South Africa has 19.6 million children (ages 0 – 18) who make up nearly 35% of the population. We have a rights-based obligation to provide children with the “highest attainable standard of health” and in all their health matters, to consider their best interest. Children have a Constitutional “right to basic health care services”, as outlined in Section 28 (c) of the Bill of Rights, and this right has priority over that afforded to adults, as it is not subject to progressive realisation (see Chapter 1).

The fulfilment of children’s and adolescent’s health rights is dependent on a health system that recognises and is purposively structured to foreground and address their needs. For example, in the recent formulation of the first National Palliative Care Policy, child palliative care professionals were only included late in the process, and only after significant lobbying on their part. Whereas in a child-centred system, every health policy, whether for clinical or support services, will consider the needs of – and impact on – children.

Achieving the “highest attainable standards of health” is also dependent on actions in other social, economic and political spheres of society, commonly referred to as the social determinants of health. Multiple social, political, economic and environmental systems must therefore work together with the formal health care system to foreground child health.

Recent country experiences show that as economic and social conditions in countries improve for everyone, children’s health with respect to preventable conditions improves considerably. A global analysis of the success factors underpinning improvements in maternal and child health across 144 low- and middle-income countries indicated that health sector investments accounted for only half of the reduction in under-five mortalities between 1990 and 2010. The remaining gains were driven by health enhancing investments in other sectors such as improved education, access to clean water and reductions in poverty and income inequality. It is therefore the obligation of the ‘whole-of-society’ to meet children’s health needs, and not that of the health sector alone.

Policies in other sectors can also undermine child health in numerous ways. For example, trade and industry policies that allow the ‘Big Food’ industry free license to market and promote unhealthy food and drinks to children are fuelling the rise in childhood obesity. It should be a requirement that every policymaking team, regardless of sector, should do a child health impact assessment and fashion their policy goals to positively favour children.

Continuous and consistent gains in child health also require sustained political will, that endures across changes in political and health ministry leadership. Thailand, an upper-middle income country similar to South Africa, is a good example of such sustained commitment towards improved health care over decades. Their journey towards universal health coverage (UHC) was characterised by successive governments and ministers of health keeping the vision and working towards it in an incremental, sustained manner. Although the official UHC policy was implemented in 2002, the groundwork towards UHC began long before this. Despite political and economic challenges faced in the country, a “continuing decline in infant deaths has been recorded from more than 100 per 1,000 live births before 1970 to 9.5 per 1,000 live births in 2017”. A similar dramatic drop in maternal mortality occurred over the same period.

We have also made progress in child health in South Africa. For this we recognise the thousands of frontline health workers and managers who contributed to achievements such as the reduction in child mortality and mother-to-child transmission of HIV. As in Thailand, where sustained progress has been made, we too need to press forward these advances by maintaining what works well and responding to persistent and new challenges.

This means that child health policies and practices must incrementally become stronger and not regress. For...
example, the 1997 White Paper for the Transformation of the Healthcare System that laid the foundation for early policy reform, had no fewer than 119 references to children, with a number of substantive child health policy proposals.\(^7\) The current National Health Insurance (NHI) Bill\(^8\) has only 16 references to children, mainly definitions and prescripts that relate to registration, with no substantive proposals for child health, other than in principle guaranteeing all children’s (including foreign children’s) entitlement to basic health care services.

Some persistent challenges that require an urgent response include:

- the largely preventable nature of child and adolescent illnesses, injuries and deaths;
- the continued focus within health services on children under five and relative neglect of the health needs of older children;
- children’s significantly inequitable access to health care and other services, which causes persistent inequities in their health outcomes and their experiences in the health system;
- a health system which addresses child and adolescent health in a fragmented way, through individual condition-linked and programmatic interventions;
- care being provided across the system in an idiosyncratic way, and individual health facilities, different levels of care and programmes competing for resources and not aligned towards a set of common goals for child health; and
- the absence of a ‘whole-of-society’ approach to child health and well-being which results in policies and practices in other sectors which potentially undermine health gains made for children. For example, if in the education sector families who live in poverty are required to make significant contributions to uniforms, stationary and transportation costs, it cancels out the benefits of the Child Support Grant which intended to provide much needed nutrition and other basic needs, which in turn impacts on child health.

Addressing these challenges in an enduring, coordinated manner requires a ‘whole-of-society’ and a ‘whole-of-health system’ approach, whereby practitioners, managers, policymakers and politicians are aligned towards a common vision for child-centred health care and “work together to create an integrated system and consolidate and improve existing services for children”\(^9\).

Notwithstanding the critical role of other sectors, this chapter focuses attention on the formal health care system as the primary custodian of child health. We posit that it requires the whole health system, and not just child-specific programmes and services to address child health. This is crucial as the manner in which the health system is structured, can either promote or thwart the delivery of child and adolescent health services and the attainment of children’s health rights.

In contemplating these challenges and the required response, this chapter considers the following questions:

- **Why is there a need for a child-centred health system?**
- **What is a child-centred health system?**
- **Why is it important to develop a health systems approach to child health?**
- **What does child-centredness look like in practice?**
- **What needs to be put in place to ensure a coordinated approach to child health?**
- **What might a child-centred district health system look like?**

### Why is there a need for a child-centred health system?

Children are the demographic foundation of our society and our first obligation is to meet their needs. The life course approach posits that good health in childhood lays the foundation for good health in adolescence and adulthood. Healthier adults are more productive, engaged citizens and are better able to nurture and care for children.\(^10\) Two critical time periods where special attention is warranted are the first 1,000 days of life, where children’s developing bodies and brains are most sensitive and adolescence, where a second, crucially important window of opportunity exists to influence the development of children’s brains and their futures. Investments in these two periods of childhood have the greatest influence on the development of lifelong health and disease.

However, prioritising children is not just because they have future, ‘longer-term’ value. They live in the present and have rights, entitlements and significant and pressing health needs. Furthermore, the window of opportunity to intervene when children become seriously ill or injured is significantly narrower than it is for adults, and time delays in treating children have adverse consequences.

### What is a child-centred health system?

The orientation and response of a child-centred health system is fundamentally shaped and structured with the child in mind, and from the child’s point of view, and in so doing is directly responsive to the specific needs and circumstances of children.
A child-centred (meaning child and adolescent) health system is strongly advocated for by international child health bodies such as UNICEF and WHO. It is commonly referred to as a child- and family-friendly health system. However, a child-centred health system needs to extend beyond ‘friendliness’ in the type and manner of care it provides to children. It requires that the whole health system proactively, purposively and in a structured way, prioritises and addresses the needs of children.

One of the most comprehensive expansions on what a child-centred health system means, is that of the Council of Europe in its guidelines for child-friendly health care. These guidelines define a child-friendly health system as: “health care policy and practice that are centred on children’s rights, needs, characteristics, assets and evolving capacities, taking into account their own opinion”.

It is a health system that creates the potential for a child to ‘survive’ to his or her fifth birthday, and ‘thrive’ into adolescence and young adulthood by helping them access the resources needed to reach their full capabilities. It therefore requires health systems to ‘transform’ and become proactive and responsive in addressing child health.

South Africa already has some measures in place for the purposive creation of child- and adolescent-friendly health environments. These include the Mother and Baby-Friendly Hospital Initiative and Adolescent and Youth Friendly Services. The most recent initiative from the Department of Home Affairs aims to enable all public health facilities with obstetric services to provide babies with birth certificates within 24 – 48 hours of their birth, which will allow them to access various social services.

A health system that fully invests in child and adolescent health will:

- enhance the capabilities of children and optimise their well-being and in so doing be true to the Constitutional commitments to children; and
- reduce future workloads and future costs.

For example, the elimination of childhood malnutrition (stunting and obesity) will reduce the burden of preventable non-communicable diseases (NCDs) in adulthood and reduce the need for lifelong, expensive health care. Similarly, adequate and sustained HIV prevention and treatment in childhood and adolescence has ongoing health benefits in adulthood and significant resource savings.

Building a child-centred health system requires the commitment of many role-players, including:

- families and communities who are key in the generation of health and well-being of children
- frontline workers responsible for the delivery and management of child health services,
- managers accountable for child and adolescent health (district, provincial and national health managers),
- role-players in other sectors that have significant influence on child health (such as the Departments of Finance, Labour, Transport, Safety and Security, Social Development, Education, amongst others), and
- those with political accountability for children’s health and well-being (national and provincial Ministers of Health, party politicians for whom families of children vote and the President, as the ultimate custodian of child citizens).

It also requires an active citizenry: older children and adolescents who are able to advocate for themselves; adults who advocate on behalf of younger children; human rights watchdogs that actively take up causes on behalf of children and force accountability at the highest level of decision-making; a network of civil society organisations to advocate for and with children, such as the South African Civil Society Coalition for Women’s Adolescent and Child Health; Section 27, People’s Health Movement and similar civil society organisations working in other sectors; as well as those in research and academic environments who can amass evidence to support actions to promote equitable child health.

Put together, it is possible to build a powerful movement for child health by harnessing the commitment and passion of the many people in the health system and society who are committed to caring for children. It requires a clear common purpose and clear priorities – with a focus on addressing the essential, basic health needs of children.

Fostering a health system that is child-and family-centred cannot be achieved in a piecemeal manner. It is not only the responsibility of child-specific health personnel who work in child-specific programmes and services, but that of the whole of the health system.

**Why is it important to adopt a health systems approach to child health?**

A health system is commonly described as a complex entity, made up of many varied and integrally related components, as illustrated in Figure 55. In this diagram, the familiar World Health Organization (WHO) building blocks are depicted in the dark green circle. It means that finance, human resources, health information, services, leadership and governance arrangements must be aligned to support good quality, appropriate and effective child and adolescent health services.
An important characteristic of responsive health systems is that they are “people-centred”, referring both to the people who work in the health system, as well as users and patients who benefit from the services provided.

A health systems approach to child health means that all parts of the health system must work together to achieve the desired results: increased access and use of services and, ultimately, better health outcomes. Aragon introduced the notion of system software — including communications, processes and organograms — and indicates this to be as important as the hardware (such as medicines and supplies). Elloker draws attention to the intangible software that exists within people such as values, interests, beliefs, motivation and trust that shape the culture and the ethos of the health care system as outlined in Figure 56.

In order to address child health goals and build a health system that foregrounds children and adolescents, all the components of the system must be aligned and work together towards a common vision for child health. Strong leadership and governance structures are therefore crucial to ensure child health is prioritised to achieve the desired outcomes. Such a systems approach to improve child health requires:

- a renewed and stronger focus on child development and well-being, and not just the absence of disease,
- building on successes and strengths incrementally and continually, despite changes in executive and political leadership,
- collaborating with other key sectors that profoundly influence child health,
- aligning all parts of the health system and follow through on child health policy commitments,
- prioritising children in budgetary commitments, and
- capacitating the health workforce (frontline service providers and managers) to address child health issues.

Given the centrality of people in the health system, the building of relationships and teams is fundamental to achieving child health goals. Furthermore, the multi-faceted determinants of child health require that individuals and teams work across the boundaries of the traditional health care system, and

**Figure 55: Framework for people-centred health systems strengthening**


**Figure 56: The intangible software**

network and engage with community-based systems and other sectors to support children and families.\textsuperscript{15} It requires leadership at multiple levels of the system, in clinical and support service structures and active engagement of clinical and managerial governance structures at facility, district, provincial and national levels.

In order to ensure that child health services are provided in a consistent manner in all 52 districts and all nine provinces, synergy and co-ordination are required across all components of the health system. As expressed in the European Council’s ideal for a child-friendly health system, “the right things happen, to the right children, at the right time, in the right place and using the right staff, who are supported in the right way, to achieve the right outcomes, all at the right cost”. Whilst this is a tough ideal to achieve, in its simplest form it requires that children’s best interests are served and considered at all times.

The World Health Organization adopts a systems approach to providing quality health care to children and adolescents, which recognises that the provision of quality care depends not only on evidence-based medicine, but needs to be accompanied by effective communication, respect and emotional support to enhance the patient experience of care. This in turn requires investment in building the capacity of a child health workforce and creating a child- and adolescent-friendly environment as illustrated in Figure 57. Services should be supported by the necessary resources, together with a clear commitment to enhance children and adolescents’ experience of care.

Figure 57: Standards for improving quality of care for children and young adolescents in health facilities

The South African health system therefore requires:

- a set of principles to guide the behaviour of the system and the people who work in it, to ensure that children, adolescents and their families are aptly foregrounded and prioritised: the first principle being that of children participating and exercising their agency in matters concerning their health,
- a clear vision for child health and a plan to direct all activities towards such a vision,
- accountable and responsive leadership at all levels of the health care system (see Figure 56), to ensure that child health goals are followed through year-on-year and are aligned with constitutional requirements,
- a commitment to consolidating the “essentials of child health care” in an evidence-informed manner and making no child is left behind, and
- a focus on strengthening the district health system as the first level of care for children.

**What does child-centredness look like in practice?**

The following two examples highlight the importance of creating a child-friendly environment and promoting children’s participation in their own health care.

**Promoting child participation**

Promoting children’s agency and participation is a central aspect of child-centred health systems and a principle and practice that is critical when providing services to children. There are three broad reasons why children and young people should participate in issues that affect them:16

- **Practical benefits to services.** The effectiveness of services depends on listening and responding to customers. Giving children and young people an active say in how policies and services are developed, provided, evaluated and improved and should ensure that policies and services better meet their needs.
- **Promoting citizenship and social inclusion.** Promoting early engagement in public and community life is crucial to sustaining and building a healthy society. Listening to children and young people is a powerful means of persuading children and young people that they are valued and are able to make a meaningful contribution.
- **Personal and social education and development.** Active participation is also seen as contributing to children’s and young people’s wider personal development, increased self-worth and confidence and practical skills and knowledge.

An example of how to facilitate this in the health system is the innovative child-led radio station, RX Radio (Case 25).

**Case 25: RX Radio child/young reporters experience in contributing to the improvement of health care delivery at the Red Cross War Memorial Children’s Hospital**

*Gabriel Urgoiti in collaboration with the RX Radio team and Jennifer Ruthe*

RX Radio, run by and for children, has the potential to affect change on many levels. Firstly, it gives young people the chance to build the life skills and confidence needed to voice their opinions, take on new roles and become actively involved in community life. Guided through a series of radio diaries, interviews, podcasts and live shows, this catalytic move opens conversation between peers, family members and professionals alike - forging reciprocal connections and building shared understanding. Whether it’s the patient-listener taking comfort in the knowledge that they are not alone, the young reporters forming new friendships and allies, the parents opening up about their experience, or the health care professionals taking extra time to listen to and allay their patient’s fears, each and every link forms a life-changing support system – a marker on the road to physical and emotional recovery.

Holding the mic gives children the power to engage with adults, ask questions and share their opinions. In the process, children’s voices are helping to influence the way that health professionals communicate with children. Within the hospital environment, adults are starting to question the common assumptions that are made about how child patients feel, what they know and understand, what they need and what they want.

As a result of listening to children’s and families’ voices on the radio, health professionals are reviewing and changing policies and protocols. For example, in a podcast entitled “Make pain easier”17 children and parents speak about their experiences and advise health professionals on how to minimize procedural pain. These insights have informed the development of a new pain protocol at Red Cross War Memorial Children’s Hospital, which encourages health providers to provide pain medication, be truthful about pain, and ensure children have a parent and caregiver present to support them through painful procedures.
Whilst the radio station employs a unique medium for fostering participation, there are many other ways in which children’s voices and agency can be recognised and fostered. In KwaZulu-Natal a children’s health charter has been developed to guide health workers and facilities in recognising children as equal participants in their own health matters. In a paediatric palliative care non-governmental organisation, Paedspal, children engage in creative art and song and thus express their feelings and desires for their health care.

Building health facilities with children in mind
Support service policies do not always consider the need to prioritise children and adolescents, but in a child-centred system, this should be an integral consideration in policy and planning activities of finance, human resources or infrastructure development. Case 26 describes how children were purposively considered in the building of a district hospital, that would have required the finance, infrastructure development and engineering components to collaborate with clinical service providers in the design and construction of the children’s ward.

Children’s and adolescent’s particular needs should be considered in how facilities are designed and built. For example, general hospital emergency departments and community health centres must have separate sections for children, so that children do not have to compete with more vocal and demanding adults or be exposed to significant trauma when faced by severe injuries and bleeding. The necessity for separate child waiting rooms was illuminated in research done more than 20 years ago. These child-centred considerations have informed the development of the Infrastructure Unit Support Systems (IUSS) Guidelines for Neonatal and Paediatric Facilities. The Guidelines outline a clear set of principles, norms and standards to inform the design of neonatal and paediatric wards and highlight the importance of consulting children and families. As stated in the guidelines:

Entering a hospital complex or any unknown environment can be daunting for adults, let alone children and young people. Every effort needs to be made to make healthcare environments friendly, welcoming and, where appropriate, focused on the healthcare needs of children.

Case 26 provides an example of how children’s needs were considered in the design of a district hospital.

Whilst these examples speak to specific elements of a child-centred health care system, the take-away message is that the needs of children and adolescents must be considered in the planning and delivery of all elements of the health system including both clinical and support services. This requires a systems-wide awareness of the needs of children and adolescents and an awareness of how to cater for their needs.

What might a child-centred district health system encompass?
The district health system is the primary interface between children, their families and the health care system and provides a range of services to promote maternal, child and adolescent health, while more complex or severe cases are referred to higher levels of care. For this reason, we have chosen to focus on the practicalities and possibilities for developing a stronger child-centred district health system.

The current structure
Formal state provision of child health services occurs at different levels. At a primary level, approximately 4,000 nurse-led clinics form the backbone of child health care and are the first point of contact for most children dependent on the public sector, whether for prevention or curative visits. Clinics deliver the lion’s share of preventative child health interventions, such as immunisation, and curative care for uncomplicated acute illnesses. Getting child health services ‘right’ in clinics is therefore essential. Clinics in turn refer more acute and complex conditions to larger community health facilities.

Malizo Mpehle Memorial District Hospital in the OR Tambo district of the Eastern Cape provides a good example of how to consider children’s needs in infrastructural development. It has a beautifully designed child health ward, bright and airy, with a central play area inside which flows to a protected play area on the outside. The nurses’ station is centrally placed, and smaller cubicles are arranged in a semi-circle in front of it to allow nurses to see into every cubicle. There is a reclining chair next to every bed/cot that allows caregivers to stay with their child and sleep comfortably. It means that the architects, engineers, financiers, hospital management, nurses and parents have all worked together to create a space that is responsive to the needs of both caregivers and children.
health centres, where nurses and medical officers offer more advanced curative, antenatal and obstetric services. Clinics and community health centres have also been earmarked as the preferred sites for the provision of adolescent- and youth-friendly services, although these have limited reach.

District hospitals provide out-and-in patient services for children who require more advanced care. These hospitals in turn refer to regional and specialist hospitals for secondary and tertiary level care.

A variety of community-based providers and support structures for child health exist, including the ward-based outreach teams (consisting of community health workers) who are intended to provide home-based care and services to children and families, and provide a link between households and facility-based services (as outlined in Chapter 11). Yet these teams have only recently been recognised in policy and their roles are still evolving and not fully established. Similar community-based services offered by non-governmental or faith-based organisations are not always known to the formal state service providers, nor are they adequately integrated with formal state health care to ensure synergy and continuity of care.

**Current system challenges**

Chapter 1 highlights significant inequalities in access and quality of care both between and within provinces and districts. This is further compounded by the idiosyncratic provision of child services at both clinic and district hospital level. This means that no two clinics (or hospitals) in the same district offer services in a standardised way. What service is offered, where in the clinic it is delivered, by whom, and how it is offered is left to the discretion of the individual unit, as is the case with the idiosyncratic delivery of the Integrated Management of Childhood Illness (IMCI) strategy illustrated in Case 3.

Similarly, what exactly has to happen during a well-child visit remains open, for instance, developmental screening remains a “nice-to-have” rather than a prescribed activity. This is especially concerning, given the compelling arguments for how one life phase impacts on the next.

Addressing current challenges in child health service provisioning has been done in a piecemeal, uncoordinated way, with a tendency to focus efforts on a particular issue or programme, rather than systemically addressing child health priorities.

For example, providing an integrated Maternal, Child and Woman’s health (MCWH) and HIV service during well-child visits has been promoted by some as an opportunity to improve outcomes for mothers and children by reducing the number of clinic visits and ensuring they receive a comprehensive package of follow-up care. Yet it is complex and difficult to integrate the full range of mother, child and prevention of mother-to-child transmission of HIV services in

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**Case 27: Idiosyncrasies in the delivery of the integrated management of childhood illness**

The IMCI strategy is regarded as a cornerstone of preventive, promotive and curative care for children at the primary level. It has three components: health worker training, health systems strengthening and improving family and community practices. In South Africa, health worker training has received the most attention and nurses have been trained in the delivery of IMCI.

Although the IMCI strategy has been offered at South African primary health care centres since 1998, it is not yet clear if this constitutes a prescribed, preferred or optional strategy for managing sick children. Thus, a sick child may or may not be offered the IMCI approach, by a professional or ancillary nurse who may or may not have any child health training. This may be done in a separate sick children’s room, or one with sick adults, or another with well children. The encounter may be recorded on a structured form, clinic card, piece of paper or in the Road to Health Book. The decision about why the service is offered in a particular way may be the result of a decades-old historical decision or one established a month ago.

The current application of IMCI within facilities is largely interpreted as one clinician administering all components of IMCI (including triage, sick-child management, preventive care and health promotion) during a single consultation. While this is ideal, it has been cited as a barrier to the correct application of IMCI, mainly because it is time-consuming.

A proposed alternative is task-shifting, whereby auxiliary nurses or even trained lay health promotion providers deliver the prevention and promotion components of IMCI. While this threatens the holistic single provider delivery model, it could optimise the use of resources by allowing trained practitioners to focus on diagnostic and management tasks, while auxiliaries complete less skill-intensive components, with the potential for improved efficiency.
the South African setting as several health workers need to collaborate to provide services and skilled health workers are scarce, so human resources have to be used with maximum efficiency. Integration involves developing models suitable for this context, which may even vary from clinic to clinic according to space and staffing to provide, as far as possible, a seamless, user-friendly service.

The co-existence of integrated and vertical approaches has been a source of ongoing international debate with few tangible solutions. Policymakers need to consider mechanisms at both strategic and operational (service delivery) levels to improve the links. There is increasing recognition that a diagonal approach – which allows both vertical programmes (such as the Expanded Programme of Immunisation) and horizontal programmes (such as IMCI) to operate – may improve health system functioning.

While there are a number of vertical and horizontal programmes in place, there is no clear consensus of what constitutes ideal child care at a clinic or hospital. National initiatives such the Ideal Clinic model, while offering detailed guidelines on standards for a primary health care (PHC) service, have left this critical issue untouched.

The issue of what a child-oriented service looks like and how it might best be delivered, requires much more attention and demands national consensus before allowing districts and individual clinics the right to mould their service in response to local challenges, while remaining true to the underlying principles.

What needs to be put in place to ensure a coordinated approach to child health?

Developing a national plan for child health

The first step towards a child- and adolescent-centred system is to have a clear national plan and vision. Whilst South Africa has a fairly comprehensive body of policies, programmes and protocols to guide the structure, functioning and delivery of most aspects of child and adolescent health services, there is no overarching national policy with a clear implementation and advocacy plan on how to achieve child health goals. Having such a plan in place is particularly important, as current policy reforms towards National Health Insurance (NHI) and universal health coverage pay limited attention to child health.

There are very few examples of countries (almost all high income) with overarching national policies dedicated to child health and well-being. In Africa, Uganda sets an example of a low-income country with a national action plan for child well-being (Case 28).

South Africa with its upper-middle income status and available resources could lead the way in this regard, if a coherent movement for child health is put in place, with a
strong coordinating mechanism to ensure that all government departments are actively involved in the development of a National Plan of Action for Children.

**Getting a basic package of services defined and in place**

Part of having a national plan is to have a clearly defined package of basic health care services, as stipulated in the Constitution. Such an essential package of health care services is currently being developed by the Ministerial Committee on Morbidity and Mortality in Children under five (COMMIC). Ultimately the package must describe the essential services for children at each level of care, who should provide it and what must be in place for it to be delivered successfully.

As we move towards the implementation of NHI it is both urgent and essential to clearly define the “basket of care” that will be provided. The essential package of care for children could lead the way in this regard and must receive urgent attention by the National Department of Health. This package will allow children, adolescents and their families to know what their health entitlements are and will enable evidence-based advocacy for child and adolescent health.

The plan must be costed and accompanied by clear norms and standards for staffing, infrastructure and equipment, and outline the necessary resource requirements. Whilst in the Ugandan example the resources are derived from non-state sources, it is essential that the plan has dedicated budget allocation. As an upper middle-income country that spends 8.5% of its gross domestic product on health, there are sufficient monetary resources to fully fund a basic health care service package for children, provided these are managed and directed appropriately.

Furthermore, if districts include the essential package of child and adolescent health care into their annual performance plans and budgets, it will allow for better tracking of budgets, unlike the current situation where it is impossible to adequately identify and monitor budget allocation to child health.25

**Strengthening community-based systems for child health**

There are other countries in Africa that have instituted health system reforms at the community level that have had significant child health benefits.

Community-based interventions remain a central component of preventive, promotive and curative health care. There is increasing evidence of the critical role of community providers in maternal, newborn and child health. An analysis of the impact of interventions delivered within community, PHC and hospital settings, found that interventions delivered within communities could avert 2.4 million maternal, newborn and child deaths compared with 0.8 and 0.9 million at primary health care and hospital levels.29

The strengthening of community-based delivery platforms, by incorporating community cadres as integral members of district health teams, requires high level policy and budgetary commitments.

Examples of African countries that have prioritised community-based delivery of child health services include Malawi (Health Surveillance Assistants), Niger (Agents de Sante Communautaire) and Ethiopia (Health Extension Workers - see Case 29).30

In South Africa, good progress has been made to increase this cadre of health worker through the ward-based outreach teams (WBOTs),31 yet many districts are still struggling to incorporate the WBOTs as part of the formal health workforce. WBOTs are meant to be located and supervised in the community-based arm of primary level care, in coordination with the facility-based services. An evaluation of the NHI pilot sites found that poor integration of WBOTs with PHC facilities led to a lack of clarity around their roles and compromised their training and supervision, while stakeholders at provincial and district levels describe how the unclear line of reporting for WBOTs adversely affected their success.32 It is imperative for these challenges to be resolved, as CHWs form an essential part of the health workforce and if they are supported adequately, would make significant improvements in child health outcomes.

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**Case 29: The Health Extension Programme of Ethiopia**

In Ethiopia, an ambitious Health Extension Programme (HEP) was launched in 2003 which aimed to provide universal access to mainly preventive primary health care, through the recruitment of more than 34,000, government-salaried, mostly female health extension workers (HEWs), who receive one year of training. Over 16,000 health posts were built and two HEWs operate from each health post to serve a kebele, the smallest administrative unit of about 5,000 people. HEWs split their time between outreach activities and their health post.26

Since the launch of the HEP, the under-five mortality rate declined from 124 per 1,000 live births in 2003 to 58 in 2017.27 An analysis of factors contributing to these declines noted reductions in stunting and improvements in the coverage of oral rehydration solution (ORS) and care-seeking for suspected pneumonia.28
contributions to strengthening child and adolescent, and family health care.

**What might a child-centred district health system encompass?**

In South Africa the re-engineering of primary health care has introduced teams that have the potential to improve child and adolescent health if they work together in a planned and co-ordinated way. This includes the district clinical specialist teams (DCSTs) who provide clinical governance for maternal and child health, together with the WBOTs and school health teams. All of these teams provide essential outreach services in partnership with facility-based clinic and hospital teams (see Figure 58).

Box 19 outlines some of the important ingredients that need to be in place in order to build a child-centred district health system.

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**Figure 58: Teams and networks of care and support for child health at district level**
Box 19: The systems ingredients for a child-centred district health system

At the provincial level
• A clear plan for child health, linked to a resource strategy and clear mechanisms for engagement with the necessary sectors and community-based systems. This is the responsibility of the district management team, in partnership with DCSTs, who oversee clinical governance.
• Strong leadership for child health, including clinical governance leadership such as should be provided by the DCSTs.

At the level of a district management team
• A designated person in the district management team to be the focal person for child and adolescent health in district planning and budgeting processes and developing district-level relationships with their counterparts in other sectors, as well as between levels of care.
• Explicit provision for child and adolescent health in district budgets

At a clinical governance level
• Every clinic, community health centre and district hospital manager must know what the requirements are for their facility to deliver good quality child health and be able to advocate for the necessary requirements
• Have clear coordination mechanism(s) for the delivery of a continuum of services, from household to district hospital.
• Facilitate the development of clear and functioning referral pathways and these must be explicit to all facilities.

At facility level
• Staff adequately trained, competent and confident in addressing the most common child health conditions to a high quality and efficiency level.
• Equipment and supplies to prioritise the continuous availability of essential paediatric medicines, paediatric-sized equipment (scales and height meters, paediatric-sized blood pressure cuffs, paediatric and neonatal-sized needles and laryngo-tracheal tubes amongst others).

Building teams, relationships and networks
• Teams for child health, as depicted in Figure 58, have the potential to form integral linkages as follows:
• The WBOTs span the boundaries between the home, community and clinics as the first line of contact with community-based support structures.
• The facility-based teams provide a clear link between clinics, community health centres and district hospitals.
• School health teams formally connect with schools and other sectors and non-profit organisation working in the school setting.
• The DCSTs are well-positioned to span the boundaries across sectors at district level and ensure that referral pathways work optimally drawing on their clinical expertise, and extensive networking.
• Designated boundary spanners to build networks and relationships across teams, and sustain these, across levels of care and across sectors.
• Specific forums for engagement with colleagues from other sectors and community-based health structures and build the capacity for every sector to understand their contribution to child health and motivate every sector to develop a ‘child health in all’ approach to their policies, planning and budgeting.

At a support service level
• Human resources: A critical mass of community health workers trained in neonatal, child and adolescent health care; child health-trained nurses in all clinics, community-health centres and district hospitals; and rehabilitation workers to provide for children’s developmental and rehabilitative needs.
• Planning and budgeting: Child and adolescent health service package must be integrated and made visible in district annual budgets and performance plans.
• An essential drug list for child health, that is prioritised within district drug supply chains.
• A supply chain that procures the necessary child-sized and child-appropriate drugs, equipment and consumables.
• Information system: Have defined district level targets and key indicators of success for a child-centred system (not just individual child health outcomes), with associated monitoring and evaluation. For example, the proportion of facilities that are deemed child-and adolescent-friendly or coverage and distribution of staff trained in IMCI.
• Infrastructure development: Any new facility must be designed in a way that specifically caters for the needs of children, families and adolescents as outlined in the IUSS guides.
Table 32: Roles, responsibilities and actions required to provide child-centred care at district level

<table>
<thead>
<tr>
<th>Roles and responsibilities</th>
<th>Examples of actions required</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>District management</strong></td>
<td></td>
</tr>
<tr>
<td>Ensure that all pillars of clinical governance are managed.</td>
<td>• Coordinate district teams to provide integrated child care – single programme coordinator for EPI, TB, HIV and IMCI.</td>
</tr>
<tr>
<td>Monitor and evaluate district child health indicators and respond appropriately.</td>
<td>• Track under-five and neonatal mortality rate, severe, acute malnutrition in-patient mortality rate and immunisation coverage.</td>
</tr>
<tr>
<td>Include paediatric activities and budgeted items in annual district performance plan.</td>
<td>• Specify budget allocations for child health in every annual district performance plan.</td>
</tr>
<tr>
<td><strong>Clinic manager</strong></td>
<td></td>
</tr>
<tr>
<td>Organise paediatric care to optimise child health outcomes.</td>
<td>• Conduct monthly performance evaluations through dashboard indicators.</td>
</tr>
<tr>
<td>Arrange staff duties and rotations to maximise patient outcomes.</td>
<td>• Retain IMCI trained staff for at least two years after training.</td>
</tr>
<tr>
<td>Ensure equipment, essential medication, etc. meet norms and standards and are available.</td>
<td>• Support outreach – identify WBOT leader at the clinic.</td>
</tr>
<tr>
<td><strong>Clinic staff</strong></td>
<td></td>
</tr>
<tr>
<td>Optimise child care delivery.</td>
<td>• Offer IMCI as the preferred method of sick care.</td>
</tr>
<tr>
<td>Strive for quality.</td>
<td>• Extend well-child care delivery beyond immunization.</td>
</tr>
<tr>
<td></td>
<td>• Booking system for well-child care.</td>
</tr>
<tr>
<td></td>
<td><strong>District clinical specialist team (paediatric dyad)</strong></td>
</tr>
<tr>
<td>Improve clinical effectiveness.</td>
<td>• Mentoring support to staff, review mechanisms and development of facility specific action plans, including implementation of protocols.</td>
</tr>
<tr>
<td>Manage clinical risk.</td>
<td>• Analyse and learn from adverse events and deaths (mortality and morbidity audits).</td>
</tr>
<tr>
<td>Assist professional development and management.</td>
<td>• Staff training, supervision, monitoring and mentoring.</td>
</tr>
<tr>
<td>Create demand.</td>
<td>• Behaviour change of patients promoted through improved quality of services.</td>
</tr>
<tr>
<td>Establish accountability.</td>
<td>• Collect, interpret and respond to data.</td>
</tr>
<tr>
<td></td>
<td>• Demand responsibility from administration and staff for clinical outcomes.</td>
</tr>
<tr>
<td><strong>Ward-based outreach team</strong></td>
<td></td>
</tr>
<tr>
<td>Deliver individual maternal, neonatal and child care.</td>
<td>• Support breastfeeding, promote growth, prevent and rehabilitate severe acute malnutrition.</td>
</tr>
<tr>
<td>Support community health activities outside the household.</td>
<td>• Support groups (breastfeeding, HIV adherence), school health.</td>
</tr>
<tr>
<td>Integrate own function with that of other departments.</td>
<td>• Ensure access to water and sanitation (local government), social grants (social development), ID documents and birth certificates (home affairs), maintenance (justice), initiate community food gardens (agriculture); report domestic violence and abuse (social development and police).</td>
</tr>
</tbody>
</table>
Limpopo had made significant strides in reducing neonatal mortality through the Limpopo Initiative for Newborn Care (LINC). However, progress has slowed and the deaths of babies (> 2.5kg) due to birth asphyxia are a particular cause for concern. An innovative and “out-of-the-box” solution was needed.

The Limpopo team embarked on an extensive evidence-informed process, which included a literature review, a causal tree analysis and learning from practices elsewhere in South Africa, in order to inform their response to problems in maternal and neonatal care. This extensive exercise identified ‘negative staff attitudes’ as one of the key drivers for poor maternal and newborn outcomes. This was in keeping with the WHO’s identification of Respectful Maternity Care (RMC) as essential in improving intrapartum care. This led to the creation of the Limpopo Maternal CARE (LimMCARE) project, which provides support across the full continuum of care, from sexual and reproductive health and rights to antenatal care, labour and child birth.

The programme aims to ensure that all women have a positive pregnancy and birth experience, including giving birth to a healthy baby in a clinically and psychologically safe environment with practical and emotional support from a birth companion and kind, technically competent clinical staff. The programme is being piloted in the Greater-Letaba sub-district which consists of a district hospital, one community health centre and 20 clinics. RMC champions in each facility and RMC advocates in sub-district and district management were identified.

An intensive mentorship approach focused on improving communication with clients, supporting women to deliver in their position of choice, promoting the use of birth companions and pharmacological and non-pharmacological pain relief.

Antenatal classes were also started to empower pregnant women to become active participants in their pregnancy, labour and birth. The classes cover safe and planned conception, the three trimesters of pregnancy, labour, birth, postnatal care, kangaroo mother care and breastfeeding. Further support is provided through a facilitator guide, teaching aids and a toolkit of pain relief tools such as birthing balls, massages, heat and cold packs, aqueous cream and Vaseline. As well as a booklet to guide and support pregnant women throughout their pregnancy journey.

Health care providers were initially sceptical about birth companions being in the labour ward. Yet, health care providers now claim that the presence of birth companions has created a calm atmosphere in the labour ward and this enables them to provide better quality care.

The programme recognized that every single person who interacts with a pregnant woman within the health system needs to adhere to the principles of respectful care and has therefore extended the programme to sensitize and acknowledge the role of emergency medical services, cleaners, clerks and security staff.

Caring for the carer is an integral part of RMC. Health care providers who feel respected and valued in the workplace are more inclined to respect and value their clients. A merit system has been introduced to acknowledge and motivate individuals and facilities.

Imparting knowledge and skills is critical and fairly straightforward. Changing attitudes, which is a prerequisite for translating knowledge into practice, is far more difficult and requires constant and long-term mentorship. Health care providers need to internalize respectful care in order to change their behaviour towards patients. It is not about ticking boxes. It is about providing care from the heart.

Maternal deaths at Kgapane Hospital have declined from 18 deaths in 2015/16 to seven deaths in 2017/18, and at the time of going to press there had been no maternal deaths since November 2018. While there has not yet been a noticeable impact on the overall neonatal mortality rate, it has reduced asphyxia, which was the cause of 26% of neonatal deaths in 2016/2017, to only 10% of deaths in 2018/19.
• every nurse practitioner has knowledge of the basic child health conditions and is equipped to manage these;
• nurses are supported with the correct child-specific equipment and essential drugs;
• spaces are configured to prioritise children in queues and preferably have separate waiting rooms;
• functional referral pathways link children and families to community health centres and districts hospitals;
• each facility has a directory of the available support services in the surrounding community and contact details of their peers in other sectors such as social development, safety and security. For example, schools in the Free State have employed an ‘adopt a school’ concept with SAPS, social development and clinics in their area. A similar approach of inviting other sectors to ‘adopt a clinic’ may be helpful in building intersectoral networks of support; and
• facility managers and health care workers are actively encouraged to work across boundaries and strengthen linkages between clinics, homes, communities and other sectors in order to strengthen support for children and families.

Finally, there are a number of crucial service providers who impact on child health but are not currently part of the formal health system. These include:
• environmental health officers who are crucial in overseeing safe and health-promoting environments where children live, learn and play,
• rehabilitation workers who support children with disabilities and long term health conditions, and
• palliative care service providers who are primarily employed within non-governmental organisations and who provide multi-disciplinary support, care and treatment to children and families.

How are some of these approaches being applied in practice to address common childhood conditions?
The following three cases illustrate how it is possible to deliver child- and family-centred care at the district level. It requires innovative thinking, and a willingness to extend services beyond the usual boundaries, and it needs a champion to lead the way.

**Case 31: Linking children with severe acute malnutrition to community health workers: The Stanger experience**
Vanessa Comley, General Justice Gizenga Mpanza Hospital (Formerly Stanger Hospital), KwaZulu-Natal Department of Health

Severe acute malnutrition (SAM) is a major contributor to morbidity and mortality in children under five years in the Ilembe district of KwaZulu-Natal. While mortality from SAM has been reduced through the World Health Organization’s in-patient guideline, reducing the incidence requires the involvement of community health workers (CHWs).

The KwaZulu-Natal Integrated Management of Acute Malnutrition (IMAM) programme includes referral of all children with SAM to CHWs by the health facilities. The aim is to provide education, screen households, identify and refer at-risk children and support patients following discharge.

Stanger Hospital developed a standard operating procedure to improve communication with CHWs. Following admission of a child with SAM, the CHW is contacted and informed. A home visit is done to screen other children in the household, assess the context and identify risk factors. This information is conveyed to the hospital’s multi-disciplinary team (MDT) to resolve any problems that impact on maternal and child health. Monthly meetings are held between the MDT and CHW supervisors to address difficult cases, problems and discuss educational topics.

This collaboration and linkage increased from 20% in 2015 to 100% in 2018. Previously, all children hospitalized with SAM were included in an MDT programme involving weekly ward rounds, daily management, admission of mothers to aid nutritional rehabilitation, education and toy-making. Moving forward, we need to strengthen CHWs to facilitate home management of uncomplicated SAM cases.

Strengthening the link between the health facilities and CHWs led to a reduction in SAM admissions from 432 to 99 between 2013 and 2018. SAM deaths declined from 61 to 4 and the case fatality rate from 14.4% to 4%. This is probably related to increased awareness and education of CHWs and improved screening and early intervention in children with moderate acute malnutrition.

Further reductions call for stronger intersectoral collaboration between the Departments of Health, Home Affairs, Social Security, Social Development, Education and Agriculture to prevent acute malnutrition.
Pregnancy during adolescence can have a devastating impact on the health and well-being of adolescent mothers, which lasts into adulthood, and which also undermines the health and well-being of her child. Adolescent pregnancy is a major contributor to maternal and child mortality, and it leads to school dropout, lower educational attainment, and other negative social and economic effects, and to intergenerational cycles of ill-health and poverty.33

Therefore, pregnant and parenting adolescents need support to meet their own health needs and those of their neonate/infant. They also need support to meet their educational and social protection needs.

There is strong evidence that schools that create linkages with health services or offer school health services are more effective at supporting pregnant and parenting adolescents than schools without such linkages.34 An innovative model of providing support to pregnant and parenting learners is being implemented in Cape Town by the Department of Health and their funded community organisation.

They have established two school-based support groups for pregnant and parenting learners. The groups are run by health promotion officers (HPOs) who are based in the health facility in the area of the school and supported by the school health team. The groups take place in the school’s weekly, 45-minute “admin” period, and the programme is focused on the needs of the young mother and her neonate/infant, covering among other things contraception, HIV testing, the Road to Health book and immunization, parenting, and the rights of pregnant and parenting learners.

The programme strengthens links between the learners and the PHC services in their area. For example, the school nurse is invited to sessions and has given her cell number to the adolescents so that they can contact her for fast-tracking their contraceptive and immunization appointments at the clinic without missing school. Intersectoral links are forged through the programme – the HPOs refer concerns to CHWs who are available to visit adolescent mothers who struggle to return to school after their child is born.

The CHWs can link the adolescent mothers to the appropriate social protection services for grants and other services. The Department of Education social worker, who did not previously know about learner pregnancies, has been involved in the programme and now provides parenting sessions. The adolescents support each other through the stages of pregnancy and motherhood by, for example, accompanying one another to clinic appointments.

This innovative programme fosters a safe and supportive learning environment in the school for pregnant and parenting adolescents by reducing stigma and discrimination against them. It also promotes their health and the health of their children and allows them to fulfill their right to education. It is a model programme which could achieve key policy goals set down in the Department of Basic Education’s Draft Policy on the Prevention and Management of Learner Pregnancy.35

Case 30 describes how efforts to improve neonatal outcomes need to look upstream and enhance women’s experiences of labour and antenatal care.

Case 31 highlights the importance of building strong referral systems and strengthening the links between hospitals, families and community-based services in order to reduce deaths and admissions of children with severe acute malnutrition (SAM).

Case 32 highlights the potential role of schools in extending the reach of services beyond clinics to support pregnant learners and teen mothers.

These cases provide some examples of what it takes to create a holistic, systems approach to common child health issues:

- champions to take initiative and drive the issue until it becomes part of routine practice;
- reaching across sectoral boundaries to work with sectors that integrally influence child and adolescent health. An intersectoral approach is potentially where the greatest traction lies. It requires some effort beyond the usual job description, but once established, does not require large amounts of time; and
- drawing on existing teams within the health system – and beyond – to drive the process, which enhances legitimacy and sustainability.
Conclusion
A child-centred health system is not only feasible, as demonstrated by a number of practical examples in this chapter, but essential to enable a co-ordinated and sustainable approach to improving the well-being of children and adolescents. It requires individuals and teams within the health system to recognise the importance of working with one another, as well as working with a variety of teams in community-based structures and other sectors to address the key determinants of child health and promote well-being.

Key to these teams are community health workers and other boundary spanning teams, that form important links between families, communities, the formal health service and other sectors that influence child health.

At the heart of it all, is the need to be accountable for our constitutional obligation towards children and the need to recognise children, regardless of their age, as equal partners in making decisions about their own health.

This requires a shift in both thinking and practice, and the re-orientation and training of a wide range of actors in the broader health system to better understand our obligations to uphold children’s rights and prioritise their health care needs.

It also requires a strong civil society through which we can hold our political leadership accountable, as they are the ultimate accounting officers for addressing the health and well-being of all children and adolescents in South Africa.
parenthood associated with adverse socio-economic outcomes at age 30 years in women and men of the Pelotas, Brazil: 1982 Birth Cohort Study. BJOG, 126(3): 360-367.

