GTAC Analyse Assess Activate Strategic & Technical Advisory

National Treasury
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Provincial Health Departments: Commuted overtime

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NATIONAL TREASURY

SAVINGS@WORK
GOVERNMENT SPENDING REVIEWS

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1. Executive summary/ overview of issue

The apparent need, within applicable legislation, to increase hours of medical professionals in facilities is seen in the level of overtime spending. These increased hours can be obtained through additional appointments or by increasing the work hours of staff already in the system beyond the traditional 40 hour week. For the latter, section 10 of the Basic Condition of Employment Act applies and stipulates that an hour worked overtime, should be remunerated at a rate no less than 1.5 times the normal hourly rate.

It appears, based on spending on overtime that most provinces have opted for paying overtime as opposed to appointing additional staff. This is a comparatively expensive option due to the legislation in this area.

It is against this backdrop that the National Health Council (NHC) led by the National Department of Health (NDOH), whose Minister is the chairperson of the council, recognised the need to regulate the overtime system to ensure its sustainability. Requiring staff to work overtime appears to be the preferred approach to obtaining additional capacity. The only way government can get staff to work overtime, at a cheaper rate is through agreement with employees or organised labour. To deal with this, the National Policy on Commuted Overtime for Medical Officers (that is, all professionals registered with the Health Professions Council of South Africa) was developed.

In the policy, appointment of additional staff is not recommended as they are seen to usually work during normal work time, between 7:00 to 16:00, but little thought was given to sessional doctors (i.e. the opposite of Remunerative Work outside Public Service) if we accept that it is unusual for permanent appointees to work the 8 hours from the period 16:00 to 7:00. Commuted overtime is essentially the preloading of overtime and aims to cap the total overtime payable at any given time.

The policy has two main mechanisms:

- Introduction of a 1.3 times normal hourly tariff and not 1.5 times normal hourly tariff
- Capping the hours payable based on a grouping system that aligns to specific needs at facility level.

2. Problem statement

The following problems have been identified with the current policy:

(a) Nurses and doctors, in terms of the commuted overtime policy, are required to participate on an annual basis if need has been determined. The overtime requirement is based on estimated workloads for the year and the total over time awarded does not vary with changes to workload during the year.

(b) There are no national guidelines on the determination of clinical need for overtime capacity at facility level. This is at the discretion of facility managers and open to abuse as there are no benchmarks that can be used for the monitoring the implementation of the policy.

(c) There seems to be little consideration to the trade-off between capacity obtained through the commuted overtime system versus sessional appointments.

Grand problem; the cost-effectiveness of the policy is not immediately clear when looking only at overtime spending before and after implementation of the policy.

2.1. Aims and objectives

This spending review seeks to:

- Determine differences in overtime spending across provinces by level of care
- Link overtime to workload for comparative purposes
- Quantify the trade-off between capacity obtained through overtime and additional appointments.

3. Programme beneficiaries

The programme is designed to ensure increased capacity at public health facilities, its beneficiaries are therefore the uninsured population. The table below summarises the estimated number of uninsured population (mid-year population estimates less CMS number of beneficiaries on medical aids). This however is still slightly underestimated as some medical aid options do not provide comprehensive cover or provides only limited cover requiring beneficiaries to access public healthcare at some point.

Table 1: Uninsured population estimation

Province	2019	2020	2021	2022
Eastern Cape	6 086 014	6 091 079	6 097 052	6 097 250
Free State	2 451 032	2 462 739	2 473 478	2 484 713
Gauteng	11 792 005	12 100 650	12 402 905	12 707 575
Kwazulu Natal	9 983 016	10 099 806	10 215 017	10 329 285
Limpopo	5 524 876	5 569 482	5 615 572	5 654 835
Mpumalanga	4 052 333	4 118 294	4 182 282	4 244 627
Northern Cape	1 074 023	1 088 311	1 101 618	1 114 520
North West	3 519 914	3 579 820	3 636 662	3 694 198
Western Cape	5 241 444	5 346 035	5 448 259	5 553 008
Total	**49 724 657**	**50 456 215**	**51 172 845**	**51 880 010**

4. Key policies, laws, regulation and informal practices

The main guiding policies and legislation for the healthcare sector are:

i. Constitution

Chapter 2, Section 27 of the bill of rights states that, (1) Everyone has the right to have access to— (a) *health care services*, including reproductive health care; (b) sufficient food and water; and (c) social security, including, if they are unable to support themselves and their dependants, appropriate social assistance

ii. National Health Act, which draws chapter 2 of the constitution

Chapter 3 states the general functions of the National Department of Health:

> Section 21 (1) The Director General must (a) ensure the implementation of the national health policy and (b) issue guidelines for the implementation of the national health policy.
> (2) The director general must in accordance with the national policy […] (k) facilitate and promote the provision of health care services for the management, prevention and control of communicable and non-communicable diseases; and (l) co-ordinate health services rendered by the national department of health with health services rendered by the

provinces and provide such additional health services as may be necessary to establish comprehensive national health system.

(3) 22(1) National health council, MOH and HODs/MECs etc. The National Health Council must advise the Minister on- (a) policy concerning any matter that will protect, promote, improve and maintain the health of the population,

Chapter 4 states the responsibilities of the provincial department of health:

25 (1) The relevant member of the executive council must ensure the implementation of the national health policy, norms, standards in the provinces.

(2) The head of the provincial department must, in accordance with national health policy and the relevant provincial health policy in respect of or within the relevant province […] (f) plan, co-ordinate and monitor health services and must evaluate the rendering of health services (O) provide health services contemplated by specific provincial health service programmes.

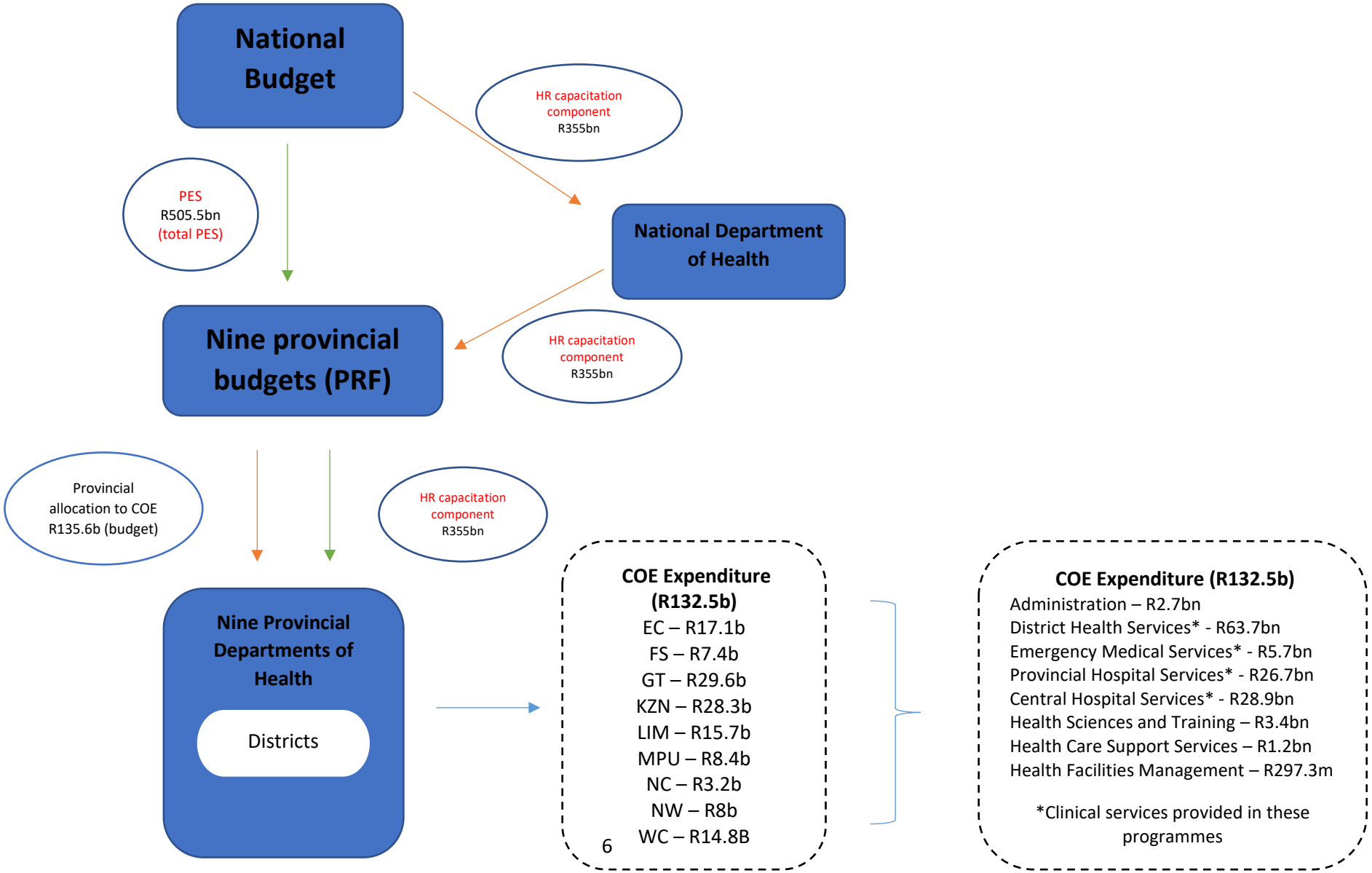
Table 2 below provides summary of specific policy, regulations relating to commuted overtime

Table 2: summary of applicable policy/regulations on commuted overtime

Policy/regulation	Key aspects
Basic Conditions of Employment Act	• Overtime is discretionary (more than 40 hours a week cannot be forced) • Remuneration at no less than 1.5 times normal hourly rate [s10(2)] • However, Act empowers employer to, upon agreement with employees, require that they work more than normal work time and; (i) pay an employee no less than normal hourly work rate but also grant 30 minutes time-off and (ii) or remunerate overtime at 90 minutes time-off [s10(3a+b)] • S9(1) 45 hour work week
Labour Relations Act	• In the public sector, employees are represented by organised labour, which through the PSCBC can enter into agreement with employer, was formed in terms of Labour Relations Act [s35]. • Therefore agreement with PSBC important
Public Finance Management Act	• The PMFA is applicable to all levels of government • Accounting authorities are specifically entrusted to ensure effective, efficient and transparent systems of financial and risk management and internal control [s38(a)] (e.g. ensure that overtime policy not abused) • Financial misconduct stipulation [s81] empowers employer to take action in cases where overtime has not been worked but authorised, by facilities CEO, clinical heads and supervisors.
Public Service Act	• Employees can be disciplined within confines the act and their services may be terminated in terms of s17 (2) if necessary.
Division of revenue Act	• The Division of Revenue Act allocates the nationally raised revenue across the spheres of Government each year. It determines the allocations to each province, both of the provincial equitable share and the conditional grants. The grant frameworks provide the rules for how conditional grants are managed and spent. • There is a specific grant framework for Human Resource Capacitation

	component, it is meant to support provinces to augment compensation budget for clinical staff

5. Flow of funds for provincial COE (with 2019/20 amounts)



6. Description of process

Step 1

All participants in the commuted overtime remuneration system to complete over time contracts.

- Contract should be renewed annually [s7.4.7]
- Operational needs for on-boarding of system needs to be determined [s8.3]
- Application forms completed by supervisors and approved by District Managers, Chief Director (Academic Hospitals) or the Health of Institution [s9.3]

Step 2

Duty roster for normal working hours of the component, duty roster for on call for the component and duty hours registered for the individual [s7.3]

- Duty rosters must made available to the Heads of Institutions in advance [s7.4]

Commuted overtime is only paid on performance of actual patient related clinical services in terms of the following:

- 1st on call; practitioner is on-site 100% of the time during performance of overtime
- 2nd on call; practitioner is off-site and can give advice telephonically but only 30% of overtime worked from home is payable to max 20hrs (see group 4)

Step 3

All Heads of Clinical Departments/supervisors certify the hours overtime worked in the rendering of clinical services on a monthly basis for each participant to the system within his/her Clinical Department/ Component

- Leave days taken needs to be reported by supervisors as these would not qualify for payment [s7.4]

Step 4

HR offices will reconcile the duty hour register with the leave applications on a monthly basis, after the leave application for all participants have been submitted by the heads of the department. Payment is processed

6.1. Notes on commuted overtime

a) Commuted overtime is based on a grouping system as discussed in table 4 below. Operational managers, as identified in the process flow, would need to determine operational for additional capacity and classify employees accordingly.

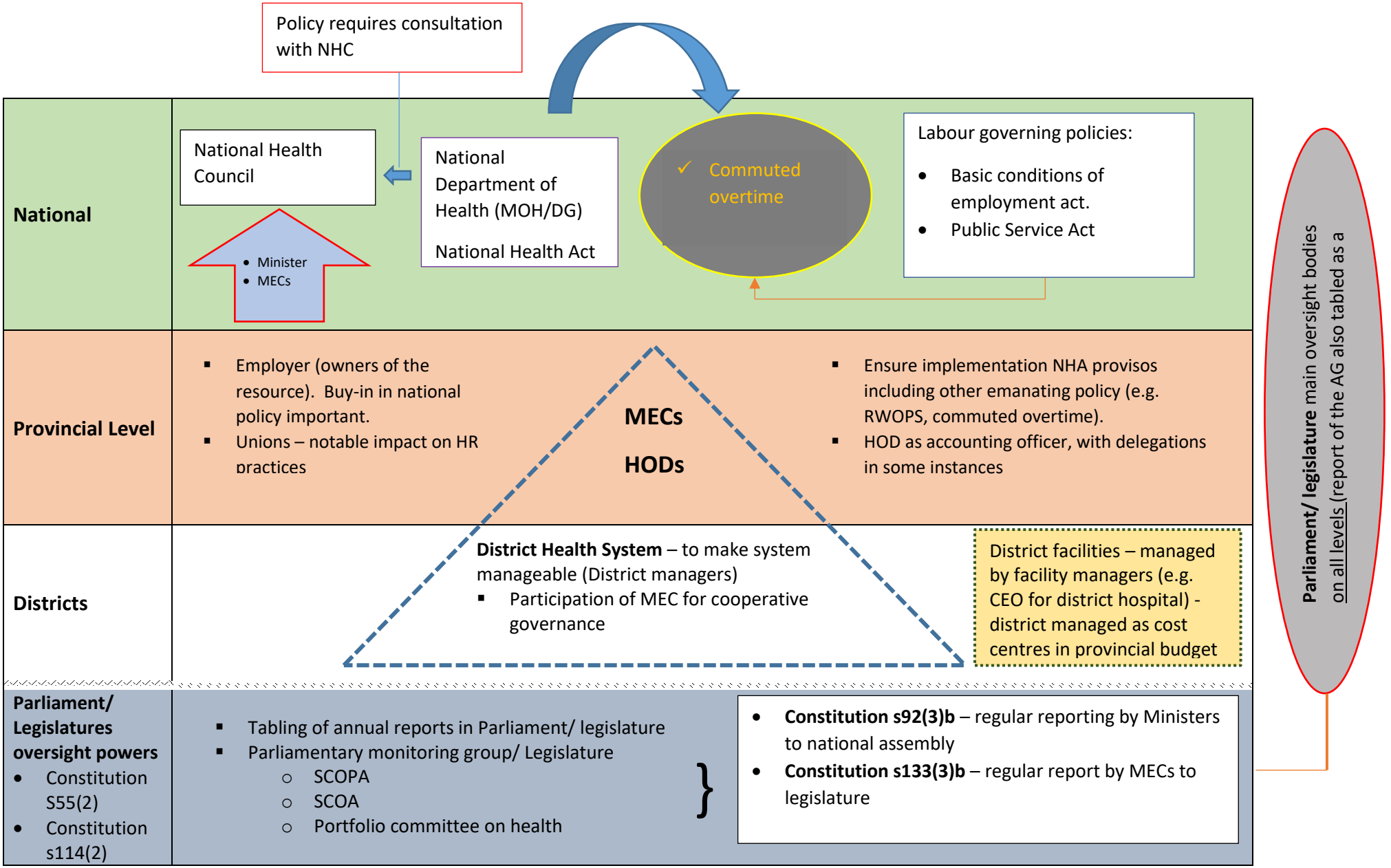
Table 3: overtime group

Groupings	How it works
Group 1	May claim for actual hours overtime worked where such duties are needed, as applicable to other categories of staff in terms of PSCBC Resolution 3 of 1999
Group 2	Overtime remuneration is payable at a fixed tariff equal to 8 hours per week at 1.3 of the applicable hourly tariff
Group 3	Overtime remuneration is payable at a fixed tariff equal to 16 hours per week at 1.3 of the applicable hourly tariff
Group 4	Overtime remuneration is payable at a fixed tariff equal to 16 hours per week at 1.3 of the hourly tariff plus actual hours worked in excess of the limit of 20 hours at the applicable overtime tariff as per PSCBC Resolution 3 of 1999

b) Payment of commuted overtime during periods of leave: Commuted overtime is payable to medical personnel who participate in the commuted overtime system for periods of annual leave within each financial year (i.e. from 1 April of a year to 31 March of that year) on the following basis:

- 22 working days in respect of employees with less than 10 years' service;
- 26 working days in respect of employees with more than 10 years' service;
- 28 working days in respect of employees appointed as public servants prior to 1 January 1966 as well as former provincial employees appointed prior to 1 January 1978.

7. Institutional framework (next page)


Policy requires consultation with NHC
National
National Health Council
National Department of Health (MOH/DG)
National Health Act
Minister
MECs
✓ Commuted overtime
Labour governing policies:
Basic conditions of employment act.
Public Service Act
Provincial Level
Employer (owners of the resource). Buy-in in national policy important.
Unions – notable impact on HR practices
MECs
HODs
Ensure implementation NHA provisos including other emanating policy (e.g. RWOPS, commuted overtime).
HOD as accounting officer, with delegations in some instances
Districts
District Health System – to make system manageable (District managers)
Participation of MEC for cooperative governance
District facilities – managed by facility managers (e.g. CEO for district hospital) - district managed as cost centres in provincial budget
Parliament/ Legislatures oversight powers
Constitution S55(2)
Constitution s114(2)
Tabling of annual reports in Parliament/ legislature
Parliamentary monitoring group/ Legislature
SCOPA
SCOA
Portfolio committee on health
Constitution s92(3)b – regular reporting by Ministers to national assembly
Constitution s133(3)b – regular report by MECs to legislature
Parliament/ legislature main oversight bodies on all levels (report of the AG also tabled as a

8. Expenditure analysis

The expenditure analysis includes the following set of analyses:

a) *COE baseline analysis*; this is done to highlight the
   - (i) importance of COE to as main cost driver and
   - (ii) to determine provinces whose COE budget are at risk of "crowding-out" funding for goods and services and capital assets.

Generally COE budgets above 65% of total budget are considered problematic by the sector at large (this view is based on information obtained from various cost-centre managers in the sector).

b) *Unit cost analysis across all programmes for the sector*; this is to assess whether COE is largely centred on actual healthcare delivery programmes. Findings will be used to make immediate recommendations to the National Department of Health, if necessary, should it be found that spending is not centred on these programmes.

c) *Zooming in on overtime*; similar to the purpose of the unit cost analysis referred to in (b), the first part of "zooming in on overtime" provides a spread of overtime for the sector by programme. This is done to determine where analysis of overtime should focus given the proportion of overtime spending by programme. The highest spending programmes on overtime were District Health Services, Provincial Hospital Services and Central Hospital Services.

d) *Overtime spending per full-time equivalent (FTE)*; the overtime spending by programme is illustrated in the context of the number of employees. A national average is then used to determine programmes where overtime is high. If any "non-direct service delivery" programmes appear as above the national average, this would suggest a need to look into the application of overtime in the given programme.

e) *Admin programme spending on overtime*; during the data analysis stage, overtime spending of +R70 million was noted on the Administration programme. An analysis was done to determine provinces where most of this spending is seen.

f) Workload and overtime analysis; an attempt is made, using a rating system, to determine comparative efficiency in the application of overtime.

a) COE sector baseline

Table 4: Total COE by province (R' million)

Province	Audited outcome			2019/20 (revised estimate)	2020/21	2021/22	2022/23	2016/17 - 2019/20	2019/20 - 2022/23
	2016/17	2017/18	2018/19						
Eastern Cape	13,454	14,559	15,981	17,130	18,348	19,352	20,371	8.4%	5.9%
Free State	5,815	6,263	6,679	7,420	7,961	8,431	8,882	8.5%	6.2%
Gauteng	23,290	25,085	26,902	29,633	33,265	36,444	38,175	8.4%	8.8%
Kwa-Zulu Natal	23,355	24,615	26,336	28,349	30,750	31,912	33,508	6.7%	5.7%
Limpopo	12,218	12,979	14,199	15,662	16,127	17,168	17,993	8.6%	4.7%
Mpumalanga	6,687	7,217	7,663	8,410	9,390	10,007	10,510	7.9%	7.7%
Northern Cape	2,322	2,572	2,864	3,157	3,375	3,598	3,771	10.8%	6.1%
North West	6,051	6,412	7,166	8,035	8,553	8,838	9,263	9.9%	4.9%
Western Cape	11,834	12,660	13,515	14,774	15,793	16,653	17,426	7.7%	5.7%
Tot	**105,026**	**112,362**	**121,306**	**132,570**	**143,562**	**152,403**	**159,899**	**8.1%**	6.4%
Prov total	**166,062**	**180,836**	**195,477**	**213,492**	**224,881**	**239,695**	**252,141**	**8.7%**	5.7%
% share of COE to total prov allocation								Average COE proportion (20/21 to 22/23)	Ranking based on average 20/21-22/24
Limpopo	71.0%	70.6%	72.0%	72.7%	72.8%	72.7%	72.4%	72.6%	**1**
Eastern Cape	65.6%	65.4%	65.3%	64.9%	69.5%	69.7%	70.4%	69.9%	**2**
Free State	`	63.9%	65.2%	65.8%	66.6%	66.4%	66.7%	66.6%	**3**
Kwa-Zulu	63.1%	61.7%	61.9%	62.8%	64.0%	62.7%	62.8%	63.1%	4
North West	62.0%	62.2%	62.3%	61.2%	64.8%	62.0%	61.2%	62.6%	5
Northern Cape	53.1%	56.3%	58.7%	58.0%	60.3%	60.3%	60.3%	60.3%	6
Mpumalanga	63.2%	59.7%	58.7%	58.9%	60.3%	60.2%	60.1%	60.2%	7
Gauteng	62.2%	59.7%	58.5%	57.8%	59.7%	60.7%	60.0%	60.1%	8
Western Cape	58.9%	58.9%	58.7%	59.2%	60.2%	59.9%	59.9%	60.0%	9
Tot	**63%**	**62%**	**62%**	**62%**	**64%**	**64%**	**63%**	**63.6%**	

Overall, the proportion of COE expenditure has remained relatively stable ranging between 62% on the lower side to 64% on the higher for the respective years between 2016/17 and 2022/23 averaging 63% for the period. Since there are no national norms for appropriate COE to total spending ratio, the national average ratio of 63.6% from the period 21/22 to 22/23 is used to identify provinces which seem to have high COE expenditure.

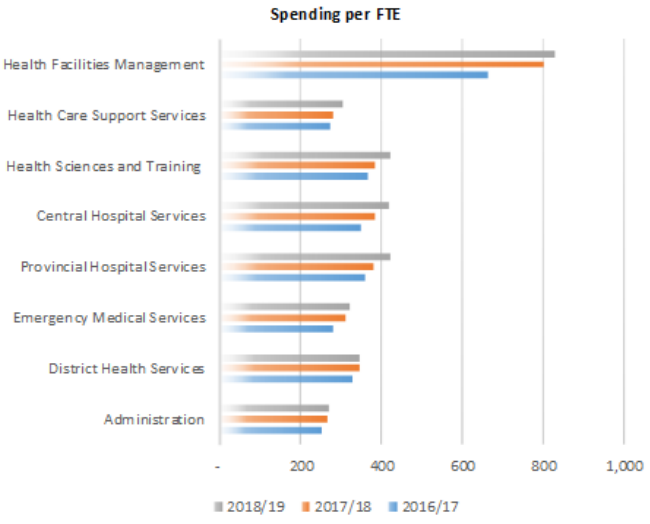
If personnel budgets are not appropriately managed, there is real risk that this COE will effectively crowd-out funding for "tools of trade" such as medicine and medical supplies. The following three provinces had the highest proportion of COE to total health spending:

- Limpopo came out top and is 9% above national average for period
- Eastern Cape is the second highest and is 6.3% above the national average for the period
- Free-State is the third highest and is 3% above the national average for the period

b) Unit cost analysis across programmes

Table 5: spending per FTE by programme

	2016/17	2017/18	2018/19			2019/20
	Outcomes			Main appropriation	Adjusted appropriation	Revised estimate
R000's						
Administration	2,280,558	2,372,259	2,480,441	2,928,677	2,766,559	2,692,665
District Health Services	49,250,646	52,479,224	57,080,629	63,443,935	63,532,006	63,688,683
Emergency Medical Services	4,284,253	4,758,415	5,030,817	5,329,058	5,251,415	5,379,945
Provincial Hospital Services	22,192,660	23,608,701	25,595,125	27,855,703	27,281,343	26,979,525
Central Hospital Services	22,841,076	24,852,326	26,591,681	27,840,981	28,424,529	28,953,138
Health Sciences and Training	3,074,119	3,079,684	3,164,064	3,676,187	3,715,418	3,373,822
Health Care Support Services	929,108	994,612	1,115,763	1,253,050	1,233,954	1,205,030
Health Facilities Management	173,324	216,970	247,066	340,777	302,313	297,268
Total	**105,025,744**	**112,362,191**	**121,305,586**	**132,668,368**	**132,507,537**	**132,570,076**
FTE (headcount) per programme						
Administration	9,085	8,943	9,250			
District Health Services	150,626	152,423	164,930			
Emergency Medical Services	15,370	15,351	15,584			
Provincial Hospital Services	61,869	61,879	60,780			
Central Hospital Services	65,097	64,837	63,474			
Health Sciences and Training	8,389	7,993	7,485			
Health Care Support Services	3,402	3,543	3,678			
Health Facilities Management	261	270	297			
Total FTE	**314,097**	**315,238**	**325,478**			
Spending per FTE (headcount)						
Administration	251	265	268			
District Health Services	327	344	346			
Emergency Medical Services	279	310	323			
Provincial Hospital Services	359	382	421			
Central Hospital Services	351	383	419			
Health Sciences and Training	366	385	423			
Health Care Support Services	273	281	303			
Health Facilities Management	665	804	832			
Total FTE per capita	**334**	**356**	**373**			



Spending per FTE increase as the level of care increases, which is expected. Of the three clinical programmes, district health services has the lowest spending, followed by provincial hospital services and then closely followed by central hospital services. There is high spending per FTE in some non-clinical programmes particularly Health Facilities Management. This may be due to high salaries paid to infrastructure/ construction specialists.

Furthermore, the following are observed:

- Broadly, staff complement by programme largely supports a preventative approach to health care as the majority of headcount in district health services.

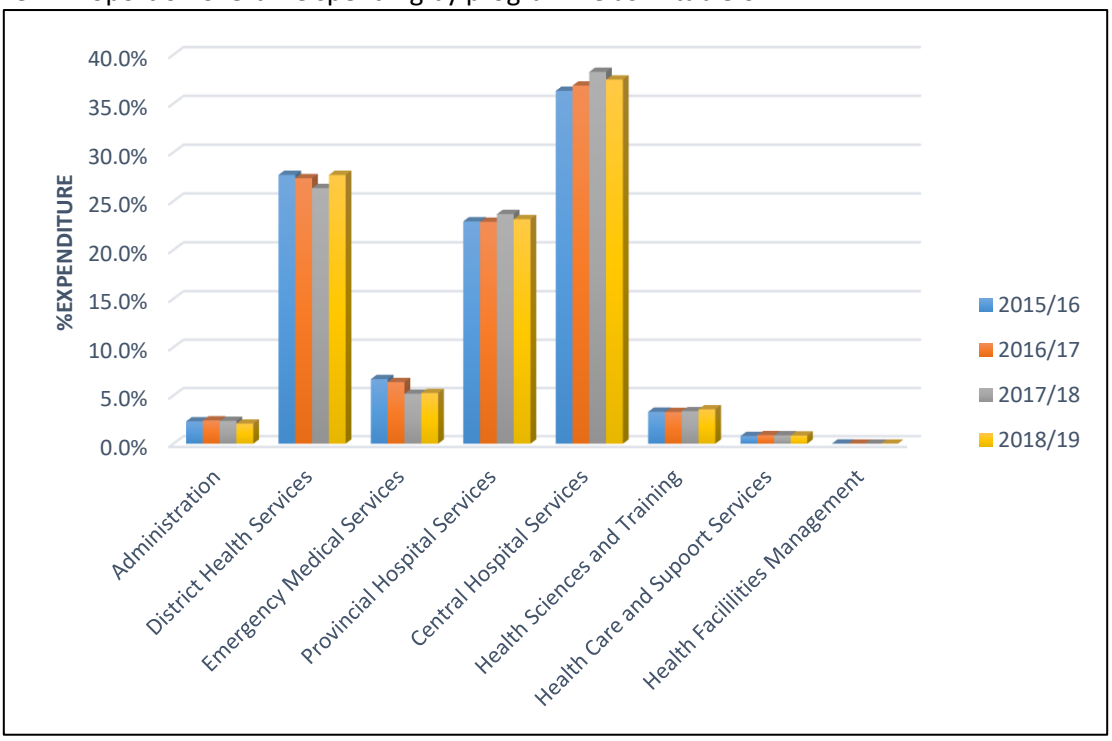
- The data supports the view that the cost per FTE at district health services level are lowest (only looking at COE but noting that this the largest cost-driver)., A formalised referral system, as with community health services delivered by community healthcare workers, becomes even more important in a universal health coverage discussion as this would be affordable at a primary healthcare level.

c) Zooming in on overtime

Table 6: Proportion overtime spending by programme

Programme name	2015/16	2016/17	2017/18	2018/19
Administration	2.3%	2.4%	2.4%	2.1%
District Health Services	27.7%	27.3%	26.3%	27.7%
Emergency Medical Services	6.7%	6.4%	5.2%	5.3%
Provincial Hospital Services	22.9%	22.9%	23.7%	23.1%
Central Hospital Services	36.3%	36.8%	38.2%	37.4%
Health Sciences and Training	3.3%	3.3%	3.4%	3.6%
Health Care and Support Services	0.8%	0.9%	0.9%	0.8%
Health Facilities Management	0.0%	0.0%	0.0%	0.0%

Figure 1: Proportion overtime spending by programme as in table 6



Overall, majority of spending on overtime is in the clinical programmes starting with Central Hospital Services, District Health Services and then Provincial Hospital Services. This is aligned with expectations, however Administration should ideally have no overtime spending as it is not a clinical programme or directly involved in services (e.g. as would be the case with health facilities which manages infrastructure in the province). Overtime in administration therefore assessed in this report.

d) Overtime spending per FTE

Table 7: Overtime spending per FTE (R'000)

Programme name (R'000)	2016/17	2017/18	2018/19
Administration	18	19	18
District Health Services	13	12	14
Emergency Medical Services	29*	24*	28*
Provincial Hospital Services	26*	28*	31*
Central Hospital Services	39*	42*	48*
Health Sciences and Training	27*	30*	39*
Health Care and Support Services	18	18	19
Health Facilities Management	1	0	1
Total	**22**	**23**	**25**

* *Values above national average*

As the case with total COE spending per full-time equivalent (FTE), overtime spending per FTE on the three clinical programmes that are the focus in this review and emergency services, are the highest. Overtime spending in Health Sciences and Training features is comparatively larger and warrants an investigation in a follow up review.

e) Admin programme spending on overtime

Table 8 shows the overtime spending as a proportion of total COE. This is done for each province using its overtime and total provincial COE data. The national average represents the total overtime as a proportion of total COE for the sector.

Table 8: Admin overtime

Overtime spending as a percent of total health COE by provinces						
Province	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
Eastern Cape	4.0%*	1.0%	0.8%	1.4%*	0.8%	0.9%
Free State	0.2%	0.1%	0.4%	0.5%	0.1%	1.4%*
Gauteng	1.7%	1.5%	2.6%	3.1%*	3.3%*	3.8%*
KwaZulu-Natal	0.3%	0.3%	0.2%	0.2%	0.2%	0.4%
Limpopo Province	2.5%*	3.8%*	3.5%*	3.0%*	1.9%*	1.4%
Mpumalanga	6.1%*	11.8%*	5.8%*	1.5%*	0.2%	0.8%
North West	0.2%	0.1%	0.3%	0.8%	0.6%	1.4%*
Northern Cape	0.7%	1.5%	0.6%	0.9%	1.1%*	1.4%*
Western Cape	0.7%	0.4%	0.4%	0.4%	0.4%	0.5%
National Average	**1.8%**	**2.3%**	**1.6%**	**1.3%**	**1.0%**	**1.3%**

f) Workload and overtime analysis

In this section, an attempt is made to easily highlight provinces which are not efficient in the management of overtime (also taking into workload data). The national average is used as benchmark

i. For the analysis, the following data was used:
   - Patient Day Equivalent (PDE); hospital workload data as proxy for service demand.
   - Persal data was used to obtain (i) overtime spending by hospital level type and province. It is noted that data may underestimate/overestimate in some areas as provinces may follow different approaches to recording employees against budget programmes.

ii. The following indicators, using data described above, were used to rate the budget efficiency on use of overtime.
   - *Deviation from norm (overtime spending)*; this indicates the extent to which a respective province's overtime spending deviates from the national average overtime spending *(negative result indicates that a province's spending lies below the national average and the opposite applies for a positive result)*
   - *Deviation from norm (overtime per PDE)*; this indicates the extent to which a province's expenditure per PDE deviates from the national average overtime spending PDE *(negative result indicates that a province's spending lies below the national average and the opposite applies for a positive result)*

iii. The colour code rating system; a rating system was developed so that it is easy to identity provinces which were which above the national average. This system uses the two indicator described in (b) above. The colour codes are assigned as explained in table 9.

Table 9: Explanation of colour codes

Colour code	Assignment	Implications
High inefficiency	If province is above national average for both indicators	If this coding is assigned, the respective province needs to consider employing additional staff for the given programme. The trade-off model (which has been developed) will support in this.
Medium inefficiency	If province is above national average for one of the indicators	If this coding is assigned, the respective province needs to consider employing additional staff for the given programme. The trade-off model (which has been developed) will support in this.
Moderate	If province below national average for both indicators	Although this is seen as positive, the province may want to review reasons for this and determine whether service delivery is not-compromised.

iv. The rating system was applied for doctors as shown in table 10 and for nurses in table 11.

For tables 10 and 11:

Deviation from norm (overtime spending) – this represents the extent to which a province's overtime spending exceed national average overtime spending and is expressed as percentage.

Deviation from norm (overtime per PDE) – this is similar to the measure above but focuses on overtime spending per PDE.

Table 10: Workload and overtime analysis (doctors) (next page)

Province	District hospitals			Prov hospitals			Central hospitals			Rating (based on 2018/19)		
	2018/19	2017/18	2016/17	2018/19	2017/18	2016/17	2018/19	2017/18	2016/17	District	Provincial	Central
Eastern Cape												
PDE	1 511 399	1 706 494	1 732 042	906 558	1 467 680	1 475 109	780 997	1 002 756	1 013 760			
Overtime spending	4 318 831	4 307 607	6 571 593	16 031 401	15 705 034	18 948 900	669 088	209 912	285 892			
Deviation from norm (Overtime spending)	**63.1%**	**79.9%**	**161.5%**	**375.2%**	**403.1%**	**332.9%**	**-46.4%**	**-81.3%**	**-72.5%**			
Deviation from norm (overtime per PDE)	**-23.0%**	**-49.6%**	**4.9%**	**201.0%**	**268.4%**	**87.5%**	**-96.4%**	**-97.0%**	**-98.1%**			
Free State												
PDE	1 511 399	1 706 494	1 732 042	567 049	528 467	530 201	457 033	451 643	459 372			
Overtime spending	27 673	51 963	7 291	-	-	-	-	-	-			
Deviation from norm (Overtime spending)	**-99.0%**	**-97.8%**	**-99.7%**	**-100.0%**	**-100.0%**	**-100.0%**	**-100.0%**	**-100.0%**	**-100.0%**		*	*
Deviation from norm (overtime per PDE)	**-99.5%**	**-99.4%**	**-99.9%**	**-100.0%**	**-100.0%**	**-100.0%**	**-100.0%**	**-100.0%**	**-100.0%**			
Gauteng												
PDE	775 495	475 469	972 115	2 961 620	1 983 112	2 830 985	3 466 659	3 372 685	3 365 555			
Overtime spending	2 766 764	2 531 714	2 503 303	79 178	65 153	66 752	31 183	64 453	59 133			
Deviation from norm (Overtime spending)	**4%**	**6%**	**0%**	**-98%**	**-98%**	**-98%**	**-98%**	**-94%**	**-94%**			
Deviation from norm (overtime per PDE)	**-3.9%**	**6.3%**	**-28.8%**	**-99.5%**	**-98.9%**	**-99.7%**	**-100.0%**	**-99.7%**	**-99.9%**			
KwaZulu Natal												
PDE	2 574 973	1 328 461	2 600 167	3 386 620	1 995 238	3 241 746	1 141 898	910 628	1 255 551			
Overtime spending	522 192	2 325 220	819 978	58 838	27 015	-	134 400	112 737	45 317			
Deviation from norm (Overtime spending)	**-80.3%**	**-2.9%**	**-67.4%**	**-98.3%**	**-99.1%**	**-100.0%**	**-89.2%**	**-89.9%**	**-95.6%**			
Deviation from norm (overtime per PDE)	**-94.5%**	**-65.0%**	**-91.3%**	**-99.7%**	**-99.5%**	**-100.0%**	**-99.5%**	**-98.3%**	**-99.8%**			
Limpopo												
PDE	1 902 921	966 802	1 662 461	959 941	657 404	960 091	298 953	98 308	293 042			
Overtime spending	6 603 717	3 848 942	335 896	1 926 729	997 377	528 506	840 996	532 483	28 274			
Deviation from norm (Overtime spending)	**149.4%**	**60.8%**	**-86.6%**	**-42.9%**	**-68.0%**	**-87.9%**	**-32.7%**	**-52.5%**	**-97.3%**			
Deviation from norm (overtime per PDE)	**-6.5%**	**-20.5%**	**-94.4%**	**-65.8%**	**-47.8%**	**-92.0%**	**-88.3%**	**-23.6%**	**-99.4%**			
Mpumalanga												
PDE	1 232 637	335 178	1 262 405	627 025	489 376	674 419	37 809	49 500	58 739			
Overtime spending	2 041 310	2 348 180	4 478 338	3 227 269	3 068 705	6 221 217	2 565 943	2 705 483	3 331 987			
Deviation from norm (Overtime spending)	**-23%**	**-2%**	**78%**	**-4%**	**-2%**	**42%**	**105%**	**142%**	**221%**			
Deviation from norm (overtime per PDE)	**-55.4%**	**39.9%**	**-1.9%**	**-12.4%**	**115.9%**	**34.6%**	**182.4%**	**671.2%**	**275.8%**			
Northern Cape												
PDE	195 450	109 439	197 463	308 253	-	320 323	38 620	-	42 846			
Overtime spending	1 151 876	520 039	1 713 398	6 760 897	6 401 449	11 582 885	4 077 432	3 496 199	3 316 639			
Deviation from norm (Overtime spending)	**-56%**	**-78%**	**-32%**	**100%**	**105%**	**165%**	**226%**	**212%**	**219%**			
Deviation from norm (overtime per PDE)	**58.8%**	**-5.1%**	**140.0%**	**273.3%**	**-100.0%**	**427.7%**	**339.4%**	**-100.0%**	**412.8%**			
North West												
PDE	405 911	268 770	443 223	376 115	240 381	714 337	74 840	881 771	1 774 441			
Overtime spending	6 195 451	5 023 538	5 838 105	2 278 811	1 827 081	2 024 510	2 918 603	2 955 225	2 280 765			
Deviation from norm (Overtime spending)	**134.0%**	**109.8%**	**132.3%**	**-32.5%**	**-41.5%**	**-53.7%**	**133.7%**	**163.8%**	**119.6%**			
Deviation from norm (overtime per PDE)	**311%**	**273%**	**264%**	**3%**	**162%**	**-59%**	**62%**	**-53%**	**-91%**			
Western Cape												
PDE	421 926	586 902	1 366 830	376 115	240 381	714 337	74 840	881 771	1 774 441			
Overtime spending	203 218	588 071	350 956	-	804	22 846	2 172	5 647	-			
Deviation from norm (Overtime spending)	**-92%**	**-75%**	**-86%**	**-100%**	**-100%**	**-99%**	**-100%**	**-99%**	**-100%**		*	
Deviation from norm (overtime per PDE)	**-87.0%**	**-80.0%**	**-92.9%**	**-100.0%**	**-99.9%**	**-99.5%**	**-99.9%**	**-99.9%**	**-100.0%**			
National												
Average overtime to total	2 647 892	2 393 919	2 513 206	3 373 680	3 121 402	4 377 291	1 248 869	1 120 238	1 038 667			
Average exp per PDE	3.71	5.01	3.62	5.87	2.90	6.85	24.03	7.09	15.09			

* - data not available for rating

Table 11: Workload and overtime analysis (nurses)

Province	District hospitals			Prov hospitals			Central hospitals			Rating (based on 2018/19)		
	2018/19	2017/18	2016/17	2018/19	2017/18	2016/17	2018/19	2017/18	2016/17	District	Provincial	Central
Eastern Cape												
PDE	1 511 399	1 706 494	1 732 042	906 558	1 467 680	1 475 109	780 997	1 002 756	1 013 760			
Overtime spending	16 141 618	13 972 691	13 191 938	27 973 514	24 901 615	15 606 226	22 633 624	23 086 202	19 583 143			
Deviation from norm (Overtime spending)	**-55.8%**	**-52.9%**	**-52.7%**	**-10.2%**	**1.6%**	**-13.7%**	**-33.2%**	**-8.5%**	**-12.6%**			
Deviation from norm (overtime per PDE)	**-71.0%**	**-82.3%**	**-67.7%**	**-19.7%**	**-58.5%**	**-39.0%**	**-83.2%**	**-69.6%**	**-57.4%**			
Free State												
PDE	1 511 399	1 706 494	1 732 042	567 049	528 467	530 201	457 033	451 643	459 372			
Overtime spending	11 383 168	8 617 569	7 183 712	8 353 324	7 225 270	6 824 512	14 205 127	9 414 104	6 957 515			
Deviation from norm (Overtime spending)	**-68.8%**	**-70.9%**	**-74.3%**	**-73.2%**	**-70.5%**	**-62.3%**	**-58.1%**	**-62.7%**	**-68.9%**			
Deviation from norm (overtime per PDE)	**-79.5%**	**-89.1%**	**-82.4%**	**-61.7%**	**-66.6%**	**-25.8%**	**-82.0%**	**-72.4%**	**-66.6%**			
Gauteng												
PDE	775 495	475 469	972 115	2 961 620	1 983 112	2 830 985	3 466 659	3 372 685	3 365 555			
Overtime spending	65 740 649	48 737 348	42 584 530	84 861 336	66 868 876	51 847 243	158 363 620	104 833 734	85 823 186			
Deviation from norm (Overtime spending)	**80%**	**64%**	**53%**	**173%**	**173%**	**187%**	**367%**	**316%**	**283%**			
Deviation from norm (overtime per PDE)	**130.3%**	**121.9%**	**85.8%**	**-25.5%**	**-17.5%**	**5.6%**	**-73.5%**	**-58.9%**	**-43.7%**			
KwaZulu Natal												
PDE	2 574 973	1 328 461	2 600 167	3 386 620	1 995 238	3 241 746	1 141 898	910 628	1 255 551			
Overtime spending	10 725 488	9 722 743	8 641 442	6 894 994	2 805 663	3 210 574	9 154 849	7 409 739	5 785 263			
Deviation from norm (Overtime spending)	**-70.6%**	**-67.2%**	**-69.0%**	**-77.9%**	**-88.6%**	**-82.2%**	**-73.0%**	**-70.6%**	**-74.2%**			
Deviation from norm (overtime per PDE)	**-88.7%**	**-84.2%**	**-85.9%**	**-94.7%**	**-96.6%**	**-94.3%**	**-95.3%**	**-89.2%**	**-89.8%**			
Limpopo												
PDE	1 902 921	966 802	1 662 461	959 941	657 404	960 091	298 953	98 308	293 042			
Overtime spending	161 870 313	134 230 173	133 551 717	49 682 480	40 573 481	30 218 944	26 666 943	16 127 870	21 615 939			
Deviation from norm (Overtime spending)	**343.1%**	**352.6%**	**378.6%**	**59.6%**	**65.5%**	**67.1%**	**-21.3%**	**-36.1%**	**-3.5%**			
Deviation from norm (overtime per PDE)	**131.1%**	**200.5%**	**240.6%**	**34.6%**	**51.0%**	**81.4%**	**-48.2%**	**116.9%**	**62.7%**			
Mpumalanga												
PDE	1 232 637	335 178	1 262 405	627 025	489 376	674 419	37 809	49 500	58 739			
Overtime spending	15 367 071	13 600 817	8 103 898	51 847 243	36 969 355	20 886 837	24 933 046	18 910 038	12 119 323			
Deviation from norm (Overtime spending)	**-58%**	**-54%**	**-71%**	**67%**	**51%**	**16%**	**-26%**	**-25%**	**-46%**			
Deviation from norm (overtime per PDE)	**-66.1%**	**-12.2%**	**-72.8%**	**115.1%**	**84.8%**	**78.5%**	**282.7%**	**405.2%**	**355.2%**			
Northern Cape												
PDE	195 450	109 439	197 463	308 253	-	320 323	38 620	-	42 846			
Overtime spending	4 441 159	2 667 279	4 626 039	1 277 297	1 659 771	1 831 453	2 783 845	1 873 655	1 548 043			
Deviation from norm (Overtime spending)	**-88%**	**-91%**	**-83%**	**-96%**	**-93%**	**-90%**	**-92%**	**-93%**	**-93%**			
Deviation from norm (overtime per PDE)	**-38.3%**	**-47.2%**	**-0.7%**	**-89.2%**	**-100.0%**	**-67.0%**	**-58.2%**	**-100.0%**	**-20.3%**			
North West												
PDE	405 911	268 770	443 223	376 115	240 381	714 337	74 840	881 771	1 774 441			
Overtime spending	19 381 611	14 197 171	12 360 114	30 952 935	22 667 978	18 074 908	22 802 949	19 097 125	15 722 959			
Deviation from norm (Overtime spending)	**-46.9%**	**-52.1%**	**-55.7%**	**-0.6%**	**-7.5%**	**0.0%**	**-32.7%**	**-24.3%**	**-29.8%**			
Deviation from norm (overtime per PDE)	**30%**	**14%**	**18%**	**114%**	**131%**	**46%**	**77%**	**-71%**	**-80%**			
Western Cape												
PDE	421 926	586 902	1 366 830	376 115	240 381	714 337	74 840	881 771	1 774 441			
Overtime spending	23 702 619	21 201 032	20 897 305	18 359 829	16 980 236	14 223 833	23 329 866	26 271 224	32 470 385			
Deviation from norm (Overtime spending)	**-35%**	**-29%**	**-25%**	**-41%**	**-31%**	**-21%**	**-31%**	**4%**	**45%**			
Deviation from norm (overtime per PDE)	**52.6%**	**-21.8%**	**-35.2%**	**27.0%**	**72.8%**	**14.8%**	**80.9%**	**-60.6%**	**-59.6%**			
National												
Average overtime to total	**36 528 188**	**29 660 758**	**27 904 522**	**31 133 661**	**24 516 916**	**18 080 503**	**33 874 874**	**25 224 855**	**22 402 862**			
Average exp per PDE	**36.8**	**46.2**	**23.6**	**38.4**	**40.9**	**17.3**	**172.3**	**75.6**	**45.3**			

9. Costing

An attempt is made to quantify losses to health sector as a result of obtaining additional capacity through commuted overtime as opposed to appointments.

9.1. Assumptions

a) Unit cost

The accompanying model allows provinces to further customise unit costs; for the purpose of this review the average unit cost was calculated as shown in tables 12 and 13 below. The *min* is the lowest salary notch as per 2018/19 DPSA salary scales and the max is the highest salary notch within a given category (doctors and nurses were used).

Table 12: unit cost calculation for doctors

	Occupation	Cost	Average	Final used
Min	Medical officer grade 1	821 205	1 091 786	1 281 125
Max	Medical offcer grade 3	1 362 366		
Min	Medical specialist grade 1	1 106 040	1 470 465	
Man	Medical specialist grade 2	1 834 890		

Table 13: unit cost calculation for nurses

	Occupation	Cost	Average	Final used
Min	Staff nurse grade 1	171 381	234 603	302 897
Max	Staff nurse grade 3	297 825		
Min	Professional nurse 1	256 905	371 190	
Man	Professional nurse 3	485 475		

Note:

The average min and max notches for both medical offers and medical specialists was used to obtain the unit cost of the doctor (R1.281m) and similarly for nursing using staff nurses and professional nurse (R302 897). This was done as it difficult to separate overtime spending on medical officers versus specialists, and staff nurses versus professional nurses. However, this shortcoming is addressed through the cost model as it allows provinces/users to simply update the unit cost and perhaps spending for a newer year. The model would then use this inform to quantify the trade-off between additional appointments and continued payment of overtime.

b) Hourly rate

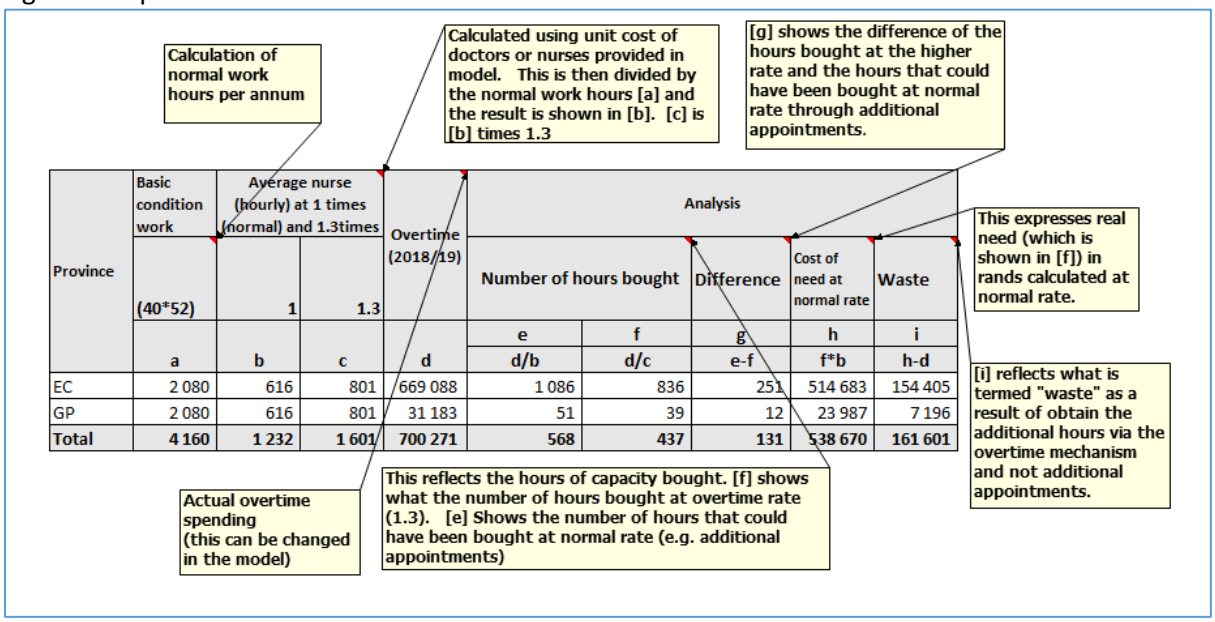
The following assumptions underpin the hourly rate estimation in the model:

- Normal work hours per unit per annum; 2080 hours (40 hour work week in line with the basic conditions of employment act and commuted overtime policy)
- Overtime hours are remunerated at 1.3 times the normal hourly rate in line with commuted overtime policy
- Overtime spending is assumed to reflect the real need for additional capacity (which will be expressed in hours)
- The 0.3 of the 1.3 times overtime rate is assumed to be the wastage

9.2. Mechanics of the model

The mechanics of the model are shown in the result table below – see sheet "mechanics of model"

Figure 2: Explanation of mechanics



Province	Basic condition work	Average nurse (hourly) at 1 times (normal) and 1.3times		Overtime (2018/19)	Analysis				
	(40*52)	1	1.3		Number of hours bought		Difference	Cost of need at normal rate	Waste
	a	b	c	d	e d/b	f d/c	g e-f	h f*b	i h-d
EC	2 080	616	801	669 088	1 086	836	251	514 683	154 405
GP	2 080	616	801	31 183	51	39	12	23 987	7 196
Total	**4 160**	**1 232**	**1 601**	**700 271**	**568**	**437**	**131**	**538 670**	**161 601**

9.3. Results of model

a) Doctors

Table 14: Trade-off scenario for doctors – district hospitals

Province	Basic condition work	Average nurse (hourly) at 1 times (normal) and 1.3times (overtime)		Overtime (2018/19)	Analysis				
	(40*52)	1	1.3		(overtime/1)	overtime/1.3)	Difference	Cost of need at normal rate	Waste
	a	b	c	d	e d/b	f (real need) d/c	g e-f	h f*b	i h-d
EC	2 080.0	615.9	800.70	4 318 831	7 012	5 394	1 618	3 322 178	996 653
FS	2 080.0	615.9	800.70	27 673	45	35	10	21 287	6 386
GT	2 080.0	615.9	800.70	2 766 764	4 492	3 455	1 037	2 128 280	638 484
KZN	2 080.0	615.9	800.70	522 192	848	652	196	401 686	120 506
LP	2 080.0	615.9	800.70	6 603 717	10 722	8 247	2 474	5 079 782	1 523 935
MP	2 080.0	615.9	800.70	2 041 310	3 314	2 549	765	1 570 239	471 072
NC	2 080.0	615.9	800.70	1 151 876	1 870	1 439	432	886 058	265 817
NW	2 080.0	615.9	800.70	6 195 451	10 059	7 738	2 321	4 765 732	1 429 719
WC	2 080.0	615.9	800.70	203 218	330	254	76	156 321	46 896
Total	**2 080**	**616**	**801**	**23 831 032**	**38 691**	**29 763**	**8 929**	**18 331 563**	**5 499 469**

*Missing data for WC, provinces will be asked to update numbers before the 15 Sept.

- Based on the overtime spending (R23.8m) for doctors for district hospitals; 29 763 hours were bought at 1.3 times the normal rate.
- Further, the rands spent on overtime could have bought 38 691 hours at normal hourly rate.
- If we assume that the hours bought using overtime (29 763) are reflective of the real additional capacity, only R18.3m would have been spent to obtain the same capacity through additional appointments.
- The difference (R5.5m) between R23.8m and the R18.3m in [i] is what is termed as "waste" in this review.

Table 15: Trade-off scenario for doctors – provincial hospitals

Province	Basic condition work	Average nurse (hourly) at 1 times (normal) and 1.3times (overtime)		Overtime (2018/19)	Analysis				
	(40*52)	1	1.3		(overtime/1)	overtime/1.3)	Difference	Cost of need at normal rate	Waste
					e	f (real need)	g	h	i
	a	b	c	d	d/b	d/c	e-f	f*b	h-d
EC	2 080.0	615.9	800.70	16 031 401	26 028	20 022	6 006	12 331 847	3 699 554
GP	2 080.0	615.9	800.70	79 178	129	99	30	60 906	18 272
KZN	2 080.0	615.9	800.70	58 838	96	73	22	45 260	13 578
LP	2 080.0	615.9	800.70	1 926 729	3 128	2 406	722	1 482 099	444 630
MP	2 080.0	615.9	800.70	3 227 269	5 240	4 031	1 209	2 482 514	744 754
NW	2 080.0	615.9	800.70	6 760 897	10 977	8 444	2 533	5 200 690	1 560 207
NC	2 080.0	615.9	800.70	2 278 811	3 700	2 846	854	1 752 931	525 879
WC	2 080.0	615.9	800.70	-	-	-	-	-	-
Total	**2 080.0**	**615.9**	**800.7**	**30 363 123**	**49 297**	**37 921**	**11 376**	**23 356 248**	**7 006 874**

*Missing data for FS, WC. GT, KZN need to be verified. Provinces will be asked to update numbers before the 15 Sept.

- Based on the overtime spending (R30.4m) for doctors for district hospitals; 37 921 hours were bought at 1.3 times the normal rate.
- Further, the rands spent on overtime could have bought 49 297 hours at normal hourly rate.
- If we assume that the hours bought using overtime (37 921) are reflective of the real additional capacity, only R23.43m would have been spent to obtain the same capacity through additional appointments.
- The difference (R7m) between R30.4m and the R23.4m in [i] is what is termed as "waste" in this review.

Table 16: Trade-off scenario for doctors – central hospitals

Province	Basic condition work	Average nurse (hourly) at 1 times (normal) and 1.3times (overtime)		Overtime (2018/19)	Analysis				
	(40*52)	1	1.3		(overtime/1)	overtime/1.3)	Difference	Cost of need at normal rate	Waste
					e	f (real need)	g	h	i
	a	b	c	d	d/b	d/c	e-f	f*b	h-d
EC	2 080	616	801	669 088	1 086	836	251	514 683	154 405
GP	2 080	616	801	31 183	51	39	12	23 987	7 196
FS	2 080	616	801	134 400	218	168	50	103 385	31 015
LP	2 080	616	801	840 996	1 365	1 050	315	646 920	194 076
MP	2 080	616	801	2 565 943	4 166	3 205	961	1 973 802	592 141
NC	2 080	616	801	4 077 432	6 620	5 092	1 528	3 136 486	940 946
NW	2 080	616	801	2 918 603	4 739	3 645	1 094	2 245 079	673 524
WC	2 080	616	801	2 172	4	3	1	1 671	501
Total	**2 080**	**616**	**801**	**11 239 817**	**18 249**	**14 037**	**4 211**	**8 646 013**	**2 593 804**

*Missing data for FS, WC. GT, KZN need to be verified. Provinces will be asked to update numbers before the 15 Sept.

- Based on the overtime spending (R11.2m) for doctors for district hospitals; 14 037 hours were bought at 1.3 times the normal rate.
- Further, the rands spent on overtime could have bought 18 249 hours at normal hourly rate.
- If we assume that the hours bought using overtime (14 037) are reflective of the real additional capacity, only R8.6m would have been spent to obtain the same capacity through additional appointments.
- The difference (R2.6m) between 11.2m and the R8.6m in [i] is what is termed as "waste" in this review.

b) Nurses

Table 17: Trade-off scenario for nurses – district hospitals

Province	Basic condition work	Average nurse (hourly) at 1 times (normal) and 1.3times (overtime)		Overtime (2018/19)	Analysis				
	(40*52)	1	1.3		(overtime/1)	overtime/1.3	Difference	Cost of need at normal rate	Waste
					e	f (real need)	g	h	i
	a	b	c	d	d/b	d/c	e-f	f*b	h-d
EC	2 080	146	189	16 141 618	110 845	85 265	25 580	12 416 629	3 724 989
FS	2 080	146	189	11 383 168	78 169	60 130	18 039	8 756 283	2 626 885
GT	2 080	146	189	65 740 649	451 443	347 264	104 179	50 569 730	15 170 919
KZN	2 080	146	189	10 725 488	73 652	56 656	16 997	8 250 375	2 475 113
LM	2 080	146	189	161 870 313	1 111 569	855 053	256 516	124 515 625	37 354 688
MP	2 080	146	189	43 358 010	297 741	229 031	68 709	33 352 315	10 005 695
NW	2 080	146	189	32 511 499	223 258	171 737	51 521	25 008 845	7 502 654
NC	2 080	146	189	6 070 985	41 690	32 069	9 621	4 669 989	1 400 997
WC	2 080	146	189	44 066 065	302 603	232 772	69 831	33 896 973	10 169 092
Total	**2 080**	**146**	**189**	**391 867 794**	**2 690 969**	**2 069 976**	**620 993**	**301 436 765**	**90 431 029**

- Based on the overtime spending (R391.9m) for doctors for district hospitals; 2 069 976 hours were bought at 1.3 times the normal rate.
- Further, the rands spent on overtime could have bought 2 630 969 hours at normal hourly rate.
- If we assume that the hours bought using overtime (2 069 969) are reflective of the real additional capacity, only R301.4m would have been spent to obtain the same capacity through additional appointments.
- The difference (R90.4m) between R391.9m and the R301.4m in [i] is what is termed as "waste" in this review.

Table 18: Trade-off scenario for nurses – provincial hospitals

Province	Basic condition work	Average nurse (hourly) at 1 times (normal) and 1.3times (overtime)		Overtime (2018/19)	Analysis				
	(40*52)	1	1.3		(overtime/1)	overtime/1.3	Difference	Cost of need at normal rate	Waste
					e	f (real need)	g	h	i
	a	b	c	d	d/b	d/c	e-f	f*b	h-d
EC	2 080	146	189	27 973 514	192 095	147 765	44 330	21 518 088	6 455 426
FS	2 080	146	189	8 353 324	57 363	44 125	13 238	6 425 634	1 927 690
GT	2 080	146	189	84 861 336	582 746	448 266	134 480	65 277 951	19 583 385
KZN	2 080	146	189	6 894 994	47 348	36 422	10 926	5 303 841	1 591 152
LM	2 080	146	189	49 682 480	341 171	262 439	78 732	38 217 293	11 465 188
MP	2 080	146	189	18 215 679	125 088	96 221	28 866	14 012 060	4 203 618
NW	2 080	146	189	25 928 705	178 053	136 964	41 089	19 945 158	5 983 547
NC	2 080	146	189	2 839 955	19 502	15 002	4 500	2 184 580	655 374
WC	2 080	146	189	23 230 200	159 523	122 710	36 813	17 869 385	5 360 815
Total	**2 080**	**146**	**189**	**247 980 188**	**1 702 888**	**1 309 914**	**392 974**	**190 753 991**	**57 226 197**

- Based on the overtime spending (R247.9m) for doctors for district hospitals; 1 309 914 hours were bought at 1.3 times the normal rate.
- Further, the rands spent on overtime could have bought 1 702 888 hours at normal hourly rate.
- If we assume that the hours bought using overtime (1 309 914) are reflective of the real additional capacity, only R190.8m would have been spent to obtain the same capacity through additional appointments.
- The difference (R57.2m) between R391.9m and the R301.4m in [i] is what is termed as "waste" in this review.

Table 19: Trade-off scenario for nurses – central hospitals

Province	Basic condition work	Average nurse (hourly) at 1 times (normal) and 1.3times (overtime)		Overtime (2018/19)	Analysis				
	(40*52)	1	1.3		(overtime/1)	overtime/1.3	Difference	Cost of need at normal rate	Waste
					e	f (real need)	g	h	i
	a	b	c	d	d/b	d/c	e-f	f*b	h-d
EC	2 080	146	189	22 633 624	155 426	119 558	35 867	17 410 480	5 223 144
FS	2 080	146	189	14 205 127	97 547	75 036	22 511	10 927 020	3 278 106
GT	2 080	146	189	158 363 620	1 087 488	836 529	250 959	121 818 169	36 545 451
KZN	2 080	146	189	9 154 849	62 867	48 359	14 508	7 042 191	2 112 657
LM	2 080	146	189	26 666 943	183 123	140 864	42 259	20 513 033	6 153 910
MP	2 080	146	189	20 610 144	141 531	108 870	32 661	15 853 957	4 756 187
NW	2 080	146	189	31 272 941	214 752	165 194	49 558	24 056 108	7 216 832
NC	2 080	146	189	9 044 541	62 109	47 776	14 333	6 957 339	2 087 202
WC	2 080	146	189	30 520 253	209 584	161 218	48 365	23 477 118	7 043 135
Total	**2 080**	**146**	**189**	**322 472 041**	**2 214 426**	**1 703 405**	**511 021**	**248 055 417**	**74 416 625**

- Based on the overtime spending (R322.5m) for doctors for district hospitals; 1 703 405 hours were bought at 1.3 times the normal rate.
- Further, the rands spent on overtime could have bought 2 214 426 hours at normal hourly rate.
- If we assume that the hours bought using overtime (1 703 405) are reflective of the real additional capacity, only R248.1m would have been spent to obtain the same capacity through additional appointments.
- The difference (R74.4m) between R322.5m and the R248.1m in [i] is what is termed as "waste" in this review.

9.4. Summary of findings from model

The model also has a summary sheet, which provides the overall savings for the country by level of care. The analysis shows that overall, R237.2m has been wasted in the sector as a result of the choice of obtaining capacity through the overtime system

Table 20: summary of results from model

Level of care	Basic condition work	Average (hourly) at 1 times (normal) and 1.3times (overtime)		Overtime (2018/19)	Analysis				
	(40*52)	1	1.3		(overtime/1)	overtime/1.3)	Difference	Cost of need at normal rate	Waste
					e	f (real need)	g	h	i
	a	b	c	d	d/b	d/c	e-f	f*b	h-d
District	**2 080**	**381**	**495**	**415 698 826**	**2 729 660**	**2 099 739**	**629 922**	**319 768 328**	**95 930 498**
Doctors	2 080	616	801	23 831 032	38 691	29 763	8 929	18 331 563	5 499 469
Nurses	2 080	146	189	391 867 794	2 690 969	2 069 976	620 993	301 436 765	90 431 029
Provincial	**2 080**	**381**	**495**	**278 343 311**	**1 752 185**	**1 347 834**	**404 350**	**214 110 239**	**64 233 072**
Doctors	2 080	616	801	30 363 123	49 297	37 921	11 376	23 356 248	7 006 874
Nurses	2 080	146	189	247 980 188	1 702 888	1 309 914	392 974	190 753 991	57 226 197
Central	**2 080**	**381**	**495**	**333 711 858**	**2 232 675**	**1 717 442**	**515 233**	**256 701 429**	**77 010 429**
Doctors	2 080	616	801	11 239 817	18 249	14 037	4 211	8 646 013	2 593 804
Nurses	2 080	146	189	322 472 041	2 214 426	1 703 405	511 021	248 055 417	74 416 625
Total sector	**2 080**	**381**	**495**	**1 027 753 995**	**6 714 519**	**5 165 015**	**1 549 504**	**790 579 996**	**237 173 999**

10. Bringing it all together

The following table brings together the work done in the review. Although this spending review shows that it is cheaper to obtain capacity through appointments as opposed to overtime, it is important note that the sector can probably only realise this in a phased manner (this assuming that buy-in to the proposal will be obtained). In the interim, the advancement of the overtime policy and its application are still important. It is for this reason that recommendations relating to issue a, b, c and d.

Table 21: Summary and final recommendations

Pocket issue	Issue no.	Finding	Recommendation
Policy is not entirely responsive to workload (e.g. participation is annual and renewable annually). If headcount happens to be increased in a given year, all those benefiting from overtime will continue to do so for remainder of said year.	a	Although savings can be immediately realised from allowing termination and re-entry to participation at any period within a given year. It is important to note that the policy, which was hugely contested by organised labour, is already a compromise by both employer and health professionals. For instance, commuted overtime is calculated on 1.3 times the normal hourly rate as opposed to the legislated 1.5 times (based on conditions of services).	• More work to done on viability of amending current policy and assess the extent to which changes would be implementable given the strong-hold unions have. • Perhaps benchmarking South African overtime practices to other countries. This will require expanding the efficiency analysis beyond the country.
No national guidelines on the determination of clinical need for overtime capacity at facility level is provided. This is entirely left to the discretion of facility managers, which leaves room for abuse and impacts monitoring capability as there would be no objective benchmark available.	b	Since supervisors and clinical heads are required to use own discretion in determining need for participation in overtime, there is no uniformity in the approval process. It is likely that participation is more than what is required as, based on discussions with a clinician, and overtime seems to be largely considered part of the package.	• National Department of Health will need to consider the development of some kind of norms to guide facilities. •

There seems to be little consideration to the trade-off between capacity obtained through the commuted overtime system versus additional appointments.	c	The summary table from the cost model, shows that in 2018/19, the sector has spent R237.2 million more than what could have spent if the capacity was obtained through appointment of additional staff. R95.9 million in district hospitals, R64.2 million in provincial hospitals and R77 million in central hospitals.	• Provinces, particularly those in the red or amber categories in table 11 and 12, will need to carefully assess the trade-off and decide if still prudent to continue with the overtime route. The cost model allows for customisation of the unit cost in order to make the analysis more sensitive to the specific provincial context (e.g. perhaps an older healthcare which would cost more etc.)