What progress has been made towards the equitable allocation of health care resources in South Africa?

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Executive summary

In the years immediately after the first democratic elections in South Africa in 1994, redistribution of public sector health care resources to the provinces was centrally driven among provinces, in pursuit of equity. In 1996, however, a new constitution introduced a fiscal federal system whereby provinces were allocated global budgets using an 'equitable shares' formula, thus giving the provinces autonomy to allocate their budgets among the health sector and other sectors. At the time, there were major concerns that fiscal federalism would constrain progress towards an equitable allocation of health care resources.

However, considerable progress has been made towards the allocation of equity in health care resources across provinces. In 2009/10, most provinces were close to the national average of per capita health care spending. A range of factors contributed to this outcome, including:

- Pressure was placed on the national Treasury to change the design of the formula that had put some emphasis on rewarding the most economically productive provinces at the expense of those with the highest poverty levels;
- Establishment of norms and standards for the delivery of health services that all provinces are expected to strive to achieve, thus allowing provincial health departments to secure a fair share of provincial resources in their negotiations with provincial treasuries;
- Some funds are allocated as conditional grants that can be used only for specified health services and many of these conditional grants particularly benefit historically under-resourced provinces.

While considerable progress has been made towards the equitable allocation of public sector health care resources among provinces, substantial disparities in spending on primary health care (PHC) services remain among health districts. It is critical that provincial health departments pay more attention to the equitable allocation of resources for primary health care services among the districts within their province. In the absence of such efforts, many South Africans will continue to be disadvantaged in their access to primary care services simply because of their place of residence.

1. Introduction

The South African public health system comprises a national Department of Health and nine provincial departments of health. The national department is responsible for policy development and overall health system co-ordination, while provincial departments are responsible for most of the public sector health service delivery. Each province has several health districts, which have limited management authority and are largely responsible for supporting and co-ordinating primary health care and district hospital services within their boundaries.

At the time of the first democratic elections in 1994, substantial disparities existed in public spending on health care across the nine provinces and among the districts within these provinces. In the early 1990s, the best-resourced province had health care spending levels per person 4.5 times greater than the least well-resourced province (McIntyre *et al*. 1995). The Department of Health attempted to address these inequities using a needs-based resource allocation formula to determine the health budgets for individual provinces. The aim was to reach equitable target budget allocations within five years.

However, with the adoption of the new constitution in 1996, provinces were given extensive decision-making powers and a fiscal federal system was introduced. In terms of this, provinces are provided with global budgets and left to decide how to distribute these funds across the various sectors. Thus, it was no longer possible to determine provincial health budgets at a national level. Instead, each province was able to determine the size of its own health budget. There were major concerns that this fiscal federal system would undermine the goal of achieving equity in inter-provincial health spending, as each province was likely to have different service delivery priorities.

This report provides an overview of resource allocation decision making in South Africa as it impacts on the distribution of health budgets. It also looks at changes in the allocation of public health care resources since the early 1990s across provinces. Finally, it considers whether resources are allocated equitably between health districts.

2. Resource allocation mechanisms in South Africa

The first step in the governmental resource allocation process in South Africa is what is termed the vertical division, where the Cabinet decides how much to allocate to national, provincial and local government levels. This decision is based on the different responsibilities for public services of each level of government, as specified in the Constitution. The second step is the horizontal division, where the total resources available for provincial government are allocated to individual provinces in the form of global budgets (and similarly for local governments). As most of the responsibility for health service delivery rests with provincial health departments, the focus of the rest of this section is on issues that influence allocations to individual provinces.

2.1 Equitable shares formula

The size of an individual province's global budget is determined by a formula devised by the Treasury. This formula uses population size and other factors to estimate

differential needs among provinces (see *Box 1*). Hence, the global budget is often referred to as the province's equitable share.

Box 1: Equitable shares formula components

The initial equitable shares formula (used for the first time in 1998/99) included the following elements:

- **Education component** based on the average size of the school-age population and the number of learners actually enrolled in each province;
- **Health component** based on the estimated size of the population in each province without private health insurance plus the population with insurance (where those without insurance were weighted four times more than those with insurance, to indicate differential usage of public sector health services);
- **Social welfare component** based on the estimated number of people entitled to social security grants (elderly, disabled and children – these three components were weighted to reflect the relative size of the different social security grants);
- **Basic component** based on the total provincial population;
- **Institutional component**, for which each province received the same amount, was based on the estimated cost of maintaining public administration, building essential capacity and participating in intergovernmental forums; and
- **Economic activity component** based on the estimated provincial income/productivity (it directed a proportion of nationally collected revenue back to the provinces where it was generated).

In 1999/2000, a **backlogs component** was introduced to redress backlogs in poorer provinces, based on the need for capital spending on health and education infrastructure in each province and the provincial shares of the rural population to promote rural development. This component was changed to reflect poverty levels in 2006/07.

Each of these components was assigned a weighting, with the total weightings equalling 100% (see *Table 1*). Some adjustments to the weightings were made in 1999/2000, particularly a reduction in the basic component and small increases in other components. In 1999/2000, the backlogs component was introduced and given a weight of 3%, which was accommodated by reducing the weighting of the basic component. There were minor changes to the weightings in 2000/01 and the formula then remained unchanged until 2005/06.

With the re-nationalisation of social welfare payments in 2006, the social welfare component was removed from the equitable shares formula. Treasury used the opportunity to change the formula to account for the removal of social welfare and to introduce a number of other important revisions. In particular, it changed the backlogs component from being based on infrastructure backlogs to a measure of the extent of poverty in each province. More importantly, Treasury used this opportunity to dramatically reduce the weighting of the economic activity component and to give relatively more weight to the health, education and basic components. (Compare 2006/07 weightings in *Table 1* to the final column, which indicates what the weighting of each component would have been if the relative weightings of components had remained unchanged when social welfare was removed.)

Table 1: Changes in the component weightings used in the equitable share formula since 1998/99

	1998/99	1999/2000	2000/01 – 2005/06	2006/07 - present	2006/07 if only social welfare removed
Education	39%	40%	41%	51%	49%
Health	18%	18%	19%	26%	23%
Social Welfare	16%	17%	17%	--	--
Basic	15%	9%	7%	14%	9%
Institutional	4%	5%	5%	5%	6%
Economic activity	8%	8%	8%	1%	9%
Backlogs (Poverty from 2006/07)	--	3%	3%	3%	4%

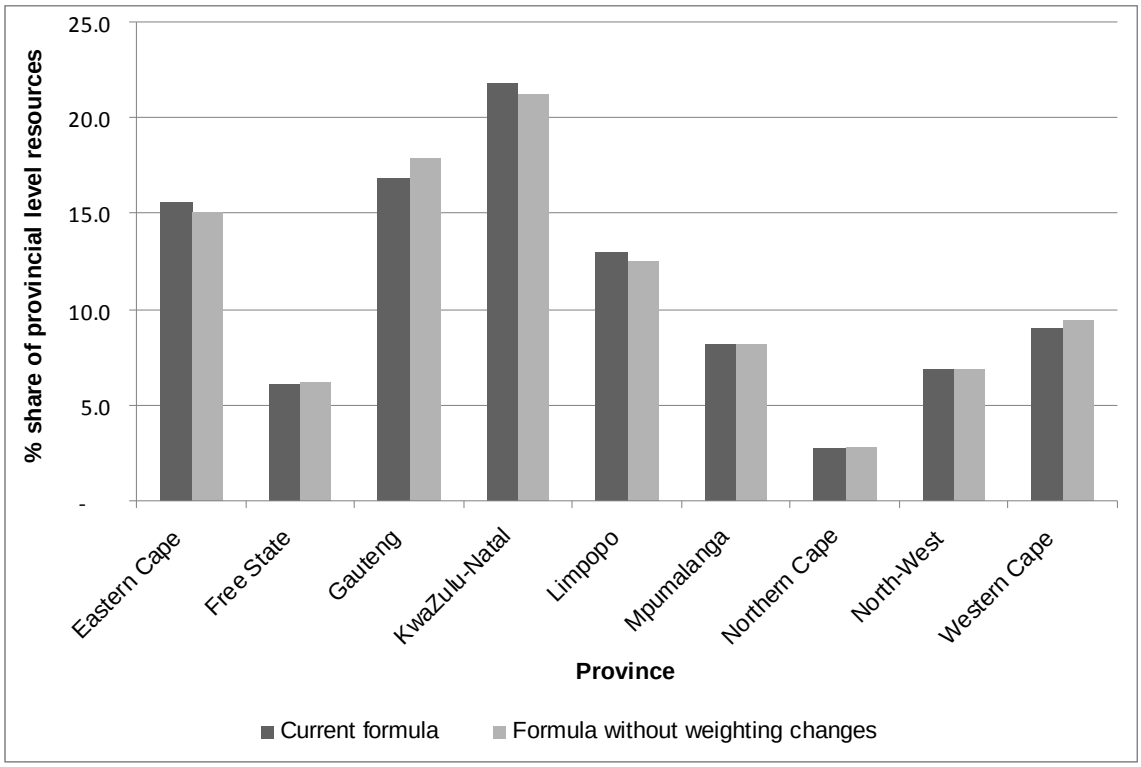
Sources: National Treasury (1998, 1999, 2000, 2006)

The quite substantial change in the weighting of different formula components has gone largely unnoticed, in the sense that there was no public commentary on the change, probably because weighting shifts were obscured by the removal of the social welfare component. Nevertheless, it represents a major policy shift on the part of Treasury.

Treasury had been under pressure for some time to reduce the weighting for, or entirely remove, the economic activity component, to change the backlogs component to reflect social deprivation or poverty rather than infrastructural backlogs and to increase the weighting of this component (McIntyre and Gilson 2000). Treasury had argued that the economic activity component was necessary as it "acknowledges the link between investment and infrastructure needs and related economic services, and the level of economic output in a province" (Department of Finance 1998: E22). However, the impact of the economic activity component was to reduce the effect of the redistributive elements of the formula; it could not be described as an equity promoting indicator but rather one that redirected resources to those provinces with the greatest economic productivity (McIntyre and Gilson 2000).

It is a major equity victory that the weighting of the economic activity component has been reduced to 1%. *Figure 1* compares the allocations to each province in terms of the formula currently used relative to what the allocations would have been if only the social welfare component had been removed and no changes made to the weightings in the formula. It clearly demonstrates that the provinces with high poverty levels (the Eastern Cape, Limpopo and KwaZulu-Natal) receive a higher allocation than if the weights had not been changed, whereas those with the lowest poverty levels (the Western Cape and Gauteng) receive lower allocations.

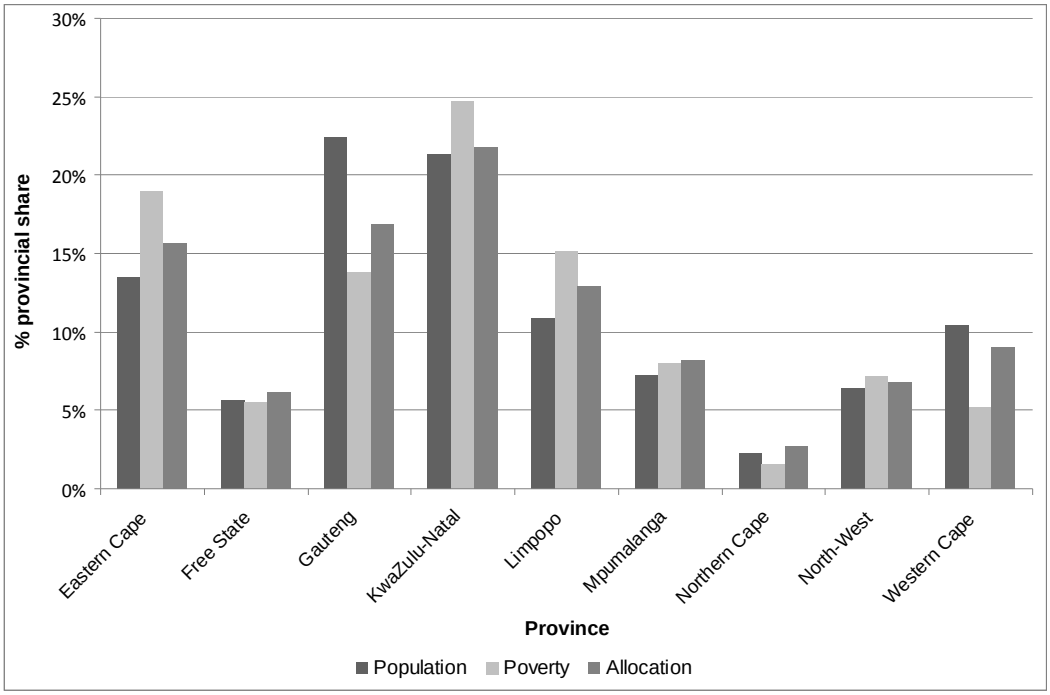
Figure 1: Impact of the changes in weighting of formula components



Source: Data derived from national Treasury (2008)

Figure 2 shows that this formula is translating into a relatively equitable distribution of general tax funds across provinces.

Figure 2: Comparison of each province's share of population, people living in poverty and budget allocation using formula



Source: Data for allocation derived from Treasury (2008); data for population and poverty derived from Day and Gray (2010)

The first column reflects each province's share of the national population, while the second column indicates the percentage of the national population living in poverty within each province. The final column indicates each province's share of general tax revenue allocated to provincial level via the equitable shares formula. It shows that provinces that have a relatively greater share of people living below the poverty line than their share of national population (e.g. Eastern Cape, Limpopo, Mpumalanga and KwaZulu-Natal) get a greater share of the general tax allocations than their percentage share of the population (i.e. their greater poverty levels are being taken into account as opposed to a simple per capita allocation). Conversely, those with lower poverty levels (e.g. Gauteng and the Western Cape) get a lower share of allocations than their percentage share of the population.

2.2 Resource allocation process issues

The equitable shares formula is used to determine a **global budget** for each province. Although the allocation is based on a formula that includes indicators of need for education and health services etc., none of these funds are earmarked for individual sectors. The funds are transferred as a lump sum and each provincial government has decision-making autonomy over how it allocates its global budget to individual sectors. This requires provincial health departments to negotiate with their provincial treasury in competition with other sectors to secure a fair share of resources for the health sector.

In addition to the equitable shares allocations to provinces, some funds are earmarked (at the stage of the vertical division) for specific services regarded as national priorities and transferred to individual sectors as conditional grants. These conditional grants are allocated to the relevant national department, which then disburses them when a province has met the conditions of the grant. For example, the Department of Health is allocated conditional grants for comprehensive HIV and AIDS services, forensic pathology services, health professions training and development, a hospital revitalisation programme and for national tertiary services.

To clarify further, during the vertical division, funds are allocated to national departments both to fund national level activities and for conditional grants. Most of these conditional grant funds are intended for use by provincial departments, but they are allocated to national departments who oversee that the funds are only used for the purpose for which they are intended. In the case of health sector conditional grants, the Department of Health decides how the grants will be allocated across provinces on the basis of variables that are relevant to that grant. For example, the conditional grant for HIV/AIDS services is allocated across provinces on the basis of the HIV prevalence in each province. Thus, a completely different set of criteria is used for allocating conditional grants across provinces than is used for the equitable shares allocation process.

Conditional grants were intended to be additional to funding currently allocated to health services by provinces from their equitable shares allocations. However, provincial treasuries have to some extent offset these conditional grants in that they determine the overall allocation that they believe each sector or department should receive (from the equitable shares and conditional grants combined) and then deduct the amount that will come from conditional grants to determine what they will allocate to that department from the equitable shares' global budget (McIntyre *et al.* 1999).

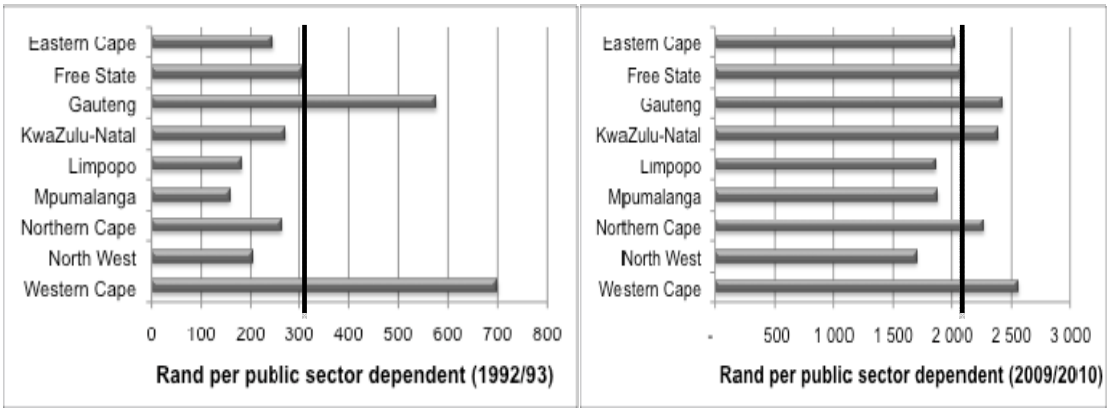
In essence, the fiscal federal system gives provinces considerable decision-making autonomy in relation to the allocation of resources between sectors. Even though the Treasury earmarks some resources for specific services in the health sector

through the conditional grant process, provincial treasuries ultimately have complete discretion over inter-sectoral allocations. This may make it quite difficult to achieve equity in the inter-provincial allocation of health care resources. This was of great concern when this system was introduced (McIntyre *et al.* 1999), particularly as it followed the, albeit short, period when there were explicit efforts to promote equity between provinces through a centrally driven process.

3. Progress towards equity in inter-provincial health expenditure

Given these concerns, it is useful to consider what has occurred in terms of public sector health care spending across provinces. *Figure 3* compares public health care expenditure across the nine provinces in 1992/93 (shortly before the first democratic elections) and 2009/10 (the most recent year for which expenditure, rather than budget, data are available). This figure presents expenditure in nominal terms (i.e. it is not adjusted for inflation). This expenditure is for all public sector health services, whether funding was allocated via the equitable shares formula or conditional grants, and includes all levels of care (from the primary care level through to highly specialised services in academic hospitals). Expenditure is expressed in per capita terms, but not using the entire population in the province. Rather the population that is dependent on public sector services (i.e. those provincial residents who are not members of private health insurance schemes) is used as the denominator. These population figures are not weighted for any other indicators of the need for health care.

Figure 3: Changes in public health care spending in provinces (1992/93; 2009/10) (vertical line represents national average)



Sources: McIntyre *et al.* (1995) for 1992/93 and Day and Gray (2010) for 2009/10

This figure shows considerable progress has been made towards a more equitable distribution of public sector health care resources among provinces over what is almost two decades. While most of the poorer provinces (such as the Eastern Cape, Limpopo, Mpumalanga and the North West) are still below the average, they are far closer to the average than in the early 1990s. Similarly, the richer provinces (the Western Cape and Gauteng) have spending levels that are far less above the national average than previously. It is to be expected that the Western Cape, Gauteng and KwaZulu-Natal have above average spending levels, given that the

largest academic hospitals are located in these provinces and that these hospitals are expected to provide highly specialised services for all South Africans rather than simply the residents of their provinces.

How has this progress towards equitable inter-provincial resource allocation been possible within a fiscal federal context? While the precise reasons are not known with certainty, it is possible to speculate on the factors that are likely to have contributed to this progress towards equity. First, the ability of provinces to allocate a fair share of their resources to the health sector is strongly linked to the size of the global budget each province receives. While South Africa followed a constrained fiscal policy in the mid-to-late 1990s, it experienced strong growth in the gross domestic product (GDP) from the turn of the century and rapid increases in tax revenue due to improved collection mechanisms. This contributed to increases in real provincial budgets (i.e. increases exceeded inflation rates), which in turn made it more feasible for provincial treasuries to allocate a fair share of provincial resources to different social sectors.

Second, if provincial global budgets are allocated equitably, there is a greater likelihood that this will translate into an equitable allocation of provincial budgets for health care services. As indicated in *Figures 1* and *2*, changes in the design of the equitable shares formula, particularly those in 2006/07, have promoted a more equitable distribution of provincial global budgets.

Third, although the equitable shares allocations take the form of a block grant (i.e. are not divided into earmarked sector-specific grants) the national Treasury introduced a requirement in 1998 that 85% of each province's allocation from general tax revenue had to be spent on social services. Although provincial health departments still had to compete with departments from other social sectors (particularly education and social welfare) for a share of provincial resources, at least the social sectors as a whole received some protection from full provincial decision-making autonomy in inter-sectoral allocations.

Fourth, the removal of social welfare allocations from provincial budgets when this function was taken back to national level contributed substantially to provincial health departments' ability to negotiate a fair share of provincial resources for health. The payment of social welfare grants had been mandatory, i.e. each province was required to pay such a grant to anyone who was legally entitled to it. During periods when provincial budget resources were constrained, such as when the South African government adopted a neo-liberal macro-economic and fiscal policy in 1996 that required limited real growth in government expenditure, provinces had to ensure that they fulfilled their social grant payment mandates before considering the needs of other sectors. Thus, while the social welfare budget was relatively secure during times of fiscal constraint, the same could not be said for the health, education and other sectors.

Fifth, the share of total health care spending at provincial level funded in the form of conditional grants increased over time, and comprised 23% of provincial health care expenditure by 2009/10. While, as indicated previously, provincial treasuries sometimes attempt to offset these additional resources through reducing allocations from the equitable shares grant, the fact that conditional grants comprise such a sizeable share of provincial spending in the health sector means that the national Department of Health can exercise some influence over the inter-provincial distribution of health budgets through conditional grants. In addition, the Department of Health uses criteria for allocating these conditional grants that often benefit poorer provinces. For example, HIV prevalence is higher in some of the poorest provinces

(particularly KwaZulu-Natal) and so these provinces receive a relatively large share of the HIV/AIDS conditional grant. The 'modernisation of tertiary services' conditional grant has specifically sought to develop the capacity of historically under-served provinces to provide tertiary level health services, which once again contributes to reducing inter-provincial health expenditure gaps.

Finally, the Department of Health has attempted to assist provincial health departments to negotiate for a fair share of provincial funds through the development of norms and standards. This took the form of service packages for the primary health-care level (Department of Health, 2001), for district hospitals (Department of Health, 2002a), regional hospitals (Department of Health, 2002b) and tertiary services (Department of Health, 2009). These service packages described the range of services that should be provided in the different types of public health facilities and the staffing required for their provision. The primary health care package was taken a step forward and was costed (Chitha *et al.* 2004), which provided the opportunity for provinces to use the estimated cost of providing adequate primary health care services per person to argue strongly for appropriate funding of these services.

These factors provide important insights for other countries of strategies that can be used to progress towards equity in the inter-provincial allocation of health care resources within a fiscal federal context.

4. Allocation of public health care resources among districts

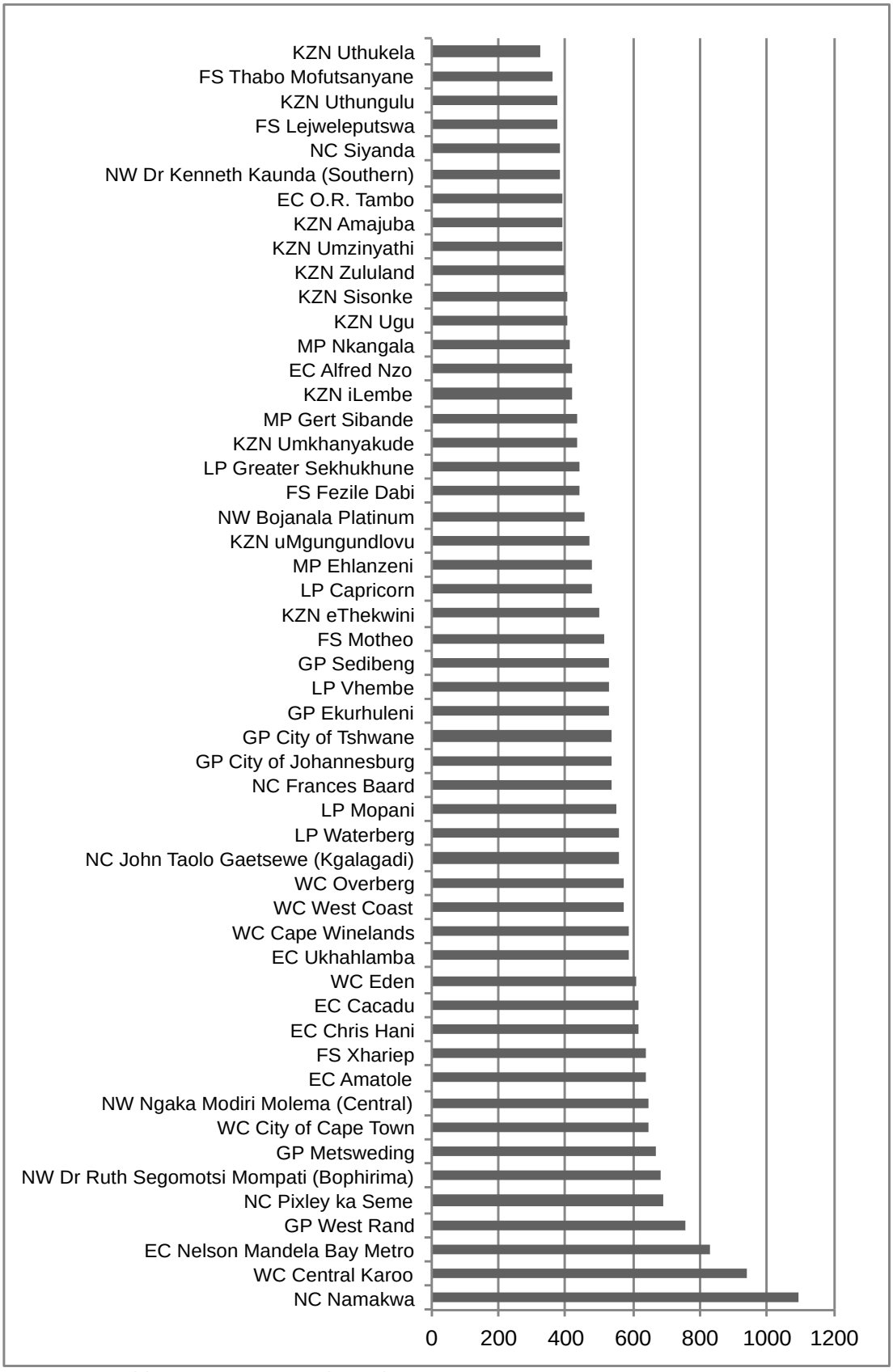
It is as important to pursue equity in the allocation of public sector health care resources **among** provinces as **within** provinces, i.e. among health districts. *Figure 4* indicates that, despite the progress that has been made in terms of an equitable allocation of health care among provinces, substantial differentials in non-hospital primary health care (PHC) spending remain among health districts.

This analysis has focused on PHC expenditure because PHC services are the foundation of the health system and, thus, equitable access to such services is particularly important. In addition, non-hospital PHC services are more likely to be used mainly by residents of that district (while district hospitals may serve some residents of neighbouring districts). Thus, per capita non-hospital PHC expenditure estimates, using the district population as the denominator, are likely to be a more accurate reflection of resource availability relative to the population served.

Figure 4 shows that per capita spending ranges from R324 in the Uthukela health district in KwaZulu-Natal to R1,095 per capita in the Namakwa district of the Northern Cape province. Although the Northern Cape is sparsely populated, and hence would be expected to have a higher per capita spending level to achieve sufficiently accessible services, the other districts in this province (John Taolo Gaetsewe, Pixley ka Seme, Siyanda and Frances Baard) do not have comparably high spending levels.

These massive disparities among health districts are particularly concerning because it is critical that all residents have a comparable opportunity to access high quality, non-hospital primary care services irrespective of which district they happen to live in.

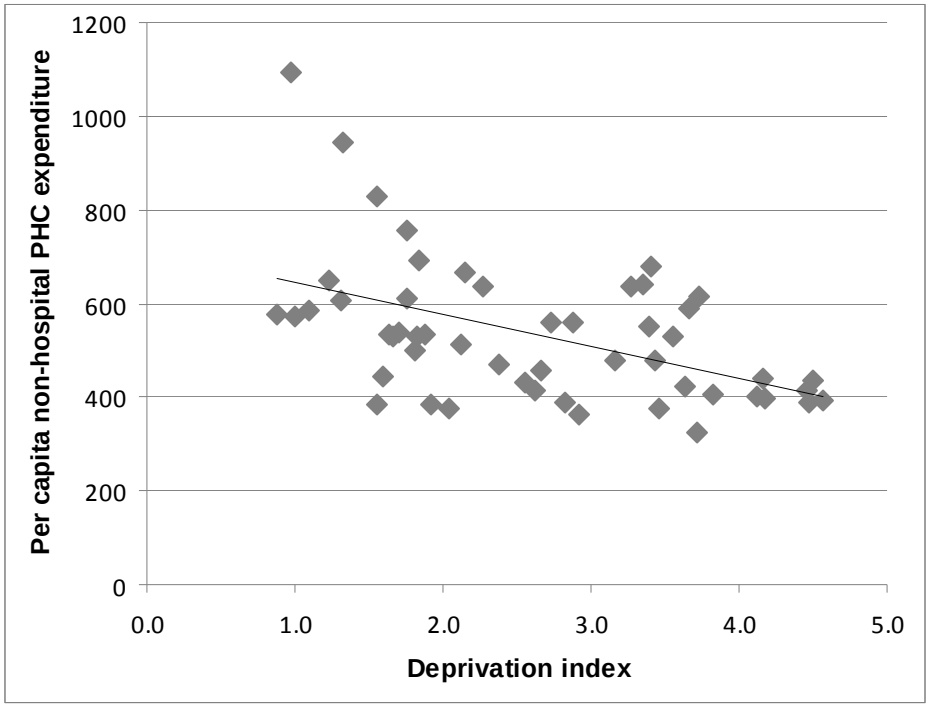
Figure 4: Non-hospital PHC spending per capita in health districts (2010/11)



Source: Health Systems Trust (2012)
Key: EC = Eastern Cape; FS = Free State; GP = Gauteng; KZN = KwaZulu-Natal; LP = Limpopo; MP = Mpumalanga; NC = Northern Cape; NW = North West; WC = Western Cape

Figure 5 compares per capita non-hospital PHC expenditure in each district with a deprivation index for that district. The index is a composite index of variables that reflect deprivation rather than simply income poverty (such as female-headed households, lack of formal education, unemployment, lack of potable water, lack of sanitation, etc.); the lower the value of the deprivation index, the less deprived the district. Although there is considerable variation, the districts with the highest per capita expenditure levels are amongst the least deprived districts and the most deprived districts have some of the lowest levels of per capita expenditure. The trend line demonstrates that overall, there is an inverse relationship between per capita non-hospital PHC expenditure and deprivation.

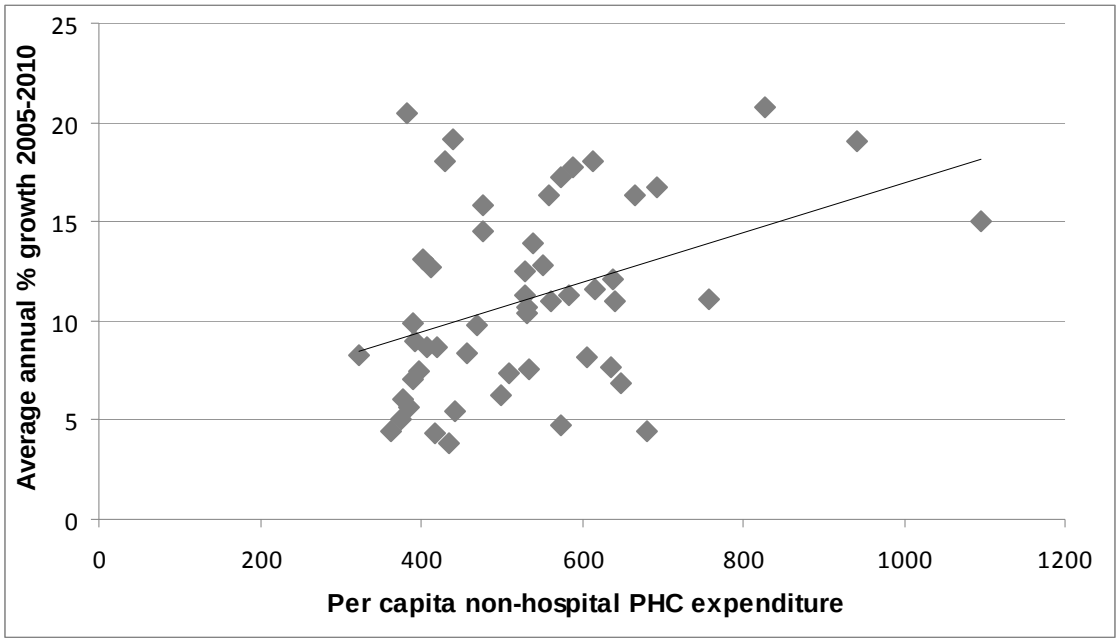
Figure 5: Relationship between 2010/11 per capita non-hospital PHC expenditure levels and deprivation by district



Source: Data derived from Health Systems Trust (2012)

Figure 6 indicates a tendency for the greatest percentage increases in annual spending to occur in districts that already have above average per capita non-hospital PHC expenditure levels. The slope of the trend line highlights this, even though there is considerable variation across districts.

Figure 6: Relationship between 2010/11 per capita non-hospital PHC expenditure levels and average annual growth rate in such expenditure between 2005-2010



Source: Data derived from Health Systems Trust (2012)

Figures 4-6 strongly suggest that insufficient attention has been paid at provincial level to the equitable allocation of resources across districts within their boundaries. A number of possible reasons contribute to the continued existence of large differences in per capita expenditure across districts. To a large extent, provinces continue to use a historical budgeting process for determining the budgets of individual districts. It is unclear why provincial health departments have not used the costed norms for PHC services and/or a needs-based resource allocation formula to guide their decisions about the distribution of PHC resources among their health districts. However, a key issue may be a concern on the part of provincial health departments about the ability of currently under-resourced districts to absorb additional financial resources (e.g. whether these districts will be able to attract additional staff, given that these districts are frequently in remote rural areas). Nevertheless, nearly two decades since the first democratic elections and the associated restructuring of the health system, more visible efforts to address absorptive capacity constraints gradually would have been expected. It is clear that the equitable allocation of non-hospital PHC resources across districts should be prioritised in future.

5. Conclusions

This review of resource allocation issues within South Africa indicates that while a fiscal federal system may make it more difficult to pursue the equitable allocation of resources than would be the case with centralised resource allocation, it is certainly not impossible. A range of factors contribute to this outcome: these include the increasingly equitable allocation of global budgets among provinces; the growing share of conditional grants in total public sector health care expenditure and their tendency to benefit particularly historically under-resourced provinces; and the establishment of norms and standards for the delivery of health services that all provinces are expected to strive to achieve.

Considerable progress has been made towards the equitable allocation of public sector health care resources among provinces, but substantial disparities in health care spending remain among health districts. Provincial health departments must pay more attention to the equitable allocation of resources for primary health care and district hospital services among the districts within their province. In the absence of such efforts, many South Africans will continue to be disadvantaged in their access to primary care services simply because of their place of residence.

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Equity in health implies addressing differences in health status that are unnecessary, avoidable and unfair. In southern Africa, these typically relate to disparities across racial groups, rural/urban status, socio-economic status, gender, age and geographical region. EQUINET is primarily concerned with equity motivated interventions that seek to allocate resources preferentially to those with the worst health status (vertical equity). EQUINET seeks to understand and influence the redistribution of social and economic resources for equity oriented interventions, EQUINET also seeks to understand and inform the power and ability people (and social groups) have to make choices over health inputs and their capacity to use these choices towards health.

EQUINET implements work in a number of areas identified as central to health equity in the region:

- Protecting health in economic and trade policy
- Building universal, primary health care oriented health systems
- Equitable, health systems strengthening responses to HIV and AIDS
- Fair Financing of health systems
- Valuing and retaining health workers
- Organising participatory, people centred health systems
- Social empowerment and action for health
- Monitoring progress through country and regional equity watches

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