

Medicare Schedule Review Board

A resource-based model of private
medical practice in Australia - final report

Volume 1 – Key findings



December 2000

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Medicare Schedule Review Board
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Dear Dr Morauta

The Practice Cost Study

We are pleased to present to you the Practice Cost Study report. The report has been prepared in accordance with the terms of reference for the study and incorporates the policy decisions taken by the Medicare Schedule Review Board.

The report is an important component of the broader Relative Value Study (RVS) and has provided an opportunity to review the costs of private medical practice in Australia. We have compiled resource-based cost profiles for all specialty groups covered by the General Medical Services Table of the Medicare Benefits Schedule. Along with the other components of the RVS, the results of the Practice Cost Study will be used to develop new fees for the General Medical Services Table of the Medicare Benefits Schedule.

Our study process has been an open and transparent one and we take this opportunity to acknowledge the input of the medical community in the development of the report.

Yours sincerely



Mike Empson
Partner
Assurance and Business Advisory Services

Acknowledgements

We would like to thank the many individual doctors, Colleges and Societies who made submissions and participated in the case studies, consultations and meetings. The comments provided valuable input to the findings of the report.

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Overview

This report presents the findings of the PricewaterhouseCoopers (PwC) study into the development of a typical reasonably efficient model for a private medical practice for each medical specialty group in Australia.

The Board has agreed to all matters identified in this report (except those identified below) contributing to the construction of resource-based models representing reasonably efficient private medical practices.

The Board has been unable to agree on whether:

- there are costs beyond those identified that would be incurred by a reasonably efficient general practice to meet appropriate accreditation and quality standards
- business risk should be recognised through the application of a loading to Medicare Benefits Schedule (MBS) fees for specific items of service
- empirical data on practice size and other data can support a one, two, three or four-doctor general practice as the reasonably efficient model in Australia, noting that the costing of a three or four-doctor model has not been subject to detailed consultation with the profession.

The study was established to determine the non-professional resources required to operate a reasonably efficient medical practice and to cost those resources. The cost of the non-professional resources (ie the practice costs) will ultimately be attributed to each item in the MBS, and will reflect the cost of delivering that item. Attribution of practice costs to MBS items is not included in this report, however Volume 4 explains the process of attribution.

It was a core constraint of the study that each item in the MBS have only one amount of cost reimbursement. However, many MBS items can be delivered by doctors from different specialty groups and at different locations, and those doctors may have different overall levels of practice costs.

To overcome this issue of diversity, we developed a model practice for all specialty groups to use as the basis for our costings. The model practice was based on the development of a notional practice in which the doctor spends 100% of his or her time delivering MBS items. Some of the model practices are based on groups of two or more doctors, where this reflects actual practice.

In the model practice, total costs of practice comprise:

- general overhead costs, which are costs applicable to all items
- direct costs, which are the costs of dedicated resources required for specific items such as diagnostic tests.

The basis of the model practice – that is, a doctor delivering 100% MBS activity (General Medical Services Table only) within a standard number of hours per week, with specific resource and cost parameters – must be taken into account when individual doctors seek to compare their actual costs with those in the model practice.

The table below shows, on a per-doctor basis, the general overhead costs and professional indemnity insurance incurred to deliver the total items in each specialty. The table does not include direct costs which are explained and costed in Volume 3.

The base costs for the study were collected in the year ended 30 June 1997. All costs have been adjusted to values current at 31 December 1999.

Annual costs per doctor to deliver 100% MBS activity by specialty

Specialty	No of doctors	Practice cost excluding direct costs and PII	Overhead PII	Procedural PII	Total PII	Total general overhead including PII ¹
		\$	\$	\$	\$	\$
Anaesthetics	7	54,083	12,995	-	12,995	67,078
Cardio-thoracic surgery	3	112,582	4,823	14,264	19,087	131,669
Cardiology	1	134,022	4,823	2,957	7,780	141,802
Dermatology	1	212,223	4,823	2,403	7,226	219,449
ENT surgery	1	167,515	4,823	13,545	18,368	185,883
Gastroenterology	1	131,616	4,823	3,605	8,428	140,044
General medicine	1	128,095	4,823	-	4,823	132,918
General practice ²	1	125,002	2,328	-	2,328	127,330
General practice	2	116,415	2,328	-	2,328	118,743
General practice	3	111,198	2,328	-	2,328	113,526
General practice	4	108,679	2,328	-	2,328	111,007
General surgery	1	130,255	4,823	12,623	17,446	147,701
Intensive care	5	42,493	6,976	-	6,976	49,469
Neurology	1	129,044	4,823	522	5,345	134,389
Neurosurgery	1	129,109	4,823	22,946	27,769	156,878
Obstetrics and Gynaecology ³	1	139,040	4,823	25,469	30,292	169,332
Ophthalmology	1	214,340	4,823	13,454	18,277	232,617
Orthopaedic surgery	1	134,924	4,823	22,105	26,928	161,852
Paediatric medicine	1	132,170	4,810	-	4,810	136,980
Paediatric surgery	1	129,298	4,823	10,863	15,686	144,984
Plastic surgery	1	136,156	4,823	20,604	25,427	161,583
Psychiatry	2	106,325	6,109	-	6,109	112,434
Radiation oncology ⁴	4	776,429	6,541	-	6,541	782,970
Rehabilitation medicine	1	126,556	2,366	-	2,366	128,922
Renal medicine	1	129,277	4,823	-	4,823	134,100
Rheumatology	1	127,617	4,823	-	4,823	132,440
Thoracic medicine	1	133,145	4,823	1,732	6,555	139,700
Urology	1	133,557	4,823	13,404	18,227	151,784
Vascular surgery	1	131,453	4,823	12,437	17,260	148,713

Source: Practice cost study, 31 December 1999

Note 1. Excludes direct costs.

Note 2. The Board asked us to include costs for different sizes of practice, in terms of the number of doctors, for the reasonably efficient model general practice.

Note 3. Costs associated with the provision of Assisted Reproductive Services (incorporating IVF) are treated as direct costs.

Note 4. The model practice for radiation oncology was developed using a different methodology from that used for the other specialties (see Chapter 1).

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1 The practice cost study

This report presents the findings of the PricewaterhouseCoopers (PwC) study into the development of a typical reasonably efficient model for a private medical practice for each specialty in Australia.

1.1 Purpose of the study

The purpose of the practice cost study was to establish the non-professional component of the cost of each item in the General Medical Services Table of the Medicare Benefits Schedule (MBS).

In July 1997, PwC was engaged by the Medicare Schedule Review Board (the Board) to construct a costing model for the non-professional components of schedule fees. The Board's key specific directives were to:

- (a) *develop the criteria to apply in the determination of resources required to operate a reasonably efficient private medical practice across a range of major specialty groups*
- (b) *construct representative models based on reasonably efficient private medical practices to assist in establishing fair and reasonable non-professional medical components in private medical fees across the range of major specialty groups.*

This meant that the models had to:

- identify the nominal MBS activity level for each specialty
- identify the physical resources incorporated into each specialty
- apply reasonably efficient cost and utilisation rates to those resources.

A copy of the terms of reference for the study is in Volume 4, Appendix A.

1.2 Context for the study

The practice cost study formed part of a much larger review conducted by the Board, known as the Relative Value Study (RVS) of the General Medical Services Table of the MBS. The Board determined that the only feasible approach to the RVS was to adopt a cost/resource-based methodology – that is, a process by which the resources used in delivering a service are identified and costed in an appropriate manner.

Before the practice cost study began, the Board decided on a formula to be adopted in the costing of medical fees. The formula views fees in terms of a professional and a non-professional component. In this report we refer to 'non-professional costs' as 'practice costs'. This formula was used as a key reference in the practice cost study and a copy is included with the terms of reference in Volume 4, Appendix A.

The findings presented in this report are based on data collected from the financial year ended 30 June 1997, which have been adjusted to 31 December 1999 values. For a detailed explanation of the process of adjustment see Volume 4, Chapter 3.

1.3 Specialty groups considered separately

Radiation oncology was considered separately from the other specialty groups. In order for a radiation oncology facility to provide a reasonable range of treatment and a reasonable level of care, a significant investment in equipment and staffing, as well as several staff radiation oncologists, is required. As a result, our methodology was modified in a number of key areas to cater for the particular requirements of this specialty. In the radiation oncology model practice, the cost of items is governed by the activity of the treatment machines rather than by the number of doctors.

The model practice for radiation oncology is presented on a per-doctor basis for the purpose of consistency in presentation. However, it is not appropriate to compare these results to those of other specialties. The costs of radiation oncology are significantly higher than those of other specialties and are better considered on a total facility basis.

Two specialty groups were not included in this study:

- emergency medicine
- pain management.

Emergency medicine and pain management were excluded from the study on the basis that they do not have specialty-specific items in the MBS.

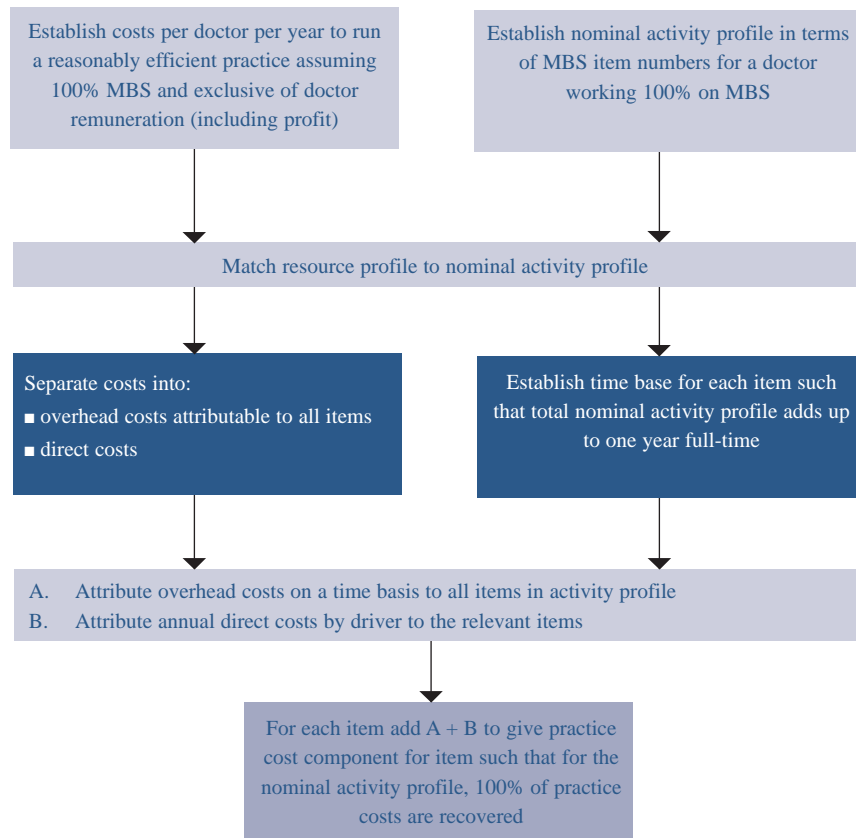
1.4 Our approach

The study was intended to determine a single amount of practice cost for each item in the MBS. The practice cost for the item would represent the reasonable costs incurred by a doctor in delivering the service covered by the item. Apart from consultation items, the MBS does not differentiate between doctors in different specialties delivering the same item, other than between general practitioners and specialists in a limited number of items. Consequently there is only one schedule fee per item. However, because of the variability of costs in differing specialties, a single practice cost component of the fee cannot necessarily match all the costs in all the specialties.

Therefore, to determine a reasonable cost for each item, PwC developed a notional or 'model' practice for each specialty included in the study. Only by using this model practice was it possible to calculate a single amount of practice cost for an individual item.

Our approach to determining the single cost per item is represented in Figure 1.1

Figure 1.1 Overview of our approach



1.5 Significant issues arising from our approach

Four issues need to be considered when viewing the results of the study:

- comparison of nominal practice level of MBS activity to actual level of activity
- comparison of nominal MBS activity profile to actual activity profile
- comparison of model practice costs to actual costs
- the effect of averaging of costs.

Comparison of nominal practice level of MBS activity to actual level of activity

The underlying principle of cost recovery under the MBS is the concept of fee-for-service. Under this arrangement doctors within the same specialty will recover costs for each individual item of service they deliver. Consequently, doctors who deliver a higher number of items will generally recover more than doctors who deliver a lower number of items.

This is particularly so if the doctors are delivering the same item (eg 15-minute consultations for general practitioners), but may not be as clear when the doctors are delivering different mixes of items, which may take different amounts of doctor time to deliver. The reimbursement received by the doctor under a fee-for-service arrangement is therefore dependent on both the level of item activity and the mix of items delivered.

The model practice is based on a full-time doctor in each specialty delivering MBS services for 100% of their time. In many cases, particularly for specialists, a doctor's actual MBS activity profile will not correlate to this 100% level. Under the fee-for-service arrangement, the doctor who delivers either more or less activity than the model practice will recover more or less than the model practice costs. Only in the situation where a doctor's actual profile of MBS activity matches the nominal practice profile, both in terms of level and mix, would they recover exactly the model costs.

Comparison of nominal MBS activity profile to actual activity profile

In many cases the actual MBS activity profile of doctors will vary from the nominal activity profile. The activity profile developed by this study will not be the final activity profile used for attribution purposes. The profile was used to show that study doctors were engaged in a particular specialty and were delivering a full-time workload for that specialty. Another study within the RVS, known as the Professional Relativities Study (PRS), being undertaken by the National Centre for Classification in Health at the University of Sydney, is developing the model activity profiles.

The important factor in comparing resource needs of an actual practice to the model practice is that each practice is operating on a full-time basis. Variations within the item mix in each activity profile will not significantly alter the resource needs of the practice, except in the case of direct cost items, which are costed separately.

Comparison of model practice costs to actual costs

In many cases the actual costs incurred by doctors for resources are affected by the doctor's discretion in these matters and by non-medical considerations such as transactions with non-arms-length bodies. For example, doctors may choose to either lease or buy a motor vehicle or practice equipment, or pay rent to a non-arms-length landlord such as the doctor's personal superannuation fund. In addition, doctors have the discretion to pay more or less for resources that ultimately provide the same function, such as the choice of motor vehicle or mode of travel to conferences and seminars. Where possible we have identified these costs and, by reversing the effects of non-arms-length and other discretionary transactions, treated them on a consistent basis (ie 'normalised' them).

Averaging of costs

The costs collected in the study, and ultimately included in the model practice profiles, are in many instances averages or weighted averages of State-by-State costs. This means that the actual costs incurred by those doctors practising in higher cost locations (such as Sydney metropolitan) will be higher than the model cost. Doctors in high-cost locations will be disadvantaged by the averaging process. Conversely, doctors in low-cost locations will benefit from the averaging process. There is no way of overcoming this as long as there is only one level of reimbursement for each item of service in the MBS in Australia. Uniform national schedule fees remain the policy position of both the Commonwealth Government and the Australian Medical Association (AMA).

1.6 Impact of the proposed new consultation item structure

The practice cost study was undertaken on the basis of the consultation items current at 30 June 1997. The Board has proposed a new consultation structure. The model practice will be adjusted to cater for the new consultation item structure when the relativities are established by the PRS.

2 The results: the model practice

For each specialty, we compiled a nominal profile of activity, the resources required to achieve that activity, and the costs required to obtain those resources for a reasonably efficient practice. We called the results the model practice. This chapter presents the model practice for each specialty.

First, it is important to highlight a number of issues where the Board made decisions in relation to costs.

2.1 Board decisions on certain discretionary costs

The study revealed significant variation in costs of certain resources, requiring a policy decision by the Board in relation to the principles employed in determining those costs. Table 2.1 provides a summary of the costs which have been determined by a policy decision from the Board, and an outline of the rationale behind the decision.

Table 2.1 Resources costed according to Board policy decisions

Resource	Rationale
Accountancy fees	The Board determined that only the costs of preparing a standard set of accounts and the tax return for each practice (as well as an allowance for business advice) should be included in the model practice for each specialty. This was due to the variation found in practice which resulted from business structure and non-medical businesses being included. The most significant variation was caused by the level of tax advice being purchased by the practice. This advice was considered to be unrelated to MBS activities and was self-funding, as the benefits received from such advice usually outweighed the cost.
Subscriptions to associations	The Board decided that each specialty group should be provided with funding to cover the costs of belonging to: <ul style="list-style-type: none"> ■ the relevant college of the specialty ■ one society or medical group ■ one industrial body ■ one other association. This issue is covered in greater detail in Chapter 7, which lists the organisations selected for each specialty and the costs of membership.
Continuing medical education (CME)	The Board decided that each specialty group should be provided with funding to cover the costs of attending CME activities. This issue is covered in greater detail in Chapter 8.
Motor vehicle costs	The wide variation in both business use and car values prompted the Board to make a policy decision on the cost of motor vehicles included in the study. The Board decided that the motor vehicle in the model practice should be the standard family Australian motor vehicle (Holden Commodore) and that 70% business use was a fair and reflective rate for determining the cost allocation for the operating needs of the practice. Running costs are based on the NRMA published guidelines (NRMA 1997).
Locum costs	The Board decided that the costs of locums in general practice will be treated as a practice cost. This issue is covered in more detail in Chapter 4.

2.2 The model practice for each specialty

The model practice for each specialty was developed on the basis of the doctor delivering 100% MBS activity, with resources and costs designed to match that activity level. The 100% MBS activity for each specialty represents a typical mix of consultation, procedural and diagnostic MBS items delivered by the doctor for 100% of their available time.

The total practice costs include general overhead costs which are applicable to all items, and direct costs for dedicated resources applicable to specific items such as diagnostic tests. The total of the costs matches the model level of activity in each specialty.

The models summarise, on a per-doctor basis for each specialty, the model activity profile and general overhead costs of practice. The overhead costs do not include direct costs associated with certain items. These direct costs are in addition to the costs reported in the following tables. Direct costs are covered in detail in Volume 3.

2.3 Anaesthetics

2.3.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	12,901
Occupancy costs	5,526
Office expenses	10,652
Other practice costs	2,405
Professional costs	9,794
Motor vehicle expenses	8,578
Working capital expenses	4,227
Total practice cost excluding direct costs and PII	54,083
Professional indemnity insurance – overhead	12,995
Professional indemnity insurance – procedural	-
Total professional indemnity insurance	12,995
Total	67,078

Source: Practice cost study, 31 December 1999

2.4 Cardio-thoracic surgery

2.4.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	46,485
Occupancy costs	16,855
Office expenses	16,899
Other practice costs	6,185
Professional costs	9,396
Motor vehicle expenses	8,578
Working capital expenses	8,184
Total practice cost excluding direct costs and PII	112,582
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	14,264
Total professional indemnity insurance	19,087
Total	131,669

Source: Practice cost study, 31 December 1999

2.5 Cardiology

2.5.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	54,723
Occupancy costs	24,961
Office expenses	18,914
Other practice costs	8,009
Professional costs	9,329
Motor vehicle expenses	8,578
Working capital expenses	9,508
Total practice cost excluding direct costs and PII	134,022
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	2,957
Total professional indemnity insurance	7,780
Total	141,802

Source: Practice cost study, 31 December 1999

2.6 Dermatology

2.6.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	109,456
Occupancy costs	39,182
Office expenses	18,566
Other practice costs	18,543
Professional costs	9,174
Motor vehicle expenses	8,578
Working capital expenses	8,724
Total practice cost excluding direct costs and PII	212,223
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	2,403
Total professional indemnity insurance	7,226
Total	219,449

Source: Practice cost study, 31 December 1999

2.7 ENT surgery

2.7.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	71,201
Occupancy costs	32,528
Office expenses	18,693
Other practice costs	14,795
Professional costs	11,036
Motor vehicle expenses	8,578
Working capital expenses	10,684
Total practice cost excluding direct costs and PII	167,515
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	13,545
Total professional indemnity insurance	18,368
Total	185,883

Source: Practice cost study, 31 December 1999

2.8 Gastroenterology

2.8.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	54,723
Occupancy costs	24,956
Office expenses	16,982
Other practice costs	8,208
Professional costs	9,123
Motor vehicle expenses	8,578
Working capital expenses	9,046
Total practice cost excluding direct costs and PII	131,616
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	3,605
Total professional indemnity insurance	8,428
Total	140,044

Source: Practice cost study, 31 December 1999

2.9 General medicine

2.9.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	54,723
Occupancy costs	24,853
Office expenses	16,387
Other practice costs	8,331
Professional costs	8,952
Motor vehicle expenses	8,578
Working capital expenses	6,271
Total practice cost excluding direct costs and PII	128,095
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	-
Total professional indemnity insurance	4,823
Total	132,918

Source: Practice cost study, 31 December 1999

2.10 General practice

2.10.1 Summary of resources and costs per doctor (1-doctor practice)

Resource category	General Overhead \$
Wages and staff costs	58,490
Occupancy costs	22,259
Office expenses	13,955
Other practice costs	10,088
Professional costs	5,568
Motor vehicle expenses	8,578
Working capital expenses	6,064
Total practice cost excluding direct costs and PII	125,002
Professional indemnity insurance – overhead	2,328
Professional indemnity insurance – procedural	-
Total professional indemnity insurance	2,328
Total	127,330

Source: Practice cost study, 31 December 1999

2.10.2 Summary of resources and costs per doctor (2-doctor practice)

Resource category	General Overhead \$
Wages and staff costs	56,723
Occupancy costs	18,171
Office expenses	13,955
Other practice costs	8,113
Professional costs	5,568
Motor vehicle expenses	8,578
Working capital expenses	5,307
Total practice cost excluding direct costs and PII	116,415
Professional indemnity insurance – overhead	2,328
Professional indemnity insurance – procedural	-
Total professional indemnity insurance	2,328
Total	118,743

Source: Practice cost study, 31 December 1999

2.10.3 Summary of resources and costs per doctor (3-doctor practice)

Resource category	General Overhead \$
Wages and staff costs	54,957
Occupancy costs	15,717
Office expenses	13,955
Other practice costs	7,392
Professional costs	5,568
Motor vehicle expenses	8,578
Working capital expenses	5,031
Total practice cost excluding direct costs and PII	111,198
Professional indemnity insurance – overhead	2,328
Professional indemnity insurance – procedural	-
Total professional indemnity insurance	2,328
Total	113,526

Source: Practice cost study, 31 December 1999

2.10 General practice (cont.)

2.10.4 Summary of resources and costs per doctor (4-doctor practice)

Resource category	General Overhead \$
Wages and staff costs	54,073
Occupancy costs	14,612
Office expenses	13,955
Other practice costs	7,021
Professional costs	5,568
Motor vehicle expenses	8,578
Working capital expenses	4,872
Total practice cost excluding direct costs and PII	108,679
Professional indemnity insurance – overhead	2,328
Professional indemnity insurance – procedural	-
Total professional indemnity insurance	2,328
Total	111,007

Source: Practice cost study, 31 December 1999

2.11 General surgery

2.11.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	54,723
Occupancy costs	24,434
Office expenses	16,528
Other practice costs	9,166
Professional costs	9,598
Motor vehicle expenses	8,578
Working capital expenses	7,228
Total practice cost excluding direct costs and PII	130,255
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	12,623
Total professional indemnity insurance	17,446
Total	147,701

Source: Practice cost study, 31 December 1999

2.12 Intensive care

2.12.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	9,410
Occupancy costs	2,794
Office expenses	7,108
Other practice costs	2,133
Professional costs	8,400
Motor vehicle expenses	8,578
Working capital expenses	4,070
Total practice cost excluding direct costs and PII	42,493
Professional indemnity insurance – overhead	6,976
Professional indemnity insurance – procedural	-
Total professional indemnity insurance	6,976
Total	49,469

Source: Practice cost study, 31 December 1999

2.13 Neurology

2.13.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	54,723
Occupancy costs	24,961
Office expenses	15,577
Other practice costs	8,680
Professional costs	9,329
Motor vehicle expenses	8,578
Working capital expenses	7,196
Total practice cost excluding direct costs and PII	129,044
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	522
Total professional indemnity insurance	5,345
Total	134,389

Source: Practice cost study, 31 December 1999

2.14 Neurosurgery

2.14.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	54,723
Occupancy costs	24,422
Office expenses	15,924
Other practice costs	8,709
Professional costs	9,525
Motor vehicle expenses	8,578
Working capital expenses	7,228
Total practice cost excluding direct costs and PII	129,109
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	22,946
Total professional indemnity insurance	27,769
Total	156,878

Source: Practice cost study, 31 December 1999

2.15 Obstetrics and Gynaecology

2.15.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	58,843
Occupancy costs	27,564
Office expenses	17,995
Other practice costs	9,615
Professional costs	9,154
Motor vehicle expenses	8,578
Working capital expenses	7,291
Total practice cost excluding direct costs and PII	139,040
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	25,469
Total professional indemnity insurance	30,292
Total	169,332

Source: Practice cost study, 31 December 1999

2.16 Ophthalmology

2.16.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	93,555
Occupancy costs	38,687
Office expenses	22,579
Other practice costs	26,024
Professional costs	9,435
Motor vehicle expenses	8,578
Working capital expenses	15,482
Total practice cost excluding direct costs and PII	214,340
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	13,454
Total professional indemnity insurance	18,277
Total	232,617

Source: Practice cost study, 31 December 1999

2.17 Orthopaedic surgery

2.17.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	54,723
Occupancy costs	28,397
Office expenses	16,528
Other practice costs	9,372
Professional costs	10,005
Motor vehicle expenses	8,578
Working capital expenses	7,321
Total practice cost excluding direct costs and PII	134,924
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	22,105
Total professional indemnity insurance	26,928
Total	161,852

Source: Practice cost study, 31 December 1999

2.18 Paediatric medicine

2.18.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	54,723
Occupancy costs	28,940
Office expenses	15,852
Other practice costs	8,329
Professional costs	8,864
Motor vehicle expenses	8,578
Working capital expenses	6,884
Total practice cost excluding direct costs and PII	132,170
Professional indemnity insurance – overhead	4,810
Professional indemnity insurance – procedural	-
Total professional indemnity insurance	4,810
Total	136,980

Source: Practice cost study, 31 December 1999

2.19 Paediatric surgery

2.19.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	54,723
Occupancy costs	24,434
Office expenses	16,441
Other practice costs	9,166
Professional costs	9,190
Motor vehicle expenses	8,578
Working capital expenses	6,766
Total practice cost excluding direct costs and PII	129,298
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	10,863
Total professional indemnity insurance	15,686
Total	144,984

Source: Practice cost study, 31 December 1999

2.20 Plastic surgery

2.20.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	54,723
Occupancy costs	29,083
Office expenses	16,719
Other practice costs	8,882
Professional costs	10,480
Motor vehicle expenses	8,578
Working capital expenses	7,691
Total practice cost excluding direct costs and PII	136,156
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	20,604
Total professional indemnity insurance	25,427
Total	161,583

Source: Practice cost study, 31 December 1999

2.21 Psychiatry

2.21.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	46,485
Occupancy costs	17,342
Office expenses	13,345
Other practice costs	5,832
Professional costs	9,247
Motor vehicle expenses	8,578
Working capital expenses	5,496
Total practice cost excluding direct costs and PII	106,325
Professional indemnity insurance – overhead	6,109
Professional indemnity insurance – procedural	-
Total professional indemnity insurance	6,109
Total	112,434

Source: Practice cost study, 31 December 1999

2.22 Radiation oncology¹

2.22.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	429,290
Occupancy costs	96,492
Office expenses	132,505
Other practice costs	70,262
Professional costs	10,439
Motor vehicle expenses	8,578
Working capital expenses	28,863
Total practice cost excluding direct costs and PII	776,429
Professional indemnity insurance – overhead	6,541
Professional indemnity insurance – procedural	-
Total professional indemnity insurance	6,541
Total	782,970

Source: Practice cost study, 31 December 1999

2.23 Rehabilitation medicine

2.23.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	54,723
Occupancy costs	23,717
Office expenses	16,045
Other practice costs	8,316
Professional costs	8,906
Motor vehicle expenses	8,578
Working capital expenses	6,271
Total practice cost excluding direct costs and PII	126,556
Professional indemnity insurance – overhead	2,366
Professional indemnity insurance – procedural	-
Total professional indemnity insurance	2,366
Total	128,922

Source: Practice cost study, 31 December 1999

2.24 Renal medicine

2.24.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	54,723
Occupancy costs	24,853
Office expenses	16,243
Other practice costs	8,228
Professional costs	8,994
Motor vehicle expenses	8,578
Working capital expenses	7,658
Total practice cost excluding direct costs and PII	129,277
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	-
Total professional indemnity insurance	4,823
Total	134,100

Source: Practice cost study, 31 December 1999

2.25 Rheumatology

2.25.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	54,723
Occupancy costs	24,961
Office expenses	15,281
Other practice costs	8,680
Professional costs	9,123
Motor vehicle expenses	8,578
Working capital expenses	6,271
Total practice cost excluding direct costs and PII	127,617
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	-
Total professional indemnity insurance	4,823
Total	132,440

Source: Practice cost study, 31 December 1999

¹ The model practice for radiation oncology was developed using a different methodology from that used for the other specialties (see Chapter 1, Section 1.3).

2.26 Thoracic medicine

2.26.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	54,723
Occupancy costs	24,853
Office expenses	18,392
Other practice costs	8,601
Professional costs	8,952
Motor vehicle expenses	8,578
Working capital expenses	9,046
Total practice cost excluding direct costs and PII	133,145
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	1,732
Total professional indemnity insurance	6,555
Total	139,700

Source: Practice cost study, 31 December 1999

2.27 Urology

2.27.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	54,723
Occupancy costs	26,812
Office expenses	16,773
Other practice costs	8,753
Professional costs	9,765
Motor vehicle expenses	8,578
Working capital expenses	8,153
Total practice cost excluding direct costs and PII	133,557
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	13,404
Total professional indemnity insurance	18,227
Total	151,784

Source: Practice cost study, 31 December 1999

2.28 Vascular surgery

2.28.1 Summary of resources and costs per doctor

Resource category	General Overhead \$
Wages and staff costs	54,723
Occupancy costs	24,434
Office expenses	16,644
Other practice costs	9,785
Professional costs	9,598
Motor vehicle expenses	8,578
Working capital expenses	7,691
Total practice cost excluding direct costs and PII	131,453
Professional indemnity insurance – overhead	4,823
Professional indemnity insurance – procedural	12,437
Total professional indemnity insurance	17,260
Total	148,713

Source: Practice cost study, 31 December 1999

3 Costing principles

This chapter explains the cost categories that are reported in the resource profiles of each of the specialties and the principles used to determine the costs incorporated into the model practice.

All financial information collected from doctors participating in the study was taken from their financial statements of 30 June 1997. Where possible, all benchmark data related to the 30 June 1997 year. Where benchmarks and survey data related to other financial periods they were adjusted back to 30 June 1997, using an appropriate index, where it was considered necessary. All costs of resources included in this report have since been adjusted to 31 December 1999 values.

Practice costs are broken down into two main categories:

- direct costs
- general overhead (or indirect) costs.

3.1 Direct costs

For the purpose of this study we defined direct costs as those costs that can be readily applied to diagnostic tests and other procedures delivered in-rooms, but which cannot be delivered using the general overhead resources allocated in the model practice. Our approach was to identify individual MBS items that require a direct cost component and then cost that component separately and in addition to the general overhead costs.

The following resources were used in the determination of direct costs for the model practice:

- technical staff such as nurses or technicians
- dedicated equipment required for specific MBS items
- premises or floor space dedicated to undertaking work covered by specific items
- consumables required to deliver the specific MBS item, eg dressings.

A detailed analysis of the costing of the direct cost items is provided in Volume 3.

3.2 General overhead costs

General overhead costs are those costs that cannot be readily identified with the delivery of a specific consultation, diagnostic test or procedure, and should be shared across all services. They include such costs as wages and rent. Through our site visits, we identified categories and types of general overhead costs. We grouped these into eight major categories for simplicity:

- wages and staff costs
- occupancy costs
- office expenses
- other practice costs
- professional costs
- motor vehicle expenses
- professional indemnity insurance (PII)²
- working capital.

3.2.1 Wages and staff costs

This category includes all costs relating to employing staff in the practice. The costs were determined based on our understanding of the staffing needs of individual practices, which vary with the level of activity of the practice (as well as with the number of doctors within a practice). We calculated the level of staff resources required for the model practice on a full-time equivalent basis. These levels and the method used to determine staffing costs are detailed in Chapter 4.

Wages and staff costs include the following on-costs:

- annual leave
- superannuation
- long service leave
- workers compensation insurance
- training.

Annual leave

This cost was based on four weeks leave for staff per year. The cost has been accounted for in the staffing structure of each model practice.

Superannuation

This cost was based on the minimum superannuation guarantee contribution rate set by the Commonwealth Government for the year ended 30 June 1997. The current rate at 31 December 1999 was 7% of gross wages.

² PII is also treated as a direct cost. Our treatment of PII is discussed in Volume 1, Section 3.2.7.

Long service leave

This cost was based on staff accruing 12 weeks leave after 10 years of service. This equates to 2% of gross wages per year.

Workers compensation

This cost was based on advice from insurance companies and was set at 0.5% of gross wages.

Training

Expenditure on staff training was not commonly observed in the site visits. An allowance of \$186 per employee was included in the model practice to cover the cost of a minor course per year.

3.2.2 Occupancy costs

Occupancy costs include all costs related to the premises in which the doctor practises, including:

- rent
- security
- cleaning, laundry and waste disposal
- electricity and gas
- contents and public liability insurance
- magazines.

Rent

Doctors commonly own the premises where they practise, but there is a large amount of discretion in their actual financial arrangements. To establish a reasonable cost, we removed variations caused by this discretion. To do this we assumed that all doctors are tenants in their rooms on an arms-length basis, and we derived a reasonable rent cost using independently determined commercial rents.

The level of rent resources and the method adopted to determine rent costs are detailed in Chapter 5.

Security

This covers the cost of operating a back-to-base alarm system. The cost of this service was based on quotes from a number of national security firms.

Cleaning

The cost of cleaning services was based on a commercial cleaning company performing the service. We allocated \$15 per square metre for cleaning.

Laundry

Laundry expenses varied significantly between specialties. We based this cost on study results.

Waste disposal

These expenses cover maintaining a sharps removal service. We based this cost on a fortnightly service from a national waste removal service.

Electricity and gas

These are the costs of lighting, heating and running rooms and any machines and equipment. Expenses varied between location and specialties. A straight average of these costs across specialties was used as the basis of this cost category. We benchmarked these to the Property Council of Australia³ costs for this category.

Contents and public liability insurance

The provision of insurance to cover theft, fire and other damage to the property, plant and equipment of the practice was calculated based on quotes from national insurance firms and the level of property, plant and equipment in the model practice. Public liability insurance was based on a quote for a \$10 million policy.

Magazines

These expenses cover the provision of reading material in waiting rooms. We based this cost on two subscriptions to weekly publications.

3.2.3 Office expenses

Office expenses include all costs related to running an office facility within a medical practice. Generally these are the costs associated with the reception and billing functions, but also include related expenses such as accounting fees. Our approach to these expenses was to use an average of the study doctors, excluding zero and other clearly erroneous data, to determine a model practice value. Where other more specific benchmarks were available, we used these to determine costs (eg bank charges were calculated by reference to the number of transactions per year).

³ Property Council of Australia Limited, *Benchmarks 1998, Survey of operating costs – Canberra Office Buildings*, Canberra, 1998.

This category includes the following expenses:

- accounting and professional fees
- advertising and promotion
- bank charges
- computer consumables
- postage, printing and stationery
- repairs and maintenance
- telephone and communications
- sundry expenses.

In the following paragraphs, we discuss each of these expenses and any relevant issues affecting our treatment of them.

Accounting and professional fees

The business structure for medical practices that were generally seen in the study comprised a service trust to run the administration functions, and an entity which employs the doctor (commonly a company).

Many doctors choose to adopt this multi-entity structure to operate the entire practice, rather than a single entity such as a partnership, company, trust or individual. There are three main reasons for doing this:

- superannuation benefits – the doctor gains a full tax deduction for superannuation payments, rather than a proportion, as would be the case if the doctor was self-employed
- cash-flow benefits – by being employed by a separate legal entity the doctor is able to take advantage of the PAYE tax payment system and thus avoid the problems associated with planning for large quarterly provisional tax payments
- tax minimisation benefits – by adopting entities such as companies and/or discretionary trusts, doctors are able to spread their income to entities or associated people with lower marginal tax rates than themselves. This can often substantially reduce the overall tax payable by the doctor.

Our approach to reimbursing doctors who adopt a multi-entity structure considers not only the costs incurred by the doctor to run the structure, but also the benefits flowing to the doctor from that structure. The model practice reimbursement for accountancy fees is therefore not set at a level that will necessarily fully reimburse doctors for their actual costs of accountancy fees. However, the benefits received by the doctor in the form of tax savings and additional superannuation deductions more than offset these additional costs.

Another issue regarding accountancy fees is the scope of work performed by the accountants. Most professional accountancy practices charge fees on the basis of time incurred. Factors that influence the time taken include the complexity of the assignment (including group structure) as well as the quality of the information and records presented. As we have allocated the model practice a competent administrative person as well as a modern computerised accounting system, we are assuming the records presented to the accountants will be of high quality (ie reconciled cashbook and bank account), requiring little investigation of discrepancies or errors.

The introduction of the Goods and Services Tax (GST) and the New Business Taxation System in Australia on 1 July 2000 could have an impact on the ongoing level of accounting fees paid by the model practice.

Advertising and promotion

These expenses cover advertising in the Yellow Pages, but also include newspaper advertising where there are changes of address, changes in hours of operation and partnership changes.

Bank charges

Bank charges cover all bank fees including merchant facilities for acceptance of credit card payments, and include taxes on various bank transactions. The tax amounts vary in proportion to activity levels and are influenced by the frequency, value and type of transactions as well as other factors such as loans with the financial institution in question and the type of account chosen.

Computer consumables

These are the expenses associated with hardware and software maintenance, minor repairs, paper costs and disks, printer toner, inks. These costs are frequently classified as postage, printing and stationery in the accounts of some practices. However, as the study showed a clear trend towards the greater use of computers for practice administration, as well as for more clinically related purposes such as CME, we included an allocation for the annual cost of practice management software as well as an allowance for consumables and minor repairs.

Postage, printing and stationery

These expenses represent the costs of providing all items of stationery and the costs of sending bills and letters to patients. The study was expected to show that billing frequency increased the costs of procedural specialists more than those of general practitioners and consulting physicians; however, this was not evident. The model practice is consistent in the costs allocated across similar specialties and considers the impact of variation in activity level.

Repairs and maintenance

We allocated an amount to cover minor repairs and maintenance on office equipment. The model practice contains an annual allowance of \$516 per doctor for repairs and maintenance. 20% of this annual allowance is related to IT maintenance. This means an allowance of \$103 for IT maintenance costs. This is a fair allowance given the impact of the warranty period that accompanies new hardware purchases.

Telephone and communications

These are the costs of telephone rental and calls, Internet and email costs, paging services and fax machines. Home telephone rental costs and a proportion of home call costs are also included. These costs were based on study data.

Sundry expenses

This consists of all expenditure not separately classified. Items include tea, coffee and refreshments for staff and patients, petty cash reimbursements, etc. An allowance of \$1,342 was included to cover these expenses.

3.2.4 Other practice costs

This category covers the following expenses:

- medical supplies
- depreciation
- bad debts.

In the following paragraphs, we discuss each of these expenses and any relevant issues affecting our treatment of them.

Medical supplies

Medical supplies include all consumable items of a clinical nature (such as dressings, syringes and pharmaceuticals), and some consumables used for direct cost items that it is impractical to allocate to an individual MBS item as a direct cost (eg dressings for minor burns).

Depreciation on fixtures in a practice

An active asset of a medical practice should be written down over its estimated useful life. Accounting principles define the portion of an asset that is consumed in a year as 'depreciation'.

The major issues we considered in determining how to account for the depreciation cost of equipment in a practice were:

- the cost assigned to the equipment, ie new, old, replacement
- the method of depreciation, ie straight line, diminishing value or other
- the rate of depreciation, ie tax or accounting.

A factor common to all physical assets held on a long-term basis is that their useful lives decline over time. Factors that can contribute to this decline are:

- wear and tear
- technical obsolescence
- commercial obsolescence.

Technical and commercial obsolescence occurs regardless of wear and tear.

Australian Accounting Standard AAS 4⁴ determines the useful life of an asset as:

- the potential physical life ... the period of time over which the asset can be expected to last physically, at a projected average rate of usage and assuming adequate maintenance*
- the potential technical life ... the period of time over which the asset can be expected to remain efficient having regard to technical obsolescence*
- the expected commercial life of an asset, corresponding to the commercial life of its product or output.*

Clause 4.4.3 of AAS 4 states:

The basis for calculating depreciation ought to be appropriate to the nature of the respective assets and their expected use. The basis chosen is that which best reflects the underlying physical, technical, commercial and, where appropriate, legal facts.

Using the above principles and determinations, we assigned useful lives to the individual assets of the model practice.

We then applied depreciation rates on a straight-line basis over the useful life of each asset. The straight-line basis ensured that an equal amount of expense per year was recorded.

Australian Taxation Office (ATO) rates for depreciation of assets such as furniture and computer systems are higher than the rates ordinarily used to determine the useful lives of assets. The reason for the ATO rates is to give businesses a greater tax deduction for asset acquisitions to encourage new investment in business assets.

ATO rates do not give a reasonable depreciation rate when one considers the economic life of the assets of the medical practice. The standard items of equipment have considerably longer useful lives than the ATO rates show, and for that reason we chose not to use the ATO rates, but rates based on our understanding of the useful lives of the various types of equipment.

⁴ Standards are developed jointly by the Australian Accounting Research Foundation, its Boards and the Australian Accounting Standards Board.

Computer software

For the purpose of this study, we treated computer software as any other fixed asset. Given technological changes in software, we determined that this asset should be written off over a period of three years.

Bad debts

An allowance of \$516 for bad debts expense is included in the model practice of all specialties. Radiation oncology was an exception to this rule based on the specific circumstances of that specialty.

3.2.5 Professional costs

Professional costs relate to the professional qualification of the doctor and the costs incurred to maintain and enhance that qualification. These costs typically include membership fees to professional bodies as well as CME expenses.

Further details of the assessment and calculation of membership of professional bodies and CME are in Chapters 7 and 8 respectively.

Professional costs also include income protection insurance, which was based on the average costs observed across all specialties during the study.

3.2.6 Motor vehicle expenses

Motor vehicle expenses include all costs of owning and running a motor vehicle. We accepted that the general overhead costs in the model practice must include a motor vehicle to satisfy the operational needs of the practice. The choice of motor vehicle for the business is a matter for the doctor's discretion. It is not possible to select one vehicle that will satisfy all doctors, but the vehicle must represent safe and reliable transport. In an effort to standardise the cost (and reduce the cost imposition of the discretion), a specific vehicle was nominated for the model practice: the Holden Commodore.

In the NRMA guide, *Vehicle Operating Costs, Passenger Cars and Light Commercial*⁵, a Holden Commodore has the following business costs per kilometre⁶:

Depreciation	41.33
Interest	14.33
Registration and insurance	10.01
Fuel and oil	10.81
Tyres	1.25
Service and maintenance	3.96
Total	81.70 cents /km

An annual usage of 15,000 kilometres (as used in the NRMA guide) using this rate would cost \$12,255.

⁵ NRMA, *Vehicle Operating Costs, Passenger Cars and Light Commercial*, 1997.

⁶ These costs per kilometre have been indexed to 31 December 1999.

In calculating the model practice cost of a motor vehicle, we considered the level of business and private usage and for consistency determined that only the business proportion of the costs should be included.

From the study data, we established percentages of business usage. There was a high degree of consistency, in that business usage claimed was generally 70%. We therefore calculated the total business proportion of motor vehicle expenses as \$8,578, being 70% of \$12,255. In our calculation we ensured that costs such as depreciation and interest were not included elsewhere in the general overhead costs, ie in our separate calculation of depreciation or working capital.

We acknowledge that this approach will not recover actual business vehicle costs for many practices. Many doctors have a higher usage level than has been provided for in the model practice and others have little or no use for a business vehicle. Nevertheless, the amount allocated in the model practice identifies the motor vehicle cost necessary for a reasonably efficient practice based on the functional requirements of that practice.

3.2.7 Professional indemnity insurance

The PII premium is one of the major differentiating costs between specialty groups. Doctors both within and across specialty groups incur widely varying PII rates. The major differences are:

- between specialty groups in Australia
- within specialty groups practising in different States
- within the same specialty group in the same State depending on the individual circumstances of the doctor (eg activity profile)
- between insuring bodies that may have different premiums available for an individual doctor and also may offer classifications that do not allow comparison with the MBS groupings or other insurers.

This variability creates significant problems when attempting to apply a single PII cost component to MBS items that are common to doctors across different specialties in all States. The PII premiums represent a significant portion of total practice costs. It is therefore important to identify the most appropriate level of PII to be reimbursed per specialty and to direct this reimbursement to those who incur the costs. The problem is further compounded by the multiplicity of State/Territory arrangements with certain categories of doctors, which often include partial State/Territory financing of the doctors' PII liability. However, because this study is premised on 100% MBS activity, it has been assumed that each doctor is responsible for meeting PII costs personally.

After consideration of the drivers of PII premiums and the degree of risk-sharing by public hospitals, the Board has determined that:

- the reimbursement of PII will be on the basis of a weighted average of premiums across Australia, with payment through the MBS system
- there will be a differential process of PII attribution for consultations and procedural items.

Weighted average of PII premiums

The weighted average method allows a single premium value to be derived by combining State-by-State premiums and State-by-State numbers of doctors in each specialty. The method arrives at a reimbursement that returns the PII paid for all doctors. To the extent that their MBS activity profiles are aligned to that of the model practice, doctors with higher than average premiums will not receive full reimbursement and those with low premiums will receive more than their actual payments. Table 3.1 shows for each specialty the PII premium of the predominant PII provider in each State and the Australia-wide weighted average.

Table 3.1 State PII premium and Australia-wide weighted average by specialty

	NSW	Vic	Qld	WA	SA	Tas	Total doctors	Weighted average
	\$	\$	\$	\$	\$	\$		\$
Anaesthetics	15,450	13,000	9,750	9,500	10,000	6,650	1,793	12,995
Cardio-thoracic surgery	20,414	22,000	14,350	15,750	10,500	7,800	73	19,087
Cardiology	5,950	12,000	4,500	5,550	6,400	7,800	447	7,780
Dermatology	5,033	12,000	4,250	15,750	4,600	5,850	276	7,226
ENT surgery	22,000	22,000	14,350	15,750	10,500	6,650	298	18,368
Gastroenterology	4,781	15,000	8,550	7,800	6,400	5,850	335	8,428
General medicine	4,781	5,100	4,250	5,550	4,600	4,100	1,542	4,823
General practice	2,375	2,500	2,150	2,350	2,160	1,900	20,828	2,328
General surgery	22,000	18,000	14,350	15,750	14,600	6,650	985	17,446
Intensive care	5,950	11,000	4,250	5,500	10,500	4,100	168	6,976
Neurology	4,781	5,100	4,500	5,550	4,600	4,100	275	5,345
Neurosurgery	41,400	22,000	24,500	15,750	18,600	7,800	99	27,769
Obstetrics and Gynaecology	41,400	27,000	24,500	32,000	17,700	11,050	973	30,292
Ophthalmology	21,435	22,000	14,350	9,500	14,600	7,800	692	18,277
Orthopaedic surgery	41,400	22,000	24,500	15,750	17,100	7,800	638	26,928
Paediatric medicine	4,781	5,100	4,250	5,550	4,600	4,100	723	4,810
Paediatric surgery	18,516	18,000	13,900	15,750	10,500	6,650	65	15,686
Plastic surgery	34,250	27,000	23,500	15,750	14,600	7,800	209	25,427
Psychiatry	5,233	6,900	4,500	5,550	4,600	5,850	1,870	6,109
Radiation oncology	4,781	11,000	4,250	7,800	6,800	5,850	122	6,541
Rehabilitation medicine	2,375	2,500	2,300	2,350	2,000	4,100	151	2,366
Renal medicine	4,781	5,100	4,500	5,550	4,600	4,100	149	4,823
Rheumatology	4,781	5,100	4,500	5,550	4,600	4,100	183	4,823
Thoracic medicine	4,781	12,000	4,500	5,550	6,400	5,850	239	6,555
Urology	22,000	22,000	14,350	15,750	10,500	7,800	197	18,227
Vascular surgery	22,000	18,000	14,350	15,750	10,500	6,650	112	17,260

Source: Specialty classification and doctor populations – AIHW⁷

Note. PII premiums current as at August 1999.

⁷ Australian Institute of Health & Welfare, *Medical Labour Force 1997*, AIHW cat. No HWL 13, AIHW, Canberra, 1999 (National Health Labour Force Series).

Differential PII attribution between consultation and procedures

Procedures attract a higher proportion of PII premiums than consulting activities. The PII attribution methodology therefore allocates a standardised portion of the total weighted average PII to the general overhead of the model practice (to cover all consulting and procedural items), with the balance allocated across only the procedural items delivered by that specialty.

A number of specialty groups have no procedural PII component. In these cases we included the total PII premium of that specialty in the general overheads of the model practice. These specialties are:

- anaesthetics
- general medicine
- general practice
- intensive care
- paediatric medicine
- psychiatry
- radiation oncology
- rehabilitation medicine.

We identified general medicine as the specialty which represented a 100% consulting practice (ie no procedural items). We used the PII premium of general medicine as the base amount for consulting included in the general overhead of the model practice.

For all other specialties the total PII premium therefore comprises two components:

- a nominal 'overhead' amount of \$4,823 (equivalent to a general physician)
- the remaining 'procedural' PII (equivalent to total PII less the overhead amount).

The 'overhead' PII is allocated through the general overhead costs in the same way as all other overhead costs and is recovered on the basis of the doctor's time. The overhead PII is recovered over all items billed by the doctor.

The 'procedural' PII is allocated over the specialty's procedural items only, based on the 'dominant group' principle (this is explained in Volume 4, Section 1.7.2.).

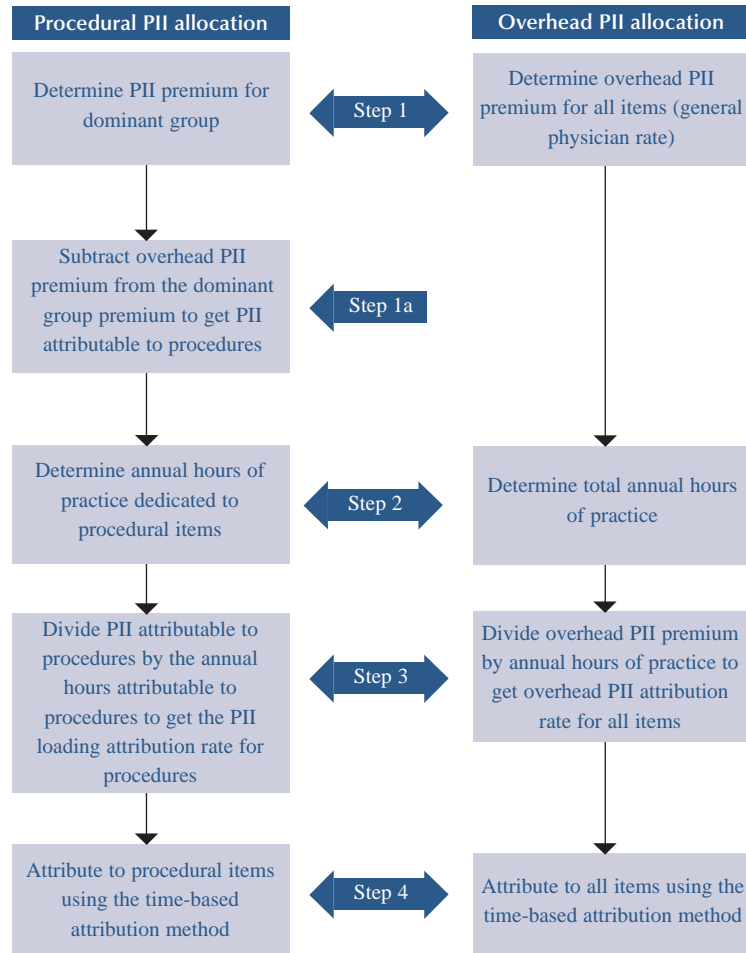
This process is represented by the formulas in Figure 3.1.

Figure 3.1 Formulas used to calculate PII attribution rate

Formula 1– Overhead PII attribution rate per hour = $c \div n$			
Formula 2 – PII attribution rate for procedures = $(t - c) \div p$			
where:	c	=	the consulting component of the PII premium (ie \$4,823)
	n	=	the number of practising hours per year
	t	=	the total PII premium
	p	=	$n - r$
	r	=	time taken for consulting items in model activity profile

The process of allocating PII to procedural items is illustrated in Figure 3.2.

Figure 3.2 PII attribution process for overhead PII and procedural loading



Example of PII attribution

We used general surgery to illustrate the application of the PII attribution methodology in Table 3.2. The following facts form the basis for the attribution example:

- general surgery PII rate: \$17,446
- consulting PII rate (general medicine): \$4,823
- annual hours of practice: 1,840
- hours delivering consultation items: 1,090
- hours delivering procedures: 750.

Table 3.2 Example of PII attribution to procedural items

	Procedural PII allocation	Overhead PII allocation	Total PII
Step 1			
Determine PII premium of the dominant group	\$17,446	\$4,823	
Step 1a			
Subtract overhead PII from total PII premium	(\$4,823)	N/A	
Total procedural PII	\$12,623	N/A	
Step 2			
Determine annual hours of practice/hours performing procedures	750	1,840	
Step 3			
Divide overhead/procedural PII by the hours of operation (or hours spent delivering procedures) to give hourly recovery rate	\$16.83	\$2.62	
Step 4			
Attribute PII to items using the time-based attribution method, as follows:			
■ 15 minute item	\$4.21	\$0.66	\$4.87
■ 30 minute item	\$8.42	\$1.31	\$9.73
■ 60 minute item	\$16.83	\$2.62	\$19.45
■ 120 minute item	\$33.66	\$5.24	\$38.90

Source: Practice cost study, 31 December 1999

The example in Table 3.2 illustrates the differential method of attributing PII and shows both the procedural and overhead components of the total PII attribution. The extent to which a doctor recovers the total cost of the annual PII premium will depend on the doctor's relative mix of consultation and procedural items.

Obstetrics and Gynaecology

The Board decided that the PII attribution methodology should be modified in relation to obstetrics and gynaecology (O&G). The issue of how to deal with the high PII premiums in obstetrics, which attract the highest premiums of any specialty – in the order of \$30,000 per year (ranging from \$11,050 in Tasmania to \$41,400 in New South Wales) – presents a number of problems for PII attribution. The high premium in O&G is caused by the obstetrics practice and the associated risks. O&G specialists who do not deliver babies have the much lower premium of the general surgeons (\$17,446) when they only perform gynaecological surgery.

The Board decided that the delivery items should have a loading equivalent to the difference between the obstetrics PII premium and the gynaecology premium. If we assume that there is a \$12,846 difference between the gynaecologists' premium and the obstetricians' premium, this will be allocated to the delivery item. Assuming the annual activity level for obstetrician deliveries is 200 items per year, this would result in a \$64.23 PII loading to that item.

Implications of the PII loading

The loading will flow on to every doctor who bills for the delivery item, irrespective of whether they actually incur the cost of the additional premium. The most likely occurrence of non-obstetricians billing this item is a doctor in general practice who performs obstetrics. These doctors generally pay an additional PII premium of \$5,000 per year to cover them for obstetrics, although a common situation in Australia is for these doctors to be reimbursed from the public hospital system.

Example of the PII loading

Assuming an annual activity level of 20 deliveries per year for obstetrics in general practice, an additional PII reimbursement of \$1,285 per year will be received by these doctors for a cost they do not incur. Doctors not receiving reimbursement from the public hospital system would be \$3,715 short of their actual PII premium cost. Table 3.3 illustrates this attribution.

Table 3.3 Examples of PII attribution for the delivery items

	Obstetrician	GP – hospital reimbursement	GP – no hospital reimbursement
Additional premium paid	\$12,846	\$5,000	\$5,000
Reimbursement	–	\$5,000	–
Delivery items	200	20	20
PII loading per item	\$64.23	\$64.23	\$64.23
MBS reimbursement	\$12,846	\$1,285	\$1,285
Gain/(shortfall)	–	\$1,285	(\$3,715)

3.2.8 Working capital

The model practice takes into account the cost of funding a reasonable amount of working capital. Working capital consists of:

- average cash at bank or bank overdraft
- average accounts receivable and payable
- average written-down value of plant and equipment.

The study data and data from the Australian Bureau of Statistics (ABS) survey on private medical practices⁸ provided an indication of the levels of working capital required in terms of current assets and liabilities. We also recognised that different doctors in different specialties have varying requirements for working capital.

⁸ Australian Bureau of Statistics, *Private Medical Practice Industry Australia 1994-95*, ABS catalogue No 8685.0, AGPS, 1997

This variation is particularly obvious when examining the accounts receivable balances of general practitioners compared with those of surgeons. The proportion of procedures to total items for a surgeon will also be translated to an equivalent percentage of fees rendered to account. This level of accounts receivable is greater than for general practitioners who effectively bill on a cash-on-delivery basis. Conversely, bulk-billing will carry all fees on an accounts receivable basis from the government – bearing little commercial risk, and payable within normal commercial terms of 30 to 60 days. The model practice for all specialties allows for six weeks' schedule fee revenue as the average accounts receivable balance.

As part of the study we established a list of general equipment expected for each practice type. The model practice assumes all equipment was purchased rather than leased or acquired on a hire purchase arrangement. In the calculation of working capital, we adopted a value for this equipment based on its average carrying value in the books of the practice over the course of its useful life. This was necessary as the cost, age and condition of equipment across different practices varies, and applying an exact percentage that would take into account all factors was not possible.

We determined an interest rate to apply to working capital based on the current risk-free rate, plus an allowance for risk:

- the 31 December 1999 10-year (long-term) Treasury bond rate of 6.96%
- plus 2.00% standard bank overdraft risk factor.

Our derived cost of funding of working capital (8.96%) was then applied to the total value of working capital required for a reasonably efficient practice by specialty.

3.3 Deputising medical services

In accordance with standard 1.1.6 of the Royal Australian College of General Practitioners (RACGP) Standards for General Practice⁹, a general practice should "ensure reasonable arrangements for 24-hour medical care for patients of the practice".

The standard includes a number of indicators for meeting this requirement:

- doctors provide their own 24-hour cover either individually or through a roster
- there are arrangements for co-operative after-hours care involving one or more local practices
- arrangements have been made with a deputising medical service (DMS) accredited according to RACGP standards for DMS
- arrangements are in place with a local hospital or other after-hours health care facility.

To meet the standard for 24-hour medical care, the model practice must either commit the doctor's time to a roster to regularly provide that service, or pay for the service from a DMS.

⁹ The Royal Australian College of General Practitioners, *Draft Standards for General Practices*, second edition, January 2000.

We investigated the costs associated with the DMS and identified a number of arrangements in various locations. The services and the associated fees are detailed in Table 3.4.

Our sources of information were discussions with the National Association of Medical Deputising Services (NAMDS), a provider in Sydney and a provider in Canberra.

Doctors pay monthly subscriptions to the DMS in order to be able to refer patients to an after-hours doctor. We understand that in most cases the fee structure is based on a two-tier system:

- level 1: participating
- level 2: non-participating.

A participating doctor commits to be part of the roster for the DMS for a maximum of nine 6-hour shifts per year. A non-participating doctor does not take part in the roster scheme and simply refers patients to the DMS.

Table 3.4 Estimated subscription rates of current DMS providers by State

City	Participating	Non-participating
Adelaide	Nil	Nil
Brisbane	\$100 per month	\$227 per month
Gold Coast	\$100 per month	\$227 per month
Hobart	Higher than Brisbane	Higher than Brisbane
Melbourne	\$75-80 per month	\$170-\$180 per month
Perth	\$50 per month	\$115 per month
Sydney	\$100 per month	\$227 per month
Canberra, Wollongong, Newcastle	All costs within 20% of the Brisbane fee	All costs within 20% of the Brisbane fee

Source: Practice cost study, 31 December 1999

The provider we contacted in Sydney has an existing fee structure of approximately \$240 per year. However, at 1 July 2000, the cost increased to approximately \$2,000 per year.

The provider we contacted in Canberra charges in the order of \$2,000 per year per doctor.

3.3.1 Incidence of usage of DMS

The general practices profile study conducted by Campbell Research & Consulting in December 1997¹⁰ provided the following details of after-hours arrangements.

Apart from having doctors on-call after 8pm during the week, practices used the following arrangements for delivering services to patients who usually attend the practice:

- 44% used a deputising or locum service
- 19% organised a roster with other practices or within their own practice

¹⁰ Campbell Research & Consulting, *The General Practices Profile Study – A national survey of Australian general practices*, final report prepared for the General Practice Branch, Department of Health and Family Services, December 1997.

- 14% had doctors from the practice seeing patients at a local hospital
- 5% provided referral to a 24-hour clinic
- 3% had no other service at all.

The figures quoted total only 85%. We were advised by Stephen Campbell, from Campbell Research & Consulting, that the remaining 15% consists of doctors who provide their own after-hours on-call arrangements. The statistics do not include those practices that provided their own after-hours arrangements.

The Campbell survey allowed for multiple answers to individual questions. The 44% therefore includes those practices that use deputising services in combination with other methods of after-hours care. Campbell also confirmed that the actual usage of deputising services was 44% of all Campbell study practices, not 52%, being 44% of 85%.

The Campbell report also states that 58% of metropolitan practices were using a DMS compared to less than 5% of any rural practice.

We also discussed with NAMDS its estimate of the percentage of doctors using its services. According to its figures, which are neither reportable nor verifiable, 75% to 80% of all full-time doctors use a DMS. Of those doctors, 12.5% are participating and 87.5% are non-participating.

Of the three possible DMS usage rates (44%, 58% and 75%-80%) discussed above, we used the Campbell rate of 44% in our calculations. Applying the Campbell figure of 58% of metropolitan practices would overstate the overall usage of the service as it ignores the low (less than 5%) usage rate of rural practices. Equally, the NAMDS figure (75% to 80% of all full-time doctors) is an estimate only.

Using the Campbell usage rate (44%) and on the current cost of such services, a reasonable allowance for the cost of the service can be determined by multiplying the annual cost by the rate of usage. Table 3.5 shows our method of calculating the cost of these services, using the two levels of costs collected.

Table 3.5 DMS cost calculation method

Item	Current cost level in Sydney	Costs in other centres
Annual cost doctor	\$2,724	\$2,040
Usage rate	44%	44%
Cost allocation	\$1,198	\$897

Source: practice cost study 31 December 1999

3.3.2 Practice Incentive Program

In August 1999, the Commonwealth Government announced the new Practice Incentive Program (PIP) funding formula for general practices providing high quality care. The PIP grants are 'per practice' rather than 'per doctor' grants.

Payments made through PIP target five aspects of general practice:

- information management/information technology
- after-hours care
- rural and remote practice
- teaching of medical students
- targeted incentives.

The new payment formula has several tiers of payments. Practices may qualify for any or all payments and all payments are cumulative. We analysed PIP data received from the Department of Health and Aged Care (the Department) as of May 2000 on PIP payments relating to after-hours care. As of May 2000 a total of 5,176 practices were registered for PIP payments. These practices represent approximately 77% of general practice patient coverage. Table 3.6 summarises information received on after-hours care by PIP practices.

Table 3.6 Incidence of DMS used by PIP practices

Category	After hours care provided by					Total
	DMS	Other practice	Local hospital	In-house	Other	
4,398 practices marked one category	2,192	624	376	1,189	17	4,398
751 marked two categories	186	165	195	205	-	751
27 marked three categories	4	9	9	5	-	27
Total	2,382	798	580	1,399	17	5,176
%	46.0%	15.5%	11.2%	27.0%	0.3%	100%

Source: Department of Health and Aged Care, May 2000

Where practices marked more than one category we spread the total evenly across the four categories of after-hours care. The table shows that 46% of PIP practices use a DMS for providing after-hours care, either as the sole provider or in conjunction with other methods. This supports the Campbell report figure of 44%.

Further PIP data provided by the Department (October 2000) shows that 50% of practices use a deputising service either alone or in conjunction with another method of after-hours care provision.

On average, the annual cost for a non-participating doctor in a DMS is approximately \$2,000 per year. After discounting for the 47% (mid-point between Campbell report 44% and revised PIP data 50%) usage of the service, the cost per doctor would be \$940 per year.

This cost is only applicable to general practice.

3.4 Business risk/profit in the context of resource-based schedule fees

The Board was unable to agree on whether business risk should be recognised through the application of a loading to MBS fees for specific items of service. This section presents the arguments for and against including business risk as a cost.

We considered the impact of business risk and return on investment in the context of the model practice. In particular, where the high cost of equipment was funded by the doctor (most commonly as a component of a direct cost item), we considered whether a percentage of that cost should be returned to the doctor to account for the risk involved with the purchase, especially where there is low doctor time.

Business risk or profit is not a practice cost. It is a reward arising from the running of a business and represents a return on the overall investment made in that business.

The extent of the return for an investor (as distinct from an employee) will reflect the risks involved; for example, a newly established doctor would have higher risks as they would have to build a patient or referral base, whereas an established doctor with patients and referral base in place would have a lower risk profile.

If the profit element, or risk, were considered part of the RVS, it would normally form part of remuneration. Doctors should be rewarded for the risks they take in setting up a practice as well as for the services they deliver. These same factors apply to most professionals in practice and if comparisons were made to their remuneration they would have the same components: that is, return on investment and salary.

There is a problem associated with doctors who have to invest in high-cost capital equipment to provide a medical service which might require only minimal doctor time; for example, equipment for diagnostic tests. To determine how they should be rewarded for that investment is a difficult issue: for example, in one specialty a doctor might be mainly consulting while another doctor in the same specialty might be delivering mainly diagnostic items with high-cost capital equipment. Were the RVS to set only one remuneration level for that specialty, the 'mainly diagnostic' (or procedural) doctor could be disadvantaged because they have engaged in a higher risk investment and receive no additional reward. However, the 'mainly consulting' doctor would argue that his or her professional liability exposure is greater and that he or she should therefore be rewarded accordingly.

We do not believe it is possible to substitute rates of return for the interest on working capital already allowed for in the practice cost study, as this would only confuse the two separate items. The practice cost study has allowed for the cost of borrowing to finance both the practice equipment and the working capital, which includes accounts receivable. This allowance defrays part of the risk of funding the business, even though the doctor would in most situations still personally guarantee any borrowing.

While we are of the view that return on investment is not a cost of practice, doctors who invest in high-cost capital equipment would expect a reward for the risk they take. The simplest method to account for this is to have a separate element of remuneration.

3.4.1 Different levels of business risk and corresponding rates

The Board requested that we investigate the matters to be considered in determining risk. We set out below the different aspects that go to make up an assessment of risk.

Unavoidable risk is the risk that arises from such things as changes in the world economy or tax reforms by Federal Government. This type of risk applies equally to all businesses regardless of the scale of the business or their industry.

Avoidable risk arises from matters specific to the individual company, such as technological changes that render equipment obsolete, and competition.

In our view a reasonable rate of return (considering that we have already allowed for borrowing in the model practice costs), would be in the range of 10% to 20% before tax and with allowances for specific aspects of a medical practice (such as patient rebates through the Medicare system). To overcome the issue of high-cost capital equipment investments, we believe a risk allowance should only be applied on the investment in equipment assets for direct cost items, as there is minimal risk on the accounts receivable funding.

Should the Board decide to include a component for risk, we recommend that a sliding scale of risk return based on the value of capital equipment be set, as set out in Table 3.7.

Table 3.7 Scale of risk return

Equipment value (net of grant funding)	Commercial risk rate	Discount applied	Risk rate
\$0 to \$50,000	10%	75%	2.5%
\$50,001 to \$100,000	15%	60%	6.0%
\$100,001 and over	20%	50%	10.0%

3.4.2 How the risk level is calibrated and quantified

The risk associated with a private medical practice is different from that of other commercial enterprises due to the effects of the reimbursement of patient fees through Medicare. In no other industry will the clients or customers of a business receive a reimbursement of 85% (or 75%) of the schedule fee for the service. Furthermore, the doctor can elect to 'bulk-bill' the service thereby requiring the patient to incur no cost at all. This leaves the doctor with an extremely risk-reduced environment within which to practise.

The risks associated with the acquisition of capital equipment still exist, however, as the doctor will still need to ensure that an adequate number of patients require the treatment the equipment provides. To take account of the reduced risk due to patient Medicare rebates, we estimated a rate for the commercial risk of an asset acquisition. We used our judgement to determine the discount based on the value of the equipment. The discount is weighted from lower value equipment with less risk, to higher value equipment with more risk.

3.4.3 Other considerations

In our view, risk reward should be considered as part of the RVS remuneration study using data contained in the practice cost study on direct cost items only where the doctor’s time is less than 15 minutes, and using a risk rating based on the capital cost of the equipment in Table 3.8.

Times for each item are being determined by the PRS and until these are available, we are not in a position to review which items will have less than 15 minutes doctor time and therefore eligible for the risk allowance.

Table 3.8 Risk rating based on value of equipment

Equipment value (net of grant funding)	Commercial risk rate	Discount applied	Risk rate
\$0 to \$50,000	10%	75%	2.5%
\$50,001 to \$100,000	15%	60%	6.0%
\$100,001 and over	20%	50%	10.0%

In considering the above, we took account of the following factors:

- the allowance of a ‘risk reward’ will further the gap between some specialties; eg, ophthalmology, dermatology and general practice
- whether some sort of grants mechanism could be introduced to offset the risk for doctors who invest in high cost equipment, eliminating the need for inclusion of ‘risk reward’ in the RVS
- what constitutes low doctor time; eg less than a standard consultation of 15 minutes.

As mentioned at the start of Section 3.4, the Board was unable to agree on the inclusion of business risk as a cost, and therefore our study has excluded this from the model practice. The AMA does not support the exclusion of business risk in the practice cost study. Both the AMA and the Department have made responses to our comments on business risk as a practice cost and the Board has requested that we include these in our report. These comments are attached as Appendix A.

3.5 Miscellaneous issues

A number of miscellaneous issues were addressed in this study. We set out below our position on each of the following issues:

- hyperbaric oxygen therapy
- impact of multiple services
- assistance at operations
- out-of-hours services including non-procedural items
- attendances at locations other than the doctor's rooms
- acupuncture
- contact lenses.

3.5.1 Hyperbaric oxygen therapy

The bulk of the current MBS services are provided in public hospitals. It was for this reason that, in consultation with the Board, we excluded hyperbaric oxygen therapy from the study.

3.5.2 Impact of multiple services

Items that fall under the definition of a multiple service item (as defined by Section 14.3 or Section T8.5 of the MBS explanatory notes) are discounted in payment.

The discounting of the Medicare reimbursement currently only applies to multiple surgical procedures. Discounting assumes that items performed in association with other items should require less time per individual item, which should result in reduced resource usage per case. It does not address the possibility of over-recovery of general overheads when a procedure is undertaken in-rooms at the same time as a consultation.

Activity-based costs related to patient administration should only be recovered once in each patient episode. Although the current rules do not apply to procedures undertaken in association with a consultation, such a rule could be developed for consultations and procedures undertaken as part of the one-patient episode.

The overall recovery of general overheads should be based on the time taken by the doctor to deliver the consultation and the procedure. When item times are developed, an appropriate allocation of time should be allowed for multiple services. The time must recognise and reflect the efficiencies associated with performing a procedure in conjunction with a consultation.

The impact of multiple services also needs to be addressed in the development of activity profiles to a full annual workload (in terms of hours) in those specialties where multiple services have a significant impact and can have the effect of distorting the total activity profile.

3.5.3 Assistance at operations

We have not been given advice from the PRS regarding the specialty groupings for these items. On a per-item basis, most of the assisting items are shared between doctors in general practice and general surgery. We do not believe the specialist cost level should be used, as the major differentiator of the practice costs is PII. Obviously this is set at the level of the surgeon, not the surgeon's assistant. On the basis of the initial data on dominant groups and the impact of PII, we recommended that the practice costs be set at the general practice level. However, this would include many costs that were not required if a doctor were a full-time assistant or a semi-retired doctor assisting at an operation.

3.5.4 Out-of-hours services including non-procedural items

An after-hours consultation or visit means an attendance on a public holiday, on a Sunday, before 8am or after 1pm on a Saturday, or at any time other than between 8am and 8pm on a week day not being a public holiday. Where a practice routinely conducts its business outside the hours quoted above, it is necessary for the emergency service to be initiated and delivered outside the hours normally observed by that practice for it to attract the relevant Medicare rebate¹¹.

The only specialty group that normally opens its practices outside the weekday working hours is general practice. We identified the following resources as being required to deliver emergency after-hours attendances:

- equipment (fully equipped medical bag)
- motor vehicle
- staff and other overhead costs (not specifically required at time of service delivery).

The resources required to provide emergency after-hours services are included in the model practice of general practice. They are included as general overheads, not as a direct cost. Importantly, the general overheads are completely covered by the defined annual working hours of the practice. Major costs that have been determined for a total year such as rent and staffing will not be affected by after-hours services. We have included an allowance for each doctor to cover the purchase of minor items of equipment, such as the medical bag. A motor vehicle is provided to each doctor in the model practice.

The method of attributing practice costs to items will be based on doctor time (ie the time taken for the doctor to deliver the service). The model general practice provides sufficient resources to maintain a practice for a doctor delivering 2,000 hours¹² of services per year. Practice costs are recovered on an average cost per minute; therefore any additional time spent by the doctor will recover an additional proportion of the total general overhead of the model practice, as with all other items. The practice costs associated with an emergency after-hours attendance would be marginal (less than the average). Therefore, where a doctor bills for an after-hours attendance, they will recover costs that are greater than the costs they incur.

¹¹ *Medicare Benefits Schedule Book*, Department of Health and Aged Care, AGPS, Canberra, November 1999

¹² Includes four weeks of locum time (160 hours).

3.5.5 Attendances at locations other than the doctor's rooms

There are a number of circumstances where a doctor sees a patient at a location such as a hospital, nursing home, institution or home. The costs associated with an attendance 'out-of-rooms' are adequately covered by the general overheads of the model practice.

As outlined in Section 3.5.4, the general overheads allow for the costs of a motor vehicle and include an allowance for each doctor to cover the purchase of minor items of equipment, such as the medical bag.

The doctor will recover the overhead costs associated with the out-of-rooms attendance based on the time they spend with the patient. The cost recovery is based on an average hourly rate. The MBS provides for a sliding scale of fees for attendance to more than one patient in an out-of-rooms episode. We support this approach to the extent that the total time taken for the attendances is representative of the fee after the discounting. This is largely a matter for the attribution phase of the RVS.

3.5.6 Acupuncture

The general overheads in the model practice include provision for sterilisation and a component of minor instruments. We were unable to identify any significant costs related to acupuncture that would necessitate a specific direct cost for this item.

3.5.7 Contact lenses

The instrumentation required for the fitting of contact lenses is already provided for in the overheads of the model ophthalmologist. As a result, a specific direct cost is not required for these items.

4 Staffing costs

This chapter explains the method used to determine the resource allocations for staffing a model practice. The method had to be able to analyse actual staff costs, both within each specialty and across a wide range of specialties. Such an approach was considered necessary to address the degree of discretion doctors have in selecting the number and type of staff they will engage and the salaries they will pay them.

Staffing is a major cost in most practices. In spite of this, we were unable to identify evidence of any previous systematic review of staffing levels or function across medical practices in Australia. Relatively few efficiencies from the use of new technology or process improvements implemented in other professions were observed in the medical practices visited in the study.

Staffing levels frequently appear to be based on historical levels – ie each doctor has an individual support person irrespective of the nature or level of activity. Further staffing is added to the base as the need arises. The activity in many practices included in the study varied greatly throughout a week or month. Fewer practices than expected made use of strategies such as sharing of resources to match staffing levels to activity, although the use of casual staff was evident.

Costs of staffing, like other costs, are influenced by income: the doctor's capacity to pay can affect both the extent of services sought and the price paid.

4.1 Developing the staffing profile for the model practice

We allocated staffing levels to specialty groups on the basis of the characteristics of each specialty. Resource requirements were defined and examined in relation to the level of MBS item activity for each specialty.

The study information was based on actual doctors, who in many cases did not spend all of their time in MBS-associated activity. Because the model practice was based on a doctor spending all their time delivering MBS activity, we needed to replace non-MBS activity (such as Visiting Medical Officer [VMO] work) with MBS activity. In doing this, we also increased the activity-driven costs to account for the increased level of activity.

In determining staffing levels, we took into account that they should:

- have been observed in practices participating in the study
- reflect the activity level variations within specialties
- reflect the other resources placed in the model practice such as computer-based billing and accounts systems
- reflect a reasonably efficient practice in terms of staff quality, competence and maturity
- be sufficient for the functions and activity levels in each specialty group.

Staffing levels are related to the activities that are generated by clinical and administrative activity. These activities include:

- reception
- patient billing
- patient liaison
- referral communication
- procedures booking and liaison
- management
- medical records
- nursing duties
- booking surgical assistants
- contacting anaesthetists
- practice management and bookkeeping
- technical service booking and co-ordination.

As all these functions are common across specialties, although in differing proportions, the method adopted for determining staffing levels was to choose a base that reflected a reasonable level for general practice and then vary this according to the needs of each of the other specialty groups.

4.1.1 Support staff activities

We set out below a brief discussion of the various support staff activities as we observed them in the study.

Reception

There was some variability in staff allocation for reception functions. The study data revealed that doctors believe they require a receptionist while consulting. However, this was not always reflected in practice, as at times, some general practitioners worked evening or weekend sessions without a receptionist.

Reception is a particularly good example of a function with the capacity for efficiencies based on size of practice. There were practices that had centralised the reception and patient accounts functions and had fewer than half a full-time equivalent (FTE) support person per doctor for consulting times.

Patient billing

Staff requirements for billing varied with both the activity through the practice and the complexity of the billing. Bulk billing in a consulting practice can be achieved with a minimum of resources. More complex billing, such as for hospital patients who are billed at discharge, or procedures undertaken in other facilities, requires more resources.

- Levels of staff for reception and billing
General practices observed in the study required 1.0 FTE employee for reception and billing functions for a 40-hour week. This was for a general practitioner who delivers 8,199 items per year at a rate of 4.1 patients per hour. Dermatology, ENT and ophthalmology are the only other groups to attain these levels of patient activity.
- Booking and organising endoscopy appointments as a direct cost attributed to the endoscopy items dominated by gastroenterologists.

A direct cost relating to the time taken by reception staff to book appointments and arrange the necessary patient preparation has been included as a direct cost in specific gastroenterology items.

Items 32090 (fiberoptic colonoscopy) and 30473 (oesophagoscopy) are the two most common endoscopy items of the alimentary tract and both are dominated by the gastroenterologists. Unlike surgical specialists, the bookings and counselling of patients for these items had to be made against the general patient activity in the rooms of a general physician. The typical gastroenterologist had a consulting load equivalent to a general physician's, which is double the load of the general surgeon.

A similar allocation for booking or preparatory counselling for surgeons was not considered appropriate as the in-rooms activity of surgeons was well below that of physicians. The organisation of patients for procedures was already covered by the staffing in the typical surgeon's practice allocation.

Patient liaison

General practitioners have high numbers of patient consultations per hour compared with most specialists. Only a small proportion (approximately 5%)¹³ of these patients are referred following the consultation. In the case of specialists, initial consultations involve a referral from a general practitioner. The referral process necessarily requires prior communication with the specialist's practice and the creation of patient records. Specialist practices have a higher proportion of new registrations, and these result in greater resource needs for records and hence reception staff time. This higher resource cost is offset by lower activity except for specialties such as dermatology, ENT surgery and ophthalmology.

Referral communication

Specialist practices generally prepare a letter to the referring doctor with every initial consultation. This involves considerable resource usage. Practices with annual item activity of 3,000 items will generate about eight hours of typing each fortnight. This observation was reinforced by the fact that several practices in the study contracted out their typing. These letters also generate cost and activity with postage and printing.

Procedures booking and liaison

In specialties with procedural activity, considerable work is generated by co-ordinating patients and other specialists such as anaesthetists and surgical assistants. Reception and other duties such as billing and preparation of letters are substituted for these activities while the doctor is out of rooms undertaking procedural work.

Management

All practices require administration and management, which is often carried out by the doctor personally. In acknowledgement of this, the model practice allocates one day a week (0.2 FTE) for practice management in the form of a professional practice manager. We used the ratio of one full-time practice manager for a five-doctor practice. This ratio reflects what was documented in the study and is supported by advice from a range of sources such as

¹³ An estimate based on the proportion of initial specialist consultations to general practice consultations according to Health Insurance Commission data.

practice managers involved in the study and other members of the Practice Managers' Association. The exception to this policy was anaesthetics, where one practice manager was allocated to the seven doctor practice in recognition of its different style of practice.

The allocation of the practice manager to each model practice allows each doctor to dedicate all their time in a 40-hour week to the delivery of MBS activity, rather than to practice management matters.

Medical records

Resource requirements for the management of medical records vary according to complexity and activity levels. In this case 'complexity' refers to the different file types and sources for indexing and retrieval. In low-activity specialties, the complexity of records is frequently high and in high-activity specialties, the complexity is frequently low. This appears to be the same for all specialty groups.

Nursing duties

Numbers of nursing staff employed varied greatly. The ABS survey data (ABS 1997) indicated that one in eight staff employed was a nurse. However, the data did not indicate the specific specialty groups where the nursing staff were most often employed.

The survey readily established that there was a need for nursing staff in practices that had in-rooms procedures requiring sterilisation and wound care. In these cases the nursing staff were in addition to existing staff. In many other cases the nursing staff were part of multi-skilled support staff and many were being employed and paid at the level of reception staff.

Discussions with practice managers and general practitioners led to the conclusion that nursing staff can perform a range of duties, but in a general practice of less than five doctors, activity levels do not warrant the inclusion of a full-time nursing resource. We have, however, included a 0.2 FTE nurse per doctor in the model general practice in addition to any nursing resource received from direct cost items.

4.1.2 Determining staffing levels based on activity levels

This section considers the differing activity levels of the specialty groups, in order to determine appropriate staffing levels for the model practice.

High levels of activity

The main basis of staffing is reception/administration coverage for 38 hours per week, 50 weeks per year. This is considered sufficient for a general practitioner who consults for 40 hours and has a nominal patient activity of 8,199 items per year.

Only high-activity specialties such as dermatology, ENT and ophthalmology attain the level of activity of a general practitioner. Because these high-activity specialties have similar levels of activity, together with other resource-intensive activities such as referral communication etc, they were allocated higher levels of staffing.

Average levels of activity for specialists

Specialists with annual levels of activity of 3,000 to 4,000 items should require similar levels of staffing to the general practitioner with 8,000 items per year. While these specialists have more complex activities than general practitioners, those activities are balanced with fewer numbers of patients and items.

Lower levels of activity

The groups that are low in absolute levels of item activity are anaesthetics, cardio-thoracic surgery and psychiatry. Psychiatrists, in particular, achieve efficiencies from sharing resources. They average less than one patient per hour and this allows sharing of reception and accounts staff. Their current item specificity does not allow differentiation between initial and subsequent consultation, but patients attend for more attendances than just the 'initial'. This reduces the time required for reception and accounts, as there is a single registration and subsequent visits require less documentation. Cardio-thoracic surgeons also have low overall item activity, and their needs for reception and accounts staff would be reduced as a result.

Final staffing levels

The study revealed that some variation in base staffing levels exists to account for occasional overtime, holidays and leave. Study data indicated that many specialists do not staff their rooms in periods of their own absence for annual leave. However, in the model practice we have provided an allocation for relief staff while permanent staff are on leave.

Table 4.1 identifies specific resources, links them to activity, and compares the levels required with those of the model two-doctor general practice. These assertions are based on the model activity profiles for each specialty and on discussions with doctors, practice managers, staff, nominees and Advisory Panel on Practice Costs (APPC) representatives. Further information on the role the APPC has played in the practice cost study is outlined in Volume 4, Section 1.6.

Table 4.1 Comparison of specialist staff resources with two-doctor general practice (based on activity)

Function	High activity specialty practice	Medium activity specialty practice	Lower activity specialty practice
Reception	Similar to general practice	Less than general practice	Considerably less than general practice
Billing and accounts	Greater than general practice	Similar to general practice	Less than general practice
Patient liaison	Greater than general practice	Greater than general practice	Less than general practice
Nursing	Greater than general practice	Less than or similar to general practice	Less than general practice
Management	Greater than general practice	Similar to general practice	Similar to general practice
Referral communication	Greater than general practice	Greater than general practice	Greater than general practice
Medical records	Similar to general practice	Less than general practice	Less than general practice
Procedure sessions organisation	Greater than general practice	Greater than general practice	Greater than general practice
Overall staffing	Higher than general practitioner	Similar to general practitioner	Less than general practitioner

Source: Practice cost study, 31 December 1999

The staffing levels in Table 4.1 are indicative of the levels that would be sufficient for a practice operating at the levels of activity set for the individual specialty groups. There is, of course, a great deal of discretion for the doctors to engage levels of staffing above or below those recommended in the model practice.

In Table 4.2 we have set out our approach to determining the final administrative and nursing staff levels for each type of specialty (ie low, medium or high activity levels) and for general practice. Staffing levels for radiation oncology and anaesthetics were not determined using this approach due to the size of the model practice in these specialties.

Table 4.2 Development of administrative/nursing staff profiles

	Medium activity specialty practice	Lower activity specialty practice	High activity specialty practice	General practice (high activity)
Base staff per doctor	1.0	1.0	1.0	1.0
Additional staff required	–	–	* 0.4	0.1
Leave coverage	0.1	–	0.1	0.1
Standard one-doctor practice	# 1.1	1.0	1.5	1.2
Two-doctor practice	N/A	2.0	N/A	2.4
Less: multi-doctor discount	N/A	0.2	N/A	** 0.1
Standard two-doctor practice	N/A	1.8	N/A	2.3
Three-doctor practice	N/A	3.0	N/A	3.6
Less: multi-doctor discount	N/A	0.3	N/A	** 0.3
Standard three-doctor practice	N/A	2.7	N/A	3.3
Four-doctor practice	N/A	N/A	N/A	4.8
Less: multi-doctor discount	N/A	N/A	N/A	** 0.5
Standard four-doctor practice	N/A	N/A	N/A	4.3

Source: Practice cost study, 31 December 1999

* dermatology has the highest annual activity, and has been allocated an additional 0.95 FTE

O&G has been allocated an additional 0.1 FTE for high activity ante-natal clinics

** when moving to multi-doctor practices, efficiency gains increase as the number of doctors in the practice increases

Table 4.3 sets out the overhead staff resources allocated for each model practice by specialty.

Table 4.3 Model practice staff resources by specialty

Specialty	No of doctors	Admin assistants	Nurse	Practice manager	Technician	Total staff
Anaesthetics	7	1.05	-	1.00	-	2.05
Cardio-thoracic surgery	3	2.70	-	0.60	-	3.30
Cardiology	1	1.10	-	0.20	-	1.30
Dermatology	1	1.70	0.75	0.20	-	2.65
ENT surgery	1	1.50	-	0.20	-	1.70
Gastroenterology	1	1.10	-	0.20	-	1.30
General medicine	1	1.10	-	0.20	-	1.30
General practice	1	1.00	0.20	0.20	-	1.40
General practice	2	1.90	0.40	0.40	-	2.70
General practice	3	2.70	0.60	0.60	-	3.90
General practice	4	3.50	0.80	0.80	-	5.10
General surgery	1	1.10	-	0.20	-	1.30
Intensive care	5	-	-	1.00	-	1.00
Neurology	1	1.10	-	0.20	-	1.30
Neurosurgery	1	1.10	-	0.20	-	1.30
Obstetrics and Gynaecology	1	1.20	-	0.20	-	1.40
Ophthalmology	1	1.50	-	0.20	0.50	2.20
Orthopaedic surgery	1	1.10	-	0.20	-	1.30
Paediatric medicine	1	1.10	-	0.20	-	1.30
Paediatric surgery	1	1.10	-	0.20	-	1.30
Plastic surgery	1	1.10	-	0.20	-	1.30
Psychiatry	2	1.80	-	0.40	-	2.20
Radiation oncology	4	4.50	2.00	1.00	# 24.00	31.50
Rehabilitation medicine	1	1.10	-	0.20	-	1.30
Renal medicine	1	1.10	-	0.20	-	1.30
Rheumatology	1	1.10	-	0.20	-	1.30
Thoracic medicine	1	1.10	-	0.20	-	1.30
Urology	1	1.10	-	0.20	-	1.30
Vascular surgery	1	1.10	-	0.20	-	1.30

Source: Practice cost study, 31 December 1999

includes radiation therapists and physicists

4.2 Quantifying wage rates

The rate of salary paid to support staff is an important factor in determining a reasonable allowance for staff costs. The study data indicated that significant variation in wage rates exists across locations and specialties. This section outlines the method we adopted to overcome this variation to ensure an adequate and representative level of wages for all staff categories.

Through the site visits and contact with specialty group nominees, we determined the following factors as the main drivers of wages and salary rates:

- classification of position (eg administrative assistant; practice manager)
- level of skills and qualifications required (eg diploma; degree; etc)
- responsibility level of position (eg supervisory responsibilities)
- experience (eg previous experience; current experience)
- award rates and minimum wages
- whether employee is at arms length to the doctor (eg spouse)
- location of practice (eg Sydney rates are generally higher)
- market conditions for employment in that area (eg high demand will drive up wage rates).

Our method for determining applicable wage rates was to compare study data to externally referenced rates in the relevant staffing classifications whenever possible. Sources of external information included:

- Federal and State award rates for administrative staff and nurses
- other benchmarks
 - reference to the ABS survey (ABS 1997) and Financial Management Research Centre (FMRC) benchmarks¹⁴
 - advice and market wage rates from employment agencies and the Practice Managers' Association.

We collected data from doctors across a wide spectrum of specialties and locations as a starting point for determining fair and reasonable rates. These preliminary values were then compared with award rates and other benchmarks to ensure consistency. Advice from nominees and feedback from APPC representatives was sought to help solve the complex issues relating to variation between and within locations. Adjustments to the preliminary amounts were then made and the benchmarking process repeated to ensure final values were consistent and representative. This approach was consistent with the general methodology and case study approach.

¹⁴ Financial Management Research Centre, *Business Benchmarks Gold: Key financial performance ratios on Australian small business and professional practice from 1989 onwards*, FMRC, University of New England, Armidale, November 1997

4.2.1 Study data

The study data revealed considerable variability in wages paid by specialists for administrative staff.

Table 4.4 shows the average wage paid by specialty groupings per FTE by State, and does not distinguish between nursing, administration and practice managers.

Table 4.4 Study data wage rates, including superannuation, per FTE staff by specialty grouping by State

	Location		Specialists	GPs #
	Study data	Normalised data*		
	\$	\$		
New South Wales	45,428	40,614	28,916	
Victoria	40,589	36,930	29,594	
Queensland	39,221	39,606	34,161	
Australian Capital Territory	34,764	34,764	26,029	
South Australia	47,390	42,155	-	
Overall average	42,229	39,593	32,368	

Source: Practice cost study, 31 December 1999

* the 'normalised' data excludes rates above \$50,000 and below \$20,000

no normalisation of data was necessary as rates fell within the normalised parameters

The wage rates in Table 4.4 include superannuation, which was generally 6% of gross wages. A wage rate excluding superannuation of \$37,450 ($\$39,593 \div 1.06 = \$37,352$)¹⁵ was the indicative wage for administrative staff for specialist practices in the model practice, and of \$30,550 ($\$32,368 \div 1.06 = \$30,535$) for administrative staff for general practitioners. Advice received from specialty nominees and APPC representatives led us to revise the rate for administrative staff for general practitioners up to \$32,100.

4.2.2 Analysis of awards by State

Current industrial awards for both administrative assistants and nurses are generally consistent across the States. Awards for administrative assistants range from approximately \$24,000 to \$32,000 per year. The majority of the administrative awards were between \$30,000 and \$32,000. Nursing awards range from approximately \$25,500 to \$37,000, with the majority between \$31,000 and \$37,000. The award rates were consistent with the study data for general practitioner staff, but were substantially less than the rate the study revealed for specialists' staff.

Award rates are summarised in Table 4.5.

¹⁵ 6% was the Superannuation Guarantee level at 30 June 1997, when the source data was collected

Table 4.5 Award wage rates by State

Location	Clerical awards	Nursing awards
	\$	\$
Australian Capital Territory	27,842	36,116
New South Wales	30,908	36,466
Northern Territory	27,842	36,786
Queensland	30,908	31,503
South Australia	32,071	31,509
Tasmania	23,725	25,628
Victoria	30,825	37,134
Western Australia	25,883	33,379
Weighted average (by pop'n)	30,495	34,775

Source: Federal and State industrial awards, indexed to 31 December 1999

Note. For clerical staff, award rates represent the highest level of grade and experience found.

For nursing staff the award rate represents the mid-range or equivalent to the NSW rate for a registered nurse in their 7th year of service.

4.2.3 Other benchmarks

The development of staff costs was based on benchmarking with external points of validation. The benchmark data was adjusted to 31 December 1999 rates using the method outlined in Volume 4, Chapter 3 to make it comparable to the study data. Three of the sources used to confirm the rates of wages paid to staff were the ABS survey and the FMRC benchmarks and information received from employment agencies.

The ABS survey gave the following figures:

- general practitioners: \$29,049 per FTE staff
- specialists: \$42,079 per FTE staff.

The FMRC benchmarks also provided useful information in the development of typical wage rates:

- general practitioners: \$38,477 per FTE staff
- specialists: from \$34,868 to \$35,873 per FTE staff.

Information received from employment agencies, both specialist medical and general employment, in differing locations across Australia, indicated the following:

- general practitioners: generally paid relevant award rate
- specialists: from \$32,100 to \$42,800 per FTE.

In relation to the information from employment agencies, it was apparent that there was wide variation in salaries, with rates generally consistent across Melbourne and Sydney, with Brisbane indicating lower rates more in line with the award.

4.2.4 Salary ranges

Reception and clerical staff

Award salaries of the larger States were compared with the amounts paid by study participants. In cases where the salary was clearly defined and the person was employed in an arms-length arrangement, the salaries were at or close to the award rates. The job description for the higher levels of the award is appropriate for the duties of a senior receptionist and includes supervision of other staff, provision of bookkeeping services and management of some finances.

The award rates for a senior receptionist vary between the States from \$24,000 to approximately \$32,000. Very few junior staff were encountered in the study and were only present in larger practices under the supervision of senior and experienced staff.

Benchmark data and information received from specialty nominees suggested that wage rates were about \$32,100 for general practitioner staff and \$37,450 for specialist staff. These rates were consistent with the study data and were adopted as the rates for administrative staff in the model practice.

The variation between the model practice rate for general practitioner and specialist staff is based on differences in duties and responsibilities, such as the increased typing load (volume and complexity) which is generally a feature of specialty practices. The study data identified a clear difference between salary rates for general practitioner and specialist staff. This difference was also evident in the ABS survey, which found a strong correlation between doctor's income and wage rates paid to staff. Discussion with several employment agencies also confirmed the different rates being paid to specialist secretarial staff and the secretarial staff of general practitioners. The reasons given by the agencies were the increased typing load and the personal assistant role, which is often adopted by specialists' secretarial staff.

Nursing resources

The allocation of nursing staff to a practice was a more difficult issue to address. In some cases, the patient-related functions that require nursing support can be scheduled, but generally this cannot be achieved. As a consequence, there were no full-time nurses employed in a practice until the practice was large enough (five doctors) to support a nurse for most of the time. This was supported by the study data which showed general practitioners had approximately 0.2 FTE nurses per doctor. We included 0.2 FTE nurses as part of the staffing complement of the model general practice. The addition of this nursing resource is also an efficiency gain, with the nurse substituting for the doctors' time to allow greater patient activity levels.

The proposed wage rate for nursing staff in the model practice was set at \$36,380. This is consistent with study findings, awards and information received from nominees.

Practice management

The study recognised the need for management of the practice for all doctors. This ‘practice management’ does not include those tasks that would normally be performed by the owners of the business.

Practice managers are becoming more common throughout the profession, in the form of both full-time managers in larger practices and those offering services to multiple smaller practices.

The study data showed that a practice with five full-time doctors would warrant a full-time practice manager. The efficiency requirements of the model practice would require this degree of assistance.

In the model practice, a practice manager’s salary was determined at \$42,800. There is currently no award covering this function and the amount adopted reflects discussions with various practice managers and, in particular, members of the Practice Managers’ Association. Very large and specialised practices have specific requirements for support staff which include practice managers, and adopt job descriptions and pay scales accordingly. A portion of the practice management resource allocation (0.2 FTE, or \$8,560) was included in the staff resources and costs of each doctor in the model practice.

4.3 Summary of proposed wage rates

Table 4.6 summarises the model practice base wage rates for staff for specialist practice and general practice.

Table 4.6 Model practice wage rates

Staff classification	Specialist rate	General practice rate
	\$	\$
Reception and clerical	37,450	32,100
Nurses *	36,380	36,380
Practice managers	42,800	42,800

Source: Practice cost study, 31 December 1999

** only applicable to dermatology and general practice under the typical staffing profile (although some direct cost items may have a nursing component)*

4.4 Locums in general practice

The impact of locums on the model practice is twofold. First, locums enable general practice to open 50 weeks of the year, only closing for public holidays. The effect of this is that general practices require sufficient resources to operate a practice for 2,000 hours per year, rather than the 1,840 hours required by specialty practice.

The second issue involves the cost of the four weeks of locum time. The Board determined that payments to locums were to be treated as a practice cost, and that the representative cost of locums would be \$2,000 a week. The Board also decided that a discount of 40% should be applied to the total cost, to reflect the extent to which locums are used in general practice.

Based on these decisions, the cost of locums for general practice was calculated as follows:

Estimated use:	60% of general practitioners
Cost per week:	\$2,000
Weeks per year:	4
Total cost:	\$4,800 (60% x 2,000 x 4)

5 Accommodation costs

This chapter explains the method used to determine the size and location of the rooms for the model practice in each specialty. We sought a method that would accurately determine resource requirements and at the same time attach a fair and reasonable cost to those resources. Our method was based on the data collected from the site visits, and where possible, we used external references and benchmarks to ensure consistency with current rental market conditions.

Rooms are a major cost in most practices. The study revealed a wide cross-section of room sizes and pricing structures. Arrangements vary from renting rooms from an external body at arms-length and paying commercial rates, to renting rooms from a doctor's personal superannuation fund at non-arms-length rates. In addition, many doctors own their rooms outright and only incur costs such as rates and repairs. Others share rooms in arrangements varying from simple cost-splitting to formal partnerships. This variability, and the discretionary element, added complexity to the development of a consistent treatment for rooms size and rental rates.

5.1 Determining space requirements

The method used to determine reasonable space requirements was developed after analysing the study data. This data revealed that many different renting and ownership arrangements exist and other data, such as advice from property groups and real estate agents, also reflected this. To be able to reference to external market prices, it was decided that the model practice in each specialty would rent rooms from an arms-length landlord. An appropriate level of rent was determined on a square metre basis according to the location of the property. The most obvious location parameter was the State in which the practice was located. The other key variables identified were the local commercial environment and rurality.

We established that doctors generally practise in five local commercial environments. 'Local environment' refers to a combination of the building type and the locality within the city or town. The five distinct local environments are:

- co-located with a private hospital
- medical precinct (close to a hospital or an area set up specifically for doctors' rooms)
- commercial/retail area (shopping centre and street frontage)
- stand-alone building in a residential area (converted residence or custom built)
- co-located with a private residence.

These locality variables determined the type and size of accommodation available and ultimately the rate of rent to be applied to the square metre requirements of a given practice. Table 5.1 summarises the study practices by local environment classification.

Table 5.1 Study practices by local environment classification

Local environment classification	Practices visited	
	Specialists %	GPs %
Co-located with hospital	30	–
Medical precinct	38	–
Commercial/retail area	20	43
Stand-alone	8	48
Co-located with private residence	4	9
Total	100	100

Source: Practice cost study, 31 December 1999

The space requirements for each specialty were built up on a room-by-room basis. The case study approach provided detailed information on the space requirements for each of the specialty groups.

Input was received from doctors within the study as well as from specialty nominees and the APPC representatives. The site visits allowed a clear picture of each specialty group to be developed through inspection of the physical resources in use at different practices and locations. Initial recommendations were checked with APPC representatives for reasonableness and then cross-checked and compared between specialties to ensure consistency. Comparison with established benchmarks for the size of practice rooms was not possible as such benchmarks are not available. However, we benchmarked rental costs against the ABS survey (ABS 1997) and FMRC benchmarks (FMRC 1997) as a guide to the overall adequacy of the space and rental allocation.

The process of developing space requirements demanded that the various functional areas within the medical practice be separately identified. The functional areas identified within the practices of the various specialties were:

- patient waiting room
- reception/office area
- doctor consulting room
- examination room
- minor procedures room
- staff amenities
- circulation area (estimated at 10%).

The study identified a number of specialties with similar resource requirements, which made possible the development of a number of standard rooms sizes. A rooms size that is found in many medical precinct areas, and is common to consultant physicians and some surgeons, is a 55 square metre consulting suite. This space allocation allows for:

- a waiting room
- reception desk and office area (combining a small facility area for tea-making and a storage area)
- consulting room with examination area
- general circulation (halls etc).

Where it was observed that a particular type of room (eg treatment room) was common in a practice of a particular specialty, that room was included in the build-up of space allocation for that specialty. For example, in the case of the general practitioners it was observed that a doctor tended to have a consulting room with an attached examination room, but no treatment room. General practitioner practices of two or more doctors generally had a separate treatment room. Other specialty groups such as orthopaedic surgeons generally had treatment (plaster) rooms in all sizes of practice. The anaesthetic practices visited were generally large, multiple-doctor practices, with limited individual space. In these instances we allocated sufficient space for a single office (either home or rented) for each doctor.

The practicality of sharing rooms and other facilities was the topic of much discussion with specialty nominees and at APPC meetings. Although the practice of sharing is widespread and a well accepted part of general practice, many specialty groups are opposed to the concept and dispute the benefits of sharing. Sharing arrangements observed in specialty groups tended to be restricted to waiting room and reception areas, rather than dedicated group practices. The study encountered many examples of specialists from a wide cross-section of specialties sharing facilities, both within their own specialty and with members of different specialty groups.

5.1.1 Impact of location on space allocation

The physical location of a practice often has an influence on the size of the practice rooms. In the study, considerable variation in the size of practices across locations was observed. The geographic location led to some variability; in many instances space was determined by what was available on the market. For example, if rooms were located in a converted stand-alone house, the usual size was 150 square metres. This would support two to three doctors, but could be occupied by a solo practitioner. Purpose-built rooms and medical precinct areas tended to be more space-efficient, particularly if they were co-located with a hospital.

Other factors were the preferred location of a given specialty. For example, consultant physicians' rooms are generally sited in medical precincts or co-located with a hospital. These locations incur a higher rental rate, but lead to some efficiencies in space as many of the suites are purpose-built. Shared waiting space is commonly available, as is access to other facilities. General practitioners commonly have practices that are either situated in commercial retail areas (shopping centres) or stand-alone buildings in residential areas

(converted houses). These rooms are generally larger than those found in medical precinct or hospital areas, however the rental rate is generally lower and in the majority of cases, the study team found these rooms were shared by at least two doctors.

5.1.2 Application of the methodology: three examples

A number of factors need to be considered when determining rooms size. The key factors are:

- activity level, ie number of MBS items per year
- proportion of this activity that comprises consulting items
- proportion of this activity that is delivered in-rooms
- type of patient and services delivered
- typical time required to deliver each item
- throughput of patients
- typical local environment.

We have set out in Table 5.2 three examples of how the methodology was applied taking these factors into account. Our examples deal with the space requirements in each of the specialties of general medicine, general practice and dermatology.

Table 5.2 Summary of variables per doctor used in the examples

Variable	General medicine	General practice	Dermatology
Annual MBS items	4,032	8,199	8,607
% consulting items	84%	100%	68%
% consulting items in-rooms	78%	100%	100%
Type of patients and services	Primarily consulting	Almost exclusively consulting; often substantial paediatric component	Many consultation items combined with minor procedure items in rooms
Typical time for services	Initial cons: 50 mins Subs cons: 25 mins	Item 23: 13.5 mins	Initial cons: 15 mins Subs cons: 5 mins
Patient throughput per hour	2.2	4.1	4.7
Typical local environment	Co-located with hospital or medical precinct	Commercial/retail area or stand-alone	Medical precinct

Source: Practice cost study, 31 December 1999

General medicine

The total space for a general physician in the model practice is 55 square metres, which is approximately the size of a standard-sized consulting suite in co-located rooms.

- The general physician requires a consultation room of 20 square metres. Typically this will be a combined consulting/examination room, and would be larger than a consultation room which has a separate examination room such as a general surgeon would have.
- The relatively low throughput of patients (2.2 per hour) means that a waiting room of 15 square metres is sufficient.
- The staffing profile of the model general physician is 1.1 FTE receptionists plus 0.2 FTE practice managers. As a result, only one staff member plus the doctor would generally be on hand at any given time. The requirement for reception/office space is therefore only 15 square metres. No special staff facilities would be required within the practice.
- Circulation has been estimated at 10% for all specialties, which is a commercial standard, and this equates to 5 square metres in the case of the general physicians.

There is considerable variation around this, but the requirements of the typical general physician are met by this suite. The model practice for a general physician is co-located in hospital rooms, and as a result, the space allocation also reflects market availability.

General practice

The total space for general practitioners in the model two-doctor practice (chosen for illustrative purposes) is 118.3 square metres. The model general practice is located in a commercial/retail area or stand-alone building. General practitioners have higher activity levels than physicians and we have taken this into account in their space allocation.

- The space allocation for general practitioners consists of two consulting rooms of 15 square metres each. These are sometimes larger (20 square metres each), with no treatment room (10 square metres) and reflects the high paediatric and family component of general practitioner work. Our model has adopted the smaller consulting rooms, with the inclusion of the treatment room.
- The treatment room is shared by both doctors.
- The model general practice allocates an examination/procedure room of 15 square metres, as a separate room is required when dealing with families and also as a place to change after examinations. This room is shared by both doctors.
- The waiting room of 25 square metres is larger than a physician's waiting room, as the practice is larger (two doctors), the throughput is higher and there is a high paediatric component in the general practitioner's work.
- The requirement for reception/office space is 17.5 square metres.
- Special staff facilities such as a kitchen and toilets would be required, and an allocation of 10 square metres has been made for this purpose.

- Circulation has been estimated at a standard 10% for all specialties and this equates to 10.8 square metres in the case of the general practitioners.

The standard size of rooms in these locations is larger than a co-located hospital suite and it would quite often require more than one doctor to achieve a reasonable level of efficiency.

Dermatology

The total space for a dermatologist in the model practice is 99.0 square metres, located in a medical precinct.

- Dermatology practices are high-activity practices with a complex service mix. They require extra space for the higher activity and the resulting higher staffing levels. They also deliver specific services such as Puva therapy, which require specific space for equipment.
- The throughput is higher than for general practitioners. The typical dermatologist would have either a consulting room (20 square metres) plus an examination room (10 square metres), or two smaller consulting rooms (15 square metres each).
- Dermatologists require a minor procedure room (15 square metres) as they deliver a number of procedural items in-rooms.
- The high patient throughput generates the need for a larger reception and waiting room (35 square metres) than for a general physician.
- There is also an allocation for a staff amenities/storage area (10 square metres) due to the higher staffing profile.
- Circulation has been estimated at the standard 10% used for all specialties and this equates to 9 square metres in the case of the dermatologists.
- A Puva room has been allocated through direct costs and is not included in the general space allocation. This room is typically 8 square metres.

The standard size of rooms is larger than in a co-located hospital suite, which reflects both resource needs and market availability.

The results for each of the three examples are summarised in Table 5.3.

Table 5.3 Space requirements for selected model practices (in square metres)

Functional area	General medicine (1 doctor)	General practice (2 doctors)	Dermatology (1 doctor)
Consulting room *	20.0	30.0	20.0
Treatment / minor ops room	–	10.0	10.0
Examination room	–	15.0	15.0
Office	15.0	17.5	17.5
Patient waiting	15.0	25.0	17.5
Staff amenities/storage	–	10.0	10.0
Circulation area	5.0	10.8	9.0
Total	55.0	118.3	99.0

Source: Practice cost study, 31 December 1999

* in some instances the consulting rooms for dermatologists may be two equally sized rooms of 10.0 square metres

5.2 Summary of space requirements

Our determination of the space requirements is based on one, two, three and four-doctor practices in general practice, and single doctor practices sharing some resources in specialty practice, except for anaesthetics, cardio-thoracic surgery and psychiatry, which are based on multi-doctor practices.

The model practice space requirements for doctors in each specialty are sufficient to deliver model practice activity. Where additional rooms would be required to deliver specific diagnostic or procedural items, the additional space and cost have been calculated as part of the direct cost for those specific items.

Table 5.4 details the model practice space requirements for each specialty.

Table 5.4 Space requirements for the model practice by specialty (in square metres)

Specialty	No of doctors	Consulting room	Exam room	Treatment room	Reception/ waiting	Staff amenities	Circulation (@ 10%)	Total area
Anaesthetics	7	125.0	-	-	-	-	-	125.0
Cardio-thoracic surgery	3	60.0	-	-	45.0	10.0	11.5	126.5
Cardiology	1	20.0	-	-	30.0	-	5.0	55.0
Dermatology	1	20.0	10.0	15.0	35.0	10.0	9.0	99.0
ENT surgery	1	20.0	10.0		32.5	10.0	7.3	79.8
Gastroenterology	1	20.0	-	-	30.0	-	5.0	55.0
General medicine	1	20.0	-	-	30.0	-	5.0	55.0
General practice 1	1	15.0	-	15.0	35.0	-	6.5	71.5
General practice 2	2	30.0	10.0	15.0	42.5	10.0	10.8	118.3
General practice 3	3	45.0	10.0	20.0	50.0	10.0	13.5	148.5
General practice 4	4	60.0	20.0	20.0	57.5	10.0	16.8	184.3
General surgery	1	15.0	10.0	-	30.0	-	5.5	60.5
Intensive care	5	70.0	-	-	-	-	-	70.0
Neurology	1	20.0	-	-	30.0	-	5.0	55.0
Neurosurgery	1	15.0	10.0	-	30.0	-	5.5	60.5
Obstetrics and Gynaecology	1	15.0	10.0	-	35.0	-	6.0	66.0
Ophthalmology	1	20.0	10.0	15.0	32.5	10.0	8.8	96.3
Orthopaedic surgery	1	15.0	10.0	15.0	30.0	-	7.0	77.0
Paediatric medicine	1	20.0	-	-	35.0	10.0	6.5	71.5
Paediatric surgery	1	15.0	10.0	-	30.0	-	5.5	60.5
Plastic surgery	1	15.0	20.0	-	30.0	-	6.5	71.5
Psychiatry	2	40.0	-	-	35.0	-	7.5	82.5
Radiation oncology*	4	-	-	-	-	-	-	1,000.0
Rehabilitation medicine	1	20.0	-	-	30.0	-	5.0	55.0
Renal medicine	1	20.0	-	-	30.0	-	5.0	55.0
Rheumatology	1	20.0	-	-	30.0	-	5.0	55.0
Thoracic medicine	1	20.0	-	-	30.0	-	5.0	55.0
Urology	1	15.0	10.0	-	30.0	-	5.5	60.5
Vascular surgery	1	15.0	10.0	-	30.0	-	5.5	60.5

Source: Practice cost study, 31 December 1999

* radiation oncology centres are not capable of being broken down into the standard room-by-room dissection

5.3 Developing reasonable rental rates

Rent is primarily a market-driven cost, which varies considerably between States and cities, but also between locations within cities. Considerable variation can also be created by the payment of above or below-market rental rates. A premium rent may be charged because the rooms are owned by a doctor's superannuation fund, or a below-market rate may be paid if a private hospital offers a specialist a reduction in rent as an incentive to locate to the hospital.

There are a number of factors driving the current variation in rents between doctors, and these include (not in any specific order):

- size of rooms
- location of rooms, both geographic area and local environment
- quality of premises rented
- current market conditions
- whether rooms are shared.

Our market-research based approach to rent was able to address many of these issues by removing the discretionary element of rental payments. This was important, as the model practice rooms were required to be of a good standard: neither the top of the scale nor the bottom.

We addressed the aspect of variability of location by obtaining market rental rates for each category of rental accommodation available across all States and Territories. A national weighted average for each category of accommodation was created and applied to the category chosen for a particular specialty. For example, for general physicians we used the national weighted average for hospital co-located rooms, while for general practitioners we used a straight average of the national weighted average rates for commercial retail and stand-alone rates (reflecting the equal distribution of general practitioners across both of these areas).

Table 5.5 is a summary of the market research by rental accommodation type.

Table 5.5 Rental rates per square metre by State and accommodation type

Accommodation type	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Weighted average
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Hospital co-located	387	310	258	258	258	206	206	284	320
Medical precinct	361	310	258	206	248	186	186	268	299
Commercial/ retail	310	258	209	186	206	165	165	248	258
Stand-alone	258	232	186	165	186	145	145	206	217

Source: Practice cost study, 31 December 1999

The rent expense covers the cost of rates and other charges such as body corporate fees; however it does not cover repairs and maintenance or cleaning. These costs are included separately in 'occupancy costs' in the model practice.

The rent expense for each specialty (allocated space multiplied by applicable rate) was benchmarked against the ABS survey (ABS 1997) and the FMRC benchmarks (FMRC 1997) to ensure consistency. The results of this benchmarking, which was done on a rent-paid basis for relevant specialties, showed that the study's space allocations and rental rates produced rental costs consistent with the benchmarked data.

Table 5.6 provides the rental rates applied to each specialty in the model practice. These are based on the weighted averages from Table 5.5 and the accommodation type for the specialty.

Table 5.6 Model practice rental rates payable by specialty

Specialty	Applicable rental rate	Accommodation type
	\$/sq m/year	
Anaesthetics	262	Anaesthetics composite rate *
Cardio-thoracic surgery	320	Hospital Co-Located
Cardiology	320	Hospital Co-Located
Dermatology	299	Medical Precinct
ENT surgery	299	Medical Precinct
Gastroenterology	320	Hospital Co-Located
General medicine	320	Hospital Co-Located
General practice	237	Average of Commercial/Stand-Alone
General surgery	320	Hospital Co-Located
Intensive care	155	Intensive care composite rate **
Neurology	320	Hospital Co-Located
Neurosurgery	320	Hospital Co-Located
Obstetrics and Gynaecology	299	Medical Precinct
Ophthalmology	299	Medical Precinct
Orthopaedic surgery	299	Medical Precinct
Paediatric medicine	299	Medical Precinct
Paediatric surgery	320	Hospital Co-Located
Plastic surgery	320	Hospital Co-Located
Psychiatry	299	Medical Precinct
Radiation oncology	310	Average of Hospital/Medical precinct
Rehabilitation medicine	299	Medical Precinct
Renal medicine	320	Hospital Co-Located
Rheumatology	320	Hospital Co-Located
Thoracic medicine	320	Hospital Co-Located
Urology	320	Hospital Co-Located
Vascular surgery	320	Hospital Co-Located

Source: Practice cost study, 31 December 1999

* 70 square metres @ \$217 plus 55 square metres @ \$320

** 50 square metres @ \$217 plus 20 square metres @ \$nil

5.4 Satellite rooms

In Australian medical practice some doctors operate their rooms from more than one location. This is particularly the case in specialty practice, where doctors often practise from a principal set of rooms, and have ‘satellite’ rooms at other locations for reasons of efficiency and market share. The use of these satellite rooms increases the cost of the practice when the doctor pays for reception services, rent and other overhead costs.

5.4.1 Reimbursement according to use

The Board determined that the reimbursement for the cost of satellite rooms be assessed on a specialty-by-specialty basis. To establish the use of satellite rooms in each specialty, we sought information from studies such as the ABS survey (ABS 1997) and the KPMG study¹⁶ as well as from the Health Insurance Commission (HIC). We found no reliable sources of information about the prevalence of satellite rooms. However, our study data and information and feedback from specialty nominees indicated that about 40% of some specialty groups and very few general practitioners use satellite rooms. The use of satellite rooms by the specialists was generally confined to one or two sessions per week. The use of satellite rooms in general practice was not identified by our study as being prevalent; other information sources and feedback have not provided any evidence to the contrary.

5.4.2 Reimbursement method adopted

The issue of establishing an appropriate cost, and then reimbursing only those doctors who use satellite rooms, was discussed with the APPC representatives, but no method of reimbursement through the MBS could be agreed by all parties. Arrangements for satellite rooms vary from doctor to doctor. The most common arrangements are:

- renting rooms on a sessional basis
- maintaining a second location on a full-time basis, but only staffed during doctor sessions
- using consulting rooms in other facilities (eg a private hospital) at a greatly reduced cost
- mutual arrangements between doctors, where they effectively swap rooms on a sessional basis.

In addition to these arrangements, some doctors offset their costs through efficiency measures such as subletting their main consulting rooms when they are conducting satellite sessions.

The different arrangements and the associated variation in costs made the determination of a single reasonable reimbursement for satellite rooms difficult.

Therefore, in the absence of definitive data to the contrary, we developed a method of reimbursement whereby the total costs of each specialty’s estimated usage would be reimbursed through the nominal activity profile. This method attributes a proportion of the total costs to all doctors in the specialty rather than identifying the individual doctors who incur cost, and reimbursing them outside the MBS.

¹⁶ KPMG Management Consultants, *Relative Value Study of the Medicare Benefits Schedule: Framework for Consultation/Attendance Items*, April 1996 (documentation from the Medicare Schedule Review Taskforce)

5.4.3 General overhead or direct cost?

The study separated costs into two categories: general overhead and direct costs. General overhead costs are applied proportionately to all items. Direct costs are applied to an item where the cost was clearly identifiable with the delivery of that item; examples of direct costs are specific equipment or technical staff necessary to deliver an item.

Satellite rooms are clearly not direct costs, as they cannot be attributed to a specific item or range of items. Consulting, diagnostic and procedural items may all be delivered in satellite rooms. Given this, the only alternative for including satellite rooms in the model practice was to incorporate a cost into general overheads.

Two questions flow from this decision:

- How much cost should be included for satellite rooms?
- Which specialties should receive the cost?

5.4.4 Components of the cost of satellite rooms

The costs of satellite rooms can be broken down into:

- the sessional rate for the use of the rooms
- the number of sessions performed in the satellite rooms per week
- the number of practising weeks per year
- the number of doctors (as a percentage) who actually practise from satellite rooms
- the number of doctors (as a percentage) who sublet their rooms while practising in satellite rooms.

The calculation of the cost can therefore be represented by the formula in Figure 5.1.

Figure 5.1 Formula used to calculate cost of satellite rooms

Cost of satellite rooms	=	(R x S x N x D1%) x (1 - D2%)
where:	R	= the sessional rate for the use of the rooms
	S	= the number of sessions performed in the satellite rooms per week
	N	= the number of practising weeks per year
	D1%	= the number of doctors (as a percentage) who practise from satellite rooms
	D2%	= the number of doctors (as a percentage) who sublet their rooms while they practise in satellite rooms

5.4.5 Determination of a reasonable cost of satellite rooms

Sessional rate

Based on the submissions received from the profession, the following information is available:

ENT:	\$129 per session
Psychiatry:	\$712 per month (\$83 per session)
Urology:	\$106 per session

The mid-point of the cost range is therefore approximately \$103.

Number of sessions per week in satellite rooms

Based on submissions received from the profession, the following information is available:

Obstetrics and Gynaecology:	2.0 per week
Psychiatry:	2.0 per week
Urology:	1.3 per week

We therefore calculated 1.5 sessions per week.

Number of practising weeks per year

The model practice for specialists is made up as follows:

Total weeks per year	52
Less:	
Public holiday	(2)
Annual leave	(4)
Available weeks to practise	48

For the purpose of calculating the cost of satellite rooms, we subtracted only those weeks that the doctor does not practise at all, ie four weeks of annual leave, leaving a total of 48. It is likely that the practice will be open for 48 weeks per year, although because of public holidays a number of the weeks will be shortened.

Number of doctors who practise from satellite rooms

Based on the submissions received from the profession, the prevalence of satellite rooms is:

Dermatology:	50%
ENT:	90%
Obstetrics and Gynaecology:	60%
Ophthalmology:	20%
Psychiatry:	40%
Urology:	77%

A clear identification of the percentage of doctors in each specialty using satellite rooms is impossible. Some unrepresentative surveys have been forwarded to us showing that up to 100% of specialists in some groups use satellite rooms. However, the level of use in our initial study of 40% across the specialties is the level we decided to use in our model practice. This is an estimate and has not been substantiated by external sources, but we believe it is a reasonable estimate given the lack of objective data in this area.

Number of doctors who sublet their rooms while they practise in satellite rooms

None of the doctors’ responses detailed any income associated with the renting of their own rooms while they were consulting in satellite rooms. However, our own research showed that some doctors do generate an income from subletting their rooms.

We imputed a percentage of doctors who sublet their rooms as 20%. This figure is an estimate based on the premise that it is reasonably efficient for doctors to sublet their base rooms for at least part of the time they are using satellite rooms elsewhere.

Given that satellite rooms can be rented at \$103 per session, we assumed that the doctors’ principal rooms could also be rented for \$103 per session.

Cost of satellite room

Based on the formula in Figure 5.1, the cost of satellite rooms would be as set out in Figure 5.2.

Figure 5.2 Satellite rooms cost calculation

Cost of satellite rooms	=	(R x S x N x D1%) x (1 – D2%)
where:	R	= the sessional rate for the use of the rooms = \$103
	S	= the number of sessions performed in the satellite rooms per week = 1.5
	N	= the number of practising weeks per year = 48
	D1%	= the number of doctors (as a percentage) who practise from satellite rooms = 40%
	D2%	= the number of doctors (as a percentage) who sublet their rooms while they practise in satellite rooms = 20%
Cost of satellite rooms	=	(\$103 x 1.5 x 48 x 40%) x (1 – 20%) = \$2,379 (minor difference due to rounding from indexation)

5.4.6 Which specialties should receive the cost?

In consultation with the Board, we provided an allocation for satellite rooms to only those specialties that provided supporting information in respect of satellite rooms in their response to the preliminary findings report of the practice cost study¹⁷, with three exceptions:

- anaesthetics
- general practice
- intensive care.

Both anaesthetists and intensive care specialists are hospital-based and do not practise in satellite rooms. While there are instances of general practitioners operating satellite rooms, these are the exception rather than the rule. We determined that there is insufficient use of satellite rooms to warrant an allocation in the general practice model practice.

Table 5.7 lists the satellite room allocation by specialty for the model practice.

Table 5.7 Satellite room allocation in the model practice

Specialty group	PwC recommendation
Anaesthetics	No recognition
Cardio-thoracic surgery	No recognition
Cardiology	Allowance of \$2,379
Dermatology	Allowance of \$2,379
ENT surgery	Allowance of \$2,379
Gastroenterology	Allowance of \$2,379
General medicine	Allowance of \$2,379
General practice	No recognition
General surgery	No recognition
Intensive care	No recognition
Neurology	Allowance of \$2,379
Neurosurgery	No recognition
Obstetrics and Gynaecology	Allowance of \$2,379
Ophthalmology	Allowance of \$2,379
Orthopaedic surgery	No recognition
Paediatric medicine	Allowance of \$2,379
Paediatric surgery	No recognition
Plastic surgery	No recognition
Psychiatry	Allowance of \$2,379
Radiation oncology	N/A – consulting items shared with surgeons
Rehabilitation medicine	Allowance of \$2,379
Renal medicine	Allowance of \$2,379
Rheumatology	Allowance of \$2,379
Thoracic medicine	Allowance of \$2,379
Urology	Allowance of \$2,379
Vascular surgery	No recognition

Source: Practice cost study, 31 December 1999

¹⁷ PricewaterhouseCoopers, *A resource-based model of private medical practice in Australia. The practice cost study – Preliminary findings for discussion*, 5-volume report to the Medicare Schedule Review Board, March 1999

6 Differential cost analysis

A core requirement of the terms of reference for the practice cost study was to analyse the differentials between costs of practice. We undertook a differential cost analysis of the variations in the study data on both a specialty basis and a State basis.

Our approach to much of the differential cost analysis was to analyse each major resource (staff, accommodation and PII) component in terms of these variables. We have presented our analysis of these resources in the report. These costs, that collectively represent approximately 65% of the total overhead costs of the model practices, exhibited the greatest variations based on location and other factors.

The analysis focused on the differences in costs affecting:

- the location where services are provided
- size of practice
- geographic location.

6.1 Location where services are provided

In each specialty group doctors generally deliver some services away from their consulting rooms. The model practice represents a practice that operates both in-rooms and from other locations (for example home visits and hospitals) and as such does not differentiate between the costs of providing services in and out of rooms.

The resources and associated costs in the model practice reflect this style of practice, and include costs such as motor vehicle expenses. As with all services in the MBS, if doctor time is involved in delivering that service, a proportion of general overhead will be attributed to that item in the model practice.

For direct cost items, the method ensures that any cost borne by an external facility (ie a third party) in which the doctor delivers the service will not be reimbursed to the doctor as a direct cost. The reimbursement will still include the direct cost of those resources provided by the doctor. The direct costs relate to equipment and consumables that do not vary in price because they are used out of rooms.

The direct cost methodology is based on the principle of reimbursing doctors only those costs which they actually incur. The direct cost methodology is explained in Volume 3.

6.2 Size of practice (number of doctors)

We have addressed the differences in the size of practice and the number of doctors per practice in Volume 4, Section 2.4.

6.3 Geographic location

We reviewed major measurable variations in the data and presented them in a way that allowed comparison with other larger data sets, such as general cost information or demographics of medical practice.

Our ability to make valid comments from this approach relied on:

- a classification of location that would allow comparison of the study practices with other data
- study data on the effect of location on practice cost drivers.

6.3.1 Classification on the basis of location

The Australian Institute of Health and Welfare (AIHW) publication *Medical Labour Force 1995*¹⁸ was used as the source of classification of practices according to geographic location. The AIHW source for classification was the Department of Health and Family Services' rural, remote and metropolitan areas (RRMA) classification. We referred to the AIHW publication for information regarding the distribution of doctors across the RRMA classifications in Australia. We assumed that the distribution of MBS item activity and payments would generally follow the distribution of private practitioners in the general rural classifications.

The RRMA classifications are shown in Table 6.1.

Table 6.1 RRMA classifications with example sites

Area	Example site
Metropolitan centres	
Capital cities	Canberra
Other metropolitan (pop >100,000)	Wollongong
Rural zones	
Large rural centres (pop 25,000-99,999)	Wagga Wagga
Small rural centres (pop 10,000-24,999)	Nowra
Other rural centres	Cowra Shire
Remote centres	
Remote centres (with urban centres of >5,000)	Alice Springs
Other remote centres	Bourke (NSW)

Source: *Medical Labour Force 1995*, AIHW July 1997

¹⁸ Australian Institute of Health & Welfare, *Medical Labour Force 1995*, National Health Labour Force Series No 10, AIHW Catalogue No HWL 5, AIHW, Canberra, July 1997.

6.3.2 The effect of location on practice cost drivers

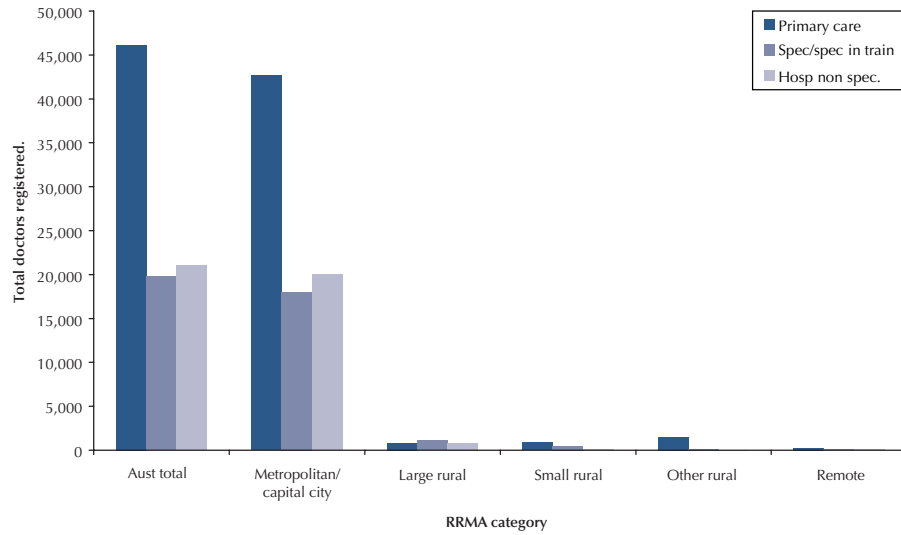
We identified the major factors explaining the variability in costs between practices in the study and practices throughout Australia. As the model practice is based on a single level of activity for each specialty, the effect of activity was accounted for within specialties. However, it was important to ensure that cost differences between specialties, where activity is the major determinant of cost, reflected activity levels. Table 6.1 summarises these factors according to cost categories.

Table 6.1 Effect of geographic location on cost categories

Resource category	Major effect of geographic location
Wages and staff costs	Reception staff salary levels do not vary greatly across Australia. Higher levels are recorded in Sydney and Melbourne CBDs. Our analysis of the differentials in wages and staff costs is covered in detail in Volume 1, Chapter 4
Occupancy costs	Location of practice in a hospital or medical precinct is the greatest determinant of rent variation. In the same location, rents are highest in Sydney and Melbourne with lower rents in Hobart. Rurality affects rent favourably but availability of suitable accommodation may negate this. Our analysis of the differentials in occupancy costs is covered in detail in Volume 1, Chapter 5
Office expenses	No great variation between States but can increase with rurality.
Professional costs	Higher cost of travel for CME in some areas but this is often offset by subsidies in remote areas.
Motor vehicle expenses	Higher cost of fuel in some States and areas. Higher cost of insurance in Sydney and Melbourne. Difficult to estimate the total effect.
Professional indemnity insurance	Clear State differentials. Our analysis of the differentials in PII costs is covered in detail in Volume 1, Section 3.2.7
Working capital expenses	No substantial differences across States or locations.

Comparing the costs of the groups across locations in Australia is only possible if the groups studied occur across the locations and deliver similar services in each location. Such comparisons are not possible in the case of cardio-thoracic surgeons, for instance. Tertiary referral specialties only occur in metropolitan areas in locations near major tertiary hospitals. Other specialties such as general medicine occur across more locations but are more prevalent in metropolitan and provincial areas. In terms of the RRMA classification the service mix is very similar in capital city, other metropolitan and large rural locations. The major difference in the proportion of general practitioners to specialists occurs from large to small rural centres, but there are less than 1,000 specialists in total in Australia in areas like the small rural centres. This distribution is illustrated in Figure 6.1.

Figure 6.1 Proportion of doctors in each RRMA category



Source: Medical Labour Force 1995, AIHW July 1997

7 Professional membership costs

This chapter outlines the issues around and options for treating the costs of registration and subscriptions to professional bodies. A doctor has no discretion over the payment of registration fees levied by State and Territory governments – such fees must be paid as a prerequisite for the right to practise. Other subscriptions, although not necessarily mandatory, are important in ensuring continued quality in medical practice. These include, for example, subscriptions paid to specialty colleges, other craft groups and special interest groups.

It is acknowledged that membership of a number of such representative groups is an essential practice cost. These memberships keep a doctor informed about current issues not only in clinical matters, but also in employer, management and legal issues across a wide spectrum of professional and business functions.

We analysed actual costs incurred by all study participants, and identified the following average costs:

- general practitioners: \$1,136
- specialists: \$2,994.

Specific benchmarking of this data was not possible. Both the ABS survey on private medical practices (ABS 1996 & 1997) and the FMRC business benchmarks (FMRC 1997) include these costs in other larger cost categories. We therefore relied on feedback from nominees and APPC representatives to confirm our findings.

The advice from the specialty group nominees was that, except for the college subscriptions, subscriptions were ‘desirable’ or held by ‘many’ of the doctors. The level of MBS reimbursement is determined by the specialty definitions of the National Specialist Qualification Advisory Committee recognition. The study team was unable to state that any membership other than the college subscription was ‘necessary’ for MBS practice. Nevertheless, in view of the value of such memberships, we allocated a reimbursement that covers:

- medical registration fees
- membership of two national professional associations, one being the specialty college for which the doctor is eligible and the other the chosen society of the relevant specialty
- membership of one national industrial association
- membership of one local special interest group.

Table 7.1 summarises the cost of professional membership by specialty as included in the model practice. The Board accepted these proposed costs for registration and subscriptions to professional bodies.

Table 7.1 Organisations and subscription fees by specialty

Specialty	College	Society/Association	Industrial body	Other	Registration	Total cost
Anaesthetics	Australian and New Zealand College of Anaesthetists \$981	Australian Society of Anaesthetists \$878	\$898	Other association \$103	Medical Board \$165	\$3,025
Cardio-thoracic surgery	Royal Australasian College of Surgeons \$1,100	Australian Society of Cardiac and Thoracic Surgeons \$361	\$898	Other association \$103	Medical Board \$165	\$2,628
Cardiology	Royal Australasian College of Physicians \$929	Cardiac Society of Australia & New Zealand \$465	\$898	Other association \$103	Medical Board \$165	\$2,560
Dermatology	The Australasian College of Dermatologists \$1,239	N/A	\$898	Other association \$103	Medical Board \$165	\$2,406
ENT surgery	Royal Australasian College of Surgeons \$1,100	Australian Society of Otolaryngology Head & Neck Surgery \$2,000	\$898	Other association \$103	Medical Board \$165	\$4,267
Gastroenterology	Royal Australasian College of Physicians \$929	Gastroenterological Society of Australia \$258	\$898	Other association \$103	Medical Board \$165	\$2,354
General medicine	Royal Australasian College of Physicians \$929	Australian Association of Consultant Physicians \$88	\$898	Other association \$103	Medical Board \$165	\$2,184
General practice	Royal Australian College of General Practitioners \$770	N/A	\$898	Other association \$103	Medical Board \$165	\$1,937
General surgery	Royal Australasian College of Surgeons \$1,100	Australian Association of Surgeons \$563	\$898	Other association \$103	Medical Board \$165	\$2,829
Intensive care	N/A	Australian and New Zealand Intensive Care Society \$465	\$898	Other association \$103	Medical Board \$165	\$1,631

Table 7.1 Organisations and subscription fees by specialty (continued)

Specialty	College	Society/Association	Industrial body	Other	Registration	Total cost
Neurology	Royal Australasian College of Physicians \$929	Australian Associations of Neurologist \$465	\$898	Other association \$103	Medical Board \$165	\$2,560
Neurosurgery	Royal Australasian College of Surgeons \$1,100	Neurosurgical Society of Australia \$490	\$898	Other association \$103	Medical Board \$165	\$2,757
Obstetrics and Gynaecology	The Royal Australian College of Obstetricians & Gynaecologists \$1,048	National Association of Specialist Obstetricians & Gynaecologists \$170	\$898	Other association \$103	Medical Board \$165	\$2,385
Ophthalmology	Royal Australian College of Ophthalmologists \$1,500	N/A	\$898	Other association \$103	Medical Board \$165	\$2,667
Orthopaedic surgery	Royal Australasian College of Surgeons \$1,100	Australian Orthopaedic Association \$970	\$898	Other association \$103	Medical Board \$165	\$3,237
Paediatric medicine	Royal Australasian College of Physicians \$929	N/A	\$898	Other association \$103	Medical Board \$165	\$2,096
Paediatric surgery	Royal Australasian College of Surgeons \$1,100	Australian Association of Paediatric Surgeons \$155	\$898	Other association \$103	Medical Board \$165	\$2,422
Plastic surgery	Royal Australasian College of Surgeons \$1,100	The Australian Society of Plastic Surgeons \$1,445	\$898	Other association \$103	Medical Board \$165	\$3,712
Psychiatry	Royal Australian & New Zealand College of Psychiatry \$929	Other association eg Psychotherapy Association of Australia \$382	\$898	Other association \$103	Medical Board \$165	\$2,478
Radiation oncology	Royal Australian College of Radiologists \$1,032	N/A	\$898	Other association \$103	Medical Board \$165	\$2,199

Table 7.1 Organisations and subscription fees by specialty (continued)

Specialty	College	Society/Association	Industrial body	Other	Registration	Total cost
Rehabilitation medicine	Royal Australasian College of Physicians \$929	Aust. Assoc. of Consultants in Rehabilitation Medicine \$41	\$898	Other association \$103	Medical Board \$165	\$2,137
Renal medicine	Royal Australasian College of Physicians \$929	Australian and New Zealand Society of Nephrology \$129	\$898	Other association \$103	Medical Board \$165	\$2,225
Rheumatology	Royal Australasian College of Physicians \$929	Australian Rheumatology Association \$258	\$898	Other association \$103	Medical Board \$165	\$2,345
Thoracic medicine	Royal Australasian College of Physicians \$929	Other association eg Australian Association of Consultant Physicians \$88	\$898	Other association \$103	Medical Board \$165	\$2,184
Urology	Royal Australasian College of Surgeons \$1,100	Australian & New Zealand Association of Urological Surgeons \$729	\$898	Other association \$103	Medical Board \$165	\$2,996
Vascular surgery	Royal Australasian College of Surgeons \$1,100	Australian Association of Surgeons \$563	\$898	Other association \$103	Medical Board \$165	\$2,829

Source: Practice cost study, 31 December 1999

8 Continuing medical education costs

This chapter outlines the issues and options for recovery of the costs associated with CME. The amount of time and resources dedicated to CME is often at the discretion of the individual doctor, depending on the specialty. This, together with a number of other factors, made the development of a fair and reasonable resource allocation a complex process.

The Board accepted the CME allocations for both general practice and specialist practice outlined in this chapter. These were derived on the basis of one national conference every second year for general practice, and one national conference each year plus one international conference every second year for specialist practice. The annual cost allocation for CME is \$1,256 for general practitioners and \$4,394 for specialists.

8.1 Issues to be considered

The involvement of doctors in CME activity is variable. It is acknowledged that the average degree of involvement may be less than that which is considered desirable. It is also acknowledged that what might be considered desirable among the more enthusiastic members of the groups would lead to considerable over-reimbursement to many doctors if used as a basis for reimbursement.

There is little scope for verification of costs incurred, other than the data collected in the study, some surveys, and the inference that can be drawn from comparing total group numbers to their attendance at national meetings.

Although CME is mandatory for members of many professional bodies, there is usually enough flexibility in the requirements to allow members to gain recognition through activities that incur little cost. None of the specialty groups make compliance with CME requirements compulsory through attendance at conferences or other activities that might generate cost to the doctor.

The study observed the influence of income on specialist CME expenditure. In order to establish eminence in a particular field, a doctor might undertake significant expenditure and training in excess of that required to maintain a reasonable level of competency. Any such expenditure to achieve eminence in a field should be considered as an offset against expected higher earnings.

8.2 Method

We undertook research to identify any formal requirements for CME from specialty colleges, how these can be met by individuals, and whether any costs could be estimated. Letters were written to all colleges. The matter was also raised with specialty nominees and at the APPC meetings to obtain any available guidelines from other bodies, particularly craft associations.

The feedback indicated that only two groups recognised within the MBS have obligatory CME. The obstetricians and the vocationally registered general practitioners would lose their eligibility for continued college membership if they did not comply with their colleges' CME requirements. This was the case in August 2000, and other groups intend to make it compulsory in the future.

A reasonable allocation for each specialty group was assessed based on the following criteria:

- what the doctors themselves reported as a satisfactory or desirable CME commitment
- what the colleges indicated was the expected level of commitment
- the amounts identified by the study doctors as spent on CME as conference or course costs
- benchmarking with the ABS survey (ABS, 1997) and FMRC (FMRC 1997) benchmarks and other recognised benchmarks to verify the results.

8.3 General practitioners

Vocationally registered doctors who are fellows of the RACGP have a recognised CME program. Although the program gives credit for attendance at conferences, there is no obligation to include these conferences within CME. Many organisations cater for the CME needs of general practitioners. In all States general practitioners have formed divisions that co-ordinate CME and have regular clinical meetings; rural and remote doctors have access to funded training and education centres.

Much of the education offered to general practitioners is sponsored or subsidised by pharmaceutical companies and other suppliers, and is delivered locally. Urban general practitioners have access to regular clinical meetings that are fully sponsored by these organisations. Thus there is little direct cost to these general practitioners or their practices, other than a commitment of their time.

The study team collected detailed individual financial data from multiple general practitioners in different States and different geographical locations. Few general practitioners had recorded any costs for personal CME. National conferences for general practitioners are poorly attended compared with those of their specialist colleagues. Although there are about 25,000 general practitioners in Australia, a national meeting of 1,000 or more would be exceptional. Not all those attending would be private practitioners bearing their own costs.

It was noted, however, that doctors from rural and isolated areas were among the general practitioners who had recorded actual expenditure for conference or workshops. We contacted a rural training unit which gave an indication of course and conference costs for rural general practitioners. Intensive one-week workshops are available for rural general practitioners for a registration fee of \$1,032. The majority of rural general practitioners attend such workshops on the basis of one every four years. The unit indicated that only about a quarter of the attendants pay their own costs – the rest are subsidised by pharmaceutical companies.

8.3.1 Applying the assessment criteria

What the doctors themselves reported as satisfactory or desirable CME commitment

Regular attendance at local meetings and appropriate journal reading is all that is reported by urban general practitioners. Rural practitioners reported the need to attend a procedurally based program for a week each year.

What the colleges indicated was the expected level of commitment

The RACGP program does not indicate specific meetings or conferences to be attended, but does credit attendance at approved meetings. Annual attendance figures of less than 3,000 at general practitioner conferences would suggest that, on average, individuals attend the national conference less than once in 10 years.

The amounts identified by the study doctors as spent on CME as conference or course costs

The average cost per general practitioner was \$888. This figure does not present the full story in regard to CME. The study data clearly showed that general practitioners who undertook CME spent considerably more than the \$888 average. For the doctors who incurred CME costs the annual cost ranged from \$1,500 to \$3,000. However, the average level of CME expenditure overall was reduced to a large degree by the high percentage (50%) of doctors who spent little or nothing on CME activities.

Benchmarking with ABS and FMRC data and other recognised benchmarks to verify the results

Benchmarking of the study findings was not possible as both the ABS survey and the FMRC benchmarks included CME costs in their pool of 'other expenses'.

8.3.2 The allocation

The Board noted that general practitioners receive significant levels of sponsored and subsidised CME. Although it can be argued that an allocation through the MBS supplements the CME that is already being provided without cost to the general practitioners, an emphasis on improving and maintaining quality medical practice would justify a funding allocation.

An allocation of \$1,256 was therefore accepted by the Board on the basis of attendance by general practitioners at one major national conference every second year (equivalent to attendance at a regional conference each year). The calculation for the CME allocation was as follows:

Conference costs (based on 5-day national conference every two years)

Conference registration costs	516
Travel costs (airfare)	570
Allowance for accommodation and incidentals*	1,426
Total	\$2,512
50% of this costs represents an annual allocation of \$1,256.	

* allowance is based on ATO published rates, TR 99/7

8.4 Specialist groups

8.4.1 Applying the assessment criteria

What the doctors themselves reported as satisfactory or desirable CME commitment

Following written requests and personal approaches to representatives of colleges, we established that a national conference each year involving travel and an international conference every second or third year was expected. Study data identifying actual expenses supports this.

Many of those contacted claimed that it was difficult for every specialist in a discipline to attend the appropriate conference each year due to the need for coverage of the specialty at a local or hospital level. Alternative scientific conferences are offered each year so that individual doctors can alternate with colleagues in a particular discipline.

What the colleges indicated was the expected level of commitment

The Royal Australasian College of Physicians (RACP) has a well-documented and disseminated CME program. This is available to all physicians. Groups such as the dermatologists have their own programs, but these are very similar to the physicians' Maintenance of Professional Standards (MOPS) program. Although the program is not prescriptive with regard to attendance at clinical meetings, there is an expectation that most will attend about two per year. A recent survey by the RACP registered about 90% of respondents as having attended clinical meetings in the past six months. Virtually all respondents had attended a meeting in the last five years. The clinical meetings referred to were meetings external to the hospital or physicians' practice.

The MOPS program requirements could be satisfied without expenditure by individual doctors. The programs offer the participants a variety of learning methodologies. Participation in or completion of these learning tasks earns doctors CME points that are aggregated annually or over a defined number of years. In complying with the desired

number of learning points, an individual could pursue a path which involved no external meetings or conferences. Although possible, it appears from our requests for information from colleges and doctors that this is very uncommon behaviour. A high level of expenditure was encountered in the study. In the specialist groups, it was concluded that compliance with the normative levels of CME was high, with high levels of attendance at national conferences and meetings.

The amounts identified by the study doctors as spent on CME as conference or course costs

The specialists included in the study had a high incidence of expenditure for conferences or clinical meetings in the year under study. Commonly, the total claims for expenses were between \$2,000 and \$5,000, with individuals claiming up to \$30,000 for extensive international conference travel. The average cost for all specialists was \$5,472.

Benchmarking with ABS and FMRC data and other recognised benchmarks to verify the results

The study data, together with feedback from nominees and APPC meetings, indicated that specialists have higher levels of expenditure than general practitioners. However, external data such as the ABS survey and the FMRC benchmarks did not separate data into sufficient detail to provide any guidance on this issue.

8.4.2 The allocation

The Board accepted that on the basis of the information from the colleges and specialty nominees and identified in the financial data of the study doctors:

- specialists should be considered as a single category. An overall allocation would be sufficient for the few smaller groups that insisted on the requirement to travel overseas each year
- an amount representing the costs of a national conference or meeting each year with an international meeting every second year should be used as the basis of the allocation.

Calculations for costing conferences:

National conferences (based on 3-day conference every year)

Conference registration costs	516
Travel costs (airfare)	570
Allowance for accommodation and incidentals *	713
Total	\$1,799

International conferences (based on 5-day conference every two years)

Conference registration costs	826
Travel costs (airfare)	2,581
Allowance for accommodation and incidentals *	1,783
Total	\$5,190
This provides an international allocation of \$5,190 every second year and therefore \$2,595 per year.	
Total (per year)	\$4,394

* allowance is based on ATO published rates, TR 99/7

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List of abbreviations

AAS	Australian Accounting Standard
ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health & Welfare
AMA	Australian Medical Association
AMWAC	Australian Medical Workforce Advisory Committee
APPC	Advisory Panel on Practice Costs
ATO	Australian Taxation Office
AWE	Average Weekly Earnings
AWOTE	Average Weekly Ordinary Times Earnings
CME	Continuing Medical Education
CPI	Consumer Price Index
DH&FS	Department of Health and Family Services
DMS	Deputising Medical Services
ECG	Electrocardiography
ENT	Ear, Nose and Throat
FMRC	Financial Management Resource Centre, University of New England
FTE	Full-time equivalent
GMST	General Medical Services Table
GST	Goods and Services Tax
HIC	Health Insurance Commission
IVF	In-vitro Fertilisation
KPMG	KPMG Management Consultants
MBS	Medicare Benefits Schedule
MOPS	Maintenance of Professional Standards
NAMDS	National Association of Medical Deputising Services
O&G	Obstetrics and Gynaecology
PAYE	Pay-As-You-Earn
PII	Professional Indemnity Insurance
PIP	Practice Incentive Program
PRS	Professional Relativities Study
PwC	PricewaterhouseCoopers
RACGP	Royal Australian College of General Practitioners
RACP	Royal Australasian College of Physicians
RBA	Reserve Bank of Australia
RRMA	Rural, Remote and Metropolitan Areas
RRS	Remuneration Rates Study
RVS	Relative Value Study
SNA	Safety Net Adjustment
TMUI	Treasury Measure of Underlying Inflation
VMO	Visiting Medical Officer
WCI	Wage Cost Index (ABS); Wages and Cost Index (Government)

Appendix A

Responses to PwC's comments on allowing for business risk in practice costs

AMA response

BUSINESS RISK IN THE CONTEXT OF RESOURCE-BASED SCHEDULE FEES

*AMA's response to PricewaterhouseCoopers' comments on allowing
for business risk in practice costs*

This paper gives the AMA response to the supplementary report of 7 September 2000 by PricewaterhouseCoopers (PwC). This report was prepared for the 66th meeting of the MSRB ("Business risk/profit in the context of resource-based schedule fees") and is referred to below as the "Section 2.6 report".

Précis of AMA position

- The AMA is concerned that the Relative Value Study (RVS) will be impaired if it does not take proper account of the business risk that is inherent in private medical practice.
- There is a persuasive case for handling return on capital in the context of the Practice Cost Study (PCS), not the Remuneration Rates Study (RRS) as proposed by PwC;
- The PCS adopts a methodology for estimating the cost of premises (rental equivalence) which is conceptually correct in the way it handles business risk. The AMA supports that methodology;
- The AMA further supports the PCS methodology for estimating motor vehicle costs;
- The PCS should encompass a consistent methodology for estimating the rate of return on all elements of fixed capital employed in a medical practice. The inclusion of some elements of fixed capital in "working capital expense" is unsustainable. The occupancy costs methodology is easily adapted for other elements of fixed capital. The appropriate rate of return for investment in fixed assets (plant and equipment) is implicitly achieved by adopting an operating (non-financial) lease cost. This should replace both the depreciation allowance and the interest cost;
- There are elements of business risk which will not be reflected in the operating lease cost. Not all these should be compensable. In particular, fees set in an RVS context should not compensate risk takers for poor business decisions, nor should they compensate risk takers for capital acquisitions undertaken for services which are outside the MBS. The remaining elements of business risk will probably be small and can be overlooked; and
- The method for handling the cost of working capital is broadly acceptable. There is scope to use a more conventional concept of working capital. PwC have used a risk

margin of 2 percentage points (using the 10-year bond rate as the riskless reference rate). The AMA sees a compelling case for adopting a risk margin of 3 percentage points.

Background

The PCS implicitly allows for a risk-assessed rate of return on some elements of capital invested in a private medical practice but not on other elements. One of the PCS cost categories is the working capital expense. This is calculated by applying an interest rate (the cost of funding) to the total value of "working capital" required for a reasonably efficient practice by specialty. Working capital is defined by PwC as comprising average cash at bank or bank overdraft, average accounts receivable and payable and the average written-down value of plant and equipment. This is an unusual definition, both in regard to the inclusion of some (but not all) of the fixed capital typically employed in a private medical practice and because not all elements of working capital (as defined by convention) appear to be covered.

At least three other practice cost categories also involve charges for fixed capital employed—occupancy costs (covering premises), other practice costs (covering depreciation of equipment including office equipment and computers) and motor vehicle expenses.

Remuneration or cost (RRS or PCS)?

In the Section 2.6 report, PwC assert that "business risk or profit is not a practice cost" and that "it is a reward arising from the running of the business and represents a return on the overall investment made in that business". The report goes on to argue that if the profit element or risk was considered a part of the RVS, it would normally form part of the RRS.

To handle rate of return on capital as a remuneration issue is to pre-suppose that only the owner/operator of a medical practice can provide the risk capital:

- This flies in the face of the PCS methodology for occupancy costs. Under the rental equivalence method, it makes no difference whether or not the medical practitioner has any equity in the premises. It is indeed irrelevant whether the medical practitioner supplies the risk capital for a private medical practice or whether that capital is provided by another investor or investors. This is explicitly recognised by PwC in their explanation of the methodology for estimating occupancy costs.

"Doctors commonly own the premises where they practise, but there is a large amount of discretion in their actual financial arrangements. To establish a reasonable cost, we removed variations caused by this discretion. To do this we assumed that all doctors are tenants in their rooms on an arms length basis, and we derived a reasonable rent cost using independently determined commercial rents." ;

- There is no empirical validity in the proposition that private practitioners supply the risk capital. On the contrary, the trends in the corporatisation of medical practice are all for the counter model whereby a third party extends the risk capital and receives a return

for that within the payments made by the GP associate for the supply of premises and business services; and

- The RRS has sought to establish the value of the time and the professional expertise of a medical professional, with reference to the relative complexity of the work and the salaries paid in the comparator professions. It has not collected data on returns to sole proprietors in those professions. Likewise, the comparisons with salaries of employed medical practitioners involve no comparable return on investment. The RRS is simply not designed or equipped for the task of estimating the compensation for business risk.

The case for handling all return on capital issues in the context of the PCS, rather than the RRS, is persuasive.

Risk assessment

It is very difficult to envisage how the RVS could fail to take account of business risk. Risk is present in all business endeavours (although the degree of risk will vary from industry to industry as well as within industries). In the long term, pricing will reflect the risk undertaken by investors. Private medical practice will vanish if those investing are not able to earn a rate of return at least equal to the opportunity rates of return on investments of comparable risk. Since the RVS seeks to establish pricing for the reasonably efficient business for the medium term, the various studies need to reflect the normal business risks that the reasonably efficient business would encounter.

Why rental equivalence is the correct methodology

The rental equivalence methodology adopted by PwC in the PCS is robust. The concept of economic opportunity cost lies at the heart of economic assessments. The rental equivalence method used for occupancy costs is an opportunity cost method. A medical practitioner who happens to own business premises is, in that role, an investor. The business premises might be rented out to another independent business or used for the surgery. There is no reason why medical fees should underpin a higher (or lower) rate of return on that investment if it is used for the surgery compared with rented at market rates. The arms-length rental equivalence method achieves that outcome. It established equity between medical practitioners who invest in their business premises and those who rent. It is the theoretically correct methodology.

Rental equivalence does, of course, include an element for return on capital or "profit". The key point is that it includes a rate of return on capital which appropriately reflects the business risk associated with that sort of investment. Investment in business premises comprehends a lower business risk than investment in some more specialised items of plant and equipment. Business premises no longer required for the surgery can be rented out at the market price, whereas technological change can render some medical equipment worthless.

Motor vehicle expenses

The method for calculating motor vehicles expenses in the PCS is also robust. It too implicitly includes an element for return on capital or "profit". Again, that return appropriately reflects the relatively low business risk.

Other fixed capital

The AMA contends that if the conceptually correct method can be used for occupancy costs and for motor vehicles, it can also be used for other items of fixed capital (plant and equipment), and it should. It is highly desirable to have a consistent and well understood method for handling rate of return issues. Such a method will produce the desired outcome of equity between equipment-intensive procedural specialists and consultants and it will produce commercial rates of return which appropriately reflect the business risk assumed by the provider of risk capital, whoever that is.

The commercial rate of return on plant and equipment investment is the return an investor would receive if there were no guarantee from (no risk assumption by) the medical practitioner. It is not the rate of return that would be implied in a financial lease or a long-term operating lease (extending for the technical life of the equipment). Such leases have the effect of the lessee assuming business risk from the lessor in return for a lower leasing cost. Short term rental costs are likewise an inappropriate guide as these involve larger transaction and handling costs. The appropriate commercial cost to correctly reflect non-diversifiable business risk is that of that an operating (non-financial) lease, one that the lessee can walk away from at any point in time without financial penalty. Such a lease cost will cover both the funding cost (the implied interest rate on the capital being provided) and consumption of capital (the depreciation).

PwC argue that the commercial risks accepted by persons investing in private medical enterprise are low compared with many other industries. To the extent that this is true, it will be reflected in the operating lease charges.

The AMA considers that there are no insurmountable difficulties in making the required assessments. The relevant items of plant and equipment can be pooled and assessed in terms of their average life span. Typically, an operating lease will be for a fixed term which involves the lessee in assuming some of the business risks of the owner/lessor. This can be handled by establishing an appropriate risk margin. Operating leases are a very common way of engaging fixed capital in a business. There will be abundant market information on rates and the markets are competitive.

The AMA is unable to support PwC's proposals for a sliding scale of risk return, based on the value of capital equipment, with a high discount for larger equipment values. There is no empirical or theoretical basis for this.

Working capital

With plant and equipment handled separately, the items remaining in working capital as defined by PwC are average cash at bank or bank overdraft and average accounts receivable and payable. A more conventional definition of the working capital requirement is average net current liabilities less net current assets. This is the average working capital "gap" amount which has to be financed. Working capital is required for many purposes other than funding net receivables. In particular, net current liabilities will include any undrawn returns to the owner(s). The timing of drawings should not have any impact on the working capital requirements. It is unclear whether PwC's reference to net receivables includes the liability to owners or whether it merely refers to trade credit received and advances.

In the PCS, PwC adopted an interest rate of 8.96%, calculated by adding a risk margin of 2 percentage points to the long-term (10-year) Treasury bond rate (6.96% as at 31 December 2000). The 2 percentage point margin is said to reflect commercial realities of risk assumed by overdraft lenders. The AMA agrees with PwC's assessment that there is minimal risk in regard to accounts receivable funding. The PCS methodology has an explicit provision for bad debts in "other practice costs". Therefore, the AMA agrees with the essence of PwC's approach to the cost of working capital, that of establishing the commercial risk margin charged by the providers of that working capital.

That said, the commercial realities are not an issue for speculation. The relevant data are published every month in the Reserve Bank Bulletin. Over the past 15 years, the average margin between the small business overdraft rate and the 10-year bond rate has been 3 percentage points. The margin for the latest month (August 2000) is 2.89 percentage points.

Banks now extract a higher proportion of their income from fees levied on accounts and services whereas they once relied more heavily on the gross margin between deposit rates and lending rates. Accordingly, the effective cost of overdraft borrowing has increased relative to the published overdraft rate. The case for a 3 percentage point risk margin over the bond rate is compelling.

Matters excluded

While the AMA considers that some changes in PCS methodology are indicated, the changes do not compensate investors for all business risks, nor should they:

- Individual investors who make poor business decisions (relative to their competitors) will receive commensurately lower returns on their investments; and
- Investors who purchase equipment in the hope that benefits might be approved in the future are taking two risks: the risk that the expectation is not met and the risk that the same item may be purchased later on at a lower price due to technological improvements. It is not appropriate to reflect these risks in the rate of return assessment. The RVS is concerned with setting fees for items within the MBS. Investors are quite entitled to take risks in betting whether Medicare benefits may become available in the future, but they are not entitled to have that risk taking underwritten by the public purse.

Australian Medical Association

16 October 2000

Department of Health and Aged Care response

The Department's response to the paper prepared by the AMA on business risk

The Department notes that the Board were unable to agree on the appropriate treatment for business risk in the Practice Cost Study. The paper prepared by the AMA addresses both the issue of whether business risk should be included in the study and the method by which it should be calculated. Due to the nature of the Medicare arrangements the Department considers that there is only negligible business risk in this sector. In addition, the practice cost study has already accounted for a number of areas of business risk, for example, through the allowance for bad debts.

The AMA paper proposes a margin of 3% above the long term bond rate for the interest rate applying to working capital. This argument is partly based on the increase in bank fees and charges over time, the effective interest rate on borrowings now being above the published overdraft rate. The Department does not accept this argument as the Practice Cost Study has already provided for bank fees and charges.

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