Section A:

Indicator Comparisons per programme by District

1 Finance

Muchiri Wandai

Total health expenditure measures the final consumption of health goods and services (i.e. current health expenditure) plus capital investment in health care infrastructure. This includes government spending on medical services and goods, public health and prevention programmes, and administration. The main programmes and sub-programmes for health expenditure are shown in Table 1.

Table 1: Health expenditure programmes and sub-programmes

Programme	Sub-programme								
1. Administration	1.1 Office of the Member of the Executive Council (MEC)				1.2 Management				
2. District Health Services	2.1 District Management	2.2 Community Health Clinics	2.3 Community Health Centres	2.4 Community-based Services	2.5 Other Community Services	2.6 HIV and AIDS	2.7 Nutrition	2.8 Coroner Services	2.9 District Hospitals
3. Emergency Health Services	3.1 Emergency Transport				3.2 Planned Patient Transport				
4. Provincial Hospital Services	4.1 General (Regional) Hospitals	4.2 Tuberculosis Hospitals	4.3 Psychiatric/Mental Hospitals		4.4 Sub-acute, Step-down and Chronic Hospitals		4.5 Dental Training Hospitals		4.6 Other Specialised Hospitals
5. Central Hospital Services	5.1 Central Hospital Services				5.2 Provincial Tertiary Hospital Services				
6. Health Sciences and Training	6.1 Nurse Training Colleges		6.2 Emergency Medical Services (EMS) Training Colleges			6.3 Bursaries	6.4 Primary Health Care Training		6.5 Training Other
7. Health Care Support Services	7.1 Laundries	7.2 Engineering	7.3 Forensic Services		7.4 Orthotic and Prosthetic Services			7.5 Medicine Trading Account	
8. Health Facilities Management	8.1 Community Health Facilities		8.2 Emergency Medical Rescue Services		8.3 District Hospital Services		8.4 Provincial Hospital Services		8.6 Other Facilities

This chapter discusses five indicators based on the District Health Services (DHS) programme. In the 2014/15 financial year, provincial government expenditure on the DHS was slightly above R64.181 billion, which represented 45.5% of total provincial government expenditure (Table 2). This expenditure is only marginally above the medium-term estimate (R64.086 billion) for the year according to the 2010/11–2016/17 Provincial Budgets and Expenditure Review.[a]

Table 2: Provincial government expenditure by main programme, 2014/15

Programme	Expenditure Rand	Percentage
1. Administration	3 598 958 655	2.6
2. District Health Services	64 181 454 670	45.5
3. Emergency Health Services	5 554 371 029	3.9
4. Provincial Hospital Services	28 695 094 577	20.4
5. Central Hospital Services	25 803 946 974	18.3
6. Health Sciences and Training	4 247 532 665	3.0
7. Health Care Support Services	1 322 364 523	0.9
8. Health Facilities Management	7 521 819 249	5.4
Total	140 925 542 340	100.0

The main items of health expenditure are categorised as capital (buildings, machinery and related equipment); recurrent expenditure (staff salaries and goods and services such as clinical, laboratory, blood and pharmaceutical supplies);

a South African National Treasury. Provincial Budgets and Expenditure Review: 2010/11–2016/17. Pretoria: Ministry of Finance, 2014.

and transfers and subsidies. Expenditure on salaries and staff-related benefits (R91 billion) was more than double the expenditure on clinical and blood supplies, pharmaceuticals, laboratories and other recurrent expenditure (R38 billion).

The percentage of DHS expenditure that cannot be allocated to specific districts within provinces continues to be very high in the Free State (FS) (26.4%), Limpopo (LP) (18.2%), Mpumalanga (MP) (18.1%) and North West (NW) (17.8%). This was also the case in previous financial years. Much of this unallocated expenditure was spent on HIV and AIDS and Community-based Services for all provinces, except for Limpopo and Mpumalanga where a significant portion went into District Hospitals and District Management sub-programmes.

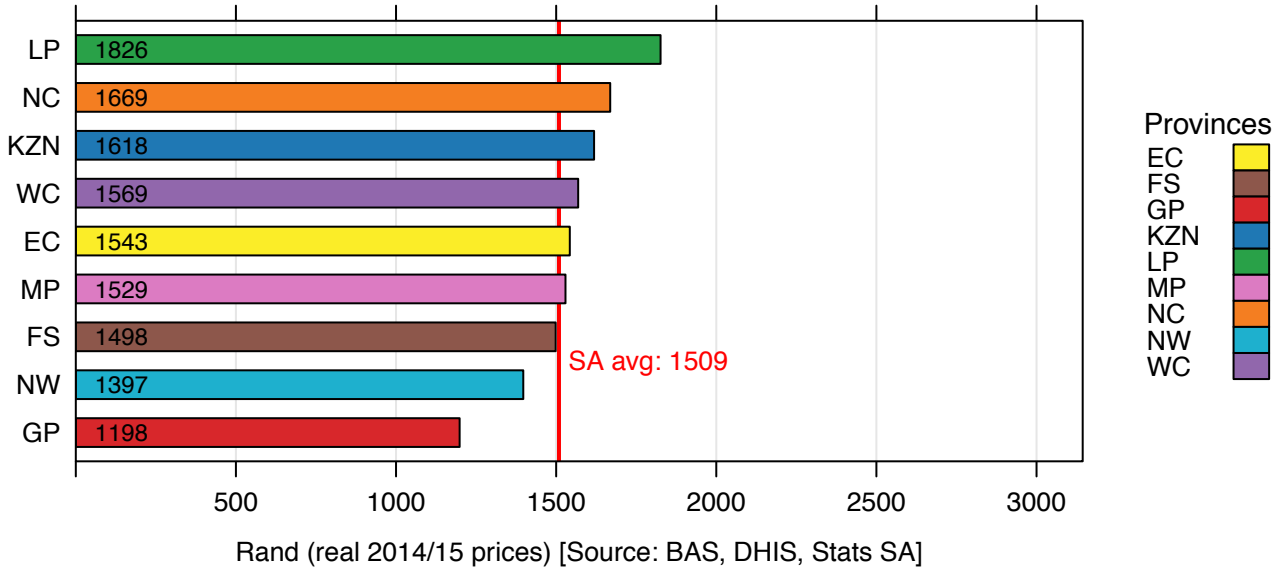
In Gauteng Province (GP), a small amount of expenditure was shown to have been spent on both Ekurhuleni/Sedibeng and also on both Johannesburg/West Rand, and was therefore difficult to allocate to the specific district.

1.1 Provincial and local government DHS expenditure per capita (uninsured population)

Provincial and local government (LG) expenditure per capita (uninsured) on DHS is the total amount spent per person without medical aid coverage. The numerator is the sum of provincial and LG expenditure under programme 2 ('District Health Services' in Table 1), except for expenditure on sub-programme 2.8 (Coroner Services). The denominator is the estimated uninsured population per district.

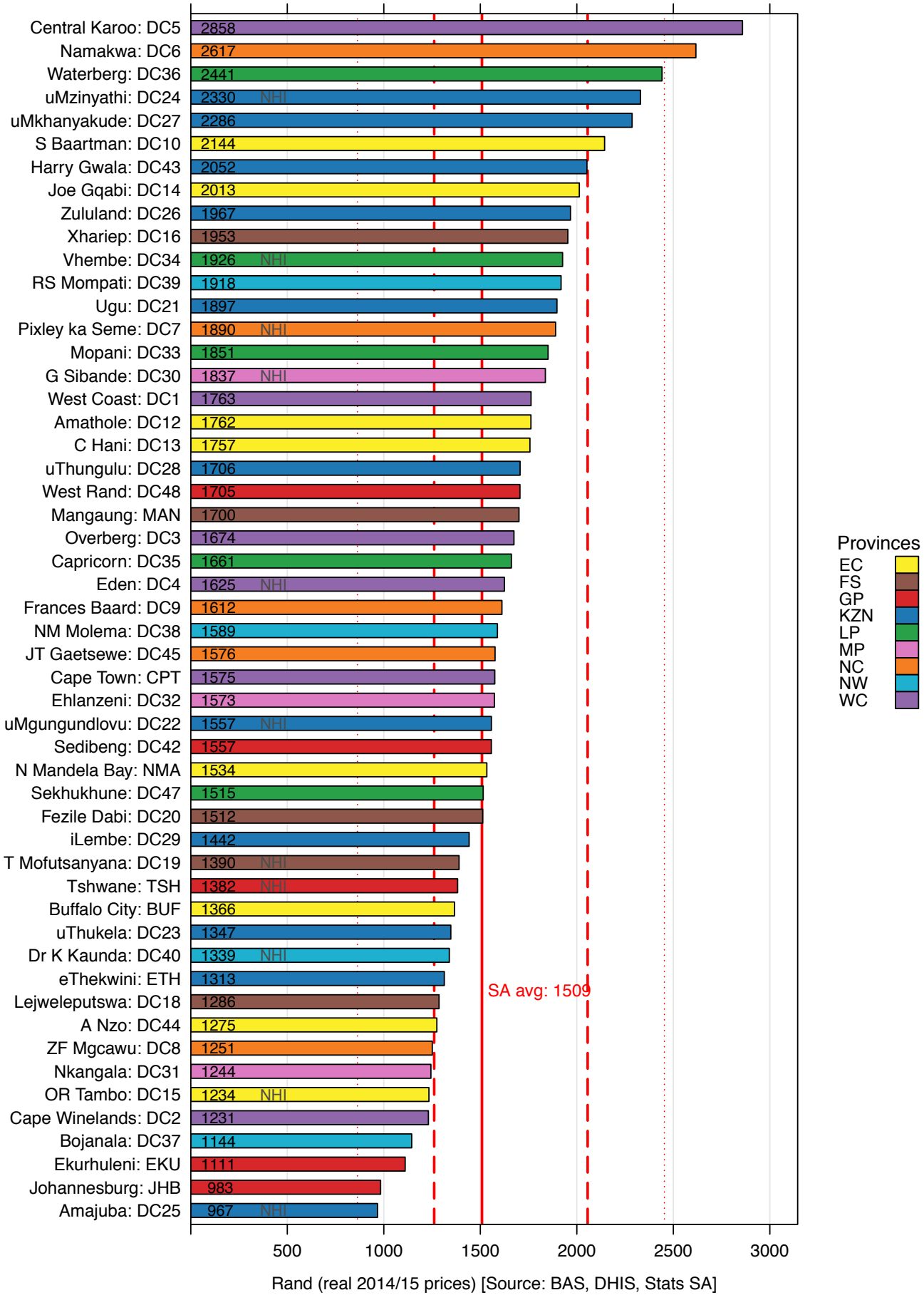
National expenditure on DHS per capita (uninsured) was R1 509 in 2014/15. Figure 1 shows the provincial differences in DHS spending per capita (uninsured), with Limpopo having the highest expenditure (R1 826) and Gauteng the lowest (R1 198). These two provinces also had the highest and lowest expenditure in 2013/14.

Figure 1: Provincial and local government DHS expenditure per capita (uninsured) by province, 2014/15

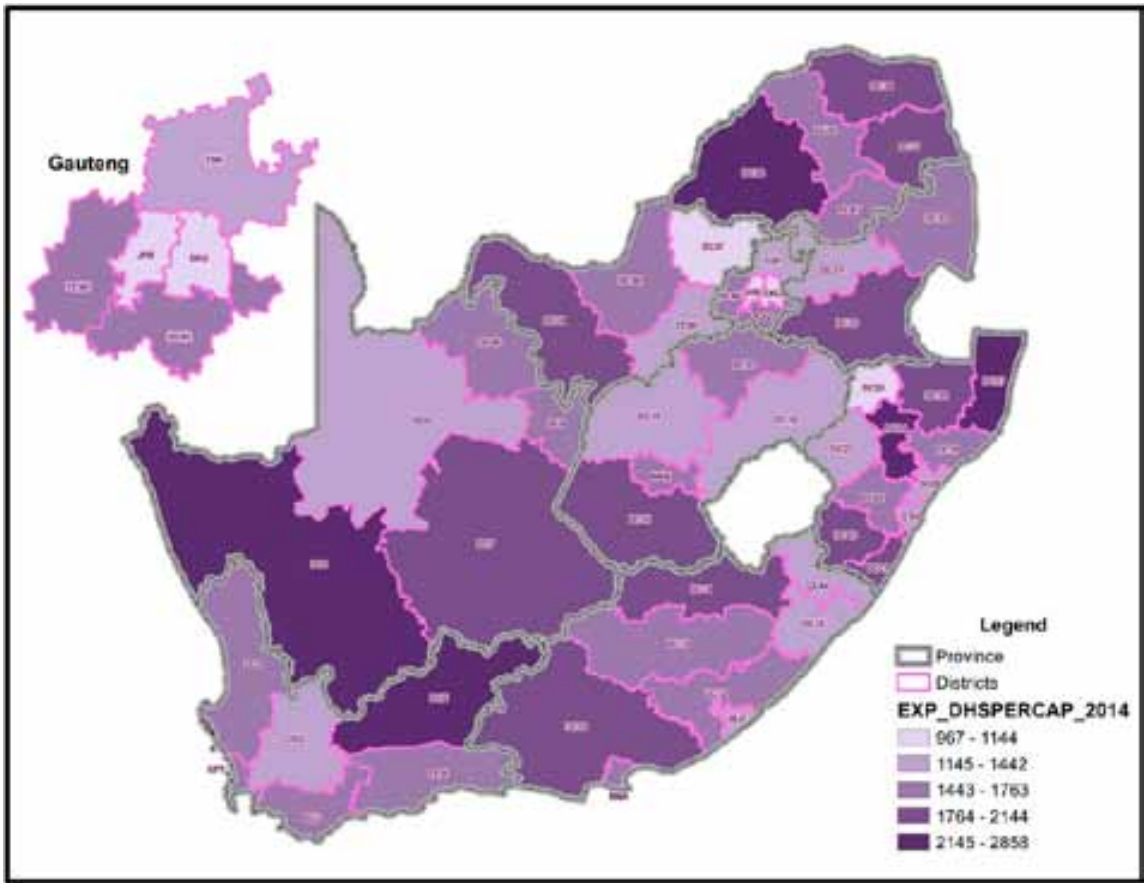


There are wide variations in the per capita (uninsured) expenditure on DHS among districts nationally, and also among districts within the same province. The three districts with the highest per capita expenditure on DHS (uninsured population) were the Central Karoo (Western Cape (WC)) at R2 858, followed by Namakwa (Northern Cape (NC)) at R2 617, and Waterberg (LP) at R2 441 per capita. Amajuba (KwaZulu-Natal (KZN)) had the lowest per capita expenditure at R967 (Figure 2 and Map 1).

Figure 2: Provincial and local government DHS expenditure per capita (uninsured) by district, 2014/15

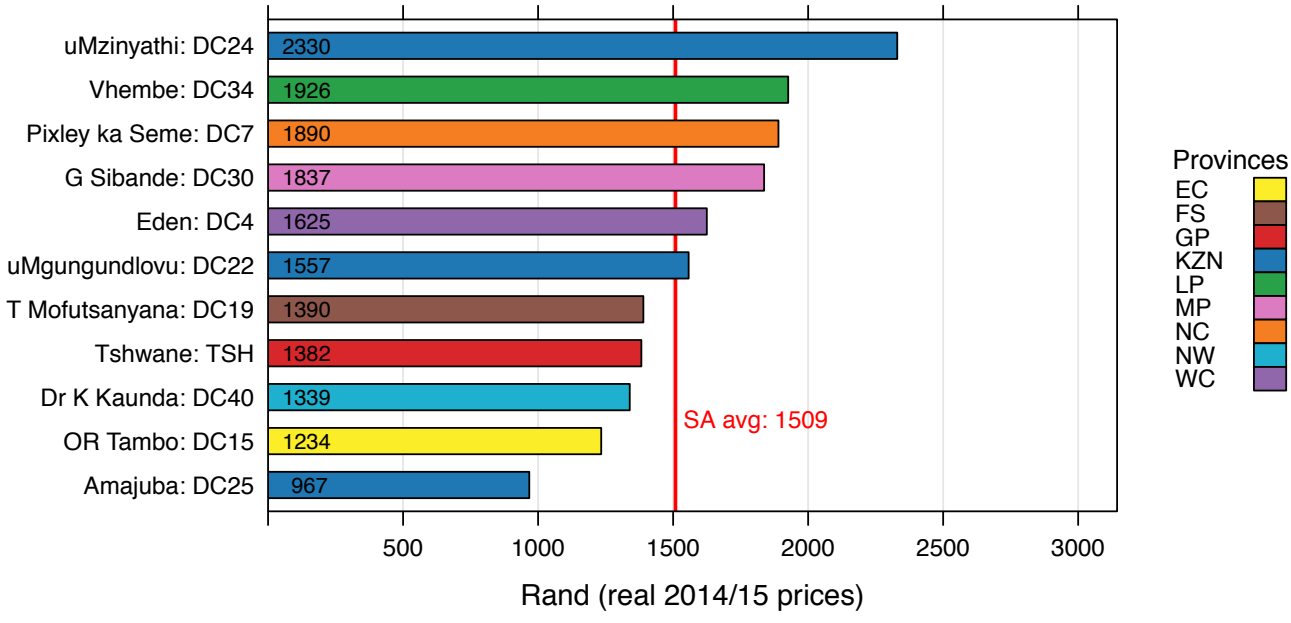


Map 1: Provincial and local government DHS expenditure per capita (uninsured) by district, 2014/15



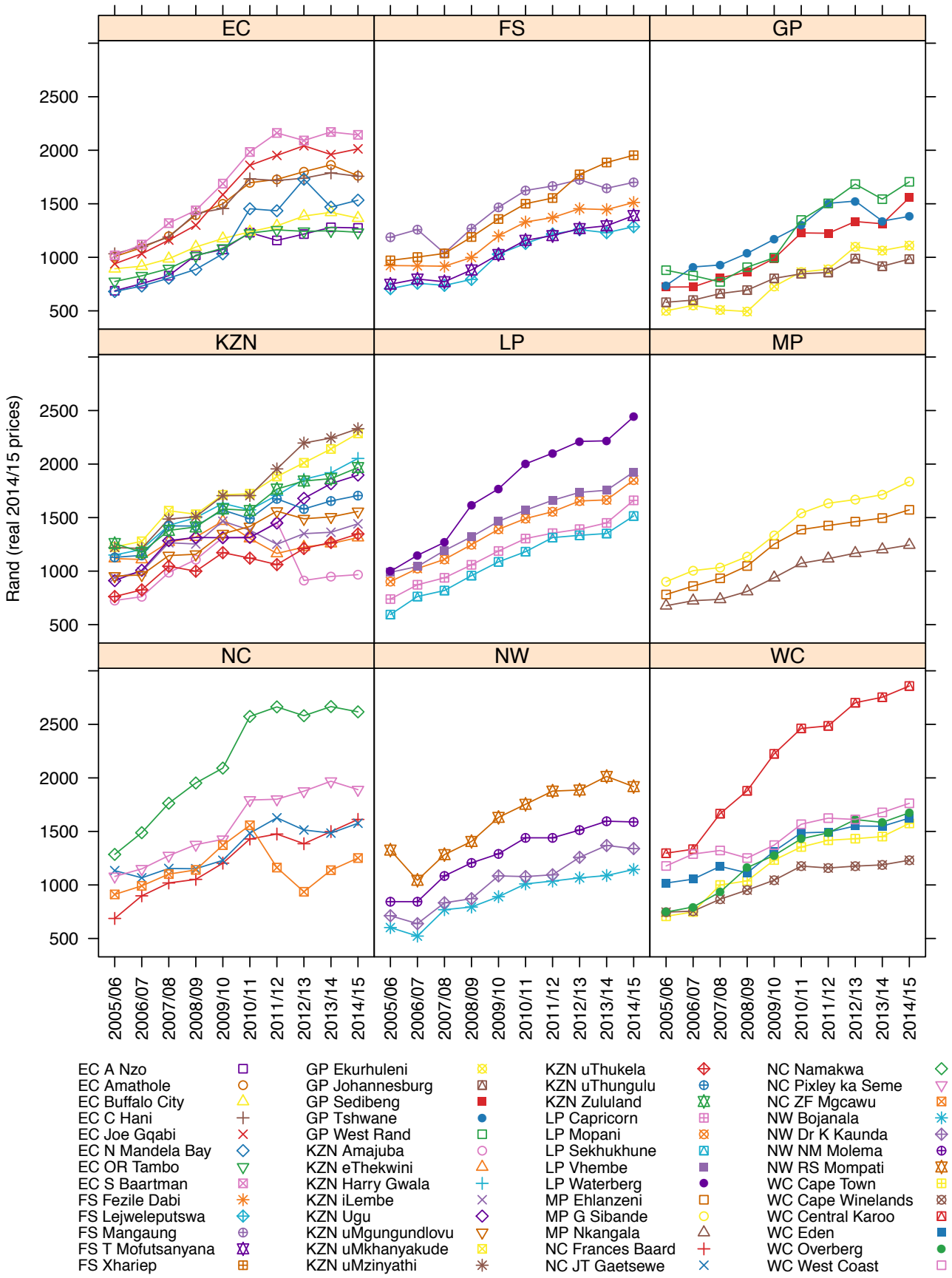
The three National Health Insurance (NHI) districts (Figure 3) from KwaZulu-Natal province (uMzinyathi with the highest per capita expenditure, uMgungundlovu with an average expenditure, and Amajuba with the lowest expenditure), show how districts defined by similar parameters can exhibit much variability. The second highest NHI district was Vhembe (LP) at R1 926, followed by Pixley ka Seme (NC) at R1 890. The same three NHI districts had the highest per capita expenditure (uninsured) in 2013/14. Amajuba (KZN) was the lowest for the second year in a row at R967.

Figure 3: Provincial and local government DHS expenditure per capita (uninsured) by NHI districts, 2014/15



In most cases, year-on-year per capita expenditure increased for districts within provinces (Figure 4). One noticeable exception was Amajuba (KZN) where expenditure dropped dramatically between 2010/11 and 2012/13. ZF Mgcawu (NC) had a similar drop between 2010/11 and 2012/13. The distribution in expenditure among districts in the provinces has remained almost the same over the years, showing little change in the way funds are utilised/distributed among these districts.

Figure 4: Annual trends: Provincial and local government DHS expenditure per capita (uninsured)



There was a wide range in the per capita expenditure in each of the socio-economic quintiles (SEQs). Over the years two districts, namely Central Karoo (WC) and Namakwa (NC), have consistently shown the highest per capita expenditure; they are both in SEQ4 and both have small population numbers with low population density (Figure 5).

Figure 5: Annual trends: Provincial and local government DHS expenditure per capita (uninsured) by SEQ, 2014/15

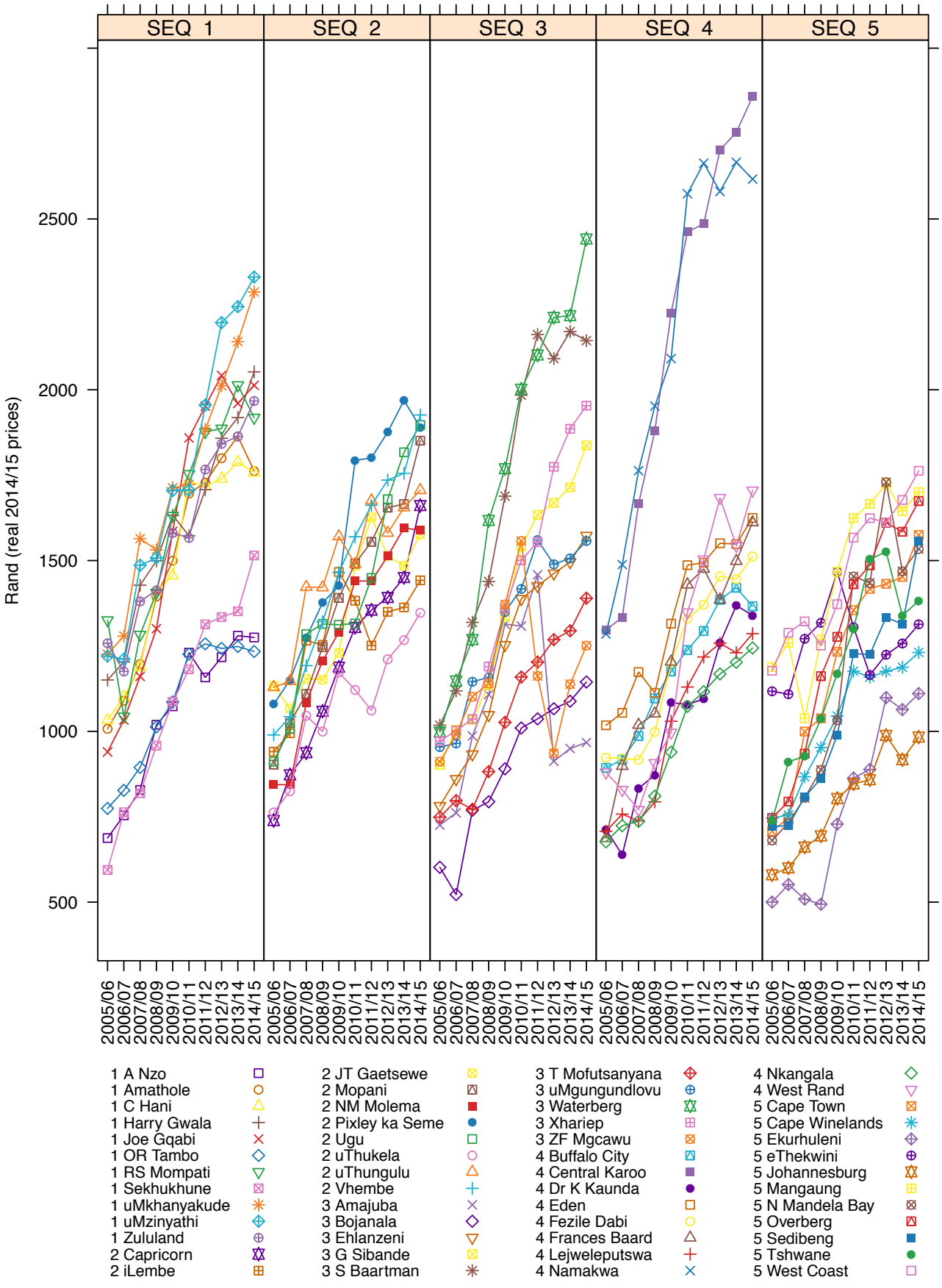


Table 3 clearly illustrates the importance of district hospitals in contributing to overall DHS expenditure per capita. Total DHS spending shows a clear gradient, with SEQ1 (the most deprived) having the highest per capita expenditure, and SEQ5 the lowest. This is reversed in both the primary health care (PHC) per capita spending and the PHC headcount (average cost per patient seen). The relative lack of district hospital beds in many of the large metros due to limited district hospitals (e.g. Johannesburg and Ekhuruleni (GP)) plays a significant part in these trends.

Table 3: DHS expenditure per capita (uninsured), PHC expenditure per capita (uninsured), and PHC expenditure per headcount by SEQ, 2011 and 2015 (Rand)

SEQ	DHS per capita		PHC per capita		PHC per headcount	
	FY 2011	FY 2015	FY 2011	FY 2015	FY 2011	FY 2015
SEQ 1 (most deprived)	1 500	1 724	714	823	269	283
SEQ 2 (deprived)	1 417	1 700	697	899	229	284
SEQ 3	1 402	1 566	679	835	252	295
SEQ 4 (well off)	1 270	1 467	782	917	275	331
SEQ 5 (best off)	1 172	1 312	816	951	281	330

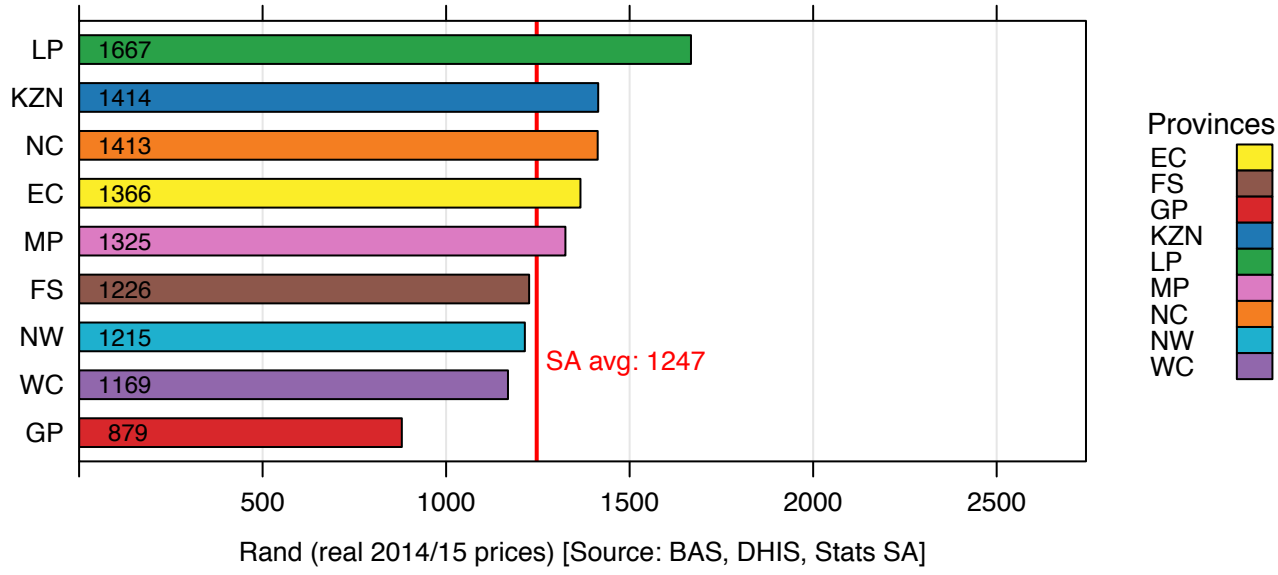
FY = financial year.

1.2 Provincial and local government DHS expenditure per capita (total population)

The provincial and LG district expenditure on DHS per capita (total population) refers to the total amount of money spent on DHS per person with and without medical scheme coverage.

Figure 6 shows the provincial differences in DHS expenditure per capita (total population), with Limpopo having the highest expenditure (R1 667) and Gauteng the lowest (R879). The national average for the 2014/15 year was R1 247. Figure 6 also illustrates the influence of the high number of people on medical aid insurance in the two most urbanised provinces, namely Gauteng and the Western Cape.

Figure 6: DHS expenditure per capita (total population) by province, 2014/15



At district level, DHS expenditure per capita was highest in the Central Karoo (WC) at R2 494 and lowest in Johannesburg (GP) at R739 (Figure 7). Among the NHI districts, uMzinyathi (KZN) had the highest expenditure (R2 167) and Amajuba (KZN) the lowest (R877).

Figure 7: DHS expenditure per capita (total population) by district, 2014/15

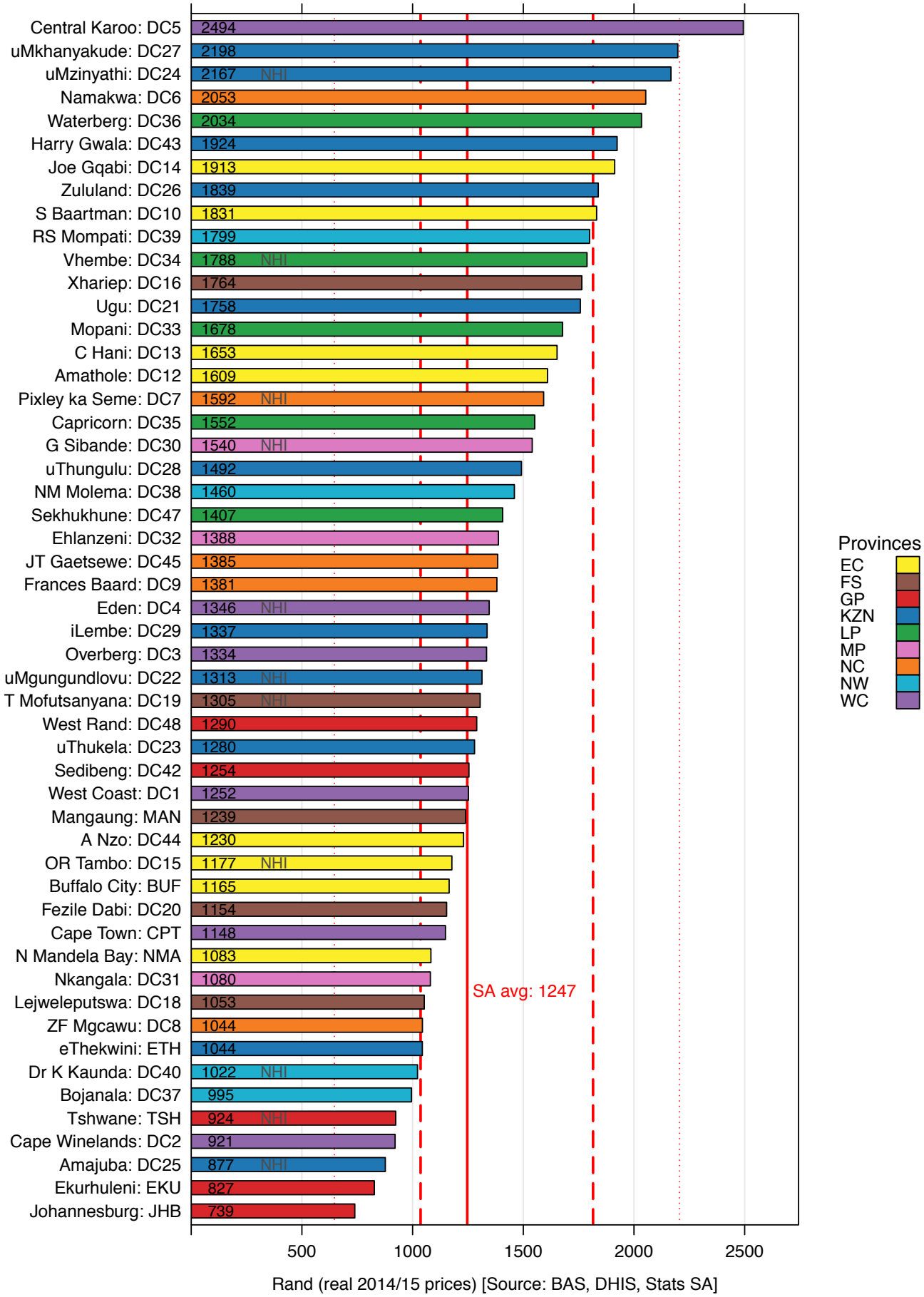
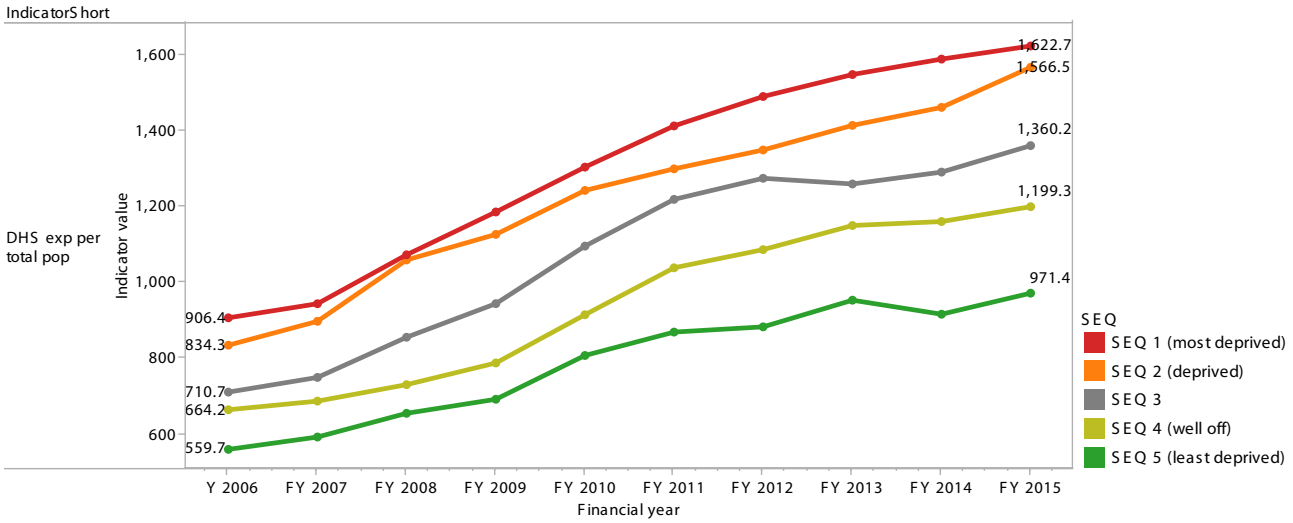


Figure 8 shows trends in coverage by socio-economic quintile (SEQ), with coverage being highest in SEQs 1 and 2 and lowest in SEQ5.

Figure 8: Trends in average district values by SEQ for DHS expenditure per capita (total population)

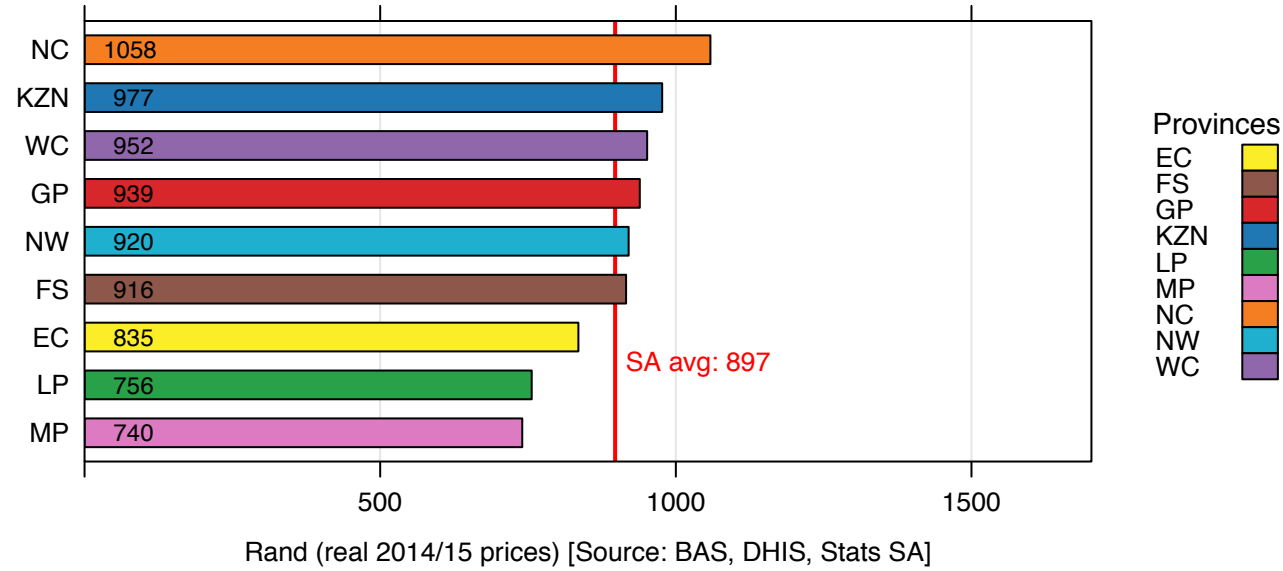


1.3 Provincial and local government PHC expenditure per capita (uninsured population)

PHC expenditure for the uninsured population includes expenditure on sub-programmes 2.2–2.7 (Table 1) of the DHS expenditure. This forms the numerator for this indicator. The denominator is the estimated uninsured population per area.

Figure 9 shows that Mpumalanga, Limpopo and the Eastern Cape (EC) had low per capita expenditure (uninsured) on PHC (R740, R756 and R835 respectively) compared with the Northern Cape and KwaZulu-Natal (R1 058 and R977).

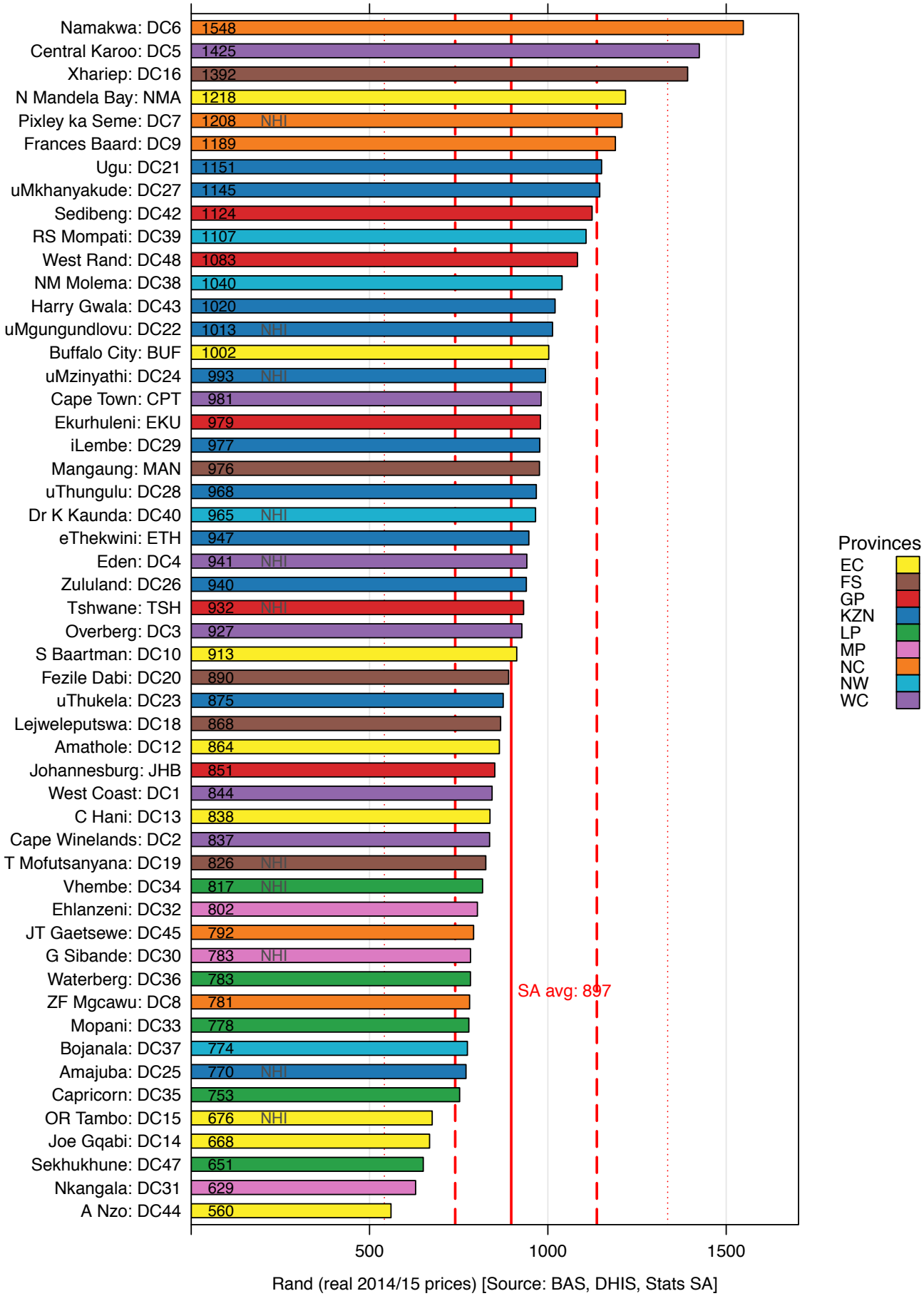
Figure 9: Provincial and local government PHC expenditure per capita (uninsured) by province, 2014/15



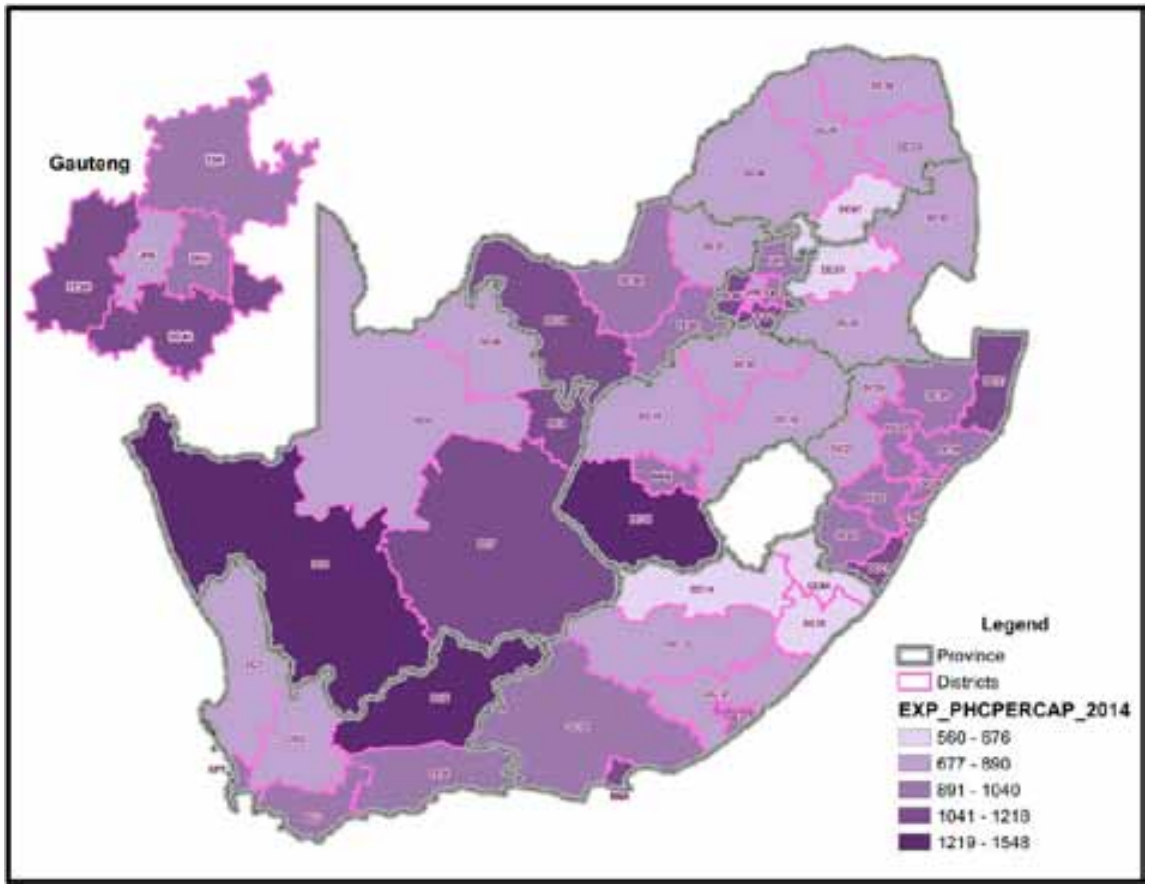
Xhariep (FS), Namakwa (NC) and Central Karoo (WC) had the highest PHC expenditure per capita (uninsured) among the districts at R1 257, R1 243 and R1 215 respectively. These are all districts with low population numbers and low population density (Figure 10 and Map 2). The district with the lowest PHC per capita expenditure (uninsured) was Alfred Nzo (EC) at R541.

The NHI district with the highest PHC expenditure per capita (uninsured) was Pixley ka Seme (NC) at R1 208, and the lowest was OR Tambo (EC) at R676.

Figure 10: Provincial and local government PHC expenditure per capita (uninsured) by district, 2014/15



Map 2: Provincial and local government PHC expenditure per capita (uninsured) by district, 2014/15



The annual trends (Figure 11) show that there was less inter-district variation in PHC per capita expenditure (uninsured) for districts in Gauteng, KwaZulu-Natal, Limpopo and Mpumalanga than for districts in the Free State, Northern, Eastern and Western Cape. Over the years, PHC expenditure per capita (uninsured) in Xhariep (FS), Namakwa (NC) and Central Karoo (WC) has been substantially higher than in other districts within the respective provinces. These three districts are characterised by low population numbers and low population density.

The annual trends by social-economic quintile show that PHC expenditure per capita (uninsured) increased by SEQ (Table 3 above and Figure 12). In other words, districts in upper SEQs may be spending more on PHC than districts in lower SEQs, where expenditure could be more on other DHS sub-programmes and less on PHC.

Figure 11: Annual trends: Provincial and local government PHC expenditure per capita (uninsured), 2014/15

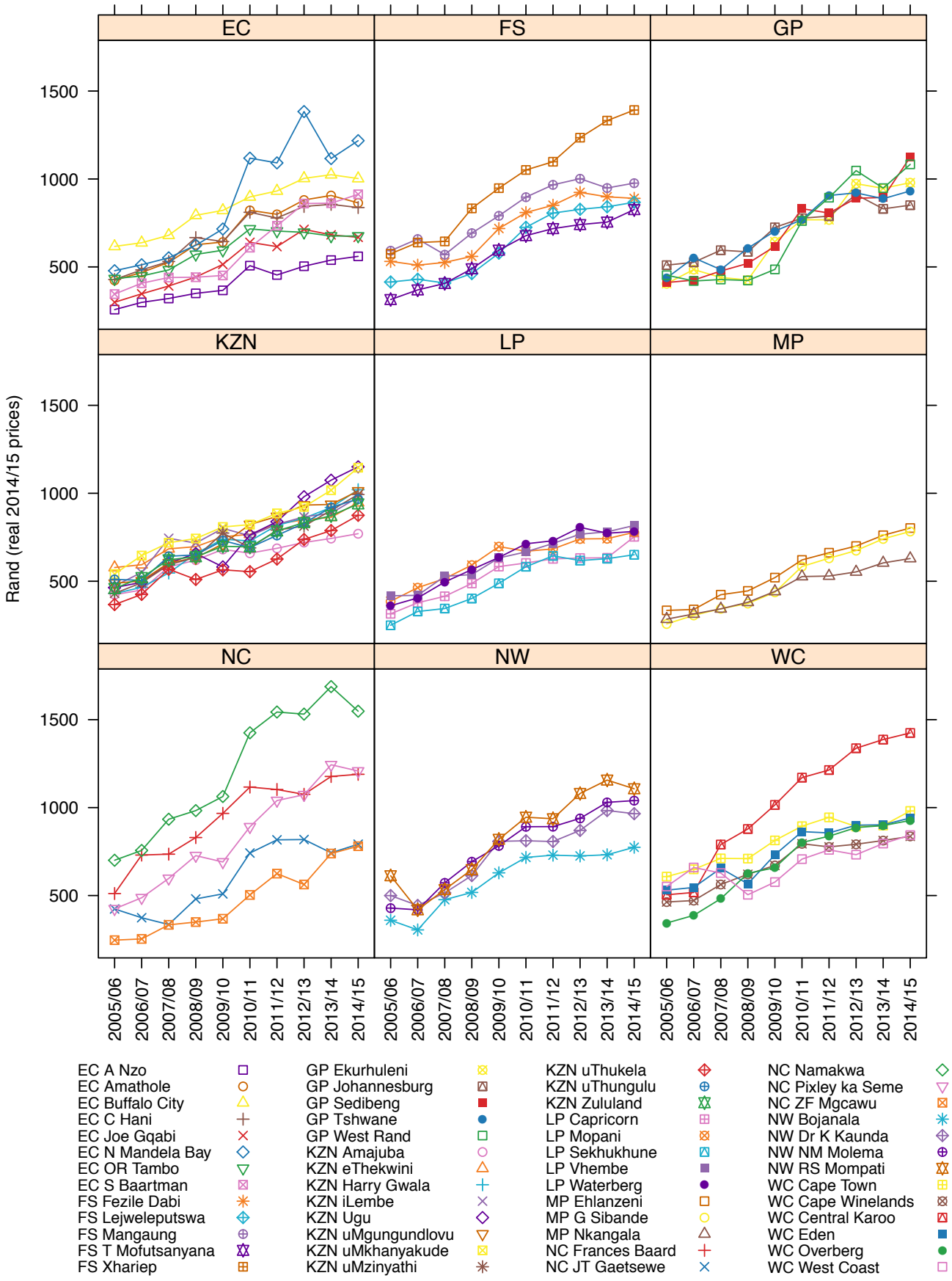
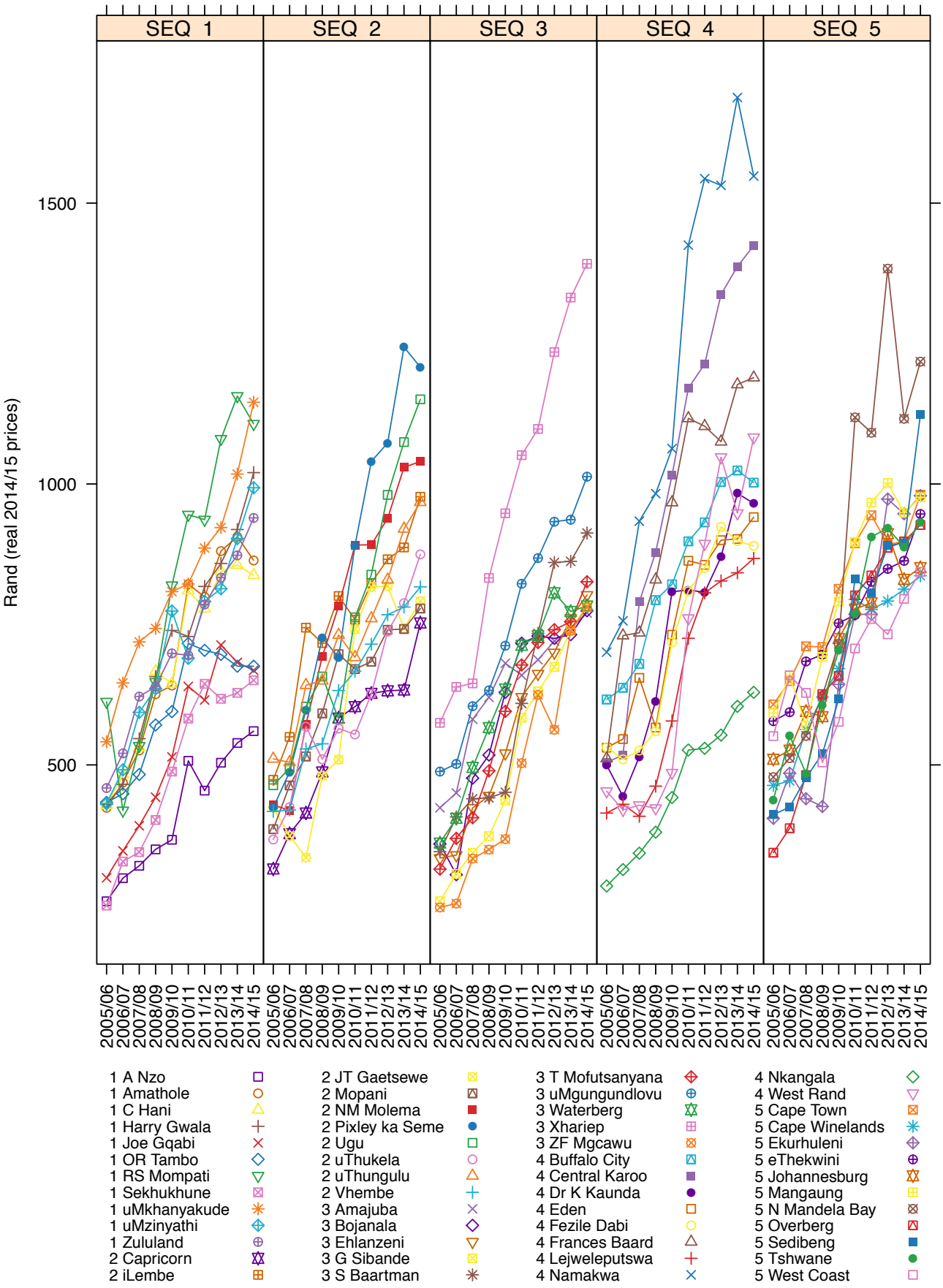


Figure 12: Annual trends: Provincial and local government PHC expenditure per capita (uninsured) by SEQ, 2014/15



As already noted, much of the provincial expenditure goes into compensation of employees. It is likely that districts with high PHC expenditure per capita have more health workers per head of population. Possible reasons for this include imbalances in staff mix; relative inefficiency of staff; overstaffing; and longer-than-average health worker time per patient (e.g. in rural areas where staff have to travel to outlying clinics). The converse may apply in districts with below-average expenditure per capita.

1.4 Provincial and local government PHC expenditure per capita (total population)

The PHC expenditure per capita (total population) measures the total amount of money spent annually by each district as a percentage of the total population in the district. Nationally, PHC per capita expenditure (total population) was measured at R742. The Northern Cape had the highest per capita expenditure at R896, while Mpumalanga had the lowest at R641 (Figure 13).

There was wide variation in PHC expenditure per capita at district level (Figure 14). Xhariep (FS) had the highest expenditure at R1 257, and replaced Pixley ka Seme (NC) which had the highest PHC expenditure per capita in 2013/14. Alfred Nzo (EC) had the lowest expenditure at R541 and was also lowest in 2013/14.

The NHI district with the highest PHC expenditure per capita was Pixley ka Seme (NC) at R1 018, and the lowest was Tshwane (GP) at R623. Coverage by SEQ is shown in Figure 15, with coverage being highest in SEQ2 and lowest in SEQ5.

Figure 13: Provincial and local government PHC expenditure per capita (total population) by province, 2014/15

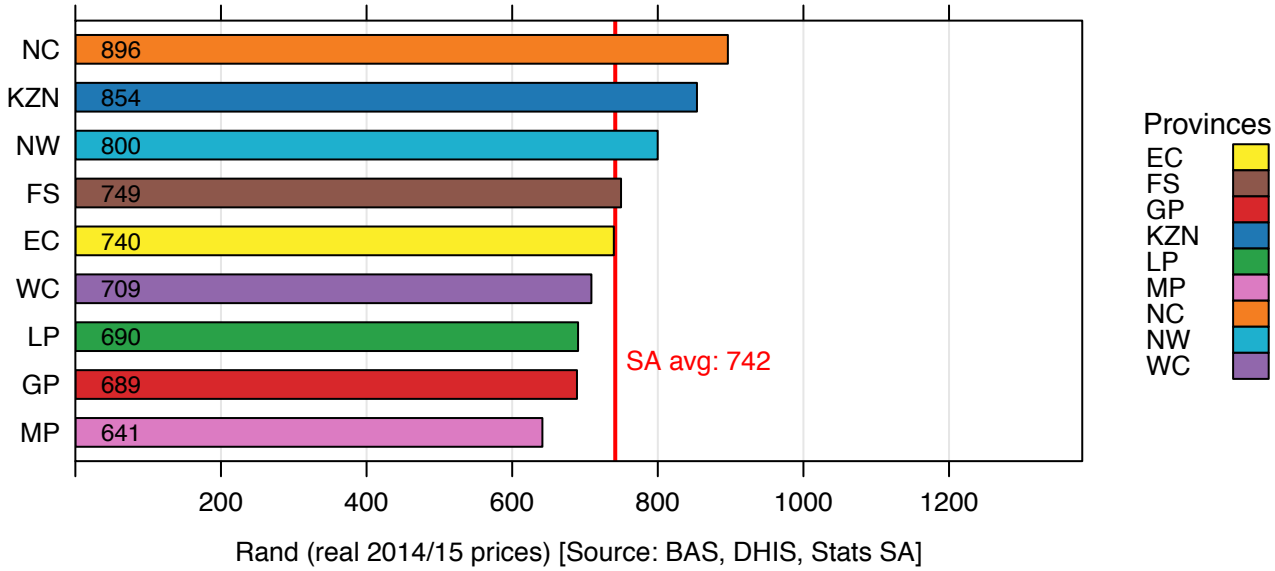


Figure 14: Provincial and local government PHC expenditure per capita (total population) by district, 2014/15

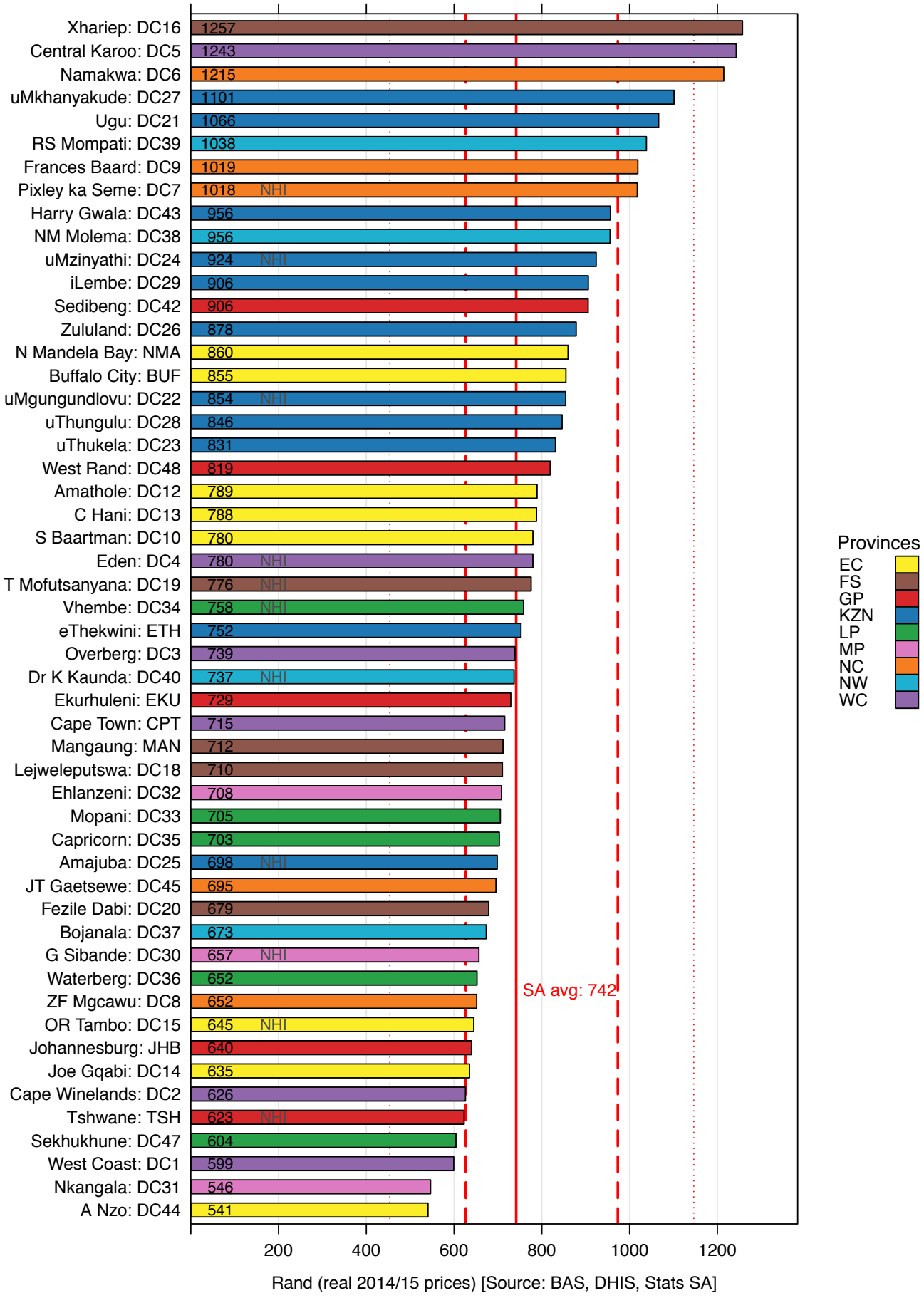
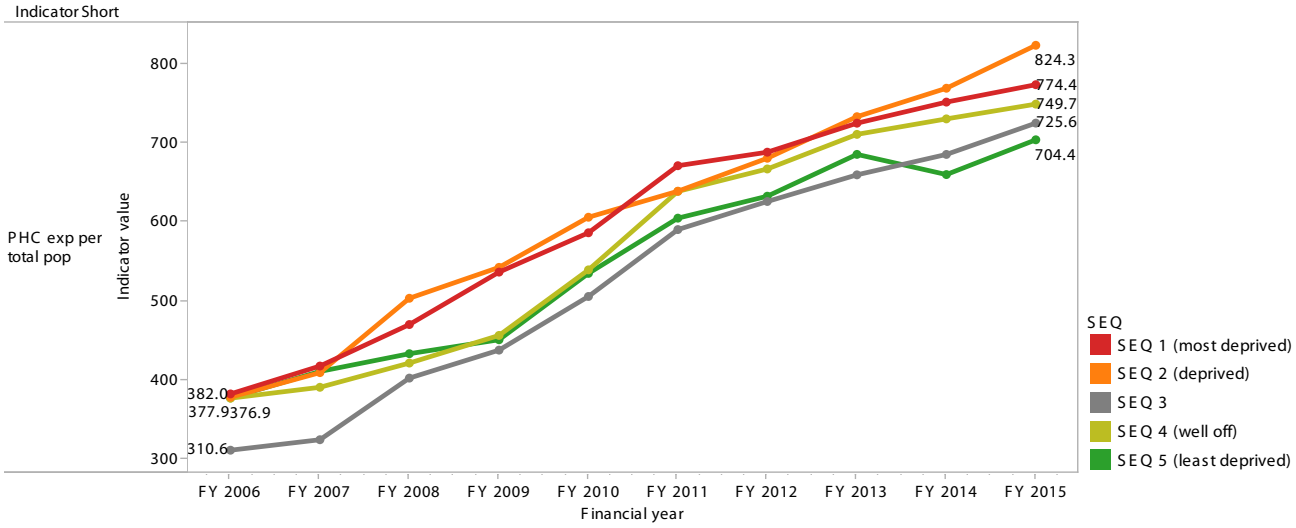


Figure 15: Trends in average district values by SEQ for provincial and local government PHC expenditure per capita (total population)



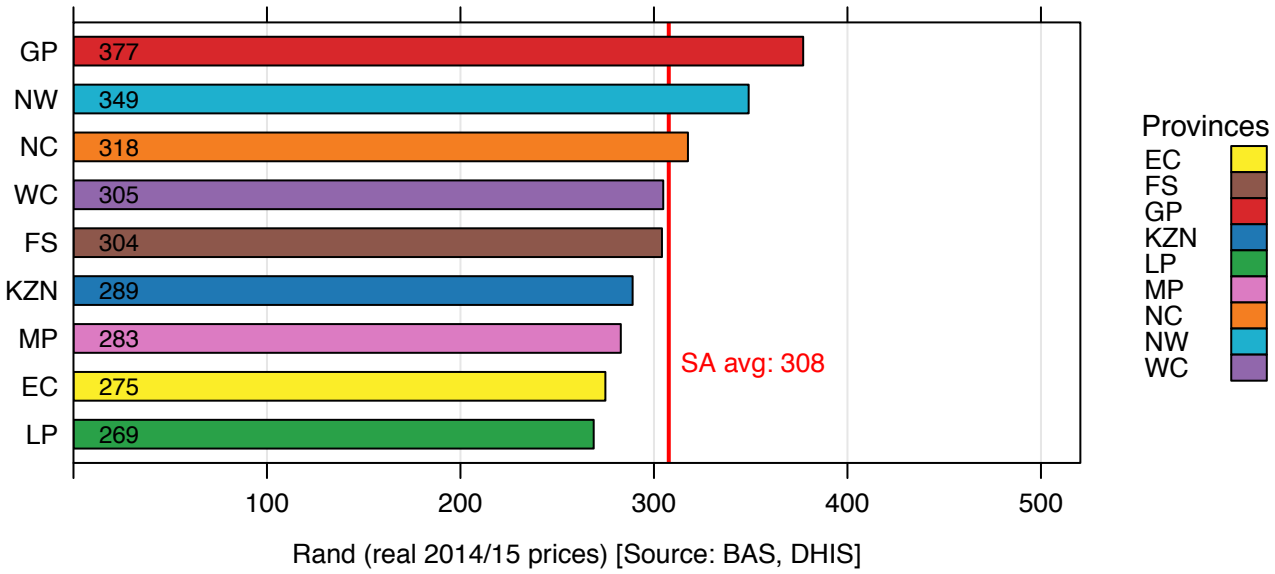
1.5 Provincial and local government expenditure per PHC headcount

This estimate refers to the amount of money spent on non-hospital PHC divided by the total PHC headcount. PHC programmes include nutrition; HIV and AIDS; community-based services; community health centres and community health clinics.

The numerator is the total expenditure on PHC, shown as sub-programmes 2.2–2.7 in the DHS programme (Table 1 above). The denominator is PHC total headcount, sourced from the District Health Information Software (DHIS); this is the number of clients of all ages attending the facility for PHC, where each client is counted once a day regardless of the number of services provided on that day.

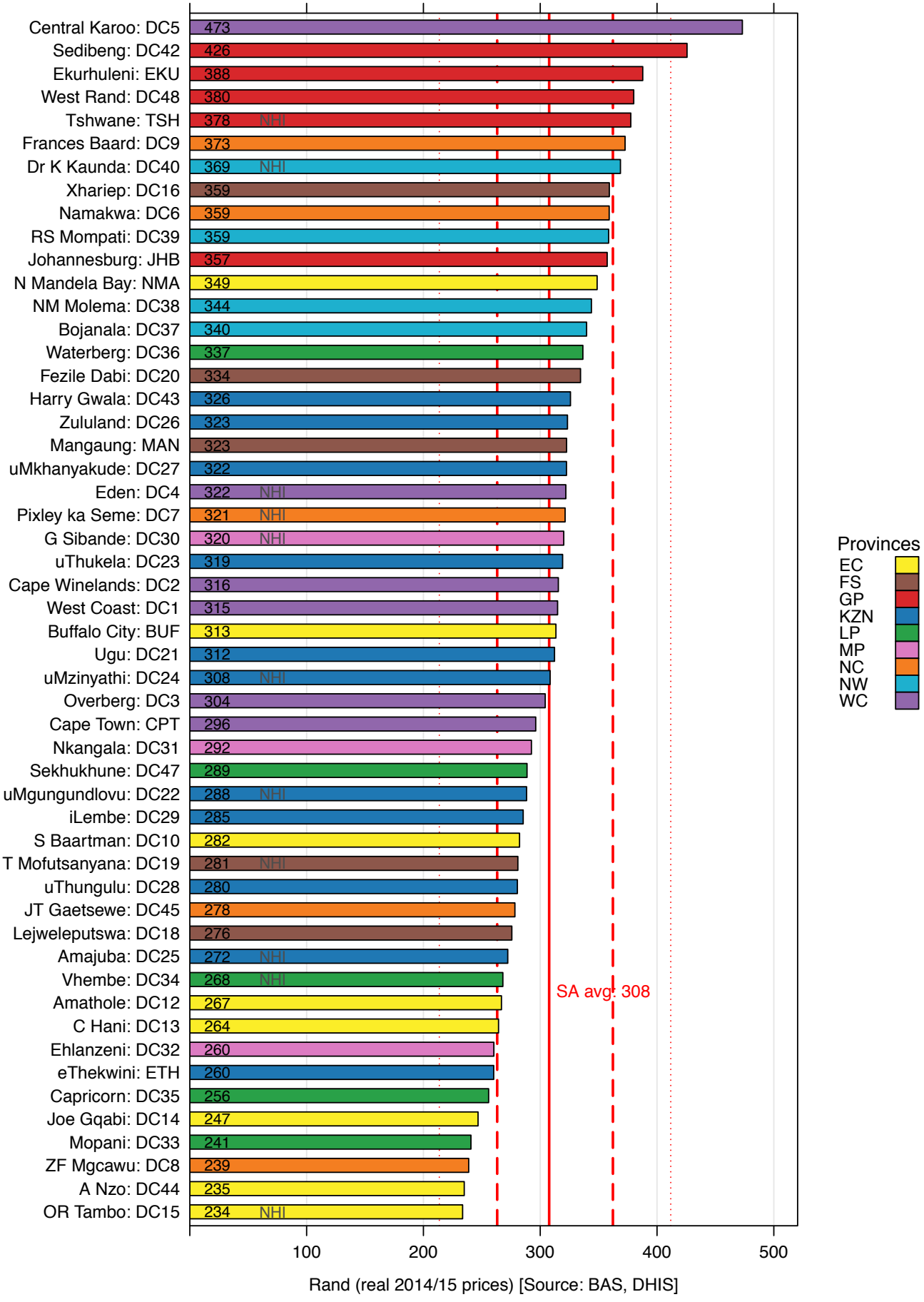
The national average PHC expenditure per PHC headcount was R308. Gauteng had the highest average expenditure (R377), followed by North West (R349). Limpopo had the lowest estimate at R269 (Figure 16).

Figure 16: Provincial and local government PHC expenditure per PHC headcount by province, 2014/15

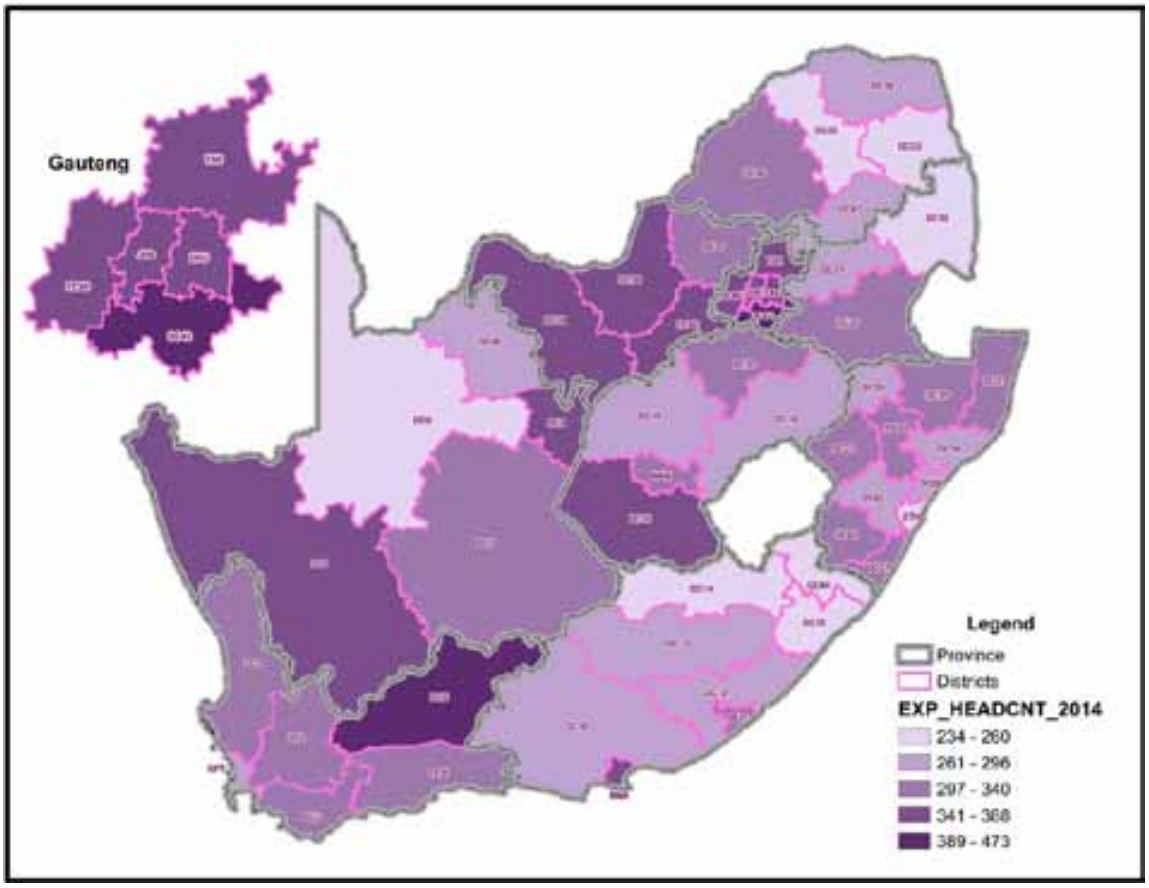


Central Karoo (WC) had a relatively high per capita expenditure on DHS and PHC, and the highest expenditure of any district per headcount (R473). Central Karoo (WC) and Sedibeng (GP) were the only two districts with expenditure per PHC headcount above R400. The district with the lowest expenditure per headcount was OR Tambo (EC) at R234 (Figure 17 and Map 3). Four of the five districts with the highest per capita spending were in Gauteng. This is either an indication of a lack of efficiency (such as relative overstaffing, unnecessary investigations) or of improved quality (more health worker time per patient).

Figure 17: Provincial and local government PHC expenditure per PHC headcount by district, 2014/15

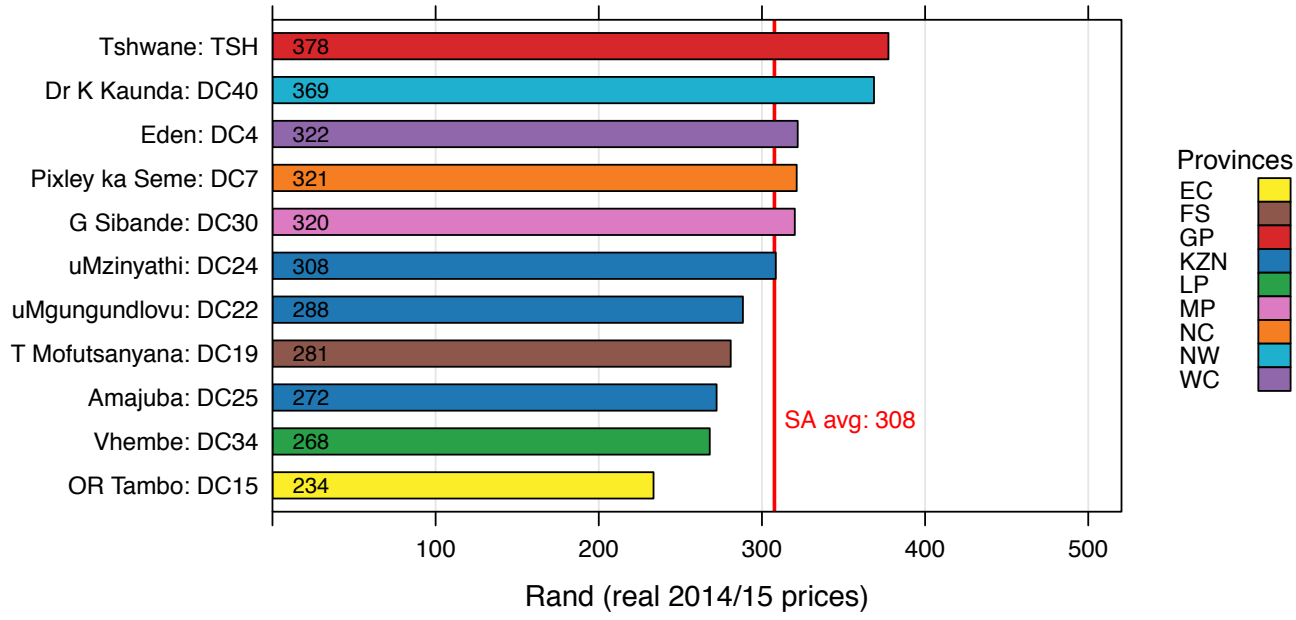


Map 3: Provincial and local government PHC expenditure per PHC headcount by district, 2014/15



Five of the 11 NHI districts had an expenditure per PHC headcount above the national average (Figure 18). Expenditure was highest in Tshwane (GP) (R378), followed by Dr K Kaunda (NW) (R369). OR Tambo (EC) had the lowest expenditure at R234.

Figure 18: Provincial and local government PHC expenditure per PHC headcount by NHI district, 2014/15



The annual expenditure trends for PHC headcount increased for all the districts (Figure 19). The rates of increase appear slow for districts in KwaZulu-Natal compared with districts from other provinces, especially those in North West. Central Karoo's rate and magnitude of increase was quite substantial compared with other districts in the Western Cape. Based on principles of equity, quality and efficiency, one would expect there to be a similar cost per PHC headcount in districts within the same province (with the exception of low population, low density districts such as Central Karoo). However, this is not the case, and in provinces like Limpopo and the Eastern Cape there are big differences in the cost per PHC headcount among the districts.

Figure 20 shows coverage by socio-economic quintile (SEQ). Coverage was highest and almost the same in SEQs 4 and 5 at around R330, and lowest in SEQs 1 and 2 at R283.

Figure 19: Annual trends: Provincial and local government PHC expenditure per PHC headcount, 2014/15

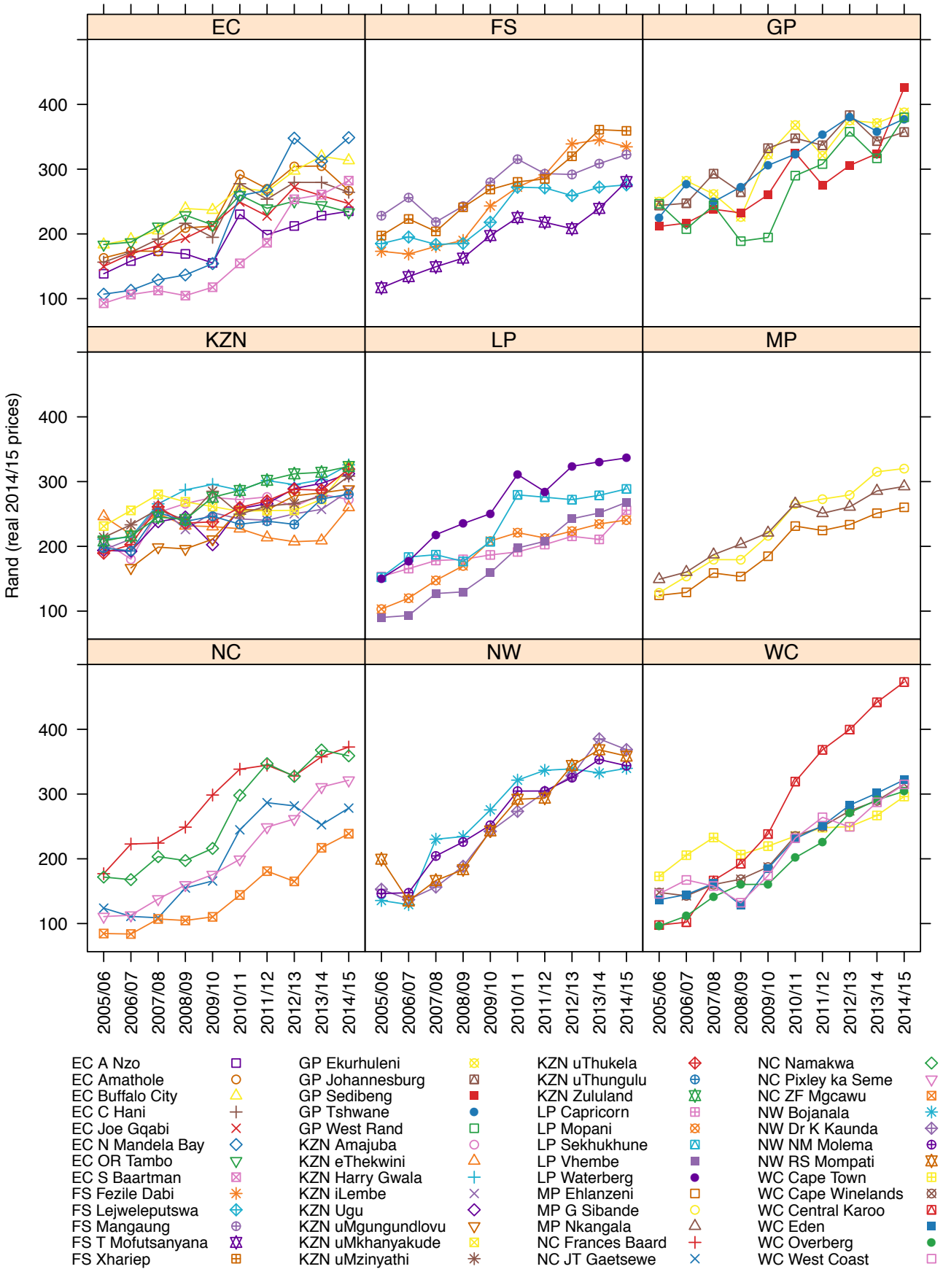


Figure 20: Trends in average district values by SEQ for provincial and local government PHC expenditure per PHC headcount