This chapter explores successes and constraints in terms of the right to access health care in rural areas. We present a case study that provides insight into daily challenges patients from poor rural communities face when accessing health care. While assessment of health and health care in rural areas is challenged by lack of a standardised definition of rurality, marked inequities are noted between health outcomes in more urbanised and rural provinces. Reasons include inadequate efforts to address social determinants of disease such as the levels of deprivation in rural areas. Furthermore, rural communities experience significant barriers to accessing health care, including financial barriers, inadequate transport, and distance to the nearest facility as well as limited services available. Understaffing and the poor state of infrastructure in many rural facilities further entrench existing inequities.

The central role of management in providing adequate care within the healthcare system is emphasized. There are several examples of good practices in rural areas. With good leadership and innovation, access to health care is possible in rural areas – even with limited resources. The rural healthcare context needs to be taken into account during design and implementation of health policies and strategies. A number of questions must be taken into consideration to ‘rural-proof’ key strategies currently being introduced, such as National Health Insurance and the new Human Resources for Health Plan. From policy development to resource allocation and implementation, requirements for rural populations need to be taken into account to ensure equitable outcomes.
For this mandate to be realised in rural communities, the specific conditions of rural areas need to be taken into account when planning health services to ensure that policies and strategies relate to rural strategies.

Reforms to the healthcare system post-1994 have been inspired by the principles of PHC as captured in the Alma Ata Declaration. In this chapter we use the principles underlying the Declaration to reflect on the care provided to rural communities, and to assess whether Government’s constitutional mandate is being met.

### Defining rural

In SA there is no standardised definition of rurality, and Government bodies, research institutions and other stakeholders use a range of criteria to define rural – or do not use rural as a variable at all. For instance, despite rural development being a specific focus of the Government, the development indicators used by the National Planning Commission do not distinguish between urban and rural areas. There have been some attempts to develop definitions, including the use of population densities, sizes of towns, characteristics of the infrastructure or predominance of agriculture. In its report on urbanisation and migration, Statistics South Africa estimated that 43.7% of SA’s population was rural. The authors used 1996 and 2001 Census data and defined ‘rural’ on the basis of a number of indicators, including whether an area fell under a traditional authority, whether it was located outside of the metros and whether it lacked ‘urban characteristics’ such as availability of amenities and infrastructure. Following their methodology, the percentage of rural inhabitants per province was calculated (Table 1).

### Table 1: Percentage of rural populations per province, from most to least rural

<table>
<thead>
<tr>
<th>Province</th>
<th>% rural population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limpopo</td>
<td>90</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>80</td>
</tr>
<tr>
<td>Eastern Cape</td>
<td>62</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>61</td>
</tr>
<tr>
<td>North West</td>
<td>59</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>55</td>
</tr>
<tr>
<td>Free State</td>
<td>25</td>
</tr>
<tr>
<td>Western Cape</td>
<td>10</td>
</tr>
<tr>
<td>Gauteng</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: Kok and Collinson, 2006.

The table illustrates the basis for using a provincial comparison as a proxy for making a rural-urban comparison. Provinces such as Limpopo or Northern Cape are juxtaposed with Gauteng and Western Cape. Another indicator that has been used as a basis for defining rural areas is deprivation, as there are high levels of deprivation in rural areas and the 10 most deprived districts in SA were found to be rural (defined by population density). Yet caution is required in equating rurality with deprivation, since there are inequities within and between rural districts while at the same time urban areas also have high levels of deprivation.

### Legal framework for rural health

Along with many other socio-economic rights, the right to access healthcare services is guaranteed by section 27 of the Constitution. However, the legislation does not require the elected Government to fully realise this mandate with immediate effect, since this would be unreasonable given the resources required, and the dire state of health care and health inequities inherited from the previous dispensation. Rather, the constitutional imperative requires Government to progressively realise this right within available resources. This imperative places on Government the duty to take all reasonable measures to address poor health outcomes and health services in rural communities. Progressive realisation implies that it is unconstitutional for access to health care to deteriorate. For this
The lack of a standardised definition of what constitutes ‘rural’ poses a challenge to making consistent and meaningful comparisons of data on rural health, which is a limitation to the data presented in this chapter. However, the trends that emerge even with an inconsistent definition of rural are important to note, and support the call for a more consistent definition to be finalised.

Health outcomes in rural areas

SA has poor health outcomes in both rural and urban areas, despite spending significantly more on health than other middle-income and developing countries which produce better outcomes.8,9 A review of the state of health in SA found insufficient progress in combating HIV, AIDS and malaria, no progress in improving maternal health, and a deterioration in the mortality of children under five years of age.9 There are large provincial differences, with the two most urbanised provinces, Gauteng and Western Cape, faring much better in health outcomes than the more rural provinces (Table 2).

Determinants of health outcomes

Social determinants of the health to health

The relationship between health and social determinants such as poverty, food security and nutrition is well documented.12 The high levels of deprivation in rural areas contribute significantly to poor health outcomes.7 Issues of education, sanitation, availability of palatable water, household income, and food security all have an impact on the health status of individuals and households. Social determinants have a greater impact on the health status of a nation than the availability of curative healthcare services.11

One social determinant of disease that has strongly shaped rural health in SA is migrancy. There are high levels of mobility between rural and urban and within rural areas, particularly among the economically active (and healthier) part of the population.5,13 In some areas seasonal labour in the agricultural sector contributes significantly to the mobility of the rural population. Similar to the case study, when falling ill many people in the economic centres of the country return to their homes in the rural areas to be cared for within the extended family system.5,13

While space is inadequate to comprehensively discuss the impact of social determinants of disease, the levels of deprivation in rural areas suggest that insufficient attention has been given to the role of social determinants of health in uplifting the health of rural communities.

Access to health care

The World Health Organization describes access to health care in terms of financial, population and service coverage.14 Financial coverage refers to social protection against the financial and socio-economic implications of accessing health care. In rural areas population coverage is influenced by distances to facilities and service coverage includes quality of care provided at facilities as well as the package of services available at different levels of care. In the section below several factors that play either a limiting or enabling role in accessing health care in rural areas are identified.

Financial coverage

SA has developed a much more robust system of social security than other African countries which includes disability, care dependency and old-age grants. These transfers play a crucial role in the survival of many rural households.15 Changes in making access to certain health services free of charge, such as maternal and child care and provision of antiretrovirals, have been critical steps in removing barriers to access to care.

Yet, as the case study illustrates, substantial barriers remain to receiving care, even in the context of free PHC in the public sector. Many families are not able to access healthcare services due to the costs involved. Rural populations are affected to a greater degree due to higher levels of deprivation.16 An episode of illness within a family with few resources can have a catastrophic impact on the entire family which may be hard to recover from.15

Transport

Closely related to financial coverage is the need for affordable and reliable transport, particularly when there are large distances and few facilities in rural areas. A number of studies have found that considerably greater access barriers are experienced by rural compared to urban communities, including distance, time and cost of accessing health services.11-19 Rural populations are particularly disadvantaged regarding emergency transport to access healthcare facilities.16

The case study also highlights the challenges faced by people with physical disabilities in accessing health facilities. There are few public transport systems available for disabled people, particularly people using wheelchairs – and even fewer in rural areas. While transport policies have sought to be inclusive, implementation and regulation of the transport industry has not adequately addressed barriers of access for rural poor and disabled people living in SA.16

Table 2: Comparison of selected health outcomes

<table>
<thead>
<tr>
<th>Health outcome</th>
<th>Best performing province</th>
<th>Worst performing province</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal mortality rate per 100 000 live births</td>
<td>Gauteng: 112</td>
<td>Free State: 313</td>
</tr>
<tr>
<td>Infant mortality rate per 1 000 live births</td>
<td>Western Cape: 22.9</td>
<td>Eastern Cape: 57.1</td>
</tr>
<tr>
<td>Tuberculosis cure rate</td>
<td>Gauteng: 78.7</td>
<td>North West: 58.3</td>
</tr>
<tr>
<td>HIV prevalence (age 15-49 years)</td>
<td>Western Cape: 9.7</td>
<td>KwaZulu-Natal: 25.7</td>
</tr>
</tbody>
</table>

Source: Day and Gray, 2010.10
Rural population coverage by private health care

Rural populations are not as well provided for in terms of private health care compared to urban populations. The private sector in rural areas comprise mostly of GPs who run cash practices, and either use local public sector hospitals or private facilities in larger towns and cities as referral centres. There are fewer private specialists and private hospitals in rural areas. Table 3 provides a comparison of numbers of private hospitals across provinces, and shows that the rural provinces tend to have the fewest private sector hospitals. The same pattern is evident in the distribution of private hospital beds and medical scheme beneficiaries across provinces. It further emphasizes that rural populations are reliant to a much greater extent on public sector hospitals than urban populations are.

Rural population coverage by the public sector

Since 1994 efforts to improve access to PHC facilities in SA have been beneficial for rural populations, as the public healthcare system provides coverage through a network of community-level care services, PHC facilities and hospitals. Yet, as discussed below, there is uneven progress. Fifteen per cent of poor rural households live more than an hour away from the closest clinic and 20% live more than an hour away from the closest hospital.22

Community-level care

Historically there has been a high reliance on home-based care to support families often on a voluntary basis in rural areas. To a large degree, this reflects the communities’ response to the HIV pandemic. Community-level care is a sphere upon which Government has recently been focusing more attention, as evidenced by the decision to re-engineer PHC23 and the introduction of programmes such as Sukuma Sakhe in KwaZulu-Natal. The latter explicitly attempts to address social issues beyond healthcare services, such as access to social services and grants, and to move beyond health education and home support. This shift in focus is likely to benefit rural populations by bringing services closer to communities and addressing some of the access barriers. For equity purposes it will be critical that the current uneven spread of community caregivers be addressed. However, the degree to which community-level care is integrated into the network of PHC clinics is variable across the country, and information from community-level care is seldom used or considered at higher levels. International evidence suggests that community care-givers can play a critical role in improving health outcomes if well supported and sufficient in numbers.24

PHC clinics and district hospitals

Many new clinics have been built since 1994, particularly in rural areas. However, large differences remain in the numbers of facilities per population, utilisation rates and staffing levels across provinces, reflecting under-provisioning in rural areas.25 The new facilities in rural areas often cannot be adequately utilised due to lack of human resources (HR). A study on PHC facilities in four rural districts of the Eastern Cape and KwaZulu-Natal found challenges with basic infrastructure such as water, electricity or telephone connections (Table 4).25

Table 3: Private hospitals per province

<table>
<thead>
<tr>
<th>Private sector facilities per province</th>
<th>Eastern Cape</th>
<th>Free State</th>
<th>Gauteng</th>
<th>KwaZulu-Natal</th>
<th>Limpopo</th>
<th>Mpusulanga</th>
<th>Northern Cape</th>
<th>North West</th>
<th>Western Cape</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>6 527 747</td>
<td>2 773 059</td>
<td>10 451 713</td>
<td>10 259 230</td>
<td>5 238 286</td>
<td>3 643 435</td>
<td>1 058 060</td>
<td>3 271 948</td>
<td>5 278 585</td>
</tr>
<tr>
<td>% of population that is rural</td>
<td>62%</td>
<td>25%</td>
<td>4%</td>
<td>55%</td>
<td>90%</td>
<td>61%</td>
<td>80%</td>
<td>59%</td>
<td>10%</td>
</tr>
<tr>
<td>No. of private hospitals</td>
<td>13</td>
<td>15</td>
<td>95</td>
<td>27</td>
<td>5</td>
<td>9</td>
<td>3</td>
<td>10</td>
<td>39</td>
</tr>
<tr>
<td>No. of private hospitals/100 000 rural population</td>
<td>0.32</td>
<td>2.16</td>
<td>22.72</td>
<td>0.48</td>
<td>0.11</td>
<td>0.40</td>
<td>0.35</td>
<td>0.53</td>
<td>7.39</td>
</tr>
</tbody>
</table>

Table 4: Access to basic amenities in the Eastern Cape and KwaZulu-Natal

<table>
<thead>
<tr>
<th></th>
<th>EC (n=20)</th>
<th>KZN (n=20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of safe drinking water</td>
<td>20%</td>
<td>25%</td>
</tr>
<tr>
<td>Availability of electricity</td>
<td>45%</td>
<td>85%</td>
</tr>
<tr>
<td>Availability of flush toilets</td>
<td>40%</td>
<td>75%</td>
</tr>
<tr>
<td>Operational telephones</td>
<td>20%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: Schoeman and Faber, 2010.25

The study further reported that inadequate infrastructure negatively impacted on the quality of services since basic functions such as calling an ambulance have the potential to become major service delivery challenges.

Service coverage

In terms of equity, within the healthcare system the whole population should be able to access similar levels of care.26 However, in many instances the package of services at PHC and district hospitals is at times much more limited than in urban settings (as seen, for instance, in a very low caesarean section rate).7 Since in rural settings the public sector often constitutes the only health service in the area, the options are much more limited for these patients.

Referral system and access to specialist services

Rural hospitals and clinics form part of a larger referral system, which is not always based on rational planning but rather on historical factors such as location and, perhaps more importantly, availability of services. The availability of specialist services at regional hospitals may be very variable; for example, Limpopo had only one regional hospital with a qualified anaesthetist in 2002.27 If regional services are poor or unavailable, a patient from a rural hospital has to be referred to tertiary services, usually even further removed geographically. Outreach programmes by specialists to
mostly district hospitals has been a strategy that has improved the clinical support for peripheral services.26-28 Evidence suggests that a more integrated visit that includes teaching, clinical audits and consultations may have a better overall impact than merely relocating the specialist clinic in to another setting.28 Strengthening of regional services is vital for good support of rural hospitals, particularly when outreach programmes become part of the core functions of regional services.

Emergency services both within and between rural areas and regional or tertiary centres are also typically less resourced than emergency services in urban areas, resulting in long waiting times.16 In emergencies (particularly obstetric cases) this may be catastrophic, and there is a push to increase capacity for managing increasingly complicated cases in the periphery.27, 29, 30

Quality of care

An important aspect of service coverage is not just availability of facilities or the range of services available, but also the quality of the care received. The public healthcare system relates to patients in particular ways, often perpetuating stereotypes and assumptions. The biomedical focus of the healthcare system does not address the social determinants of disease, and nor does it engage adequately with cultural expectations, migrancy or social dynamics of changing cultures.16 The case study highlights how patients are assumed to understand the structure and bureaucracy of the healthcare system, including levels of care and requirements for access to care.

Many concerns have been raised regarding the quality of care that rural people are receiving at public sector facilities. Recent community consultations around healthcare in rural areas showed that rural health care users have identified shortages of staff, bad staff attitudes, large distances to health facilities and services, insufficient medication, lack of monitoring and evaluation, patient transport and shortage of ambulance services as major areas of concern.31

Although the national average for delivery without a skilled attendant is 9%, case studies in rural areas such as Hlabisa, KwaZulu-Natal, show that an estimated 63.5% of women gave birth at home; for Agincourt in rural Mpumalanga the figure was 23.1%.17 In terms of delivery at health facilities by a skilled health attendant (a Millennium Development Goal 5 process indicator), the national average was 84% in 1998 – but only 74% for rural women compared to 93% for urban-based women.32 These findings point to the unequal chances rural women have for a safe delivery, most likely due to their geographical location and socio-economic status. However, when assessing quality of care indicators, a heterogeneous picture emerges, with variable quality of care throughout the country.

Functioning of the healthcare system

Leadership and management

In order to address the issues of access to health care in rural areas as described above, the healthcare system has to function adequately. This is influenced strongly by leadership and governance as well as equity in resources. Local leadership and management are crucial to improving patient care.33 Chopra et al. argue that stronger leadership and greater local accountability are conditions for improvement in coverage and quality of maternal and child health services.34

Multiple systemic issues such as the availability of HR, the procurement system, transport, clinical audits and availability of drugs impact on capacity to provide a good-quality service. Appropriate, informed decisions can limit the negative impact of severe resource constraints, while critical gains are possible even with limited increases in resources if managed well. For instance, instead of keeping doctors at the hospital during times of severe understaffing, a manager may decide to send doctors to service the peripheral clinics in order to prevent congestion at the hospital. This also has direct positive implications for patients, who can access care more locally.35 However, a recent Delphi study involving 64 rural healthcare experts identified “the appointment of people to senior posts in hospitals, district offices and provincial Departments of Health without requisite knowledge, skills and experiences” as the biggest challenge for rural health care.36

The shortage of health professionals is a significant barrier to the right to health in rural SA and has been touched on already. North West and Limpopo residents have the lowest access to health professionals of different categories, while Gauteng and Western Cape residents are the best off.10 Small teams of health professionals are particularly vulnerable, with the loss of one professional having a much larger impact on service delivery.29 The urgency of replacement is not always well understood by decision makers located far from the rural services. This has become apparent with provinces imposing staffing moratoriums across the board, severely affecting recruitment in already understaffed rural areas.37

Resource allocation for rural areas

A recent study found that the provinces with the greatest health burdens, least economic resources and largest populations received the smallest share of national public healthcare funds.18 The racial and geographical iniquities of the apartheid past have not been adequately addressed in current healthcare spending processes, and provinces with greater existing capacity in terms of hospitals and number of doctors benefited from higher funding allocations. The continued inequities are explained by the “infrastructure-inequality trap”, where better-resourced health infrastructure requires higher levels of funding to maintain current levels of care, and also has greater capacity to spend the funds allocated and leverage additional funds.19 As a result, the inequitable distribution of healthcare infrastructure continues to perpetuate inequalities between urban and rural areas, such as per capita spending on PHC.2

Performance of the healthcare system is frequently assessed by efficiency indicators such as cost per patient day equivalent.7 However, efficiency indicators should not be the only criteria for resource allocation. In order to provide a certain service, a number of basic resources need to be available, regardless of how well utilised the service is. An example of this is caesarean sections. In order to be able to perform a caesarean section, minimum staff and equipment needs to be available, regardless of whether one or 10 caesarean sections are performed in one night. The cost of only a few caesarean sections in a rural hospital is thus proportionately higher. However, in certain instances concerns about cost and workload should not dictate the availability of vital services. This is
true for many mobile services, which may spend an extraordinary amount of time and resources travelling long distances to see only a few patients. By definition the services are going to be less efficient, and a more nuanced understanding of resource allocation needs to be in place to address the right to health for remote populations.

There is little doubt, however, that severe inefficiencies and poor management contribute strongly to both the cost and quality of healthcare delivery. In as far back as 1996 a research report commissioned by the Department of Health found a strong urban bias and high levels of inefficiency and inequity in resource allocation. This was aggravated by a lack of systems and capacity to rationalise, manage future resource allocation and develop efficient use of resources at the micro level. The Integrated Support Team reports made similar findings in 2009.

**Governance**

Many of the current health reforms draw on the experience of other countries such as Brazil, which managed to move rapidly toward achieving the Millennium Development Goals by implementing PHC strategies. A critical feature of their healthcare reform was that it took place in a particular social and political context in which there was increased demand for local governance and improved services. In SA however, governance, both in terms of provincial accountability to implement national strategies as well as local accountability to communities, remains poor. The accountability of local leadership has been identified as a particular concern for rural health. The role of the community and meaningful and empowered mechanisms of holding services accountable locally are crucial – yet largely lacking.

**Good practices**

There are ample exceptions to the trend of poor service delivery, staffing and management in rural health care. In many instances rural doctors and nurses have managed to form strong relationships with individuals and communities as well as organisations working in the community. The role of these relationships in service provision has not been adequately explored in SA.

The first antiretroviral (ARV) programmes in the country to reach the 2011 targets in terms of coverage of catchment populations (as defined in the National Strategic Plan) have been rural, defined by low population densities, and programmes that pioneered ARV integration into PHC clinics were also rural sites. There have been dramatic improvements in perinatal mortality rates and inpatient mortality rates in some rural hospitals, often performing better than urban hospitals. The horizontal integration of vertical programmes such as TB and HIV care has been successful in many rural services. Working in resource-limited settings prompted initiatives such as task-shifting and extending the scope of practice. Many such innovations in rural areas preceded (and at times informed) national policies.

Success stories are not recorded and published enough, and the many dedicated healthcare professionals working in rural communities in difficult circumstances remain hidden and seldom acknowledged. The role played by foreign qualified doctors in particular is often not recognised, despite the high level of reliance upon them. Working in a resource-limited environment requires healthcare professionals to go beyond their scope of practice and often to break professional rules (such as a single doctor giving the spinal anaesthetic and performing the surgery in cases of caesarean section) in order to save lives.

**Implications for the future**

Mechanisms need to be in place to rectify the inequalities and inequities of the past. Internationally, guidelines have been developed for the ‘rural-proofing’ of policies by applying a set of questions that need to be explored when developing any new policy. Such tools need to be applied to ensure that legislation, policies and strategies are aligned with stated objectives and are constitutionally sound (see Box 2).

**Box 2: Critical questions to ask when designing or reviewing a new health policy**

- Does this policy assist in the progressive realisation of access to healthcare services in rural areas in an equal manner compared to urban communities?
- Have rural health practitioners been involved in the design of the policy?
- Have rural communities been engaged in the design of the policy?
- Has research from rural areas been used in formulating the policy?
- How will remote communities access this service? What can be done to make it easier for them to do so?
- At what facility level will this service be delivered, e.g. clinic, district hospital or regional hospital?
  - Is the type of facility level the closest possible to rural communities?
  - Are proper referral systems in place to ensure accessibility for communities living far from the proposed facility?
  - Have the costs for rural patient transport been factored in?
  - What minimum levels of HR are required to implement this policy?
  - Are these levels available in rural areas?
  - If not, what can be done to ensure accessibility of the promised service as a result of this policy in rural areas?
  - Do we need relatively more HR in rural areas to reach remote communities with this service?
- What financial resources are required to roll-out this policy? What factors may make this more expensive in rural versus urban areas?
- What additional equipment is required to roll-out this policy in rural areas?
- How will monitoring and evaluation of the implementation be carried out?
- Have efforts been made to minimise paperwork?
- How will we ensure that rural and remote communities are adequately informed about the new policy?
- Are there any risks that the policy will entrench further inequities if the above questions are not addressed?

Source: Adapted from Versteeg and Couper, 2001.

These questions need to be critically explored and applied to all the current policies and strategies, such as the NHI, re-engineering of PHC and the new HR plan, to mention a few. Detailed reflections and explorations are needed to understand the impact of the new policies on rural areas and how to achieve equity, particularly for resource-intensive interventions.

An equally rigorous process needs to follow the development of regulations, strategies and resource allocations for implementation of the policies. Clear mechanisms have to be in place to ensure that the processes and allocations are rural-friendly. It is crucial that the detail of issues such as funding care at the point of delivery,
achieving compliance with the National Core Standards (in order to qualify for NHI funding) or managing HR requirements for initiatives are explored from a rural perspective in order for the system to start addressing the inequities of the past successfully.

Conclusion

The right to health care in rural areas is compromised by a number of health system and socio-economic barriers. The inequities of the past have persisted, with inadequate focus on addressing the barriers to accessing health care holistically, including the rural patients’ journey from their dwelling to the point of care.

To realise the right to health, the specific conditions and realities of rural areas need to be taken into account. This in turn requires sufficient insight by policy makers into rural health systems, so that implementable policies are designed that can achieve their intended goals equally among citizens. The focus on inequities related to race and socio-economic status needs to be broadened to include the explicit link to geographical location.

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