Development of the health system in the Western Cape: experiences since 1994

6

Authors:

Lucy Gilson[i,ii]
Leanne Brady[i]
Tracey Naledi[i,iii]
Helen Schneider[iv]
David Pienaar[iii]
Anthony Hawkridge[i,iii]
Krish Vallabhjee[i,iii]

Provincial governments in South Africa have a critical responsibility in terms of population health, yet few provincial-level analyses of health-system development have been undertaken. This chapter reports on research being conducted in the Western Cape to understand the province's particular experience of health-system transformation since 1994, set against wider national experience. The research is being undertaken collaboratively by the authors of this chapter, a team of Western Cape provincial health managers and researchers.

The chapter is structured to reflect the Western Cape's 22-year experience. The situation that faced the province in 1994 is outlined briefly, followed by a description of key features of the three health strategies that have driven provincial health-system development over time. An assessment is then presented of the overall nature and patterns of Western Cape health-system change, and the achievements and limitations of this transformation are considered. The chapter concludes with some early lessons from this experience, and relevant, international experience is considered.

This chapter reports on research being conducted in the Western Cape to understand the province's particular experience of health-system transformation since 1994.

i School of Public Health and Family Medicine, University of Cape Town
ii London School of Hygiene and Tropical Medicine
iii Western Cape Provincial Department of Health
iv School of Public Health, University of the Western Cape

Introduction

The 1994 African National Congress (ANC) Health Plan[1] outlined a vision for post-apartheid health-system transformation founded on equity; this demanded radical system re-structuring, and was eventually translated into the 2003 National Health Act (NHA).[2] The 1996 Constitution,[3] meanwhile, gives national and provincial governments concurrent responsibility for health care, and the NHA gives the provincial health minister the responsibility to consider "any matter to protect, promote, improve and maintain the health of the population within the province". Thus provincial governments are both responsible for implementing national health policies and have the authority to develop health legislation for consideration by the provincial legislature. Yet since 1994, there appear to have been no specific analyses of provincial health-system development, notwithstanding an early report on provincial health-department restructuring[4] and a few cross-provincial analyses around particular health services.[5,6]

This chapter reports on ongoing research being conducted in the Western Cape (WC) to understand this province's particular experience of health-system transformation since 1994. The focus is on the system as a whole, including governance and resourcing functions, rather than on a particular health service. The research is being undertaken collaboratively by the authors of this chapter, a team of WC provincial health managers and researchers. This chapter is the first output of the larger project. It presents a descriptive but detailed overview of health-system development in the WC since 1994, highlighting critical dimensions of this experience.

Methods

The chapter draws on research data generated through document review (of strategic and annual plans and reports, and other relevant material); analysis of routine data and the *District Health Barometer*; two workshops held separately with urban- and rural-based provincial health managers; a set of detailed, key-informant (KI) interviews (with respondents from the provincial Department of Health (PDoH) at various system levels; respondents from outside the Department; and respondents with national experience); and short interviews with respondents with long-term experience in the WC health system. Through these processes, we have so far engaged with a total of 73 health-system actors in reconstructing and gathering perspectives on the experiences of the 1994–2016 period. The researchers have led data collection and analysis, but the whole team has met consistently to plan, reflect on and consider early data analyses. Key-informant interviews were conducted with informed consent, and respondents' confidentiality and anonymity have been protected by the researchers. Qualitative data analysis entailed a broad thematic analysis, with relevant coding, and triangulation across respondents and across data sets (including document reviews and quantitative data). Ethical clearance was provided by the University of Cape Town.

Findings

The situation facing the Western Cape in 1994

The WC inherited quite a different apartheid legacy from that of the other provinces. It was one of only two provinces that elected a coalition government, led by the National Party, and one of the two provinces in which the new administration was created out of a single, and fairly well-functioning, former bureaucracy (the Cape Provincial Administration (CPA)). It also had a legacy of socio-economic advantage, with the second-highest income per capita and the highest human development index,[7] which translated into better health indicators, e.g. the WC provincial infant mortality rate was more than 1.5 times lower than the national average in 1994 (27 per 1 000 live births versus 48 per1 000 live births).[8]

In terms of health services, the WC had a global reputation for innovative and high-quality hospital care and had significant 'academic health capital', in the form of three universities offering a wide range of health professional training (including two offering medical training). In resourcing terms, the province had the highest public-sector health expenditure per capita across provinces (twice that of the national average[9]), as well as the highest availability relative to population of clinics and public-sector doctors and nurses, and the second-best availability in terms of acute public hospital beds. The inclusion of private-sector resources slightly improved the WC's relative resource availability (e.g. from an eight to nine-fold difference in doctor availability compared with the province with the lowest availability[7]).

Nonetheless, as health services nationwide had been seen as "instruments of the state in achieving apartheid goals",[10] this also left its imprint on the WC.

First, the hospicentric nature of healthcare provision nationally was particularly evident in the WC. In 1992/93, 60% of total provincial hospital expenditure was spent on academic and tertiary-level acute-care hospitals (72% when tuberculosis (TB) and special hospitals are included[11]), compared with 58% spent on academic and tertiary hospital care nationally.[7] The extremely limited provision of lower-level care placed particular pressure on the three central hospitals – highlighting the need to strengthen hospital services outside Cape Town.[a,b,11]

Second, similar to the situation nationally,[12] public healthcare provision in the WC was severely fragmented between multiple authorities, preventive and curative services, and along racial lines, with particular consequences for primary care in Cape Town.[c] Private health care, meanwhile, largely targeted the higher-income and white population, although in rural areas private, part-time District Surgeons were contracted on a fee-for-service basis to provide curative primary care to 'State patients' in their own surgeries.[d,13]

Third, the racism permeating the WC provincial health sector was exemplified by the fact that none of the racially divided administrative authorities specifically took responsibility for healthcare provision to the black population, which had no residential rights in Cape Town

a Key-informant interview 22 August 2016.

b Key-informant interview 6 September 2016.

c Timeline mapping workshop with the PDoH, Cape Town 16 December 2015.

d Key-informant interview 24 June 2016_a.

prior to 1994.[d,e,f,12] Health care was "segregated on every level, through our human resources and everything"[e] even down to the minutiae of hospital administration: "every hospital had pink and green folders on a racial basis".[d]

Overall, therefore, in 1994 there simply was no 'health system' in the WC province when judged against the now widely used World Health Organization (WHO) definition of the term: "a coherently organized set of services and people seeking to promote, restore or maintain population health in a particular geographic area".[14]

A 20-year perspective on Western Cape health-system development

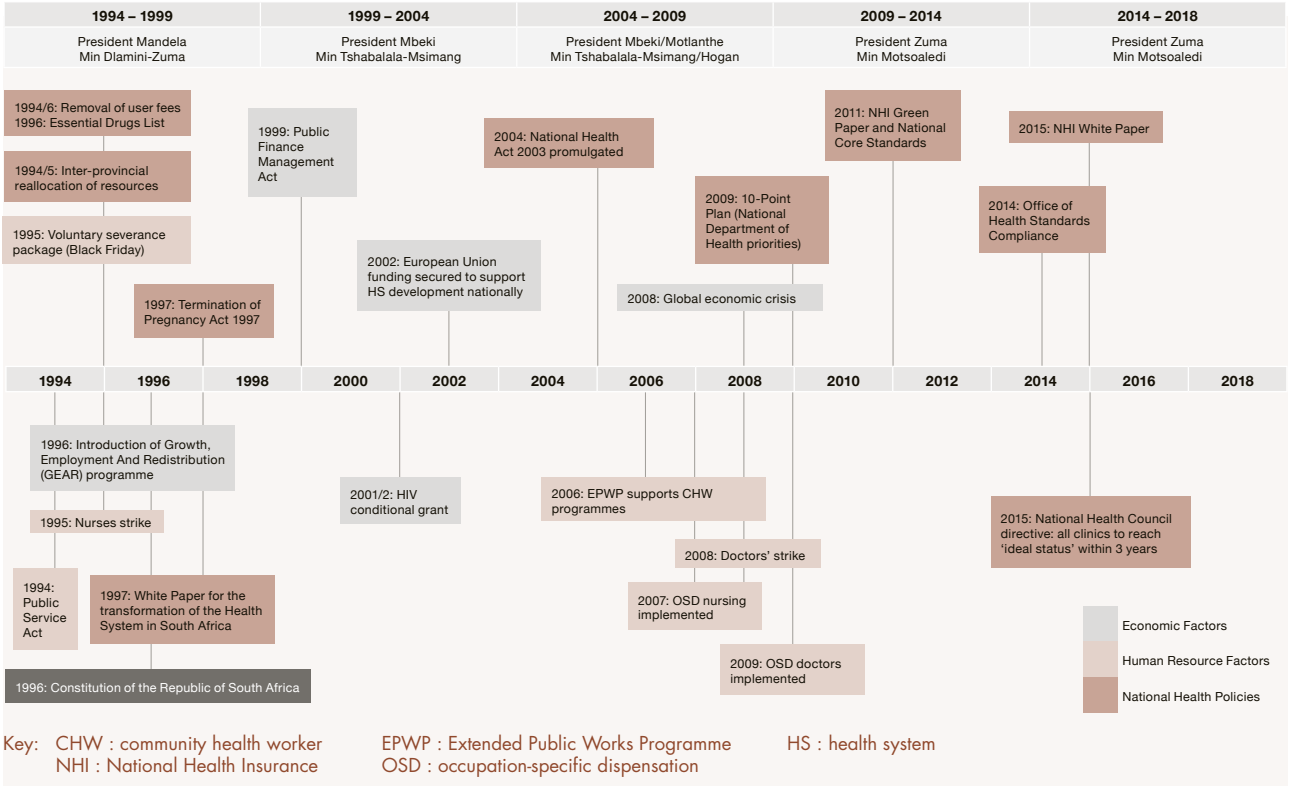
Within the context of broader political and economic change, as well as national health-policy imperatives (Figure 1), three successive provincial health strategy documents have guided WC health-sector transformation since 1994 (Table 1).

The 1995 Provincial Health Plan closely mirrored the ANC Health Plan[1] in its emphasis on implementing a primary health care (PHC) approach and supporting the integration of health within wider social development. More specifically, the 1995 plan (Table 1) proposed a service-delivery model based on comprehensive primary care services, led by clinical nurse practitioners (CNPs), organised within district sub-units integrating previously vertically organised health programmes, with referral pathways to district and regional hospitals. A specific intention was to ensure that use of academic hospitals and other 'supra-regional' services would be "limited to what is essential and no more".[11] In this early period, PHC services were strengthened through national initiatives (Figure 1), while over 120 primary care clinics were renovated and built, and over 1 000 hospital beds were closed, as the proposed 'size and shape' of the post-apartheid provincial health system was put in place.[g,h] Realisation of the HIV and AIDS burden also led the PDoH to trial delivery of the AZT (zidovudine) short-course regimen in 1999, despite wider governmental AIDS denialism[h,c] Antiretroviral therapy (ART) was later rolled out across the province, supported by donor funding (Figure 2).

The appointment of a new Head of Department (HoD) in 2002 and the national requirement to develop a Service Transformation Plan stimulated the development of the second provincial health strategy (Table 1). The goal of the Comprehensive Service Plan (CSP) was to "reshape, reprioritise and re-engineer"[d] the health system to ensure that people received care at the correct level, thus enhancing the overall affordability and efficiency of the system. Provincial respondents judged that the CSP "concretised" the PHC philosophy of the 1995 Plan, enabling the "reorientation" of the provincial health system by providing a "roadmap" for decision-making. Supporters of the CSP said that, "it galvanised us, focused us, gave us some direction … [It was] used for taking everybody along with us".[b,i,j,k]

e Key-informant interview 30 August 2016.
f Key-informant interview 1 December 2016_a.
g Key-informant interview 20 October 2016.
h Key-informant interview 12 December 2016.
i Key-informant interview 24 May 2016.
j Key-informant interview 2 September 2016.
k Key-informant interview 19 August 2016.

Figure 1: Critical contextual factors influencing provincial health system development



Key: CHW : community health worker
NHI : National Health Insurance
EPWP : Extended Public Works Programme
OSD : occupation-specific dispensation
HS : health system

Source: Timeline mapping workshops with the PDoH, Cape Town 16 December 2015 and Worcester 11 July 2016; WC Annual Reports.

Table 1: Comparison of the three Western Cape provincial health strategies after 1994

	1995 Provincial Health Plan	HealthCare 2010 + Comprehensive Service Plan (CSP)	HealthCare 2030
Vision/Mission	"To promote and maintain the optimal health of all people in the WC province through the integration of health within the broad context of social reconstruction and development, and by ensuring the provision of a balanced health system and all related services"	Secure basic access to quality services for the whole population of the province, whilst tackling the changing burden of disease (HIV and AIDS and TB) and intra- and inter-provincial inequity	"Achieving optimal health outcomes of the population requires robust upstream interventions by the whole of society and a high-quality, comprehensive health service"
Key drivers	Move towards PHC approach and decentralisation of health services Optimal service to be provided within budget limit	Build on 1995 Plan Reshape health services towards: 90% contacts at primary level, 8% at secondary level, and 2% at tertiary level Improve quality and financial sustainability of health services	Maintain service-delivery shape of HealthCare 2010/CSP A systems approach to health-system development Move from curative paradigm to one of prevention, promotion and wellness, adopting a patient-centred approach Focus on values of caring, competence, accountability, innovation, responsiveness and respect (C^2AIR^2)
Key thrusts: District Health Service (DHS) with District Hospitals (DH)	District Management Team will have responsibility for planning and management Community-level services will • encompass local CHC, linking to clinics and other services, offering comprehensive package of care, led by clinical nurse practitioner and formally accountable to community; • be organised within sub-units of districts, with clear referral pathways to district and regional services. Vertically organised programmes will be integrated into comprehensive services at each level. DHs to be upgraded	Metro DHS (Cape Town) will comprise four sub-structures, each with its own management team, reporting to the District office Five rural districts will be divided into sub-districts, with sub-district management led by DH medical superintendent and hospital to support CHCs and clinics Community-based services, including TB and HIV, to be managed as integral component of DHS but provided mainly by NPOs Two new DHs to be built in Metro, and regional hospitals to be converted to district hospitals	District level to enable service delivery, integrate decision-making and be accountable to provincial level Strengthen focus on prevention and promotion within PHC; and strengthen rehabilitation services and mental health care TB management integrated within primary, home and community-based care Manage tension between vertical programme structure and integrated service delivery Small DHs to provide full package of care
Key thrusts: Hospitals	Rationalise and restructure highly specialised services in academic hospitals; reallocate resources to PHC, district and regional services Strengthen regional hospitals outside Cape Town (George, Paarl, Worcester) to filter upwards	Retain all three academic hospitals, each with the critical mass of level 2 and 3 beds needed for teaching purposes Across the province, reduce level 3 beds and increase level 2 and 1 beds Number of level 3 beds determined by funding through National Tertiary Services Grant	Central hospitals integral to service-delivery platform; will continue to advocate for adequate conditional grant funding Level 3 and large DH (level 1) to offer mix of bed types to meet needs of immediate population General specialist (level 2) hospitals to offer outreach and support to DHs

Key: CHC : community health centre NPO : non-profit organisation PHC : primary health care

Source: Provincial Health Plan 1995,[11] HealthCare 2010,[15] and HealthCare 2030.[16]

Significant steps in District Health System[l] (DHS) development were made in line with the plan (Table 1 and Figure 2). In 2005, all primary care services in rural areas were brought under provincial management within new health districts. In Cape Town, DHS management structures were established and new managerial appointments made in 2009/10. The reclassification of some level 2 hospitals also strengthened the DHS, and as broadly envisaged in the 1995 Health Plan (Table 1), construction of two new District Hospitals began in under-served areas in Cape Town, alongside regional hospital upgrades (Figure 2). DHS human-resource development included extending the CNP cadre, appointing family medicine physicians, and developing community-based services by contracting with non-governmental organisations (NGOs), in part to employ community health workers (drawing on the external resources of the HIV/AIDS Programme and the Expanded Public Works Programme).[c,m]

Within hospitals, however, there were operational challenges in implementing the CSP's 'ideological' efforts to distinguish between level 2 and 3 care, as part of a drive to contain overall hospital expenditure and protect resources for PHC and the DHS.[i,n,o] Meanwhile, the strengthened focus on efficiency and cost containment was both praised and criticised.

The current provincial health strategy, HealthCare 2030, represents the 'third wave' of provincial health reform. Although some PDoH respondents see it as "too woolly" or "soft", for others this strategy is "aspirational", "strategic" and will support "innovation" [a,i,p,q,r]

l The term 'District Health Services' is used in some policy documents. However, in this article, the internationally recognised term 'District Health System (DHS)' is used throughout.

m Timeline mapping workshop Worcester 11 July 2016.

n Key-informant interview 25 May 2016.

o Key-informant interview 24 June 2016.

p Key-informant interview 15 June 2016.

q Key-informant interview 21 September 2016.

r Key-informant interview 22 September 2016.

Recognising that the detailed structure and resourcing guidance offered by the CSP limited the flexibility needed to respond to changing contexts, HealthCare 2030 deliberately adopted a broad health systems approach and vision. Patient-centred care and quality improvement are emphasised, as well as health promotion and prevention, and the need for wider action to address the social determinants of health. The strategy also highlights the need for "dynamic and distributed leadership"[16] to develop core organisational values and nurture employee potential. As the outgoing HoD noted in his foreword, the CSP "had not focused adequately on many 'people issues', related both to patients as well as to the staff … [but] continuous improvement in patient experience can only be achieved with caring and engaged staff".[16]

Two inter-linked and noteworthy dynamics underpinning the WC health-system development over time are: (i) reshaping the health-service platform, including the role of academic hospitals, while containing budget growth; and (ii) changing relationships between the PDoH and the universities and clinicians. In the context of considerable economic constraints[s] (Figure 1), the budgetary principle underlying the 1995 Health Plan was 'cut and grow' – that is, services and expenditure at tertiary level had to be cut to reduce overall expenditure and allow reallocation towards, and growth in, primary care and rural services.[g,h] This approach fed into the CSP and its focus on separating level 2 and 3 hospital services to protect resources for PHC, alongside the strong push for efficiency improvements. Budgetary re-allocations inevitably had potential impact on the health professions' training role of the tertiary hospitals, and indeed the 1995 Health Plan initially proposed the creation of one faculty of health sciences by merging training activities across the three universities. Not surprisingly, resource re-allocation away from academic hospitals met with considerable resistance from university managers and clinicians. However, over time, budget constraints relaxed, given average annual real growth in the provincial health budget (conditional grants and the equitable share allocation) of 5.9% compared with 5.6% nationally, for 2002/03–2008/09.[18] The much improved relationships then resulted in greater engagement by university staff and clinicians in the development of HealthCare 2030, which acknowledged central hospitals as integral to the provincial health system (Table 1).

Assessing the scope of health system transformation

Although they are different documents, the three WC strategies have focused consistently on strengthening PHC and the DHS, and have sought to develop a coherent and unitary provincial health system offering accessible, equitable, good-quality, efficient and financially sustainable services for all. The emphasis of the 1995 Plan on the leading role of the public sector in the provincial health system has been a sustained feature of health-system transformation, although the private sector was acknowledged as a strategic partner in HealthCare 2030.

In summarising key health-system developments, Figure 2 demonstrates, firstly, that system change has been *sustained over time* towards the overarching goals. Each strategy document sought to build on the previous one (Table 1), while introducing new emphases. Respondents within and outside the PDoH commented that leadership stability and depth also "made a considerable contribution in the ability to move the ship in a predetermined direction".[q] Two of the four HoDs during this period served for nine and 12 years respectively, and the 2015 senior management team together had over 150 years of WC health-management experience.[c] Strong technical leadership has been supported by what respondents from different vantage points perceive as an appropriate demarcation of boundaries and roles between the HoDs and the more frequently changing political heads; in the province, "the administration is the administration and the politics is the politics".[p] Budget growth[18] together with strategic use of external resources has also enabled health-system development, alongside efficiency improvements resulting from robust management.[d,t]

Secondly, Figure 2 shows how system-wide this transformation has been: every building block of the health system[14] has been touched by change. Strengthening PHC, in particular, required not only infrastructure development across levels of care, but also health-workforce and pharmaceutical-management developments, backed up by new roles for higher-level hospitals, governance changes and strategies to leverage additional resources and improve resource use efficiency. Efforts have also been made to develop a system that offers comprehensive health care, rather than strengthening specific health programmes towards particular disease-control goals (although the HIV/AIDS programme was initially organised vertically, and HealthCare 2030 notes the continuing need to manage this tension).

Thirdly, the need for *system-deep* transformation has also been recognised, in line with international thinking (Figure 2).[19,20] Beyond the 'hardware' developments of infrastructure, service-delivery models, resource allocations, human-resource/drug-supply innovations, and organisational changes, attention has been paid to developing the health system's 'software' – both the 'tangible software' of routine managerial processes and the 'intangible software' of values and norms.[21]

Significant attention has been paid, particularly from the CSP era, to instituting planning and management processes that have sustained system-wide implementation of strategic policy directions and initiatives. Respondents outside the Western Cape see the province as one where there is "almost military precision" in terms of policy implementation,[u] and in which managers are "held to account quite deliberately".[v] The opening of two new District Hospitals in Cape Town is noted as an indication of this capacity to implement planned change over time.[f] Working within national frameworks, annual strategic planning and review and monitoring processes have also been implemented, linked to Annual Performance and District Health Plans. Quarterly monitoring and evaluation processes, meanwhile, now support review of service-delivery targets and allow reflection on wider research and specific PDoH challenges. Bringing system actors together within and across levels, these various processes were, moreover, judged by respondents to be "very powerful for the whole department" in allowing people to think about the system as

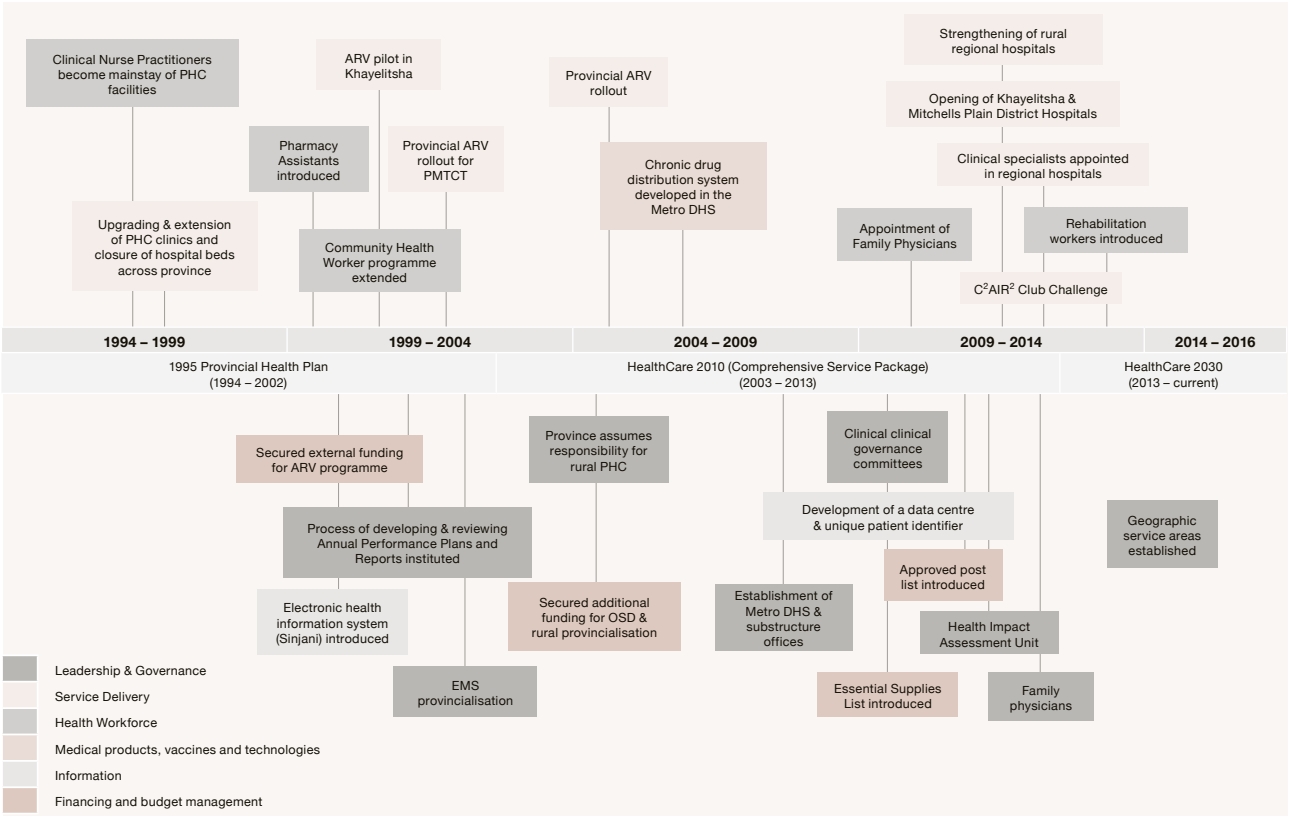
s Resulting from: the nationwide apartheid debt inherited in 1994; implementation of the Voluntary Service Package agreement (leading to the loss of 6 000 provincial health posts, including 30% of all nursing posts[17]); resource battles between sectors within the new provincial government; the health-sector decision to re-allocate resources from better to less well-resourced provinces; and the budget discipline introduced by the Growth, Employment And Redistribution (GEAR) macro-economic policy (Figure 1).

t Key-informant interview 28 October 2016.

u Key-informant interview 30 November 2016.

v Key-informant interview 1 December 2016_b.

Figure 2: Key events in Western Cape health-system development, 1994–2016



Key: ARV : antiretroviral C²AIR² : Club Challenge, a change-management initiative DHS : district health system
EMS : emergency medical services PHC : primary health care PMTCT : prevention of mother-to-child transmission of HIV
OSD : occupation-specific dispensation

Source: Timeline mapping workshops with the PDoH, Cape Town 16 December 2015 and Worcester 11 July 2016; WC Annual Reports.

a whole.[a,k,w] Information-system development, including the use of a unique patient identifier across all service platforms, has supported these processes, as has the development of in-house public-health expertise (since 2011, based within the Health Impact Assessment directorate).[c,i,w]

Financial management has, meanwhile, been strengthened by an internal audit function and relevant management tools. The Approved Post List (Figure 2), for example, has enabled hospital and district managers to make decentralised decisions about the use of their staffing budget, while retaining tight control of the total departmental budget. "As a non-financial manager, and as a CEO, you could actually understand and manage your finances and staffing, and I found that fantastic".[m] Total spending is now regularly within 1–2% of total budget, and in 2015/16 the Western Cape DoH received its 12th consecutive unqualified audit from the Auditor-General[22] (whereas the average number of unqualified audits achieved by other provinces for the nine-year period 2004/05–2012/13 ranged from seven to zero[23]).

Another area of tangible software development is the engagement of clinical expertise in system-level decision-making, notwithstanding some concerns that this engagement has reduced over time.[i,k] Family-medicine physicians now have clinical governance roles at PHC level, although they struggle to balance these roles with their service-delivery workload, and specialists based in regional hospitals (level 2 clinical heads) co-ordinate and improve patient care across the service-delivery platform in their discipline. Working through provincial clinical governance committees (PCGCs) they have the opportunity to set and share clinical standards, feed into wider policy development, and adapt national guidelines to the local setting. However, these committees differ in their functionality and effectiveness.[k,q] Five Geographic Service Areas, organised around the network of primary care clinics and district hospitals that drain to a specific regional hospital, also bring clinicians and managers together across organisational silos (including nationally demarcated budget programmes) to "design the service to look after the population in that area".[i]

Finally, each strategic plan has sought to develop the intangible software needed to sustain PHC by supporting action to address the inherited public-sector organisational culture.[4] The 1995 Health Plan focused on "ridding the department of this apartheid thing"[d] while giving practical content to the principles of health-system equity and responsiveness. HealthCare 2010 then provided a framework to operationalise these principles, and emphasised strong rational planning and robust processes of managerial accountability. HealthCare 2030 has focused attention on staff experiences of alienation and disempowerment, the need to strengthen values-based and distributed leadership, and the need to change organisational culture (Figure 2).[24] However, achieving such change is a very difficult and long-term task. For example, there is still limited diversity in the demographic profile of the PDoH managerial cadre, with only two black managers among the more than 50 director-level managers.

w Key-informant interview 9 June 2016.

The achievements and limitations of health-system transformation

Respondents working across the WC health system have certainly experienced and perceived systemic changes. Although the continuing fragmentation of urban PHC services between the PDoH and City of Cape Town remains a critical challenge, the sense of many is that: "undoubtedly, district health services have been strengthened … and also there's more of a sense that [district hospitals] should be doing more and we should understand what they are doing, and the regional hospitals are big and I think overall even that the central hospitals are actually doing more of what they are supposed to be doing as well".[i] Over time, as a respondent from outside the PDoH noted, there have been "reasonably systematic attempts to make [the system] less divided and less unequal", and now there are "decent facilities for poor people".[x]

These experiences are reflected in wider data on system-level change. Figure 3 shows the human and financial resource re-allocation towards the DHS (Programme 2) that has been achieved, indicating both an increase in overall expenditure (in real terms) and an increase in the share of total health expenditure. However, in 2015/16, the percentage of total expenditure on the DHS was still lower in the WC (39%) than the national average (45%), albeit higher than Gauteng (32%), a province that inherited a similarly large complement of academic and tertiary hospital beds. Importantly, the WC resource reallocation has been achieved while maintaining spending within budget limits.

In tandem, there have been significant (real) increases in WC per capita expenditure on the DHS and PHC (the latter slightly above the national average) and utilisation of district services.[y] Over a 12-year period (1999/2000–2010/11), there was a 60% increase in PHC utilisation, at a rate higher than population growth.[z]

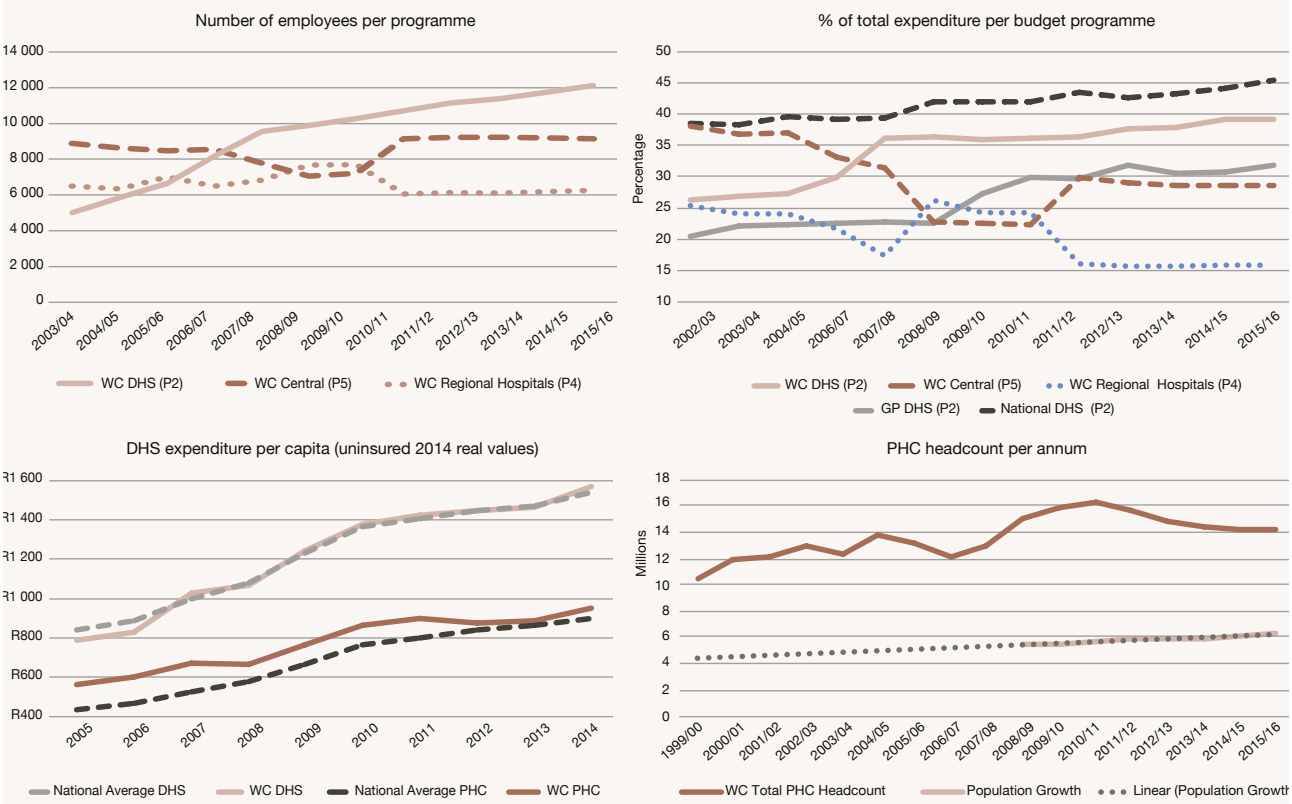
Similarly, analysis of routine data over the last five years shows a steady increase in the use of district hospitals, relative to regional and tertiary/central hospitals, where utilisation has remained static (Figure 4). These utilisation patterns are likely, moreover, to have offered particular access gains for poorer groups, given the wider evidence that district hospitals are preferentially used by these groups in South Africa.[25] A shift towards district hospital utilisation

x Key-informant interview 13 June 2016.

y A key driver of increased expenditure has been conditional grants for HIV and AIDS and TB.

z The declines in PHC headcounts in recent years are possibly due to new community-based service-delivery platforms and chronic-disease dispensing.

Figure 3: Western Cape resource reallocation to the DHS and PHC: number of employees, proportion of total health and per capita expenditure relative to national trends, and headcount per annum

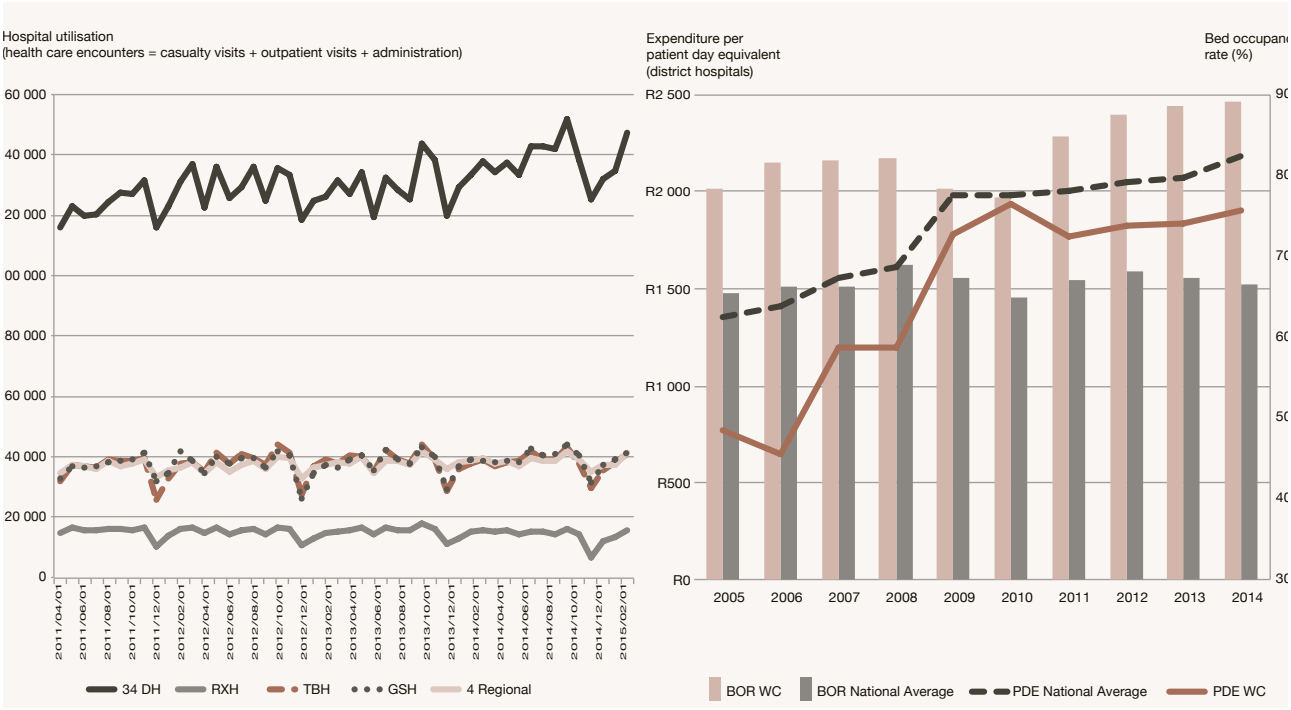


Note: different time periods in the graphs reflect availability of data.

Key: Central : central hospital (budget programme 5) DHS : district health system (budget programme 2)
Reg hosp : regional hospital (budget programme 4)

Source: WC Annual Reports (2003–2016), *South African Health Review 2011*, National Treasury Budget Annual Statements (2002–2016), *District Health Barometer* (2005–2015).

Figure 4: Western Cape district hospital utilisation and efficiency: utilisation relative to central/tertiary and regional hospitals; bed occupancy rate, and costs per patient day equivalent, relative to national trends



Key: BOR : bed occupancy rate
PDE : patient-day equivalent
DH : district hospital
RXH : Red Cross Hospital
GSH : Groote Schuur Hospital
TBH : Tygerberg Hospital.
OPD : outpatient department

Source: WC Annual Reports (2005–2014), *District Health Barometer* (2005–2014), WC Routine Facility Data (2011–2015).

is also reflected in growing bed occupancy rates, while the cost per patient-day equivalent (PDE) remains below the national level, suggesting greater efficiency than other provinces.[aa]

Three nationally accepted service-delivery indicators for which there are robust data and that reflect on system performance also show how DHS investments have been translated into improvements in programme coverage and outcomes, even if globally accepted targets have yet to be reached in some instances.

1 The Western Cape has mirrored and exceeded the national trend of increased early antenatal care (ANC), with the ANC 1st visit <20 weeks rate rising from 39% in 2005 to 66% in 2014.[26,ab]

2 TB cure rates (new smear-positive) have been consistently around 80%, compared with the 74% national average in 2013, but still below the WHO target of 85%.[26,ac]

3 By the end of 2015, close to 290 000 people had been initiated onto ART in the WC, with 210 000 remaining in care. Retention rates in the ART programme are between 80% and 85% at 12 months (compared with the WHO target of 90%), declining to between 63% and 69% at 48 months (with each new cohort showing lower retention levels). (Authors' analysis of WC Routine Facility Data)

Yet despite the improvements, many respondents noted that the WC health system still faces critical challenges of health and health-care inequity. Although decreasing over time, disparities in infant and under-five mortality across WC districts persisted in 2013.[27] There is also variation between districts in total health spending. In 2014/15, spending per uninsured/dependent person was 1.5 times greater in the City of Cape Town Metro DHS, where 64% of the provincial population reside, than in most rural districts. Meanwhile, spending variation within Cape Town was judged as likely to ignore greater health needs in Khayelitsha, and perhaps to reflect worse access to lower-level care in Eastern, Klipfontein, and Mitchell's Plain sub-districts.[28]

Many respondents were also concerned that the provincial (and national) PHC model remains bound by its past – it is an acute-care, service-delivery model not well oriented to tackling the growing non-communicable disease burden or supporting wider action to address the social determinants of health.[x,ad,q,ae] Respondents judged that re-orienting the PHC model will require the strengthening of multiple relationships within the system,[af] and will have to confront organisational barriers to learning and risk-taking – both the continuing dominance of a 'biomedical' perspective and the PDoH's 'compliance culture' (resulting from the focus on robust financial management, as well as national financial and human-resource

aa The steep increase in cost per PDE in 2009 coincided with the advent of occupation-specific dispensations and greatly increased salaries of professional staff (Figure 1).

ab In this period, antenatal care was also introduced by local government.

ac In 2013, the TB loss-to-follow-up rate (8%) in the WC was higher than the national average (6%).

ad Key-informant interview 16 September 2016.

ae Key-informant interview 26 September 2016.

af Relationships between the patient and the system, health programmes and wider service delivery, referral networks and service delivery and support services.[q,x,ad]

policy imperatives). "We've gotten to the point where we are so compliant that we can't think anymore … We lack agility."[p]

The final widely identified challenge is the failure to establish functioning processes of community engagement. While the immediate post-1994 period was characterised by significant popular engagement, the PDoH has subsequently been criticised for relying too much on formal legislative frameworks and too little on the 'risky conversations' needed to bring such frameworks alive and build trust with the community.[i,p,b,ag,r]

Conclusions and lessons

Overall, given the breadth and depth of system change described here, health-system development in the WC since 1994 can appropriately be described as 'whole system change' – that is, a series of interrelated processes of adaptation and development, working across the multiple levels of the system and engaging multiple actors (adapted from Berta et al.[29]). People working within the system are also beginning to have a sense of themselves as part of a larger whole that seeks constant improvement towards collective goals. As one respondent noted, "I think we kind of have a system at the moment that actually is performing as a health system that tries to prevent things that cause trouble for it later on, rather than just funding the trouble when it occurs".[k] From the basis of fragmented and hospi-centric services primarily offered in geographic settings that best served the needs of the white elite, the provincial health system has, therefore, become a system organised more rationally, better meeting the health needs of the broader provincial population and seeking to protect their healthcare rights.

Nonetheless, health and healthcare inequity remain critical provincial challenges. Perhaps also, as some respondents suggested, more could have been done more quickly to tackle the legacies of the past, especially given the inherited healthcare and bureaucratic capacity.

What wider lessons can be drawn from this experience?

Firstly, strengthening PHC is nationally[30,31] and internationally[19,32,33] recognised as being essential in working towards health and health-equity goals. However, it requires change at each level of the health system, so that ultimately the system as a whole is geared towards the primary level, through clinical support and referral chains that back it up. District/regional hospitals play a particularly important role in a strong, equity-oriented health system,[33] together with the integration of vertical health programmes within both service delivery and management.[34,35] Effectively managing wider partnerships – such as with the NGOs involved in home and community-based care in the WC – is also necessary, together with changes in organisational culture that value PHC.[19]

Three continuing challenges for the WC service-delivery model highlight additional lessons for PHC re-orientation elsewhere:

- the need for new PHC models better oriented to the wider health and social challenges facing populations in the 21st century;[19,34]
- relatedly, the development of inter-sectoral partnerships, and, recognising their vital role as a health resource, multiple forms of patient and community engagement;[19,34,35] and
- innovative action to address the health challenges of particularly vulnerable groups and communities.[33,34]

Secondly, as recognised internationally,[34,36] leadership and well-functioning bureaucracies are needed to drive the necessarily long-term processes of health-system development. Together they underpin the sustained implementation of coherent visions, and enable system-wide and system-deep change; in addition, leadership is needed to leverage political commitment.[33,34,36] The WC experience shows that health-system development is shaped but not necessarily bound by the legacies of the past. Leaders must take advantage of windows of opportunity to bring about change, while engaging with key health-system stakeholders; particular attention must be paid to clinicians, managing their possible resistance to change and drawing their particular perspectives into wider system decision-making.[35,36]

Separating and balancing political and bureaucratic leadership is another important governance factor, as is developing strong technical and managerial capacity by establishing district management structures with delegated decision-making power, and deepening management capacity across levels.[31,36] The WC's financial management innovations reflect wider lessons about the importance of strong planning and budgeting processes, and the importance of ensuring accountability.[34,36] However, as noted in the WC, strong central control of health-system change runs the risk of limiting innovation and risk-taking within the system. In complex systems, enabling forms of leadership that encourage continuous learning and new relationships between support services and service delivery are increasingly regarded as essential for system change,[14,37] and are new imperatives for the WC.[16]

Finally, using a wide array of public-health evidence in decision-making is important in driving health-system development, providing a shared basis for decision-making across the system and offering feedback loops to support change.[19,34–36] An important next step for the WC is to develop new forms of monitoring and evaluation that take a whole-system perspective – extending beyond services and programmes to system functions, drawing in a wider range of perspectives and knowledge, and considering not only what but also how health-system change is unfolding.

ag Key-informant interview 19 September 2016.

References

1 African National Congress. A National Health Plan for South Africa. Johannesburg; 1994.

2 The Republic of South Africa. National Health Act No 61 of 2003. Pretoria: Government Gazette South Africa; 2004.

3 Constitution of the Republic of South Africa. 108 of 1996. [cited 3 May 2017].
URL: http//www.gov.za/sites/www.gov.za/files/images/a108-96.pdf

4 Robb D, De Villiers M, Vallabjee K. Provincial restructuring. In: Barron P, editor. South African Health Review 1997. Durban: Health Systems Trust; 1997. p. 45–53.

5 Schneider H, Coetzee D, Van Rensburg D, Gilson L. Differences in antiretroviral scale up in three South African provinces: the role of implementation management. BMC Health Serv Res [Internet]. 2010;10(Suppl 1):1–9.

6 Lund C, Kleintjes S, Kakuma R, Flisher AJ. Public sector mental health systems in South Africa: inter-provincial comparisons and policy implications. Soc Psychiatry Psychiatr Epidemiol. 2010 Mar;45(3):393–404.

7 McIntyre D, Bloom G, Doherty J, Brijlal P. Health expenditure and finance in South Africa. Durban: Health Systems Trust and the World Bank; 1995.

8 Western Cape Government. 20 Year Review. Western Cape. Cape Town; 2013.

9 Gilson L, Doherty J, Mcintyre D, Thomas S, Brijlal V, Bowa C, et al. The Dynamics of Policy Change: Health Care Financing in South Africa, 1994–1999. Monograph No.66. Johannesburg: Centre for Health Policy, University of Witwatersrand/Health Economics Unit, University of Cape Town; 1999.

10 Price M. Health care as an instrument of Apartheid Policy in South Africa. Health Policy Plan. 1986;1(1):158–70.

11 Strategic Management Team. 1995 Provincial Health Plan. Cape Town; WC Department of Health; 1995.

12 Coovadia H, Jewkes R, Barron P, Sanders D, McIntyre D. The health and health system of South Africa: historical roots of current public health challenges. Lancet. 2009;374(9692):817–34.

13 Mcintyre D, Kruger E, Valentine N, Van Zyl N, Jacobs T. An evaluation of existing part-time district surgeon services and alternative mechanisms for future contracting with general practitioners. Cape Town: Health Economics Unit; University of Cape Town 1997.

14 World Health Organization. Everybody's business: strengthening health systems to improve health outcomes [Internet]. WHO's Framework for Action. Geneva: WHO; 2007.
URL: http://www.who.int/healthsystems/strategy/everybodys_business.pdf

15 Western Cape Department of Health. Healthcare 2010: Health Western Cape's plan for ensuring equal access to quality health care [Internet]. Cape Town; 2003 [cited 3 May 2017].
URL: https://www.westerncape.gov.za/annual-publication/health-care-2010

16 Western Cape Department of Health. HealthCare 2030: The Road to Wellness [Internet]. Cape Town; 2013 [cited 3 May 2017].
URL: https://www.westerncape.gov.za/assets/departments/health/healthcare2030.pdf

17 Vallabhjee K. An analysis of the voluntary severance package and its effects on the health department in the Western Cape for the financial year 1996/97. Cape Town: WC Department of Health; 1997.

18 Blecher M, Harrison S. Health Care Financing. In: Ijumba P, Padarath A, editors. South African Health Review 2006. Durban: Health Systems Trust; 2006.

19 Van Lerberghe W, Evans T, Rasanathan K, Mechbal A. The World Health Report: Primary Health Care now more than ever. Geneva: World Health Organization; 2008.

20 Sheikh K, Ranson MK, Gilson L. Explorations on people centredness in health systems. Health Policy Plan. 2014;29(suppl_2):ii1–ii5.

21 Ellokor S, Olckers P, Gilson L, Lehmann U. Crises, Routines and Innovations – the complexities and possibilities of sub-district management. In: Padarath A, English R, editors. South Africa Health Review 2012/13. Durban: Health Systems Trust; 2013.

22 Western Cape Department of Health. Annual Report 2015/2016 [Internet]. Cape Town; 2016 [cited 3 May 2017].
URL: https://www.westerncape.gov.za/assets/departments/health/annual_report_2015_16.pdf

23 Rispel LC, Jager P De, Fonn S. Exploring corruption in the South African health sector. Health Policy Plan. 2016;31(2):239–49.

24 Western Cape Department of Health. Leadership Development Strategy. Cape Town: Western Cape Government; 2016.

25 McIntyre D, Ataguba J. What do we know about poverty, inequality and health in South Africa, and what are the health system reform implications? An overview of recent research. In: Towards Carnegie III Conference, University of Cape Town. Cape Town: SALDRU; 2012.

26 Health Systems Trust. District Health Barometer [Internet]. [cited 28 Jan 2017].
URL: http://www.hst.org.za/district-health-barometer-dhb-2

27 Morden E, Groenewald P, Zinyakatira N, Neethling I, Msemburi W, Daniels J, et al. Western Cape Mortality Profile 2013. Cape Town: SA Medical Research Council; 2016.

28 Maredza M. Assessing equity in health and health care. Cape Town: University of Cape Town; 2015.

29 Berta W, Virani T, Bajnok I, Edwards N, Rowan M. Understanding whole systems change in health care: insights into system level diffusion from nursing service delivery innovations – a multiple case study. Evid Policy. 2014;10(3):313–36.

30 Naledi T, Barron P, Schneider H. Primary Health Care in SA since 1994 and implications of the new vision for PHC re-engineering. In: Padarath A, English R, editors. South African Health Review 2011. Durban: Health Systems Trust; 2011.

31 Rispel LC. Analysing the progress and fault lines of health sector transformation in South Africa. In: Padarath A, King J, Mackie E, Casiola J, editors. South African Health Review. Durban: Health Systems Trust; 2016.

32 World Health Organization Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. Geneva: WHO; 2008.

33 Gilson L, Doherty J, Loewenson R, Francis V. Challenging Inequity through Health Systems. Health Systems Knowledge Network. Johannesburg: World Health Organization Commission on Social Determinants of Health. Johannesburg: Centre for Health Policy, EQUINET, London School of Hygiene and Tropical Medicine; 2008.

34 Samuels F, Amaya A, Pose R, Balabanova D. Pathways to progress: a multi-level approach to strengthening health systems. London: Overseas Develpment Institute; 2014.

35 Best A, Greenhalgh T, Lewis S, Saul JE, Carroll S, Bitz J. Large-Scale Transformation in Health Care: A Realist View. Milbank Q. 2012;90(3):421–56.

36 Balabanova D, McKee M, Mills A. "Good Health at Low Cost": 25 years on. What makes a successful health system? London: London School of Hygiene & Tropical Medicine; 2011.

37 Baser H, Morgan P. Capacity, Change and Performance. Maastricht: European Centre for Development Policy Management; 2008.