial teams after each visit.
2. Off-site support from paediatricians to their district hospitals as:
 - a. Scheduled weekly telephonic ward rounds of all children in the hospital to ensure that the correct diagnosis has been made and the right management is in place.
 - b. Unscheduled telephonic consultation for advice on problem patients, even when a referral or transfer is not required.
3. In-reach for staff in peripheral hospitals to spend a week or two in a regional hospital paediatric department for experiential learning.
4. Ad hoc events for staff development such as Emergency Triage, Assessment and Treatment or Management of Small and Sick Newborn courses.

i Perinatal Problem Identification Programme – a computer-based programme used for auditing stillbirths and neonatal deaths

ii Child Healthcare Problem Identification Programme – a computer-based programme used for auditing child deaths

Figure 59: Child- and family-friendly health workforce: Clinical care, support and supervision



Oversight is also needed at the facility level. At the PHC clinic on-site responsibility lies with the operational manager (OM). At the district hospital, oversight must be shared between the OM – preferably a specialist children’s nurse of the children’s ward – and the medical officer allocated to child health services. As the OM is a permanent, non-rotating presence in the children’s ward, s/he is best placed

to drive clinical governance activities in the ward. The rotating medical officer has a responsibility for clinical care in the hospital, the integration of hospital and community-based services, as well as links with specialised regional level services, a role that should be shared with the DCST members and outreach paediatrician.

Box 20: Core competency framework for a child- and family-centred health workforce

Global and national strategies, including the national HRH strategy and the Strategic Plan for Maternal, Newborn, Child and Women's Health in South Africa, highlight the need for an appropriately trained, resourced and skilled inter-professional and multi-tiered workforce to deliver child-, adolescent-, and family-centred health services. While specific knowledge and contributions will vary between professions and cadres, it is possible to define a common set of competencies that need to be shared by all workers in order to achieve integrated child, adolescent and family-centred service delivery. Various international³⁷

and local³⁸ core competency frameworks for child and adolescent care have been considered in developing recommended core competencies for a child-, adolescent- and family-centred health workforce in South Africa.

In Table 33, these frameworks have been adapted to the local context – lower-resourced, high need, primary care model of service delivery, integrating the care and support provided to children with additional and complex needs into homes and communities – and tailored to focus on South Africa's leading causes of death in infants and children.

Table 33: Core competencies for a child- and family-centred workforce

Domain	A child- and family-friendly workforce has the essential knowledge and skills to ...
Growth and development	<ul style="list-style-type: none"> • Understand the life course approach with particular emphasis on the first 1,000 days and the adolescent period. • Support children, adolescents and families to optimise their health, development and quality of life. • Understand, assess and monitor normal child and adolescent growth and development. • Recognise abnormal growth and development and take appropriate steps to manage or refer appropriately.
Communication and partnership	<ul style="list-style-type: none"> • Interact with children, adolescents and their families in ways which are: <ul style="list-style-type: none"> • engaging and meaningful; • tailored to the child's age and stage of life; • responsive to individual needs and preferences; and • culturally sensitive. • Offer appropriate information, support and counselling to promote health and facilitate informed participation in their health care.
Child rights	<ul style="list-style-type: none"> • Act as advocates for child, adolescent and family health and well-being. • Safeguard and promote the welfare of the child and adolescent. • Identify and respond to the needs and vulnerabilities of children and adolescents. • Respect, protect and fulfil the rights of children and adolescents. • Consistently apply laws and policies with respect to care, protection, informed consent, confidentiality and privacy. • Respect the evolving capacity of children and adolescents for autonomous decision-making. • Recognise and report violence, exploitation, abuse and neglect.
Integrated working	<ul style="list-style-type: none"> • Appreciate the social determinants of health and the contribution of different sectors to child and adolescent health and well-being. • Understand the need and value of intersectoral collaboration. • Foster integrated, coordinated and continuous care between disciplines and levels within the health sector. • Use health information systems to achieve an efficient and effective health system for children and adolescents.
Clinical care of children	<ul style="list-style-type: none"> • Understand the continuum of care as well as the structure, functioning and relationships within the health system. • Appreciate the value of multi-disciplinary care and teamwork. • Identify children in need and provide or help them to access appropriate care. • Understand and recognise health challenges of the different life stages and implement evidence-based care and management.

Conclusion

The effective delivery of health care requires a sufficient number of appropriately skilled health professionals. A child- and family-centred health workforce must cater for the continuum of care – promotion, prevention, cure, palliation and rehabilitation – across all levels of the health service from the home and clinic to the hospital. In order to cater for the changing burden of childhood diseases and accommodate a

broader range of children, it is critical that such a workforce includes a wide spectrum of professions – medical, nursing, allied services and community health workers – who have the necessary competencies to work with children (see Box 1); are able to work as a multi-disciplinary team; in a coordinated, supported and supervised system; to deliver appropriate, quality care to both children and their families.

To achieve the vision of a child- and family-centred workforce, all cadres of health professionals will require basic and ongoing training in their specific clinical discipline, as well as in clinical governance and leadership which is appropriate to the local context. The health service requires champions for children who are able to promote the needs of children;

unite and lead the child health workforce; and cooperate with other professionals within the health sector such as environmental health practitioners, who can contribute to a safer and cleaner environment for children; and engage with non-health sectors to address the social determinants of health.

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