

Chapter 6

BUDGET ANALYSIS AND EXPLORATION OF ISSUES TO INCREASE PERFORMANCE IN BASIC EDUCATION AND HEALTH

6.1 Introduction

South Africa spends a large amount of its budget on health and education, mainly through provincial governments, which accounts for almost 70% of consolidated provincial government expenditure. This chapter reviews the role of public expenditures in promoting development outcomes in education and health programmes. Coming at a time when fiscal policy is tightening, this chapter explores how well public expenditure works to deliver basic education and health policy objectives and millennium development goals (MDGs) – specifically universal primary education and a reduction in the under-five child mortality rate – and how government might best support publicly funded programmes to achieve MDG outcomes. Education and health outcomes are a function of the complex interaction of factors such as socioeconomic status, poverty, cultural, geographical, and environmental, as well as other determinants and conditions which have a bearing on the quality of life.

The chapter focuses on the return on investment in education and health, to ascertain whether South Africans obtain good value for the large amount of money that the government spends on education and health. The differences in the provision of education and health in terms of efficiencies, quality and performance are wide within and between provinces. Many township and rural schools perform badly, and low standards of quality education and efficiency are prevalent and persistent in these areas and among poor households. In a nutshell, the basic education system in South Africa faces access to formal and epistemological (transfer of knowledge) problems, which will form the core of this chapter.

Maternal and child mortality rates are increasing, life expectancy is worsening, and the public sector health care system remains under severe pressure. The burden from communicable and non-communicable diseases, injury and trauma continues to be a barrier to faster development. Substantial increases in mortality and morbidity threatens to overwhelm the health system, with HIV/AIDS and tuberculosis (TB) posing the greatest challenges. This state of affairs is the principal cause for concern about prospects for South Africa achieving effectively both education and health MDG goals and targets.

Efficiencies and quality improvements cannot be corrected by higher levels of expenditure without service delivery reforms, proper resource planning and management, and a commitment to tackle inherited problems in education and health sectors irrespective of what happens to access. Reforms in these sectors need to go hand-in-hand with the broader intergovernmental fiscal reforms of government. The ability of provincial governments to determine actual budget allocations and to drive expenditures within these sectors is limited and inequitable at times. The intergovernmental fiscal relations system is undergoing reforms especially in the area of concurrent functions, which are necessary to target and allocate resources more efficiently in order to facilitate the proper financing of education and health services.

Other spheres of government have an important role to play in improving the social determinants of education and health, such as proper shelter, water, sanitation, transport, and social assistance. Government is also crucial in order to channel fixed capital investments in the education and health sectors across the country, especially in rural areas.

6.2 Public Expenditure and Performance Outcomes of Basic Education, and Health and Rural Development in South Africa

6.2.1 Governance and Institutional Frameworks for Education and Health Services

Schedule 4 (part A and B) of the South Africa Constitution (Act No. 108 of 1996), as amended, lists education and health (including municipal health services) as functional areas of concurrent national and provincial legislative competence. In terms of the National Health Act (No. 61 of 2003) provinces are given bulk responsibilities for primary health care, while municipal health services are defined narrowly to include environmental health services and are a function of metro and district municipalities. As defined in the Municipal Structures Act (No.117 of 1998), local municipalities have historically provided municipal health services, with minimal services outside the cities and main towns (Centre, 2011). This institutional arrangement potentially gives rise to an unfunded mandate for health services at local government level. Public expenditure for basic education and health in South Africa has been rapidly increasing since 1994. The aim has been to equalise service and improve access to services for the previously disadvantaged members of the population.

6.2.2 Resource Allocations and Funding of Education and Health Services

As mentioned earlier, spending in education and health constitutes roughly 70% of consolidated provincial budgets. These two priorities are funded mainly through the provincial equitable share (PES), which is an unconditional fiscal transfer system. However, other national education and health priorities are funded through conditional fiscal transfers or conditional grants. For example, (i) *Education*: Dinaledi schools, HIV/AIDS, life skills education, national school nutrition programme, technical secondary schools recapitalisation; (ii) *Health*: health revitalisation programme, comprehensive HIV/AIDS programme, forensic pathology services, health professions training and development programme, and national tertiary services.

Unconditional fiscal transfers allow operational and financial decision-making to be decentralised to the provinces and municipalities with national departments only retaining responsibility for policy-making and determining norms and standards (Okorafor *et al.*, 2005). Depending on provincial priorities and pressures, Provincial Executive Councils (PECs) and Legislatures determine the amount of money that goes to each function based on national priorities, the influence of provincial treasuries and the capacity of each provincial department to motivate for funding. In essence, fiscal decentralisation, or the intergovernmental relations system in South Africa, limits the role of national government to determine actual resource allocations within provinces, except for conditional grants. This makes the challenge of planning, funding and coordinating policy objectives more complex in a multi-sphere system of government. Adequate fiscal transfers are critical in order to address the problems of equitable access to the education, health care and rural development programmes. In the Annual Submission for the Division of Revenue for 2010/11, the Commission made recommendations for reviewing the provincial equitable share (PES) formula, and highlighted the formula's design problems associated with attempts to achieve too many objectives using one instrument. Other intergovernmental fiscal relations (IGFR) challenges are that provinces do not always adequately fund education and health, and that they use the PES to also fund other provincial priorities that may not necessarily converge with agreed national priorities. This is to be expected as the formula is used to allocate a predetermined pool of funds horizontally. The 2011 Division of Revenue Bill reflects the changes (especially in the health component) to the PES formula for the 2011 Medium-Term Expenditure Framework (MTEF).

The weight allocated to the education component was reduced (from 51% to 48%), and the reformed health component was revised upwards (from 26% to 27%). The basic component of the formula was revised upwards (from 14% to 16%), while the other components in the formula remain the same. The reformed health component is commended as it now considers utilisation rates⁶⁹ and hospital case-mix.⁷⁰ However, the risk for the health component is reliable data, and data is barely collected for health treatment in the public health care system. The change in the education weight was based on historic expenditure, which is problematic as it only reflects provincial school enrolments. The PES review focused only on the formula, and not on the other pillars of the IGFR system, and so did not deal with vertical division and fiscal needs at a horizontal level. Generally, if the pool does not grow (given that other IGFR/vertical division issues

69 Health care utilisation rates are a measure of why people use health care services. People use health care services for many reasons: to cure illnesses and health conditions, to prevent or delay future health care problems, to reduce pain and increase quality of life, and sometimes merely to obtain information about their health status and prognosis (Schoen *et al.*, 2000).

70 Case-mix provides the health care industry with a consistent method of classifying types of patients, their treatment and associated costs. It includes developing and implementing health care classifications, tools and services (Schoen *et al.*, 2000).

are not dealt with), the review does not add much to ensuring that provincial functions are adequately funded. Still not clear is the balance on resource allocations between the spheres of government responsible for rural development. It thus remains to be seen whether these revisions to the PES formula will lead to increased equity, achieve quality, move towards better provincial education and health expenditure and less waste.

Despite real increases in education and health, correspondingly large improvements in outputs, outcomes or quality are difficult to identify. Government expenditure analysts in South Africa, which include the Commission, have raised concerns that most provincial budgets are informed by historical allocations and are simply adjusted for inflation. This practice perpetuates previous policies of depriving former homelands and poor rural areas of necessary education and health services (Chetty, 2007). Despite high vacancy rates in public hospitals, the majority of provinces are overspending on their personnel costs, mainly because of the implementation of the occupational specific dispensation (OSD). Budget, drug and staff shortages are becoming the norm in several provincial hospitals. The challenge regarding education and health performance is not about adequate funding per se but rather the system of transfers, from national to provinces and from the provinces to actual delivery centres (e.g. districts, schools, hospitals and clinics), which is not functioning efficiently.

Failures in intergovernmental policy-making, coordination and budgeting manifest themselves in resource allocations. Several studies on fiscal and health decentralisation are beginning to point to increasing spending inequalities among sub-national government, which translate into widening spatial inequalities in access to quality services. There are spending and service-level inequities between rural and urban areas. In rural areas, people still travel long distances for education and health services. Provincial inadequate budgeting and habitual over-expenditure on education and health leads to a shortfall of appropriate schools, learner support material, quality teachers, community health centres with access to full-time doctors, radiology and laboratory services, and obstetric services on a 24-hour basis. The overall performance of education and health systems needs to be strengthened and the fiscal responsibility and accountability of provincial governments improved.

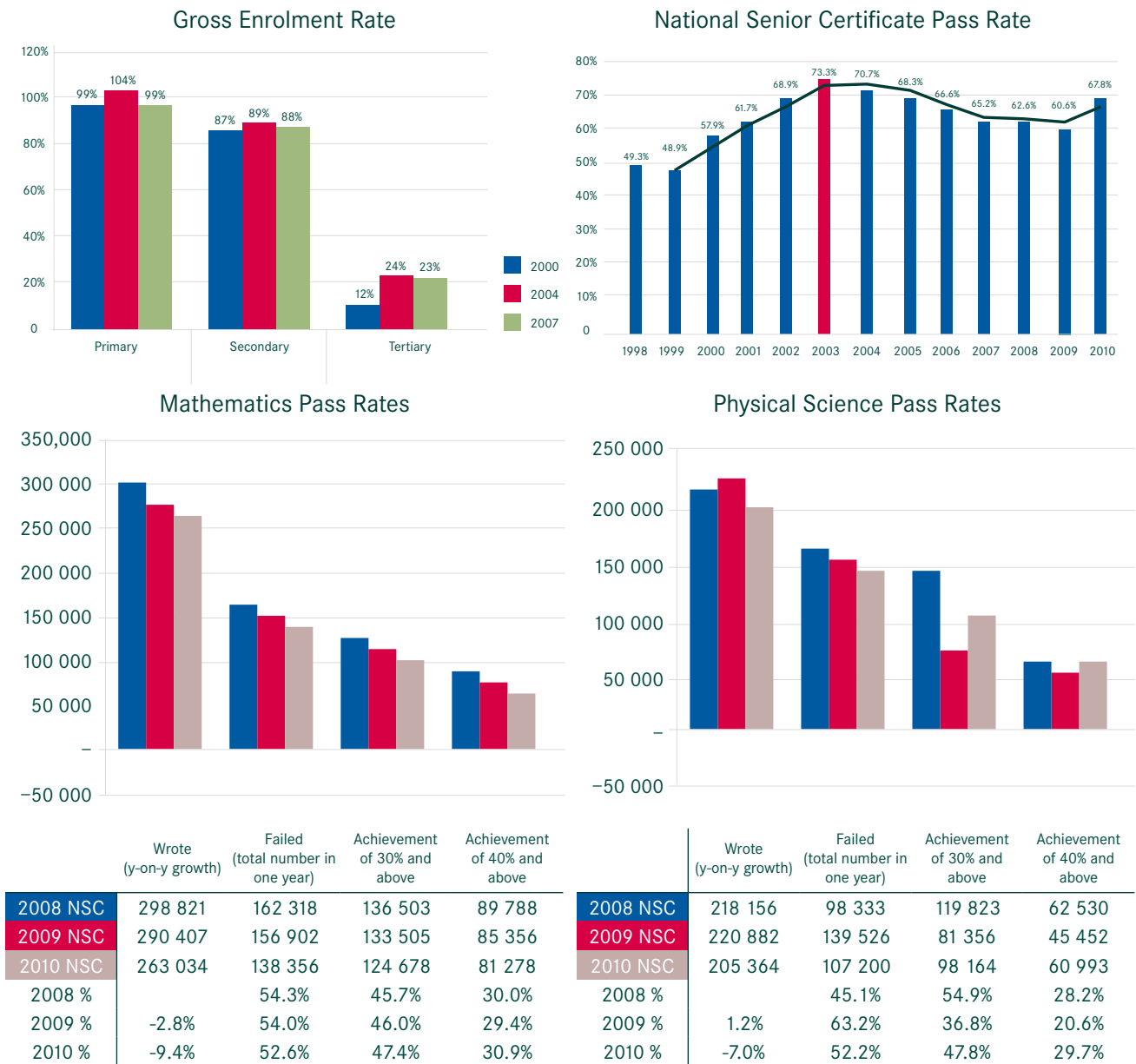
6.2.3 Performance of Education, Health and Rural Development Programmes in South Africa

In South African schools, gross enrolment rates are quite high at primary levels of education, which shows that the country has expanded access (not necessarily quality) to basic education and is on track to meeting the MDG2 of achieving universal primary education (Jansen, 2008). The challenge facing basic education in South Africa is that completion rates are low at secondary level, where drop-out rates increase each year, reaching about 20% by Grade 9 (Gustafsson and Morduchowicz, 2008). Analysts support this point, noting that over 1.3 million learners began Grade 1 in 1999, but less than half of them reached Grade 12 and became the “2010 matriculants” (Bowie, 2011). This is due to various reasons including, but not limited to, high drop-out rates and high grade repetition levels. There is thus a critical and urgent need for attention by the developmental state.

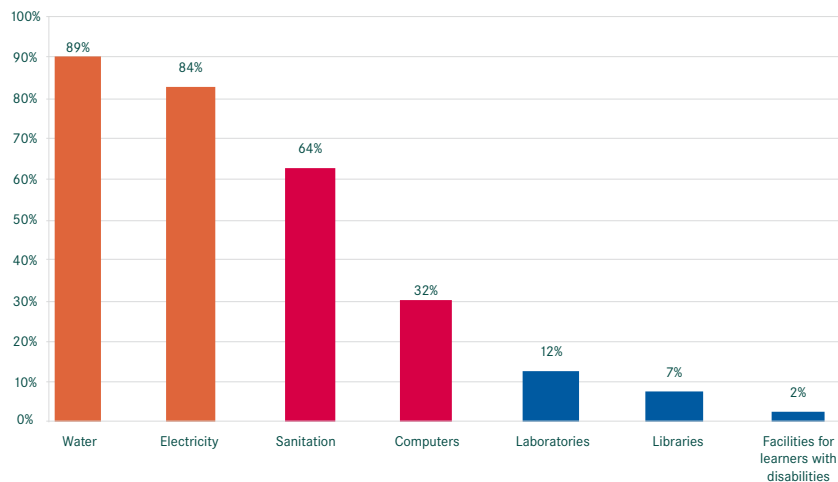
The annual average pass rate in the national senior certificate (NSC) between 1998 and 2010 was 63.2% and the pass rate in mathematics and physical science remained below 50% (see Figure 31). Furthermore, the number of NSC candidates writing the mathematics examination since 2008 has been declining. The overall pass rate in 2010 was 10% higher than that of 1955 but lower than the peak pass years of the 1960s and early 1970s. The 2008 university entrance pass rate (13.4%) was significantly lower than that of the 1950s, 1960s, and 1970s (Cronje, 2010). Quintile 1 schools, which are the poorest schools, perform badly in the NSC with some few outliers: of the 3341 learners who wrote the NSC in 2009 in Quintile 1 schools, only 265 or 7.6% passed. Bushbuckridge in Mpumalanga was South Africa’s worst-performing region in terms of 2009 NSC. There was no improvement in the NSC failure rate in Quintile 1 schools in 2010: of the 1096 learners who wrote NSC in Quintile 1 schools in 2010, only 71 or 6.5% passed.

Generally, continuing low pass rates do not augur well for the future and are a cause for considerable concern, as mathematics and physical science have been identified as key subjects for providing the skills needed for growth in South Africa.

Figure 31. Snapshot of school realities in South Africa



Schools Infrastructure



Source: Department of Basic Education: Education Statistics, 2009 - 2011

The effect of poor performance in public education system is the migration of students to independent schools, even by learners from townships. The 2009 School Realities data by the Department of Education shows that 386,098 learners attended 1,174 independent schools in 2009. These trends are interesting to note for basic education policy in South Africa, as they show substantial growth in private schooling in South Africa accompanied by socioeconomic and demographic diversification. African learners currently constitute more than 70% of all learners in independent schools, mainly in schools with low to average fees (du Toit, 2004). This is partly due to the perceived better quality education in independent schools. However, private or independent schooling is based on the willingness and ability to pay, and such schools are not easily accessible for the rural population. The government in partnership with civil society has a responsibility to fix challenges of quality education in public schools in South Africa, as migration to independent schools cannot be a solution.

Quality education and learner performance are also affected by formal access issues to education, mainly scholar transport, learner support materials, libraries, laboratories and inclusive education (i.e. catering for learners with special needs). Learner transport, especially in rural areas, remains a problem and, as the Commission has noted in its 2007 Submission, substantial institutional fragmentation is associated with the learner transport provision in provinces. This problem is particularly acute in rural areas where a significant number of learners travel long distances, use unsafe modes transport and are exposed to weather and other related dangers (Rogan, 2006). The Department of Basic Education's access norms and standards require that learners should be within a three kilometre distance of a school, but the average walking distance in rural areas is five kilometres (Rogan, 2006), beyond which transport should be provided. According to the 2009 General Household Survey by Statistics South Africa, nearly three-quarters (73.6%) of individuals attending an educational institution walk to get there. A further 8% travel by private car and 8% use buses and taxis. As a response to this challenge, the school funding norms make a provision for learners to be provided with transport or hostel facilities if they live more than one and half hours' walking distance from the nearest available school. However, inconsistencies are found across provinces with regards to the funding, procurement provision and coverage of scholar transport.

With regards to inclusive education, the 2001 Education White Paper 6 on Special Needs Education envisages that within a 20 year period, the Department of Basic Education would have expanded access and improved the quality of special schools. However, as Jansen argues, "a blind child, or a child in a wheelchair, or a child with diabetes, struggles much more to gain access to schools than children without special needs. Able-bodied children have easier access to the education system relative to children with disabilities of various kinds" (Jansen, 2008). Various analysts on special needs education agree that knowledge, skills and training for effective implementation of inclusive education is lacking in South Africa. The school environment is unprepared and unequipped for this policy imperative (Cook, 2001). For inclusive education to gain momentum, government would require investments in infrastructure, learner material, capacity and teacher support, as well as a change of attitude from both teachers and learners.

In health, the rapidly rising cost of health care and the impact on the equity and efficiency of the public sector health care system are of concern. This concern is found throughout the world. However, besides a few technocrats and policy-makers, there has been little debate about the tensions that arise between the principles of equitable financing of health and equal opportunity of access for equal health needs. It is important to note the fact that, in practice, these goals are difficult to reconcile. The concern about equity was one of the main motivating forces behind the creation of universal, equal health coverage for all in Australia, Canada, Great Britain, New Zealand, and the USA (Schoen *et al.*, 2000). Health is essential to well-being and to overcoming other effects of social disadvantage. In this regard, the Commission welcomes the fact that government intends to reform the health delivery system in South Africa through the introduction of the NHI but also notes the challenges that will need to be addressed before that objective is finally realised. Reliance on the private health market, based on private insurance and patient out-of-pocket costs results in social costs and raises access barriers for those with the greatest health care needs and divides communities around reform policies (Chetty, 2007). Equity, while it will not eradicate health problems on its own, is still the most important step toward eliminating health care disparities and should support the right to the highest attainable standard of health as indicated by the health status of the most socially advantaged groups.

According to the World Health Organisation (WHO, 2008), total health expenditure in South Africa in 2007 was equivalent to 8.6% of gross domestic product (GDP), as Table 14 shows. This expenditure was at similar levels with that of Australia (8.9%), the UK (8.4%), Brazil (8.4%), and above that of China (4.3%), India (4.1%) and Russia (5.4%). However, Russia spends more than South Africa in per capita terms. National Treasury notes that total health care expenditure in South Africa in 2007 was slightly more than R115 billion but less than half was public spending.

The private sector accounted for about 56%, the public sector for 41% and 2% was the contribution by non-governmental organisations (National Treasury, 2009). McIntyre and Thiede (2007) argue that private health expenditure has continued to increase on an annual basis since the 1980s, at rates far exceeding the inflation rate. As a result membership of medical schemes is unaffordable for most South Africans, and a relatively small proportion (16.9%) of individuals had medical aid coverage in 2009 (Health Systems Trust, 2010). Coupled to this, an estimated 21% of the population with no medical coverage prefers to use private doctors and pharmacies on an out-of-pocket basis (Gilson *et al.*, 2007).

Table 14. Health care expenditure and health status indicators
Comparison of healthcare expenditure and health status indicators in developed and developing countries

Country	Health care expenditure as % GDP, 2007	Per capita govt expenditure on health (PPP int.\$)	Life expectancy at birth, 2008	Infant mortality rate per 1000 live births, 2008 (MDG 4)
South Africa	8.6	340	53	48
High income countries				
Australia	8.9	2266	74	4
Canada	10.1	2730	73	5
United Kingdom	8.4	2446	72	5
USA	15.7	3317	70	7
BRIC member states				
Brazil	8.4	348	64	18
China	4.3	104	66	18
India	4.1	29	56	52
Russia	5.4	512	60	9
Middle income countries				
Chile	6.2	507	70	7
Cuba	10.4	875	69	5
Egypt	6.3	118	60	20
Malaysia	4.4	268	64	6
Thailand	3.7	209	62	13
AVERAGE	7.49	1005	65	16

Source: World Health Organisation estimates for country Health Accounts, 2010

Medical personnel and hospital facilities utilisation rates in developed and developing countries, 2008

Countries	Physicians		Nursing and midwifery personnel		Dentistry personnel		Pharmaceutical personnel		Hospital Beds
	Number	Density (per 10 000 population)	Number	Density (per 10 000 population)	Number	Density (per 10 000 population)	Number	Density (per 10 000 population)	(per 10 000 population)
South Africa	34 829	8	184 459	41	5 995	1	12 521	3	28
High income countries									
Australia	19 612	10	222 133	109	29 624	15	15 339	8	39
Canada	62 307	19	327 224	100	38 310	12	27 078	8	34
United Kingdom	126 126	21	37 200	6	25 914	4			39
USA	793 648	27	2 927 000	98	463 663	16	249 642	9	31
BRIC member states									
Brazil	320 013	17	549 423	29	217 217	12	104 098	6	24
China	1 862 630	14	1 259 240	10	136 520	1	351 620	3	30
India	643 520	6	1 372 059	13	55 344	1	592 577	6	9
Russia	614 183	43	1 214 292	85	45 628	3	11 521	1	97
Middle income countries									
Chile	17 250	11	10 000	6	6 750	4			23
Cuba	72 416	64	97 800	86	20 158	18	7 047	6	60
Egypt	179 900	24	248 010	34	25 170	3	92 540	12	21
Malaysia	17 020	7	43 380	18	2 160	1	2 880	1	18
Thailand	18 987	3	84 683	14	4 471	1	7 350	1	22
AVERAGE	341 603	20	612 636	46	76 923	7	122 851	5	34

Source: World Health Organisation estimates for country Health Accounts, 2010

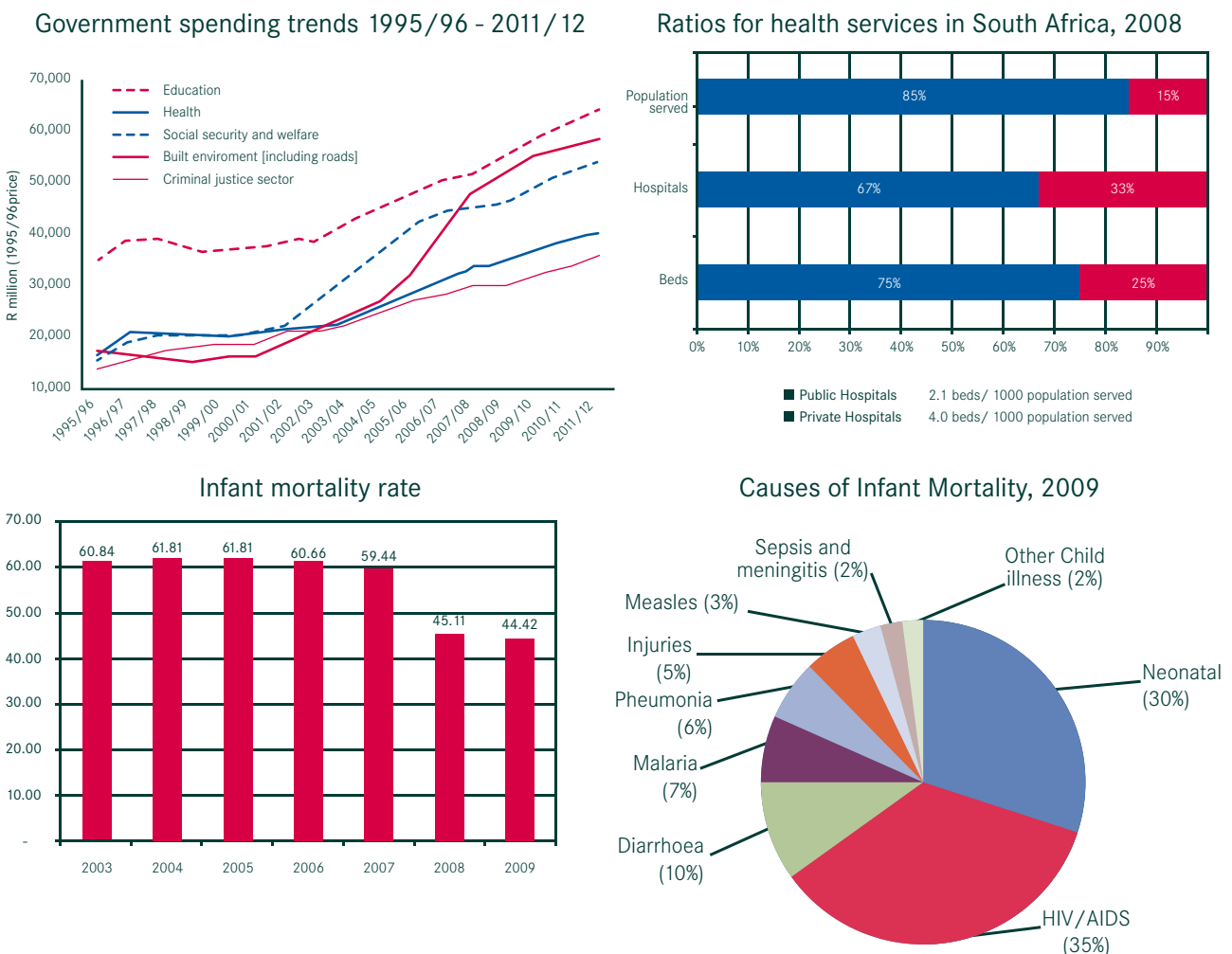
Within the public health sector system, about 88% of government health expenditure is allocated to provinces. Spending trends on the government's policy priorities show that the health sector's share of total government expenditure has been increasing since 2004/05, but from a lower base compared to education, social security and the built environment allocations. Health budget allocations are mostly growing in the area of HIV/AIDS, especially the costs of providing anti-retroviral treatment due to an increasing uptake by patients. Other health cost drivers are the hospitals and health facilities management revitalisation programme, and the provision of OSD for health professionals (National Treasury, 2010). Against the backdrop of global health of people that has improved more than in the whole span of human history (WHO, 2008), South Africa faces the challenges of declining life expectancy and high infant mortality rates. Average life expectancy in South Africa is 53 years (52 for males and 55 for females), and the under-five infant mortality rate per 1000 lives (i.e. the probability of dying by age 1 per 1000 live births) is 48 per 1000 live births.

Many health analysts and official health reports cite HIV/AIDS as the main reason for South Africans dying younger and in greater numbers. Deaths in the neonatal period contribute substantially to under-five deaths; outside the neonatal period, HIV/AIDS and childhood infections (mostly diarrhoea and respiratory infections) are the major causes of deaths (Norman *et al.*, 2006). In trying to understand variations in international health expenditures and South Africa's relatively poor health outcomes, most health analysts agree that poor maternal and child health, infectious diseases and malnutrition are associated with poverty.

Health analysts argue that there is a strong linkage between poverty, morbidity and mortality in South Africa (Woolard, 2002). The poor have particular difficulties in accessing health care services mainly because of economic reasons and social standing. Other studies also reveal complex patterns of mortality, morbidity, risk factors and unhealthy lifestyles among the poor in South Africa (Bradshaw and Steyn, 2001). The poor suffer from substantial premature mortality due to chronic disease including HIV/AIDS, strokes, asthma, epilepsy and cervical cancer. In order to finance their health needs, many poor families end up using all their resources, indebt themselves and mortgage assets to fund health care in catastrophic situations (Bradshaw and Steyn, 2001).

This state of affairs is also blamed on the country's health care system's inequities, which are exacerbated by the fact that, of the 37 million people who make use of the country's health services, the private health system caters for a population of just seven million people; the remaining 30.2 million people are treated in the public-health sector. The allocation of resources is inequitable between the private and public sectors as well as within the public sector itself (among provinces and different levels of health care). With the over-resourcing of private health insurance and under-resourcing of the public sector, health care practitioners have been attracted to the more lucrative private health system (McIntyre and Thiede, 2007). The majority of the population depends on the public sector for all their conventional health care services amid an exodus of doctors and other health professionals from the public to the private sector. Government alone cannot afford and assure all the health of the population. It is on this basis that this Submission provides recommendations towards improvements in the South African health system.

Figure 32. Snapshot of the performance of health care system in South Africa



Source: Department of Health, Health Systems Trust, National Treasury: Budget Reviews, Medical Research Council, World Health Organisation

6.3 Recommendations

This chapter sought to analyse particular challenges facing implementation of education, health and rural development policies in South Africa. Even though the government has massively increased its expenditure on education and health, the returns have been sub-optimal. Education and health in South Africa are fraught with many supply and demand side challenges, which are related not only to funding, but also to the quality services, role of teachers and health professionals, parents, state of facilities, learner performance and the recipients' status. Even though the PES has been reformed to cater for the use and demand for education and health services, provincial health budgets are not based on an estimation of the needs of health service users. Health budgets do not adequately account for the magnitude of the HIV epidemic and South Africa's other growing health challenges. Worryingly, provinces habitually overspend their education and health budgets and accrue large debt that is not adequately covered by annual budget allocations. Provincial budgets account insufficiently for the OSDs for teachers, nurses and doctors. It is worrying that OSD is being extended to other sectors and professionals, when the implementation challenges with regard to teachers, nurses and doctors still persist.

All these factors require robust intervention by the government, and the responsibility for ensuring proper financial management should rest with the National and Provincial Treasuries. If these interventions are not made promptly, the public education and health systems will be a constraint on South Africa's economic development and economic growth prospects.

With respect to basic education and health, it is recommended that:

- Government should finalise the implementation of occupation specific dispensation and formalise the performance evaluation system. In dealing with the expansion and implementation for occupational specific dispensation, government should:
 - a. Be mindful of the rising public sector wage bill relative to other priorities.
 - b. Rethink funding of personnel costs, which are centrally determined but funded by provinces through the equitable share. A full costing of the occupational specific dispensation implementation must be undertaken, and national government must take the responsibility for funding, preferably through a specific purpose conditional grant.
 - c. Formalise performance evaluation with the aim of boosting performance by emphasising high competence of education and health personnel.
- Increases in education spending should be directed towards investments that will have the biggest impact on quality, and this includes learner and teacher support materials. In this regard, government should improve quality and prioritise epistemological access to education by:
 - a. Developing capacity to evaluate academic performance of learners throughout their academic careers.
 - b. Ensuring that the required amount of time is spent on teaching by relieving teachers of administrative duties through the hiring of administrative assistants.
 - c. Supporting the training and development of teachers and making explicit the amount spent for this purpose through the Division of Revenue.
 - d. Improving schools accountability for learner performance.
- Coordination, financing and provisioning of scholar transport should be improved. The Commission is aware that agreement has been reached between the Departments of Basic Education and Transport that the scholar transport function be transferred from the Department of Basic Education to the Department of Transport. In so doing, it is recommended that:
 - a. All resources associated with delivering a service associated with scholar transport are transferred to the Department of Transport, including current assets and budget and all future resources.
 - b. A thorough assessment of the financial and fiscal implications of this shift is conducted before the shift happens.
- Government must, through input and output norms and standards, take reasonable measures to give effect to the inclusive education of intellectually disabled children. These norms should indicate human, physical, administrative and

regulatory resources provided by the government dedicated to achieving targets for inclusive education.

- The government should extend its ongoing efforts to reform health fiscal frameworks by taking into account the burden of disease giving rise to budget pressures, to cover:
 - a. Review of the funding for HIV/AIDS, opportunistic and other infectious diseases through a regular review of usage costs for chronic disease services in HIV/AIDS, TB, maternal and child health to inform resource allocations in the public sector health care system.
 - b. Institutionalisation of a budget process that forces provincial health budgets to be based on estimations of the needs of health care service users and holds provincial governments accountable for underfunding of hospitals and clinics.
 - c. Re-examination of the distribution of resources between the different levels of care without weakening the role played by tertiary hospitals, but also strengthening the role played by primary health care in the health system of the country.
- Certain functions, such as procurement, human resources and financial management, should be devolved to hospital management to boost efficiencies and better performance.