

Practice Cost Study Submissions for NHRPL: Methodology and Issues

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Agenda



- 1. Introduction
- 2. DoH Methodology
- 3. DoH Methodology vs Practice Cost Study Submissions
- 4. Implied Increases in Tariffs & Impact
- 5. 'Model' Practice Design and Income Statements
- 6. Overhead Costs, Salary, Time/Productivity
- 7. Sensitivities and Scenarios
- 8. Issues

The views in this presentation do not necessarily represent the views of Medscheme or its clients.

Introduction



- Aim: Not to comment on policy, but to inform to enable you to set your own view
- NHRPL, or RPL, is a set of standardised benchmark tariffs.
- Not enforced tariffs, but may become PMB reimbursement rate?
- Regulation 681 in the Government Gazette on 23 July 2007 sets out the underlying guidelines
 - Model spreadsheet is available on DoH website
- Requires a 'cost plus' methodology, whereby practice costs are measured plus ROI, divided by productive time in order to derive the benchmark tariffs

Introduction cont...



- Concentrating on GP and Specialist submissions of SAMA, as produced by Healthman in the 2008 submission
- The following specialist disciplines are considered:

_		
Cor	nsulting Specialists	Surgical Specialists
	Psychiatry	Otorhinolaryngology (ENT)
	Cardiology	Gynaecology and Obstetrics
	Neurology	Neurosurgery
	Paediatrics	Ophthalmology
		Orthopaedics
		Urology
		Plastic and Reconstructive Surgery
		General Surgery

DoH Methodology



Basic Formulae:

Cost per minute

- x Responsibility Factor
- x Time per consult/ procedure
- = Tariff per consult/procedure

DoH Methodology cont...



Basic Formulae:

Tariff per consult/procedure split as follows:

RCF x RVU = Tariff per consult/procedure

where

RCF = Rand Conversion Factor (akin to cost per unit time)

RVU = Relative Value Unit

DoH Methodology

DoH set @ upper end of package for public sector healthcare provider ACTUARTAL

Staff salaries + overheads + amortised equipment cost, etc.

REDUCED to lower 95% CI

(about 10% reduction)

+ 2.5% for bad debts

Salary + Overheads + ROI

Available time x Productivity

Bankers acceptance rate, earned on overheads

8 hour day; 5 days a week (120 000 mins. pa approx.) Less: 22 days annual leave; 8 days sick leave

75% productivity factor:

(= 6 hours per day treating patients)

overheads: 90 090 mins pa

direct labour: 79 290 mins pa

DoH Methodology cont...



Basic Formulae, detailed:

DL Cost p. min

- x Responsibility Factor
- x Time per consult/ procedure

OHD Cost p. min

x Time per consult/ procedure

= Tariff per consult/procedure

DoH Methodology cont...



Time per consult/ procedure:

- From activity based time studies
- Submissions did not do time studies;
 - For consults?
 - Used SAMA RVUs
 - Allowed for tiered consult tariffs
 - For procedures?
 - CPT4 codes and AMA relative value based time units applied with cross-walk to SAMA codes
 - Else missing

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Salary	Overheads + ROI
+	
79 290	90 090

Description	DoH / Survey	GP & Specialist Submission
Direct Salary: GP Specialist	R473k R757k	R601k R859k
Overheads		
Productive Time: GP Overheads Specialist Overheads		
Productive Time: Equipment		
Time per procedure		

	Salary	Overheads + ROI
#	+	
	79 290	90 090

Description	DoH / Survey	GP & Specialist Submission
Direct Salary: GP Specialist	R473k R757k	R601k R859k
Overheads	Random sampling	No random sampling
Productive Time: GP Overheads Specialist Overheads		
Productive Time: Equipment		
Time per procedure		

Salary	Overheads + ROI
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Description	DoH / Survey	GP & Specialist Submission
Direct Salary: GP Specialist	R473k R757k	R601k R859k
Overheads	Random sampling	No random sampling
Productive Time: GP Overheads Specialist Overheads	90 090 mins 90 090 mins	90 090 mins 79 290 mins
Productive Time: Equipment	65%	65%*
Time per procedure		

Salary	Overheads + ROI
+	
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Description	DoH / Survey	GP & Specialist Submission
Direct Salary: GP Specialist	R473k R757k	R601k R859k
Overheads	Random sampling	No random sampling
Productive Time: GP Overheads Specialist Overheads	90 090 mins 90 090 mins	90 090 mins 79 290 mins
Productive Time: Equipment	65%	65%*
Time per procedure	Activity based	SAMA / AMA / missing

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Prac. No.	Practice Type	Increase in Tariffs	Impact on Total Claims
14	GP	70%	8.4%
21			
44			
30			
16			
24			
26			
28			
32			
18			
36			
22			
42			
46			
	rease in claims e practice types only, i	ignoring benefit limits)	8.4%

Salary	Overheads + ROI
+	
79 290	90 090

Prac. No.	Practice Type	Increase in Tariffs	Impact on Total Claims		
14	GP	70%	8.4%		
21	Cardiology	314%	1.5%		
44	Cardiothoracic	91%	0.2%		
30	ENT	316%	1.1%		
16	Gynaecology	110%	1.8%		
24	Neurosurgery	154%	0.5%		
26	Ophthalmology	78%	0.8%		
28	Orthopaedics	157%	1.5%		
32	Paediatrics	160%	1.6%		
18	Physicians	219%	3.3%		
36	Plastic & Recon. Surgery	179%	0.1%		
22	Psychiatry	61%	0.4%		
42	Surgery	168%	1.5%		
46	Urology	338%	1.2%		
· · · · · · · · · · · · · · · · · · ·	Total increase in claims (of above practice types only, ignoring benefit limits)				

Salary	Overheads + ROI
+	
79 290	90 090

Practice Type	Increase: Consulting Tariffs	Increase: Procedure Tariffs	Increase: All Tariffs	Impact on Claims
GP	70%		70%	
Consulting Specialists	128%	259%	196%	24%
Surgical Specialists	147%	354%	229%	

2008 Submissions:

Practice Type	Increase: Consulting Tariffs	Increase: Procedure Tariffs	Increase: All Tariffs	Impact on Claims
GP	70%		70%	
Consulting Specialists	128%	259%	196%	24%
Surgical Specialists	147%	354%	229%	

DoH Parameters (with overheads as per submission):

Practice Type	Increase: Consulting Tariffs	Increase: Procedure Tariffs	Increase: All Tariffs	Impact on Claims
GP	40%		40%	
Consulting Specialists	105%	156%	130%	21%
Surgical Specialists	136%	279%	207%	

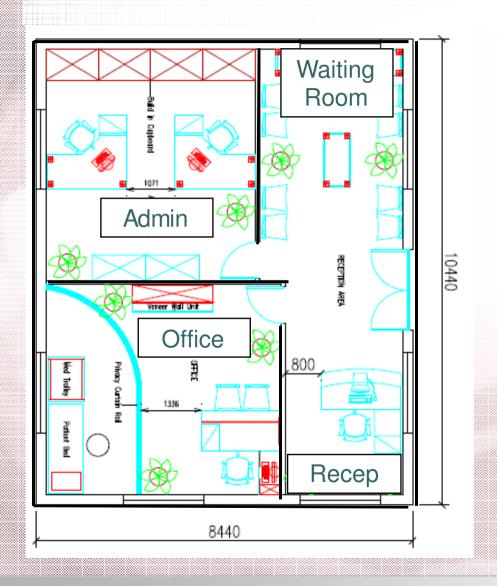
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'Model' Practice





Capital outlay std equipment:

GP = 175k

Cardiology = R466k

Rent pm:

R3k to R4k

Transport pm:

R3k to R4k

Salaries pm:

Receptionist = R12k

Cleaner = R1.5k

Accounting = R7k

Accounting/audit/mang fees

pm = R2k

Communication = R4k pm

Advertising

= R1k pm

Printing & stationery = R1k pm

'Model' Practice: Inc Statement

DoH Parameters:

	GP	Consulting Specialists	Surgical Specialists	
Income (less VAT)	1 319 272	1 864 787	2 098 150	
Expenses	1 102 322	1 460 197	1 633 897	
Practitioner Salary CTC	472 758	756 602	756 602	
Other overheads	629 564	703 595	877 295	
Nett income	216 951	404 590	464 253	
Less: Bad debt provision	27 558	36 505	40 847	
Nett income after bad debt				
provision before tax	189 393	368 085	423 405	

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Overhead Costs

Salary	Overheads + ROI
+	
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Prac. No.	Practice Type	No.*	Responses	Response %
14	GP	7 568	125	2%
21	Cardiology	117	29	25%
44	Cardiothoracic	80	11	14%
30	ENT	231	58	25%
16	Gynaecology	690	64	9%
24	Neurosurgery	123	24	20%
26	Ophthalmology	260	54	21%
28	Orthopaedics	486	102	21%
32	Paediatrics	392	35	9%
18	Physicians	518	72	14%
36	Plstc & Recon. Surg	138	17	12%
22	Psychiatry	377	69	18%
42	Surgery	471	47	10%
46	Urology	165	23	14%

^{*} DoH Notice no. 4 of 2009, showing 2007 number of practising practitioners.

Overhead Costs

Salary	Overheads + ROI
+	
79 290	90 090

_				_	
Prac. No.	Practice Type	No.*	Responses	Response %	Min. No. @ 10% error
14	GP	7 568	125	2%	77
21	Cardiology	117	29	25%	25
44	Cardiothoracic	80	11	14%	41
30	ENT	231	58	25%	52
16	Gynaecology	690	64	9%	36
24	Neurosurgery	123	24	20%	32
26	Ophthalmology	260	54	21%	54
28	Orthopaedics	486	102	21%	57
32	Paediatrics	392	35	9%	35
18	Physicians	518	72	14%	66
36	Plstc & Recon. Surg	138	17	12%	41
22	Psychiatry	377	69	18%	42
42	Surgery	471	47	10%	74
46	Urology	165	23	14%	46

^{*}DoH Notice no. 4 of 2009, showing 2007 number of practising practitioners.

Overhead Costs

Salary	Overheads + ROI
+	
79 290	90 090

Prac. No.	Practice Type	No.*	Responses	Response %	Min. No. @ 10% error	Min No. @ 5% error
14	GP	7 568	125	2%	77	301
21	Cardiology	117	29	25%	25	61
44	Cardiothoracic	80	11	14%	41	65
30	ENT	231	58	25%	52	124
16	Gynaecology	690	64	9%	36	124
24	Neurosurgery	123	24	20%	32	72
26	Ophthalmology	260	54	21%	54	133
28	Orthopaedics	486	102	21%	57	169
32	Paediatrics	392	35	9%	35	110
18	Physicians	518	72	14%	66	191
36	Plstc & Recon. Surg	138	17	12%	41	87
22	Psychiatry	377	69	18%	42	126
42	Surgery	471	47	10%	74	200
46	Urology	165	23	14%	46	100

^{*}DoH Notice no. 4 of 2009, showing 2007 number of practising practitioners.

Salary	Overheads + ROI
+	
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Practice Type	Average	25 th Percentile	Median	75 th Percentile	Minimum	Maximum		
GP	525 000	343 000	473 000	670 000	132 000	1 072 000		
Consulting Specialists	549 000	387 000	526 000	691 000	103 000	1 287 000		
Surgical Specialists	719 000	500 000	671 000	902 000	84 000	1 991 000		

Practice Type	No. of Group Practices	No. of Individual Practices	Avg Costs Group Practices	Avg Costs All Practices	Diff %
GP	39	86	475 000	525 000	-10%
Consulting Specialists	19	186	546 000	549 000	-1%
Surgical Specialists	20	380	659 000	719 000	-8%

Need to consider bias...

Either;

- Random sample from non-respondents, OR
- Adjust results by assuming an average cost for the nonrespondents;
 - Considered using average costs of lowest quartile;
 - = response% x average overhead costs as per submissions
 - + (1 response%) x average of lowest quartile overhead costs

Practice Type	No.	% Responses	Adjusted for Bias Avg Costs*	Un-adjusted Avg Costs (Surveys)	Diff %
GP	7 568	2%	269 000	525 000	-49%
Consulting Specialists	1 404	15%	321 000	549 000	-42%
Surgical Specialists	2 644	15%	436 000	719 000	-39%

^{*} Weighted response % average of survey average costs and average of lowest quartile of surveyed costs.

Overhead Costs Summary

Salary	Overheads + ROI
+	
79 290	90 090

		GP	Cons.	Surg.	Difference % from survey		
		GF	Spec.	Spec.	GP	Cons Spec	Surg Spec
	Average Overhead Costs (survey)	525 000	549 000	719 000			
	Adj. Overheads Used in Submission	564 000	604 000	734 000	7%	10%	2%
1	Less CI adjustment	527 000	573 000	705 000	0%	4%	-2%
2	Median						
3	25 th Percentile						
4	Group practices only						
5	Bias adjusted						

		GP	Cons.	Surg.	Difference % from survey		
		GP	Spec.	Spec.	GP	Cons Spec	Surg Spec
	Average Overhead Costs (survey)	525 000	549 000	719 000			
	Adj. Overheads Used in Submission	564 000	604 000	734 000	7%	10%	2%
1	Less CI adjustment	527 000	573 000	705 000	0%	4%	-2%
2	Median	473 000	526 000	671 000	-10%	-4%	-7%
3	25 th Percentile	343 000	387 000	500 000	-35%	-30%	-30%
4	Group practices only	475 000	546 000	659 000	-10%	-1%	-8%
5	Bias adjusted	269 000	321 000	436 000	-49%	-42%	-39%

GP Salary

- Salary Level 12:
 - Min = R408k; Max = R473k p.a.
 - Thus, maximum has been used in DoH model
 - Scarce skills allowance +15% for 60% of base pay
 - Include overtime = 56 hours per week
 - Combined increases package by about 45%
 - Overtime + skills allowance = R685k p.a.

=> Lowers tariff increase by about 20%

Specialist Salary

Salary	Overheads + ROI
+	
79 290	90 090

Public Sector Packages:

SMS Grade	01-Jan-08	1-Sep-08	2009
Α	R557k	R574k	R624k
В	R655k	R696k	R757k
С	R794k	R842k	R868k

- Grade B is 'principal specialist' & 'head-of-dept'
- Add scarce skills allowance +15% of 60% of base pay
 = R825k p.a.
- o Applies to 52 hour week, not 40 hour week

=> Lowers tariff increase by about 40% to 55%

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Sensitivities: Overheads

Salary	Overheads + ROI
+	
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Sensitivity	Increase:	Increase:	Increase:	Impact on
Sensitivity	GP	Cons. Spec.	Surg. Spec.	Claims
Base Case: DoH params,	40%	115%	185%	19%
overheads as per submission	10 70	11070	10070	10 /0
Base -10%	32%	106%	171%	17%
Base +10%	47%	125%	199%	21%
Median	32%	108%	178%	19%
Bias adjusted	3%	74%	133%	11%

Sensitivities: Direct Salary

Salary	Overheads + ROI
+	
79 290	90 090

Sensitivity	Increase: GP	Increase: Cons. Spec.	Increase: Surg. Spec.	Impact on Claims
Base Case: DoH params, overheads as per submission	40%	115%	185%	19%
Base -10% Base +10%	34% 46%	105% 126%	172% 198%	17% 21%
	1070	12070	10070	2170

Sensitivities: Productivity

Salary	Overheads + ROI
+	
79 290	90 090

Sensitivity	Increase:	Increase:	Increase:	Impact on
,	GP	Cons. Spec.	Surg. Spec.	Claims
Base Case: DoH params,	40%	115%	185%	19%
overheads as per submission				
Productivity labour (75%):				
Base -10%	46%	127%	199%	21%
Base +10%	35%	106%	174%	18%
Productivity overheads (75%):				
Base -10%				
Base +10%				

Sensitivities: Productivity

Salary	Overheads + ROI
+	
79 290	90 090

Sensitivity	Increase:	Increase: Cons. Spec.	Increase: Surg. Spec.	Impact on Claims
Base Case: DoH params, overheads as per submission	40%	115%	185%	19%
Productivity labour (75%):				
Base -10%	46%	127%	199%	21%
Base +10%	35%	106%	174%	18%
Productivity overheads (75%):				
Base -10%	49%	128%	203%	22%
Base +10%	32%	105%	170%	17%

Sensitivities: Working Hours

Salary	Overheads + ROI
+	
79 290	90 090

Sensitivity	Increase:	Increase:	Increase:	Impact on Claims
	GF	Cons. Spec.	Surg. Spec.	
Base Case: DoH params,	40%	115%	185%	19%
overheads as per submission				
Working hours per week (40):				
Base -10%	55%	139%	217%	24%
Base +10%	27%	96%	159%	16%
Add: Scarce skills +15% and				
GP overtime to salary; 56hrs				
for GP; 52hrs for Specialists:				
ioi di , ozinis ioi opeciansis.				
Result				

Sensitivities: Working Hours

Salary	Overheads + ROI
+	
79 290	90 090

Sensitivity	Increase:	Increase:	Increase:	Impact on Claims
	GP	Cons. Spec.	Surg. Spec.	Ciaiiiis
Base Case: DoH params,	40%	115%	185%	19%
overheads as per submission				
Working hours per week (40):				
Base -10%	55%	139%	217%	24%
Base +10%	27%	96%	159%	16%
Add: Scarce skills +15% and				
GP overtime to salary; 56hrs for GP; 52hrs for Specialists:				
Result	19%	73%	128%	12%

Sensitivities: Mix

Salary	Overheads + ROI
+	
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Sensitivity	Increase:	Increase:	Increase:	Impact on
Conclusing	GP	Cons. Spec.	Surg. Spec.	Claims
Base Case: DoH params, overheads as per submission	40%	115%	185%	19%
Volume of procedures:				
Base +10% more procedures	41%	118%	193%	20%
Times per consult/procedure:				
Base -10%	26%	94%	156%	15%
Base +max(+10%; +5 mins)	99%	164%	262%	33%

Scenarios: Increases

	Scenario	GP	Cons. Spec.	Surg. Spec.	Impact on Claims
1	As per submission	70%	196%	229%	24%
2	Submission with 65% productivity	96%	241%	280%	31%
3	DoH params; Submission overheads	40%	115%	185%	19%
4	DoH params; Bias adj overheads	3%	74%	133%	11%
5	DoH params; GP 56hr week & overtime pay; Spec 52 hr week; +15% skills allow.	19%	73%	128%	12%
6	DoH params; Bias adj overheads; GP 56hr week & overtime pay; Spec 52 hr week; +15% skills allow.	-8%	41%	88%	6%
7	DoH params; Bias adj overheads; GP 56hr week & overtime pay; Spec 52 hr week; +15% skills allow.; 85% productivity; time per consult/procedure 10% lower	-27%	12%	49%	0%

2009 Convention | clarity in a complex world | 19-20 May 2009

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Issues

- Survey response bias and small sample sizes
- Overheads large variations
- Benchmark salaries and working hours
- Productivity
- Coding issues
- Overlapping activities may be charged twice

Issues

- Submissions across disciplines not consistent
- Practice cost studies seen as 'fair rate'
- No allowance for trends in up-coding or changing behaviour, e.g. more procedures being performed
- Not linked to impact on the market (members),
 - ignores affordability, impact of buy-downs and loss of members from risk pool.

Issues

MAINISSUES:

- Should benchmark reflect an average or efficient practice?
- Setting the RPL at average;
 - all practices charging below the 'fair' RPL may increase their rates => increased claims costs across industry.
- Time per consult/procedure
 - Results highly sensitive to unknown times



2009 Convention Lite and the Pensions, Health and Life Seminars
19-20 May 2009

Sandton Convention Centre Johannesburg, South Africa