

A survey of procedural general practitioners in NSW (RRMA 4-7)
August, 2001 - January, 2002

Procedural Medicine in Rural and Remote NSW

The General Practice Workforce

NSW Rural Doctors Network

September 2002

**NSW Rural Doctors Network
Discussion Paper**

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Abbreviations

ACRRM	Australian College of Rural and Remote Medicine
AHS	Area Health Service
ALSO	Advanced Life Support in Obstetrics
APLS	Advanced Paediatric Life Support
CME	Continuing Medical Education
CMO	Career Medical Officer
DRANZCOG	Diploma Royal Australian and New Zealand College of Obstetricians and Gynaecologists
ELS	Emergency Life Support
EMST	Early Management of Severe Trauma
FRACGP	Fellowship of the Royal Australian College of General Practitioners
GP	General Practitioner
LSCS	Lower Segment Caesarean Section
NSW	New South Wales
RACGP	Royal Australian College of General Practitioners
RDA	Rural Doctors Association (NSW)
RDN	NSW Rural Doctors Network
RMSF	Rural Medical Support Forum
RRMA	Rural, Remote and Metropolitan Area Classification
VMO	Visiting Medical Officer

Preface

This study is an initiative of the Rural Medical Support Forum (RMSF). The RMSF provides NSW Rural Doctors Network with strategic advice and information on issues relating to the improved recruitment, retention and effectiveness of the rural and remote medical workforce in NSW. It has representation from State and Commonwealth government, consumers (Country Women's Association NSW), rural Divisions of General Practice, Local Government Shires Association, Aboriginal Health and Medical Research Council, Rural Medical Training Forum, Rural Doctors Association, NSW and the board of the NSW Rural Doctors Network.

The RMSF is interested in quantifying the value of procedural work carried out in rural and remote communities. It recognised that the first step in this process is to determine the scope of procedural work being carried out in these areas by general practitioners. This project was developed to provide a current snapshot of general practitioners engaged in procedural medicine in NSW (RRMA 4-7).

A steering committee drawn largely from the RMSF was established in June 2001 to oversee the development of the survey tool and provide advice and direction in conducting the investigation. Rural Doctors Association, NSW also endorsed the questionnaire as part of their concern for the continuation of procedural medicine.

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The 17 rural Divisions of General Practice and the three border Division were very helpful with workforce information and responses to queries.

I also appreciated very much the interest shown by rural doctors who took the time to fill in the survey and provide a clear picture of procedural medicine in NSW (RRMA 4-7).

Summary

The number of general practitioners practising advanced procedural skills in New South Wales (NSW) is dropping and not enough general practitioners (GPs) are acquiring the skills necessary to replace them. However, there have been no published data on the size of the procedural GP workforce since 1991. In 2001 NSW Rural Doctors Network (RDN) surveyed the existing procedural general practice workforce in RRMA 4-7 to establish numbers of GPs practising advanced procedural skills, activity levels, attitudes to specialist services and training, career intentions, and barriers to continued practice of procedural medicine.

Procedural general practice workforce

At 30 June, 2001 there were 166 GP obstetricians, 67 GPs doing lower segment caesarean sections (LSCS), 118 GP anaesthetists and 62 GP surgeons in NSW (RRMA 4-7). Of these 153 GP obstetricians (92%), 56 GPs doing LSCS (84%), 105 anaesthetists (89%) and 55 GP surgeons (79%) responded to the procedural medicine questionnaire (Table 1). A little over half of all GP obstetricians and GP anaesthetists practised in two advanced procedural skills areas, compared with over 80% of GP surgeons. Twenty two of the 205 respondents practised in all three areas.

Table 1 Characteristics of the procedural GP workforce at 30 June, 2001, based on questionnaire respondents

	All respondents	Obstetricians	LSCS	Anaesthetists	Surgeons
Respondents (head count)	205	153	56	105	56
Response rate (%)	-	92	84	89	79
Average age (years) ¹	45.8 +/- 7.7	45.6 +/- 7.6	46.7 +/- 9.1	45.4 +/- 7.0	50.2 +/- 8.5
Average years practising ¹	-	15.5 +/- 8.2	16.1 +/- 9.9	14.2 +/- 7.9	20.3 +/- 9.2
Formal qualifications (%)	-	78	77	47	38

1. mean +/- standard deviation

These GPs worked in 71 towns (representing 34% of all towns with a resident GP in RRMA 4-7). Over two thirds of all procedural towns and three quarters of the procedural GPs were in RRMA 5. Towns with 1-2 procedural GPs (48%) and towns with 3-6 procedural GPs (48%) were in the majority. Those with more than 6 procedural GPs represented just 4% of all procedural towns.

The average age of procedural GPs was 45.8 years and males comprised 87% of the workforce (compared with 75% of the general GP workforce). GPs ranged from 30 years old to 74 years old and the majority (41%) were in the 45-54 year age group. Females were significantly younger ($p < 0.001$) than males (40.1 compared to 46.6 years old) and 32% were under 35 compared with 5.6% of males. The majority of all procedural GPs had been practising their advanced procedural skills for between 11 and 20 years.

Surgeons were the oldest group, with an average age of 50.2 years and 30% were aged over 55 years. Almost half had been practising for over 20 years. Surgeons also had the lowest recruitment rates.

Procedural medicine was an important part of why 87% of procedural GPs continue to work in rural practice. There was a distinction between those enjoying procedural medicine and wishing to continue and those finding a change attractive. If procedural medicine were withdrawn from their town, only 15% stated they would definitely move to another location offering procedural skills, compared with 18% who said they would leave rural practice altogether. Therefore rural communities would not only lose the procedural skills, but in a number of cases the GP also.

Changes to the procedural GP workforce and workload over time

Only 4% of the GP workforce surveyed thought that there had been an increase in the number of procedural GPs in their town over the last 7 years, compared with 65% who thought there were less. Individual workloads have either increased (25% of GPs), decreased (37%) or stayed the same (24%). Many factors influenced individual workloads (Table 2).

Table 2 Triggers for changing average procedural workloads over the past 7 years based on respondents comments (n = 175)

Triggers for change (often more than one per respondent)	Number of respondents			
	Total	Increased workload	Decreased workload	Same workload
Changes in the number of procedural GPs in town	43	34	6	3
Hospital system	32	1	29	2
Personal decisions (includes stopping)	30	0	28	2
Specialists	27	8	17	2
Community changes	5	0	5	0
Miscellaneous	9	4	3	2

As well as community demographics, individual workloads were influenced by the availability of other advanced procedural skills in town, either by other GP proceduralists, or by resident or outreach specialist services. For example, the absence of anaesthetic skills impacts on both surgical lists and all but low risk obstetrics. Local hospital/Area Health Service (AHS) administration has a big impact on procedural workloads in some areas through its influence on facilities supplied at the local hospital (both physical and financial), types of procedures which can be performed and supply of suitably qualified nursing staff. Other factors included time constraints, threat of litigation, inadequate remuneration, on call and after hour commitments and family commitments.

The size of the GP workforce practising advanced procedural skills in obstetrics and anaesthetics has fallen by around one third over the last 10 years, and there are approximately 12 less communities where women can give birth locally. However, the number of procedures carried out does not appear to have fallen to the same extent (Table 3). Comparable numbers are not available for surgery.

During the twelve months to June 30, 2001, 17 GPs stopped practising advanced procedural skills altogether, representing 11% of GP obstetricians, 6% of those performing caesarean sections, 16% of anaesthetists and 11% of surgeons. By far the most common reason given for stopping was concern about litigation and the cost of indemnity insurance. A number of other reasons were also mentioned, including AHS budgets/lack of support, less demand for skills, age/retirement, changing patient expectations, withdrawal of facilities at hospital, difficulty of major re-skilling, poor remuneration, workload, issues around peers and worry.

Table 3 Number of procedures (self reported) per procedural GP in NSW (RRMA 4-7) in the 2000/01 financial year

	Mean [range] ⁵	Most common range (% GPs within range) ⁵	Best estimate of total numbers (all GPs)
Deliveries (including LSCS ¹) - 2000/01	45 [1 to 200]	21 - 50 (47%)	7 060 (10.6% LSCS)
Deliveries (including LSCS) - 1990/1 ²	23	-	5 950 (10.4% caesarean section)
Anaesthetics - 2000/01	290 [9 to 2070]	101 - 500 (74%)	29 691
Anaesthetics - 1991 ³	150	-	28 500
Operations ⁴	118 [2 to 607]	20 - 50 (30%)	6 169

1. Lower segment caesarean section

2. Woollard and Hays, 1993

3. Collett and Carroll, 1994

4. Defined as a surgical procedure requiring more than a basic infiltration of local anaesthetic

5. Excludes GPs stopping during the 2000/01 financial year

Workload preferences

In 2000/01 about half of all procedural GPs were satisfied with the number of procedures they did. Of those who were not, most wanted to do more, particularly anaesthetists and surgeons. The two most telling factors for those wanting to do more were limitations around provision of facilities and resourcing by AHSs, and interactions with peers and specialists. Reductions in surgical lists not only impacted on surgical activity, but also anaesthetics and, to a lesser extent, obstetrics.

Size of the future workforce

A third of GP obstetricians, 25% of those doing LSCS, 20% of GP anaesthetists and 20% of GP surgeons think they will cease practicing within 5 years. To maintain even the current workforce, at least 48 GP obstetricians, 14 GPs doing LSCS, 20 GP anaesthetists and 11 GP surgeons would need to take up practice over the next 5 years.

The corresponding numbers of GPs who have been practising these skills for less than 5 years are 13, 5, 10 and 1. There were 24 GPs out of 222 who reported they were not practising procedural medicine 7 years ago (representing 11% of the workforce at 30 June, 2001). Whilst these figures are based only on the survey, they indicate a serious and ongoing shortfall. The situation appears to be particularly serious for GP surgeons, where 44% have worked as GP surgeons for more than 20 years (compared with 27% for those doing LSCS, 22 % for obstetricians and 20% for anaesthetists).

Training

GPs surveyed felt that training/up-skilling opportunities were inadequate for both the existing and future workforce. Only 10% of respondents felt that training was adequate for the future workforce. The most prevalent concerns included sufficient training places (including hands on experience during training and in the transition to independent practice), a reluctance by new graduates to take on procedural training, and the need to address issues impacting on procedural medicine to make it more attractive to them. Particular reference was made to the difficulty of attracting GPs to do obstetrics in small country towns.

Lack of commitment by health services, increased level of responsibility, lifestyle issues and lack of financial support has led to poor numbers of GP proceduralists. These have to be addressed and then advertised to medical students to allow update of advanced posts.

The largest impediment to taking up training opportunities for the existing workforce was making the training period revenue neutral, particularly where locum cover is required. There were also concerns expressed about high workloads in some areas and de-skilling due to both lack of numbers and/or opportunities to update in others. These issues are compounded where GPs practise advanced procedural skills in more than one discipline.

Specialists

Overall respondents did not think that specialist services in their area were adequate, and the degree of dissatisfaction was greatest in the more remote locations. Procedural GPs saw specialists as an important source of advice and around half indicated they update skills by working with specialists. Specific comments centred around a lack of services, the need for support from specialist colleges for both training new proceduralists and supporting those in practice, and personal/professional relationships.

Areas of concern

The continuation of procedural medicine in NSW (RRMA 4-7) is based on the assumption that district hospitals will continue to need procedural GPs and the NSW Health Department will continue to provide adequate facilities and support staff and credential GPs to carry out procedures. The procedural GP workforce is contracting and this trend looks like continuing as the number of new recruits slows, pointing to a serious shortfall in the number of GPs prepared to practise procedural medicine. Performing procedural skills requires appropriate training and a career-long commitment to up-dating skills. The most significant barriers identified in this survey were:

- Medical indemnity - both the cost of cover and impact of the viability of offering procedural services, and a fear of litigation, which can act as a stressor and behavioural change agent.
- Availability of infrastructure, funding and support from AHS (downgrading of existing hospitals is limiting procedural practice). Withdrawal of procedural medicine could result in the loss, not only of those skills and services, but of the GPs too.
- GP willingness to be involved where long hours and much on call is necessary, intensified by workforce shortages in some areas, and the impact this has on family and lifestyle
- Adequate opportunities and encouragement to acquire advanced procedural skills in an environment encouraging hands on experience, followed by a transition period from trainee to independent practitioner which fosters confidence in using skills learned
- Costs and difficulty of getting enough CME points, or learning new procedural skills
- Concerns about skill maintenance in areas where the caseload is low
- Support from specialist colleges in training and up-skilling, and a clear recognition of the role of the procedural GP
- Remuneration/recognition.

Both the Commonwealth and State Government are working to address issues around medical indemnity, training and provision of specialist services. The impact of these changes on the willingness of GPs to train in, or remain involved in procedural medicine is yet to be evaluated. NSW Health is introducing a further 30 training posts for prospective rural

procedural GPs, in conjunction with an integrated approach to encourage GPs to embark on such a career path. These initiatives will need support from throughout the profession, including specialist colleges and universities to be successful. It will also be necessary to demonstrate to new graduates that they are embarking on a well - supported career pathway, with opportunities to work in both rural communities and in larger hospitals to up-date skills.

1. Introduction

The majority of procedural medicine (particularly more complicated procedures) is handled by specialists. Specialist services in NSW are concentrated in the most populated areas - the Wollongong-Sydney-Newcastle triangle and larger regional centres. Most rural and remote communities are not large enough to support their own specialist services. In these communities general practitioners (GPs) handle emergencies and provide a wide range of procedural skills, including obstetrics, anaesthetics and some surgery. Some rural communities also have resident specialists (often surgeons), fly in specialists or outreach services.

1.1 Nature of procedural medicine

To practice procedural skills in non-metropolitan NSW in a hospital setting a GP requires a Visiting Medical Officer (VMO) position. VMOs are employed by the local Area Health Service (AHS), which has a pivotal role in credentialling and maintaining appropriate facilities, staffing levels and funding (which relates to the delineation of clinical privileges).

VMOs are employed either on a fee for service basis, a sessional basis, or a combination of the two. In July 1988 the Rural Doctors Association (NSW) (RDA) and the NSW Health Department agreed on a new fee for service arrangement for GPs working as VMOs in non-metropolitan hospitals. This arrangement is enshrined in the NSW Rural Doctors Settlement Package and covers approximately 130 hospitals. Obstetrics and anaesthetics incentive grants were added to the package in 1993/94. The continued negotiation of the RDA Settlement Package is a positive contribution to the procedural GP workforce, though not all VMOs benefit.

Many GPs have been attracted to rural medicine because of the range of skills required, and for them VMO fee for service in rural hospitals is one of the reasons they choose to stay in rural practice (Hoyal, 1995). Hospital work was also an important factor reported by GPs for their decision to choose rural practice in the RDN GP workforce survey. Not only has this helped in the recruitment and retention of a viable rural medical workforce, it has also ensured that rural people have access to a range of medical procedures locally, rather than travelling to large regional or metropolitan centres for treatment.

1.2 Barriers to practising procedural medicine

A number of changes have occurred in the funding and delivery of health services within NSW, which have influenced the extent of GP involvement in procedural work in rural and remote communities. In implementing these changes, there are often conflicting interests between those concerned with economic importance of the health sector in small rural communities and those whose aim is to ensure efficient and effective provision of health service (Reid and Solomon, 1992).

More complex medical treatments have become concentrated in major provincial centres and in metropolitan referral hospitals and the demand for bed based care in small rural hospitals has diminished (Keating and Calder, 1997). The tendency has been to down grade or close small rural hospitals (Strasser *et al.*, 1994, Alexander, 1998, Macklin, 1999). In an evaluation of specialist support for GPs, Harris (1992) found that many GPs felt they were losing their skills as a result of hospital closures and delineation of hospital privileges.

Other barriers to GP involvement in procedural work have been identified, particularly a fear of litigation, combined with the high cost of indemnity insurance (Welch and Power, 1994, Sonergeld & Nichols, 1998, General Purpose Standing Committee No. 2, 1999). The latter is discouraging some GPs (and specialists) from carrying out procedural work, particularly where the number of procedures per year is not high. Other barriers include lifestyle and family, skill maintenance in relation to the number of procedures performed and high on call workload (Innes & Strasser, 1997). Appropriate training and retraining opportunities together with appropriate remuneration and indemnity arrangements have been identified as barriers to GPs obtaining and using their anaesthetics skills (AMWAC, 1996). Rural communities themselves have also experienced significant economic, demographic and social change over the past two decades, which is influencing their ability to attract and retain doctors, procedural or not.

There is strong support from within the ranks of rural medicine for GPs to continue to practice procedural medicine. However, it is also apparent that the number of GPs practising advanced procedural skills is dropping and only small numbers of new graduates taking up procedural medicine. There are very few published data to quantify this in NSW.

1.3 The project

New South Wales Rural Doctors Network (RDN) has surveyed the existing procedural (general practice) workforce to establish numbers of GPs practising advanced procedural skills, activity levels, attitudes to specialist services and training, career intentions, and barriers to continued practice of procedural medicine.

1.4 Aim

The aim of this paper is to establish a benchmark for the procedural workforce in NSW (Rural Remote and Metropolitan Areas Classification - RRMA 4-7) at 30 June, 2001, to comment on changes over the previous 10 years, and to discuss implications for the future GP procedural workforce.

The results of the survey are being used to lobby for changes around those issues causing concern to procedural GPs.

2. Methodology

A self-reporting postal questionnaire was developed by RDN to send to all procedural GPs in RRMA 4-7 locations within New South Wales in late August, 2001 (Appendix 1). Procedural GPs were identified from the RDN GP workforce database and in consultation with the 17 rural and 3 border Divisions of General Practice.

The questionnaire was piloted with 32 rural and remote procedural GPs (selected to give a range of procedural skills and geographic locations) in early August. As a result the questionnaire was modified slightly and posted (along with a pre-paid, self-addressed envelope) to a further 331 GPs at the end of August. A conservative approach was taken to identifying procedural GPs, and not all those sent the questionnaire were procedural. Some recipients had already ceased procedural practice and others had never been procedural. The questionnaire was also inadvertently sent to one resident general surgeon.

Procedural GPs were defined as GPs doing one or more of the following advanced skills: obstetrics (including normal deliveries, procedural intervention and operative obstetrics), anaesthetics (including general, neurolept, major regional, epidural and spinal anaesthetics) and surgery (defined as a surgical procedure requiring more than a basic infiltration of local anaesthetic).

A letter was sent to all non-respondents (143) in early October, 2001 and another copy of the questionnaire was sent three weeks later. A total of 259 questionnaires had been returned by January, 2002. Of these 224 were from procedural GPs, Two procedural GPs declined to complete the questionnaire, leaving a total of 222 completed questionnaires suitable for quantitative analysis. All of the 259 completed questionnaires were considered in the qualitative analysis of the open-ended questions in the questionnaire.

Response rates were determined against the number of GPs who self-reported practising advanced procedural skills in the RDN GP workforce survey, collected between July, 2001 and February, 2002 as part of RDN's commitment to workforce planning. The RDN GP workforce survey was distributed to all known GPs working in regional, rural and remote NSW in June 2001 (including GP registrars at practices, but not salaried hospital doctors). As part of this process, all practices in NSW were contacted (in writing or by phone) and information on procedural status was sought. This process identified some procedural GPs not sent a questionnaire. They are included as non-responders.

Statistical analysis

Data from the 222 responses suitable for analysis were coded and analysed using SPSS version 10.0 (Statistical Package for Social Sciences Inc., Chicago, IL, USA). Associations between variables were explored using the Chi-square statistic, t-tests and one way analysis of variance, with the level of significance set at $p < 0.05$.

3. Results

3.1 Characteristics of the procedural general practitioner workforce

This description of the procedural GP workforce is based on 222 questionnaires completed by GPs practising one or more advanced procedural skill at 30 June, 2001 (or having ceased to practice advanced procedural skills in the previous twelve months). Estimates of the total workforce are derived from the RDN GP workforce survey and follow up monitoring, at June 30, 2001. Response rates varied from 79% for GP surgeons to 92% for GP obstetricians (Table 3.1). The majority of non-respondents were in RRMA 4.

3.1.1 Size of the workforce

At 30 June, 2001 there were 205 procedural GPs in NSW (RRMA 4-7), identified by this survey. Seventeen ceased practising advanced procedural skills between July, 2000 and June, 2001 (Section 3.9). Obstetrics was the most commonly practised advanced procedural skills area, followed by anaesthetics and surgery (Table 3.1).

Table 3.1 Number of GPs practising advanced procedural skills at 30 June, 2001

Advanced procedural skill	Total number of survey respondents	GPs stopping between July 2000 and June 2001	GPs practising procedures at 30 June, 2001	Best estimate of procedural GPs ¹	Response rate, (based on best estimate of procedural GPs ¹)
Obstetrics	172	19	153	166	92%
LSCS ²	66	10	56	67	84%
Anaesthetics	112	7	105	118	89%
Surgery	62	7	55	70	79%

1. Self reported, through the RDN GP workforce survey and follow up monitoring, at 30 June, 2001

2. Lower segment caesarean section

A little over half of all obstetricians and anaesthetists practise more than one advanced procedural skill, compared with over four fifths of surgeons (Table 3.2). A much higher proportion of GP surgeons practise all 3 skills (40% compared with 21% of anaesthetists and 14% of obstetricians). All GPs performing lower segment caesarean sections (LSCS), except one, do other deliveries, 16 do just obstetrics, 17 do obstetrics and surgery, 12 do obstetrics and anaesthetics and 11 do all three advanced procedural skills, giving a total of 56.

Table 3.2 Skill blend of GPs practising advanced procedural skills at 30 June, 2001 (headcount)

Skill blend	Obstetrics	Anaesthetics	Surgery
Single procedural skill	71	41	7
Obstetrics + anaesthetics	38	38	n/a
Obstetrics + surgery	22	n/a	22
Anaesthetics + surgery	n/a	4	4
All three skills	22	22	22
Total number of GPs	153	105	55

3.1.2 Geographical distribution

At 30 June, 2001 there were 1 040 GPs in NSW (RRMA 4-7), spread relatively evenly between RRMA 4 and 5, with a small number in RRMA 7 (Figure 3.1). In contrast, almost three quarters of all procedural GPs were in RRMA 5, with little variation between advanced procedural skills. There was no significant interaction between the numbers of GPs with particular advanced procedural skills and the RRMA classification of the location they worked. The most notable difference was in the higher proportion of GP surgeons in RRMA 4 (34% compared with 25-29% in RRMA 5 and 7) and lower proportion in RRMA 5 (63% compared with 68-70% in RRMA 4 and 7).

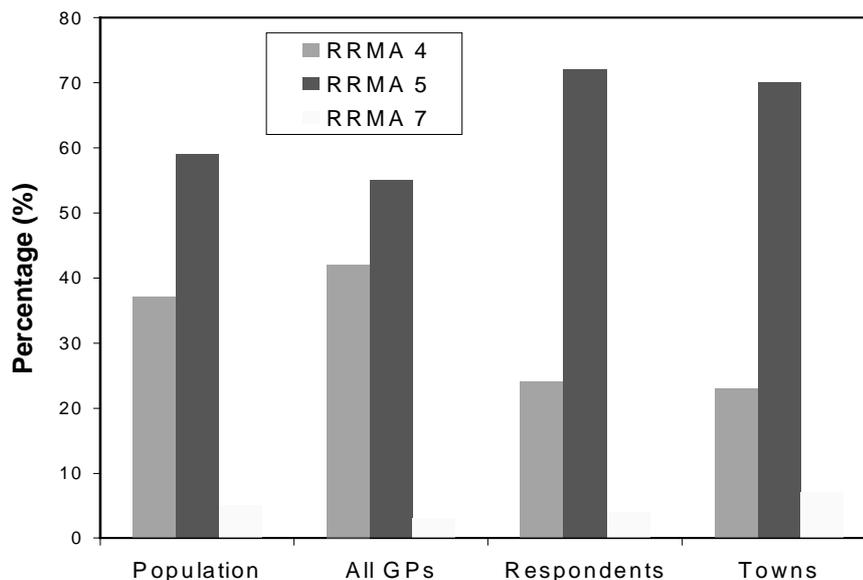


Figure 3.1 Distribution of GPs practising advanced procedural skills at June 30, 2001 in relation to all GPs, population and procedural towns in NSW, based on RRMA classification (Source: population estimates from Health WIZ v. 5.2, All GP estimates from RDN GP workforce survey and ongoing monitoring, procedural towns from respondents)

Seventy one procedural towns were identified (Appendix 2), three less than at 1 July 2000, though this situation could change again. This represents 34% of towns in RRMA 4-7 with a resident GP. The number of procedural GPs/town ranged from 1 (in 23 towns) to 9 (in 1 town). The majority of procedural towns had 1 procedural GP and 3 towns had more than 6 (Table 3.3). There was an average of 3.2 procedural GPs/town in RRMA 4, 2.8 in RRMA 5 and 2.0 in RRMA 7.

Table 3.3 Distribution of procedural GPs on a town basis (all respondents)

Procedural GPs/town	Number of towns at 1 July, 2000 (Total GPs = 222, towns = 74)	Number of towns at 30 June 2001 (Total GPs = 205, towns = 71)
1	22	23
2	10	11
3	16	14
4	12	10
5	9	8
6	1	2
7	2	2
9	2	1

The number of respondents in each Division of General Practice is listed in Appendix 3.

3.1.3 Age and gender

The average age of procedural GPs was 45.8 years and the median age was 46 years (Table 3.4). This compared with an average age of 48.8 years for the general practice workforce, RRMA 3-7). Male GPs comprised 87% of the procedural GP workforce compared with 75% of the general practice workforce.

Table 3.4 The age profile (years) and age categories (%) of GPs practising advanced procedural skills at 30 June, 2001

	Sample size	Range	Mean +/- sd	Median	< 35	35 - 44	45 - 54	> 55
All respondents	203 ²	30 - 74	45.8 +/- 7.7	46	8.9	35.5	40.9	14.8
Females	25 ¹	30 - 54	40.1 +/- 6.5	39	32.0	32.0	36.0	0.0
Males	178	33 - 74	46.6 +/- 7.5	47	5.6	36.0	41.6	16.9
GP Obstetricians	152 ¹	30 - 74	45.6 +/- 7.6	46	8.6	36.8	42.1	12.5
GP - LSCS	55 ¹	32 - 74	46.7 +/- 9.1	46	9.1	36.4	34.5	20.0
GP Anaesthetists	103 ²	32 - 61	45.4 +/- 7.0	46	7.8	37.9	42.7	11.7
GP Surgeons	54 ¹	32 - 74	50.2 +/- 8.5	50	5.6	16.7	48.2	29.7

1. 1 missing

2. 2 missing

There were only small differences in the gender ratio of GPs practising different advanced procedural skills. More female GPs practised obstetrics than LSCS, anaesthetics or surgery (16% compared with 7-9%). There was no statistically significant variation in either gender mix or mean age of the respondents based on RRMA classification. However, females were significantly younger than males ($p < 0.001$) and GP surgeons were significantly older ($p < 0.01$) than either obstetricians or anaesthetists (Table 3.4, Figure 3.2). The majority of GPs were aged between 45 and 54, followed by 35 to 44 year olds, with the exception of surgeons, where 30% were over 55. Almost a third of all female procedural GPs were under 35 compared with only 5.6% of males.

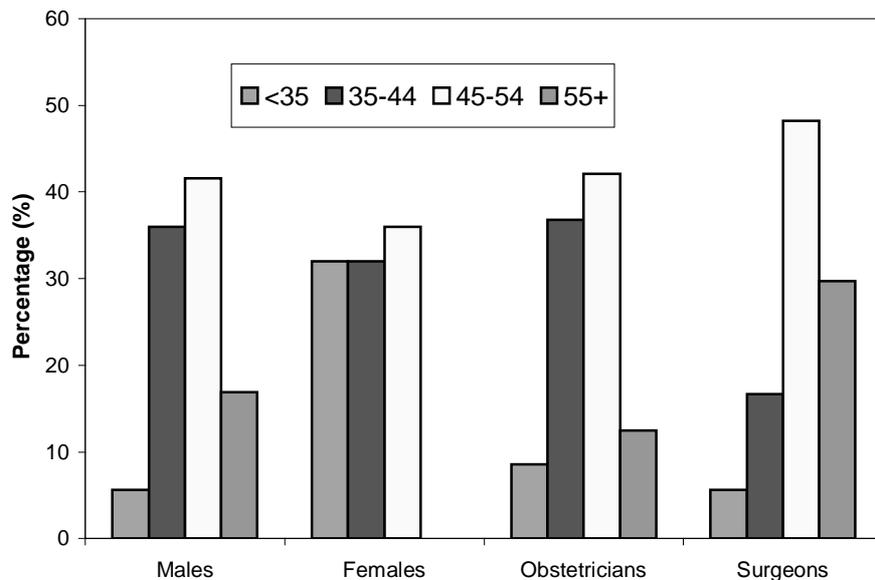


Figure 3.2 Age categories of GPs practising advanced procedural skills at 30 June, 2001

3.1.4 Years as a fully qualified GP practising advanced procedural skills

The majority of GPs have practised their advanced procedural skills for between 11 and 20 years, with the exception of GP surgeons, where the average was 20 years and the largest cohort (44%) have practised for over 20 years (Table 3.5). In contrast, only 2% of the GP surgical workforce have practised for less than 5 years. This figure is somewhat higher for obstetricians, those doing LSCS and anaesthetists (9-10%) (Figure 3.3).

Table 3.5 Years as a fully qualified GP practising advanced procedural skills at 30 June, 2001¹

	Obstetricians	LSCS	Anaesthetists	Surgeons
Total number ²	147	56	106	48
Range (years)	1-48	2-48	3-35	3-48
Mean +/- sd (years) ²	15.5 +/- 8.2	16.1 +/- 9.9	14.2 +/- 7.9	20.3 +/- 9.2

1. unadjusted for changes in training regime over time
2. Missing values for obstetrics = 6, LSCS = 1, anaesthetics = 4 and surgery = 7

3.1.5 Formal postgraduate qualifications

The proportion of procedural GPs with formal postgraduate qualifications in their field of interest was highest for GP obstetricians (78%), followed by those practising LSCS (77%), GP anaesthetists (47%) and GP surgeons (38%). Four anaesthetists and 3 surgeons did not answer the question.

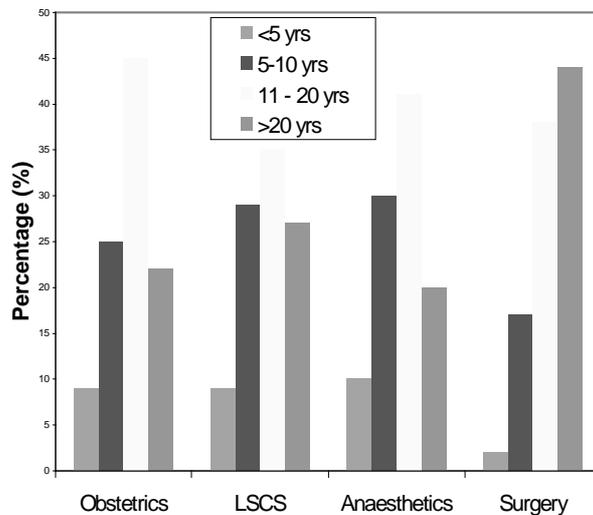


Figure 3.3 Years as a fully qualified GP practising advanced procedural skills, at 30 June, 2001

3.1.6 What is a reasonable time to repeat this questionnaire

The majority of respondents (54%) felt that the questionnaire should be repeated every 3 years. A further 26% felt it would be appropriate every 5 years, 10% felt it should be an annual survey, 7% had other comments, 5% did not answer the question and 4% felt it should never be repeated.

3.2 Changes in the procedural GP workforce over the past 7 years

3.2.1 Changes in the size and activity of the procedural workforce

Respondents gave their views on changes in both the numbers of procedural GPs in their town and their own procedural workload over the previous 7 years. They believed that the GP workforce in most procedural towns had either decreased, or stayed the same (Table 3.6). On an individual basis, over a third of GPs believed their average procedural workload was less now that it was 7 years ago. Approximately one quarter of GP respondents believed they had a heavier workload than 7 years ago, and another quarter were unsure. However, more GPs (37%) felt their workload had decreased than felt it had increased (25%).

Table 3.6 Changes in the size and activity of the GP procedural workforce over the last 7 years (n = 222) and workload preferences at 30 June, 2001

	Number of procedural GPs in your town now compared with 7 years ago (%)	Average procedural workload now compared with 7 years ago ¹ (%)	Workload preferences (%)		
			Obstetrics	Anaesthetics	Surgery
Same	30	24	56	48	54
More	4	25	26	42	42
Less	65	37	13	6	4
Unsure	1	1	5	5	0

1. 11% were not practising procedural medicine 7 years ago

When asked to comment on how satisfied they were with their current workloads, approximately half the procedural GP workforce stated they would prefer to do about the same number of procedures as they are doing now. Of those not doing their preferred workload, anaesthetists and surgeons indicated they would prefer to do more procedures, compared with obstetricians, 13% of whom would like to do less (Table 3.6). The reasons given for workload preferences not matching reality are given in Sections 3.6-3.8.

3.2.2 Reasons given for changes to average procedural workloads

One hundred and seventy five GPs (out of a possible 222) responded to the question “If your procedural workload has changed over the past 7 years, please explain.” Of those, 14 had moved to a different town during the previous 7 years. Comments by the remaining respondents were grouped, based on the types of comments made (Table 3.7). The majority of comments came from respondents whose procedural workload had decreased. The primary triggers were changes in the hospital system and personal choice, followed by interaction with specialists.

Table 3.7 Triggers for changing average procedural workloads over the past 7 years based on respondents comments (n=175)

Triggers for change (often more than one per respondent)	Number of respondents			
	Total	Increased workload	Decreased workload	Same workload
Changes in the number of procedural GPs in town	43	34	6	3
Hospital system	32	1	29	2
Personal decisions (includes stopping) ¹	30	0	28	2
Specialists	27	8	17	2
Community changes	5	0	5	0
Miscellaneous	9	4	3	2

1. 19 GPs noted they had stopped obstetrics (2 still doing emergencies), 8 had stopped anaesthetics and 5 had stopped surgery (1 still doing emergencies). Two other GPs noted stopping procedural work (advanced procedural skills not defined).

Decreasing workloads

The most common concerns relating to the hospital system were around the impact of inadequate facilities or the downgrading of facilities on the range of procedures which could be carried out. This included the operating theatre, nursing staff (particularly midwifery), equipment and funding. Both maternity units and operating theatres have been closed down, leading to reduced opportunities to practice skills and a fear of de-skilling. Five respondents mentioned no longer having an operating theatre to work in. Others mentioned that, due to budgetary constraints, their access to the operating theatre was reduced. In some cases, no after hours access was available, which impacts on obstetrics cases which can be safely managed locally, and on anaesthetics. In a number of cases it meant lists being cut back, affecting both anaesthetists and surgeons.

Hospital cutbacks have lead to no after hour's theatre therefore decreased anaesthetics, no LSCS at our hospital, therefore greatly reduced obstetric numbers and increase in patients transferred

A number of respondents made a decision to stop one or all advanced procedural skills at some time over the previous 10 years (Table 3.7). Reasons given included medical indemnity, 'lifestyle' and lack of remuneration and opportunities to upgrade skills (anaesthetics). Those ceasing obstetrics were over represented.

Other factors which influenced procedural GPs to reduce their workload included:

- more cases being referred on
- not enough time to due the numbers or complexity of procedures due to pressure of time for 'office' medicine
- the decision not to up-skill in new techniques (usually surgical)
- inadequate support from both peers and the local health administration
- difficulties in coping with the after hours commitments and
- maintenance of CME/accreditation in more than one advanced procedural skill (for example, obstetrics and anaesthetics).

Specialists also influence GP workload. Where there are larger centres with specialists nearby, they tend to carry out a lot of procedures which may have otherwise been done by GPs and there is more pressure to refer cases to specialists. The introduction of a specialist obstetrician or anaesthetist can have the same impact on procedural GPs. However, more commonly respondents (particularly anaesthetists) reported a reduction in procedural workload due to losing specialists, particularly specialist surgeons.

Anaesthetics in particular decreased volume, decreased complexity relates to losing a resident surgeon. Visiting surgeons tend to take more and more cases back to Base Hospitals.

Our 2 resident surgeons have left – obstetrician retired and surgeon left and other GP surgeon/obstetrician left so less surgery done and fewer deliveries as more complicated ones now go away (eg twins).

Five respondents (all GP obstetricians) noted that their workloads were declining due to a reduction in confinements in their communities. One surgeon also commented on the increase in patient expectations of being referred to a specialist.

Increasing workloads

The most commonly cited reason for increasing procedural workloads was a reduction in the number of procedural GPs in town, leading to a greater workload for those remaining (Table 3.7). In a few cases this has led to a reduced workload, particularly where there was no longer a resident anaesthetist available. This limits surgery (particularly more complicated cases), especially emergency/out of hours surgery, and also obstetrics.

Specialists were the next most important trigger for increased workloads. When resident specialists retire the workload of procedural GPs can increase, for example obstetrics. Conversely, an increase in work by visiting or resident surgeons can increase procedural work for GPs, especially anaesthetists.

Increases in obstetrics and after hours work occurred where smaller hospitals around the area have closed (or gone on bypass). Conversely, in another location the procedural GP had more work as patients travelled from major centre because of delays there. Other reasons included changes in practice structure or acceptability and increases in on call frequency.

3.3 Importance of procedural work to staying in rural practice

Procedural practice is the heart of general practice that provides high self esteem, self worth, make a change, feels like a real doctor who is capable for improving people's health without dependence on script pads, clerical referral pads or drugs.

GPs were asked to respond to the statement that "procedural medicine is an important part of why I continue to work in rural practice". The majority agreed (35%) or strongly agreed (52%), while 8% disagreed. A further 6% neither agreed nor disagreed (n = 219).

If procedural medicine became unavailable in their practice:

- 35% said they would stay in the same location
- 15% said they would move to another location offering procedural medicine
- 18% said they would leave rural practice
- 32% said they were unsure what they would do (24% unsure and 8% giving an "other" explanation)

Gender and physical location (RRMA) did not significantly influence how GPs viewed the importance of procedural medicine in their practices, or their decision if procedural medicine were no longer available. However, the more strongly GPs agreed that procedural medicine was an important part of why they continued to work in rural practice, the less likely they were to indicate that they would continue in the same place if it was no longer available.

Fifty nine GPs provided additional comment on their decisions. Attitudes and feelings varied widely. There was a sense of disappointment or disillusionment where GPs saw procedural medicine as an important component of practising rural medicine and wished to continue. Only 15% indicated they would move to another location offering procedural medicine.

Feel disillusioned, contemplate leaving, but in view of my age, practice building commitments etc. leaving is not really a viable option.

A number of GPs commented that it would be difficult to leave their community as they were well established and reluctant to leave for a variety of reasons. For some such a move would depend on their partner's career and children's schooling (particularly primary school). Other reasons for making a move difficult included age or impending retirement, financial investment and the need to sell their practice, and finding a suitable location for their family and medical practice.

I would prefer to work in a rural environment irrespective of the presence or absence of procedural medicine. However procedural medicine (especially obstetrics) does add an extra dimension to practice - if the right opportunity arose I would consider relocation.

Several GPs commented that they continue procedural medicine out of a sense of obligation to their communities, rather than for enjoyment.

I would not suffer but the community would suffer. I do not particularly enjoy obstetrics but feel obliged to continue obstetric practice because it is needed. It is too far for many women to travel to the Base Hospital. Our patients are poor and many do not have transport.

For others, procedural medicine is no longer a part of why they continue in rural practice and to no longer practice procedural medicine would be a relief, in deference to the high workload it entails and concerns about unexpected consequences.

Initially procedural work attracted me to rural practice - now I would like to stop but feel trapped and obliged if I am to stay in the town I should be a proceduralist. Ironically I feel less confident as I do less and less whilst under greater general and particularly medico-legal scrutiny.

Some saw it as a prompt to move to a more favoured location, citing family or lifestyle changes.

Am sufficiently disheartened to consider working in a city for the other benefits it would bring - particularly for family reasons

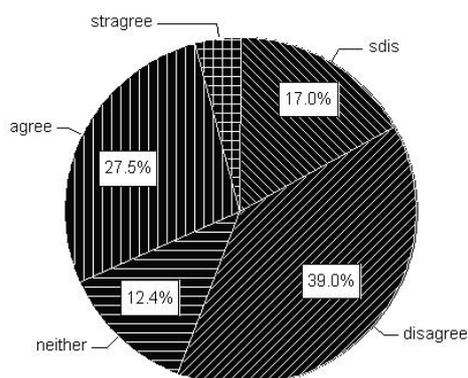
I have children at boarding school and family in Sydney. The challenge and appeal of rural practice without procedures would not be sufficient to keep me in the country.

For others it would be a prompt to consider leaving medicine altogether.

3.4 Interaction with specialists

GPs were asked to respond to the statement, "Specialist services (including outreach services) are adequate in my area", using a five point scale where 1 = strongly disagree, 3 = neither disagree or agree and 5 = strongly agree. The mean score was 2.63 +/- 1.17 - indicating that on average GPs did not think that specialist services were adequate in their area. In fact, 56% disagreed with the statement, 31.6% agreed and a further 12.4% neither disagreed nor agreed (Figure 3.4).

Figure 3.4: Responses to adequacy of specialist services (n = 218)



Procedural GPs in RRMA 4 were most satisfied with specialist services and those in RRMA 7 least satisfied (Table 3.8).

Table 3.8 Effect of RRMA on satisfaction with specialist services

Response (%; n = 218)	RRMA 4	RRMA 5	RRMA 7	Total
Disagree	36.9	60.9	66.7	56.0
Agree	45.3	27.6	22.2	31.7
Neither disagreed or agreed	15.1	11.5	11.1	12.4

Thoughts about the adequacy of specialist services were similar for each of the advanced procedural skills. More GP anaesthetists (64%) disagreed that specialist services were adequate, compared with 55% of obstetricians and 54% of surgeons.

GPs were also asked to agree or disagree with statements concerning types of interaction with specialists (Table 3.9). Respondents indicated that specialists are an important source of advice for procedural GPs and around half also update skills by working with specialists. The majority appeared to be happy with the amount of contact they have with specialist outreach services and very few GPs (<6%) did not interact with specialists, except to refer patients.

Table 3.9 Interaction between procedural GPs and specialists

Type of interaction (%; n= 218)	Yes	No
Seek advice from specialists in chosen skills area	89.5	10.5
Update skills by working with specialists	49.8	50.2
Like more contact with specialist outreach services	27.9	72.1
Do not interact with specialists, except to refer patients	5.5	94.5
Comment on other issues with specialists	21.0	79.0

Forty nine respondents (21% of the sample) also commented on other issues they had with specialists. These comments condensed into three main areas: Lack of services, issues around Specialist Colleges and training, and personal/professional relationships with specialists.

3.4.1 Lack of services

Seventeen GPs commented directly on what they felt were inadequate specialist services in their areas. Particular specialties mentioned included urology, physicians, dermatology, mental health services, ophthalmology, ear, nose and throat, neurology, orthopaedics and paediatrics. Several GPs pointed to an inadequacy of outreach services, either because there were not enough specialists in their regional centre to provide a service, or there was a lack of desire to do so. Where outreach services were operating, respondents noted that visiting specialist services only work well if the same specialist visits regularly, and if there is a good level of communication between the GP and the specialist. This could be enhanced by the specialist staying overnight.

Concerns were also raised about succession planning for specialist services. Four GPs mentioned losing specialists (including obstetricians, paediatricians, physicians, orthopaedic specialists and surgeons). Several others mentioned the need for Area Health Services (AHS) or hospital administration to support and maintain specialist services.

The lack of desire to provide outreach services; as years have gone on and local specialists have grown old and retired, specialist services have not filled their place.

Many services operate on a knife edge and are always close to being inadequate or non-existent.

3.4.2 Colleges and training

It was obvious from the comments that procedural GPs would appreciate support and an open dialogue with the specialist colleges around attitudes towards rural procedural medicine and providing adequate specialist services. They would also appreciate greater recognition of the requirement for, and difficulty in achieving, up-skilling for procedural GPs. As one GP expressed it - "*Better able to continue procedural work with 'backup' from specialist.*"

3.4.3 Personal/professional relationships

GPs reported a wide range of views on personal and professional relationships with specialists, according to their own experiences. This area attracted the majority of comment (27 out of the 49 respondents who commented on specialists).

A number of GPs recognised that most specialists are supportive of procedural GPs and helpful with advice and education, either face to face or over the telephone, while others could be obstructive or difficult. It was also recognised that they, like GPs, are extremely busy and that each influences the workload of the other. Several GPs drew attention to the close relationship between visiting specialists and GP anaesthetist workload. Conversely, contracting a specialist such as an obstetrician and gynaecologist can lead to deskilling of GP obstetricians.

Five respondents commented on feelings of distrust in their relationship with specialists, particularly arising from a sense of competition. For example:

Visiting specialists have attempted to restrict procedural range of skills (in my area) for GPs - for their personal/business reasons.

Eight respondents noted lack of communication to achieve desired patient outcomes and several noted a general reluctance to advise on practical issues.

3.5 Training

GPs expressed a diverse range of views about the adequacy of upskilling and continuing medical education (CME) for the current workforce and postgraduate training in procedural skills for the future GP procedural workforce. They were dissatisfied with both, particularly training for the future medical workforce (Table 3.10). Only 33% of respondents felt that training was adequate for the existing workforce and only 10% felt that postgraduate training for the future workforce was adequate.

Table 3.10 Degree of satisfaction expressed by procedural GPs about the adequacy of training for the present and future GP procedural workforce

Score	Up-skilling and continuing medical education is adequate for the current workforce (%)	Postgraduate training is adequate for the future workforce (%)
1. Strongly disagree (1)	14	29
2. Disagree (2)	43	46
3. Neither disagree or agree (3)	11	15
4. Agree (4)	29	9
5. Strongly agree (5)	4	1
Total number of respondents	217	215
Mean score \pm sd ¹	2.65 \pm 1.44	2.09 \pm 0.97

1. standard deviation

3.5.1 Respondents thoughts on training

Of all 259 respondents, 180 commented on the adequacy of training, including 12 no longer practising procedural medicine. The majority of comments reflected low satisfaction with both postgraduate training (both the type of training offered and the number of graduates taking up the training) and barriers to up-skilling and CME in procedural medicine. Many comments also reflected a genuine concern about the future of procedural medicine and the fact that not enough graduates are acquiring the skills needed to replace the cohort of GPs now practising advanced procedural skills. Others reflected an underlying sense of despair/frustration/disenchantment - "*too little too late*".

.... in another 10-15 years, at the current rate, most will have ceased practice, accompanied by the closure of surgical and obstetric units in many towns.

If women are to be able to continue to give birth in their own rural towns there needs to be many more fully competent GP surgeons, GP obstetricians and GP anaesthetists trained and these people need to be supported once they are in their rural towns.

Future workforce

Respondents felt that the value and role of GP proceduralists should be recognised by both the specialist colleges and AHS (NSW Health Department). They also felt that GP procedural training needs to be a dedicated training program with adequate numbers of appropriately resourced training positions for both graduates and practising GPs requesting up-skilling. Specialists (and specialty colleges) need to be involved in procedural training and have in place practical protocols for training, up-skilling and certification of the GP workforce.

Eleven respondents commented on a role for the Australian College of Rural and Remote Medicine (ACRRM) in delivering such training. Roles identified included publicising training positions, encouraging more GPs to undertake advanced training in procedural skills and certifying those GPs. There also needs to be good coordination between training providers and hospitals providing training and up-skilling posts - and clearly identified resources.

Some respondents expressed the desire to see regional centres take the lead in training programs, to encourage formation of ongoing relationships and to make ongoing professional development easier.

This appears to be reasonably well catered for in GP training programs in regional centres ie Orange, Wagga, Tamworth etc. for those who want to and push for procedural skills. It is hopelessly inadequate closer to Sydney teaching Hospitals especially in obstetrics and surgery where residents in obstetrics may well do minimal procedural skills being pushed out by midwives, registrars, senior registrars and fellows eager to get procedural experience.

A number of respondents noted a lack of opportunity for practical 'hands on' opportunities to practice and refine new skills. Related to this was the observation that graduates often have a lack of confidence in practising their skills.

New prospective proceduralists have to be trained in pragmatic, practical sympathetic base hospital which leave that trainee with confidence and skill - BUT even more importantly the transition and consolidation of these skills occurs if and when that trainee can relocate in a district hospital and be supported by a group of peers with experience.

Many of the comments around lack of confidence referred to obstetrics. Concerns were expressed about both the lack of graduates training in procedural obstetrics, and (for those that were) a lack of confidence to do operative obstetrics. Respondents commented on the inadequate exposure to advanced procedural skills - labour ward obstetrics and insufficient forceps and LSCS experience. Several respondents also commented on the difficulty of up-skilling to do operative obstetrics.

Unfortunately the latest "crop" of DRANZOG graduates all want to do "shared care" - a crying shame! All seem terrified of managing a SVD in the bush. All seem to have obtained no training in how to manage a SVD without the O/G registrar holding their hand!

There appears no coordinated training scheme for future procedural GPs to perform caesarean sections without assistance and to perform anaesthetics. Training in gastroscopy and colonoscopy skills is sadly lacking. There needs to be

a financial carrot at the end ie. vastly increased obstetrics and anaesthetics fees and a training scheme (perhaps using a UK year or two) which produces competent proceduralists.

I would be doing caesars if I had been given the chance to perform one in my Dip Obs 6 months, although I assisted in > 40 caesareans.

There was a strongly expressed view that too few people are being trained in surgical skills and in LSCS, making recruitment difficult. A lack of clear mentorship in surgery was also raised as an issue.

The need for more trained GP anaesthetists to maintain the present workforce was also clearly expressed, as was the inadequacy of training places. Many of the present workforce did anaesthetics training attachments in the United Kingdom. GP anaesthetists generally did not feel well supported by their specialist college. Most respondents commenting on anaesthetics training felt there were good refresher courses available, particularly because of the support from regional centres like Orange.

One of the strongest messages to come through was a concern about where the future workforce was coming from. While a number of respondents felt there should be more training posts available (particularly in regional centres) allowing more graduates to acquire procedural skills, others wrote of a reluctance by graduates to take up training posts, or if they do, to practice advanced procedural skills in the long term. This is having an impact of the workforce as departing procedural GPs are harder to replace.

Training may be adequate but the current medico legal environment and attitudes of new graduates make it highly unlikely that trainees will end up practicing their skills.

The issues facing existing procedural GPs (maintenance of skills, poor remuneration for those skills, cost of medical indemnity and threat of litigation, CME requirements, lifestyle, fear of responsibility/isolation and support for district hospitals) will also deter future procedural GPs from taking up procedural medicine in a rural setting. In particular, medical indemnity was seen by many procedural GPs as a major barrier.

For future GP proceduralists the medico-legal dilemma of major expense and threat to practice processes beyond sensible health requirements stands as a major impediment to taking on the satisfaction and challenges of procedural work.

Current workforce

Issues around CME and up-skilling for the current workforce attracted a lot of comment. The majority of respondents expressed dissatisfaction with both.

While no formal system exists, the general feeling was that there are sufficient opportunities (for example, courses and secondments) available for GPs to maintain and improve their skills. Courses, such as Emergency Life Support (ELS), Advanced Life Support in Obstetrics (ALSO), Early Management of Severe Trauma (EMST) and Advanced Paediatric Life Support (APLS) and obstetric emergency courses were considered to be well run and adequate. However, a number of GPs felt that there is virtually no training in surgery

(including endoscopies) or advanced obstetrics procedural skills (particularly for those wanting to upgrade to operative obstetrics) for practising rural GPs. This generally needs to be done privately, and can be financially very demanding. Anaesthetics and emergency medicine were reported as being better organised.

A number of GPs commented on the difficulties of attending courses and other types of upskilling. The cost, including lost income, involved was the major barrier. These costs can be significant, even for regionally based courses, but are more difficult for city based courses. Particular issues included:

- time out from a high patient workload at the practice
- locum cover (often very difficult to find, especially if a number of GPs from one area wish to attend the same event)
- travel and accommodation
- covering hospital rosters
- time away from family.

One solution suggested was to have formal, paid attachments to teaching hospitals. This would overcome the difficulties of obtaining paid study leave. A number of other respondents suggested a government subsidy to attend courses. Some respondents overcome this issue by attending metropolitan hospitals as supernumerary registrars or similar. However, this model does not work for everyone.

A number of respondents felt that there was inadequate remuneration to balance against increased skill level and time committed. There is little incentive to spend the extra time training to then pay extra high insurance and do extra on call hours.

The financial incentives in procedural GP practice (certainly in anaesthetics and obstetrics) are insufficient to keep GPs doing what they are already doing, so why would a GP trainee spend an extra 12 months of training so he can practice a skill and earn less than seeing patients in the rooms? The professional satisfaction has to be matched by a decent remuneration commensurate with the extra training, skill and responsibility involved as well as the extra intrusion on your family and private practice.

A number of respondents were concerned about maintaining their skills, due to lack of opportunity to practice them, lack of facilities and the need to maintain confidence through skills updates.

3.6 Obstetrics (including LSCS)

3.6.1 Number of deliveries

One hundred and fifty three respondents identified themselves as GP obstetricians at 30 June, 2001. Of those 55 were doing LSCS (as was one GP surgeon). The majority of respondents were delivering between 21 and 50 babies per year (Table 3.11). The mean number of deliveries (excluding LSCS)/GP was 39.6 [range 1 to 200], the median was 35.0 and the mode was 30. The mean number of total deliveries (including LSCS) was 45.0 [range 1 to 200], median 40 and mode 40.

Table 3.11 Numbers of deliveries per GP obstetrician in the 2000/01 financial year (excludes those stopping in that year)

Number of deliveries per GP	Range	0-20	21-50	51-100	> 100
Deliveries, excluding LSCS (n = 151)	1-200	36	88	21	6
LSCS ¹ (n = 53)	0-40	44	9	0	0
All deliveries (n = 153)	1-200	32	78	34	9

1. ~45% were emergencies

The total number of babies delivered between 1 July 2000 and 30 June 2001 (including deliveries by GPs who stopped practising during the year) was self-reported as 7 060 (including 745 LSCS). It is an underestimate of the actual figure due to a response rate of less than 100%. It is also based on the individual's capacity to record and report accurately the number of deliveries in the given time.

3.6.2 Preferred workload

GP obstetricians were asked how many deliveries they would prefer to do. Of those who responded (n = 152) 56% were satisfied with their workload and 5% were unsure. Twice as many of those who were not satisfied preferred more cases than preferred less (Figure 3.5).

Eighty seven GPs commented on reasons for not doing their preferred number of deliveries (Table 3.12). The majority (almost 3 to 1) of comments related to reasons why the number of deliveries done was less than they would prefer.

The caseload depends on the size and characteristics of the catchment population, on the number of obstetricians and access to specialist obstetricians, on the facilities available and support provided by the local AHS, on non procedural peers and on personal choice. The most significant issues reported for limiting caseload for GP obstetricians were AHS/hospital restrictions and fewer available deliveries (Table 3.12).

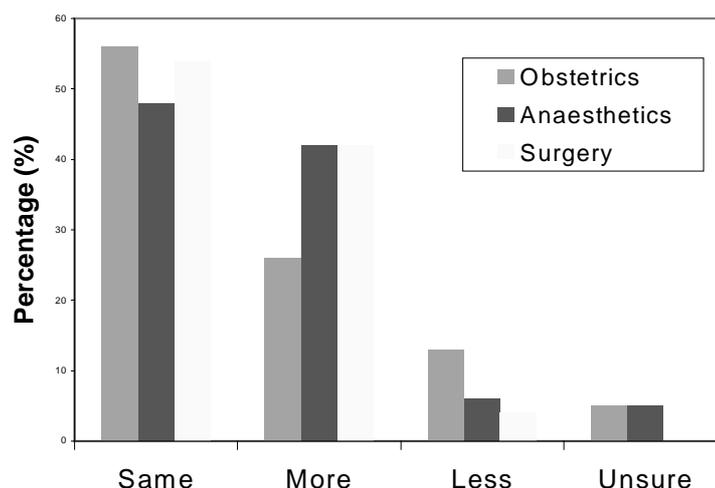


Figure 3.5 Comment on preferred workload

Table 3.12 Reasons given by GP obstetricians for doing less deliveries than they would prefer

Issues raised	Frequency
AHS/hospital restrictions	15
Fewer deliveries available/rostering	14
Referrals from other GPs	5
Presence of other procedural GPs in town	4
To maintain confidence	4
Consumer expectations/ desire for specialist cover	3
Drift of patients to base hospitals	2
Other	3

Prefer more deliveries

Fifteen GPs in 12 towns believed the number of deliveries they were doing was limited by restrictions imposed by their local hospital. This included issues such as threatened, temporary or permanent closure of the local maternity unit, withdrawal of 24 hour theatre access for caesarean sections and lack of both midwives and theatre staff. Consequently there were more out of town referrals as the complexity of cases dealt with locally was reduced. Where hospitals were unable to provide adequate midwives, theatre cover and staff, patients were more likely to be transferred to other hospitals during labour.

Eight GPs from 7 towns noted fewer deliveries in their areas due to factors like an aging population (and hence falling birth rate), migration of young people out of the community, and loss of jobs and infrastructure discouraging young families – all leading to fewer women having babies. A drift of patients to the base hospital (observed by 2 GPs in one town) and, in another town, the loss of the resident obstetrician leading to more patients seeking care out of town, are other factors reducing the number of deliveries. Three GPs noted that consumer expectations (or a desire to seek specialist cover) meant there were fewer deliveries available.

GPs from 4 towns mentioned they would like more deliveries, but there were not enough confinements to go around. The number of deliveries/GP also depends on the rostering system in place, and on referrals by other GPs in town. Three GPs from 2 towns noted that lots of

referrals were going to female colleagues. Others noted that their obstetrics unit was under pressure because of the number of referrals by non-obstetrician GPs out of town rather than to a GP obstetrician in the same town. Also one GP noted that they sent away any complicated pregnancies, - further reducing the number of deliveries available.

Three GPs noted they would do more deliveries with another GP obstetrician to share on call work. Two others noted they had no access to a resident anaesthetist, which limited in type of deliveries they could do.

Only obstetric provider in town with no anaesthetist so unable to do primigravida or complicated multiparous deliveries. These have to be sent to bigger centres.

One GP quoted family reasons and two were in the process of building up their practice.

Four GPs touched on the issue of skills maintenance and confidence and its influence on their participation in GP obstetrics. Too few deliveries doesn't allow for skills maintenance and too many impacts heavily on home life.

Prefer less deliveries

Fewer GPs commented on why they would prefer to do less deliveries (Table 3.13).

Table 3.13 Reasons given by GP Obstetricians for doing more deliveries than they would prefer

Reasons	Frequency
Fewer doctors participating in obstetrics	9
Like to cease altogether, but constrained by situation	7
Intending to cease	1
Change in hospital policy	1

Two issues also dominated why some GP obstetricians do more deliveries than they would prefer. A number did this due to a shortage of obstetricians and the need to care for all patients. Others felt they would like to cease all together, but felt constrained by their situation (Table 3.13). Having fewer doctors able and willing to do obstetrics increases the caseload and makes on call onerous and leave more difficult to take. Seven respondents reported feeling obliged to continue practising obstetrics to support their colleagues and their communities. Several were unhappy with the conditions under which they were practising.

3.7 Anaesthetics

3.7.1 Number of anaesthetics

One hundred and five respondents identified themselves as GP anaesthetists at 30 June, 2001. The majority of those were doing between 101 and 500 anaesthetics per year and 8 were doing over 500 (Table 3.14). The mean number of anaesthetics/GP was 290 [range 9 to 2070], the median and mode were 30 (n = 101).

Table 3.14 Individual workload of GP anaesthetists in the 2000/01 financial year (excludes those stopping during that year)

Type of anaesthetic	Range	Number of anaesthetics performed by each GP			
		1-50	51-100	101-500	>500
General (n=99)	0 - 1210	20	15	54	4
Neurolept (n = 99)	0 - 1000	33	20	17	3
Major regional (n=99)	0 - 140	60	7	2	0
Epidural (n = 89)	0 - 70	44	2	0	0
Spinal (n = 91)	0 - 90	43	5	0	0
Total (n = 101)	9- 2070	14	4	75	8

Table 3.15 Total numbers of anaesthetics performed by GP anaesthetists in the 2000/01 financial year

Type of anaesthetic	Number self-reported in 2000/01 ¹	% emergency
General anaesthetics	16 788	15
Neurolept	8 070	6
Major regional	1 787	17
Epidural	668	35
Spinal	963	29
LSCS	1 059	-
Total	29 691	13

1. Includes all GP anaesthetists practising at some time during the year

3.7.2 Preferred workload

Figure 3.5 showed that 48% of GP anaesthetists were satisfied with their workload and 5% were unsure. The majority of those who were not satisfied preferred more cases than preferred less (42% and 6%, respectively).

Demand for anaesthetics comes from doing elective lists for fellow procedural GPs, usually in the same town, and doing lists for resident or visiting surgeons (general, orthopaedic, gynaecological) and for dentists, and doing emergencies. Demand is influenced by the number of surgical cases, the number of anaesthetists in town and proximity to the nearest base hospital.

Prefer more deliveries

Sixty eight GPs commented on reasons for not doing their preferred number of deliveries. The majority of comments were from GPs wanting to do more anaesthetics, but being constrained by the available caseload. Lack of, or declining surgery lists was the main reason given for restricted case loads. In over half the comments of this type, AHS or hospital restrictions were also mentioned. Downgrading of facilities and equipment and, in several cases, closure of the operating theatre were examples.

Twenty respondents commented directly on a decrease in the number of surgical cases. Reasons included, surgeons aging and doing less, surgeons leaving or retiring and not being replaced and visiting surgeons tending to take more complex cases back to base hospitals.

The limits of surgical services in this region are the main impediment to more anaesthetics. ie waiting lists and equipment issues and lack of money required to have more lists.

In some cases the lack of surgical services has been directly sheeted home to a lack of desire by the hospital or the AHS. Examples given included regulating the workload of existing surgeons and blocking new ones coming, not fully utilising or downgrading operating theatres thus reducing lists, or restricting procedural GPs in their activities (complexity or number of procedures/lists).

Unfortunately, likely to be doing a lot less in future due to administration of ... AHS greatly decreasing surgical service over last 12-24 months. Likely to be no more caesarean sections, less general anaesthetics and if our surgeon leaves due to the changes, there will be no anaesthetics at all.

Others commented more generally that there were not enough cases to go around and fewer GPs with surgical and obstetrics skills to carry out procedures.

Thirteen respondents commented directly on the impact on the difficulty of maintaining their skills in an environment where caseloads are limited. Several GPs keep their numbers up by doing surgical lists at a nearby base hospital when they are short of consultant anaesthetists. Another travels out of town to do anaesthetics.

Two GPs noted that they would prefer more lists and not less anaesthetists.

It might be suggested if we are doing too few anaesthetics then we should reduce the number of GP anaesthetists but to do that would make the burden of being available or on call for emergency LSCS anaesthetics too onerous.

Four respondents were frustrated by a lack of current VMO status. Several chose to do locums but one noted they would cease if no regular work became available.

Other reasons given by individual GPs for not doing as many anaesthetics as they would prefer included:

- slowness of theatre lists and pressure of other work
- the only doctor in town doing caesarean sections
- non procedural GPs tend to refer out
- Hard to do without more doctors

Prefer less anaesthetics

Five respondents commented about reasons for doing more anaesthetics than they would like to do. Reasons given included intending to stop and less availability due to surgery commitments.

Three respondents were unsure about their preferred workload. One was the only doctor doing anaesthetics in their town, another would prefer not to do anaesthetics, but felt constrained by their situation and the third was concerned that their numbers were too sufficient to maintain skills.

3.8 Surgery

3.8.1 Number of operations

Fifty five respondents identified themselves as GP surgeons at 30 June, 2001, according to the criteria in the questionnaire. The majority of those performed between 20 and 50 operations in the 2000/01 financial year (Table 3.16). The mean number of operations/GP surgeon was 118 [range 2 to 607], the median was 50 and the mode was 20 (n = 49).

Table 3.16 Individual workload by GP surgeons in the 2000/01 financial year (excludes those stopping during that year)

Type of operation	No. of GPs ¹	Range	Number of operations performed by each GP				
			0-20	21-50	51-100	101-200	> 200
Reduction of fractures	43 (8)	0-80	29	4	2	0	0
Vasectomy	35 (7)	0-50	22	6	0	0	0
Other operations ²	32 (7)	0-115	18	3	3	1	0
Other trauma surgery ³	28 (8)	0-40	16	4	0	0	0
Gastro endoscopy	16 (5)	0-200	2	1	3	5	0
Sigmoid endoscopy	19 (6)	0-50	10	3	0	0	0
Colon endoscopy	10 (4)	0-200	0	0	2	4	0
Total endoscopies	23 (6)	0-450	6	0	2	6	3
Pilonidal sinus	22 (7)	0-10	15	0	0	0	0
Appendicectomy	20 (6)	0-30	13	1	0	0	0
Tubal ligation	20 (6)	0-25	13	1	0	0	0
Carpel tunnel syndrome	20 (6)	0-26	13	1	0	0	0
Hernia	17 (6)	0-51	7	3	1	0	0
Tonsillectomy	13 (6)	0-30	6	1	0	0	0
Varicose veins	12 (6)	0-10	6	0	0	0	0
Endoscopic cholecystectomy	5 (3)	0-15	2	0	0	0	0
Open cholecystectomy	5 (3)	0-12	2	0	0	0	0
Best estimate of the total number of operations	55 (4)	2-607	14	13	4	9	11

1. The number of GPs who report doing each type of operation. The number in brackets represents those who indicated they did the procedure but did not supply numbers.

2. A list of other operations is given in Appendix 4.

3. 'Other trauma surgery' includes unspecified operations defined by individual GPs and not covered in the list provided in the questionnaire

While 62 GPs indicated they did some surgery during the 2000/01 financial year (Table 3.1), only 49% did 4 or more types of operation (Table 3.17). Twenty eight GPs identifying themselves as GP surgeons do LSCS.

Table 3.17 Range of operations carried out by GP surgeons (n = 62)

Type of operations	GP surgeons		Types of operations (excluding LSCS)
	Number	%	
1-3	28	45	Closed reduction of fractures, vasectomies, endoscopies, other trauma surgery, carpal tunnel syndrome, other operations (particularly D&C, skin grafts and abscesses), pilonidal sinus and tubal ligation
4-6	10	16	
7-8	9	15	
9-13	11	18	
Unknown	3	5	

Table 3.18 Total numbers of self-reported surgical procedures performed in the 2000/01 financial year (does not include LSCS)

Type of operation	Number self-reported in 2000/01	% emergency
Reduction of fractures	525	44
Vasectomy	544	0
'Other operations'	670	17
Other trauma surgery	240	65
Endoscopy - gastro	1 093	1
Endoscopy - sigmoid	218	9
Endoscopy - colon	918	<1
Endoscopy - total	2 229	2
Pilonidal sinus	39	13
Appendicectomy	132	71
Tubal ligation	107	0
Carpal tunnel syndrome	165	0
Hernia	194	<1
Tonsillectomy	71	0
Varicose veins	28	0
Cholecystectomy - endoscopic	25	0
Cholecystectomy - open	14	14
Total	6 169¹	16

1. 120 not specified as elective or emergency

3.8.2 Preferred workload

Figure 3.5 showed that 54% of GP surgeons were satisfied with their workload in the year July 2000 to June 2001. The majority of those who were unsatisfied would prefer to do more operations (42% of the total compared with 4% who would prefer to do less).

Thirty three respondents commented on reasons for not doing their preferred number of operations. Only two respondents were doing more operations than they wanted (because none of their colleagues did surgery and because they were de-skilling). The majority of the comments referred to reasons why GPs were not doing as many operations as they would prefer (Table 3.19).

Table 3.19 Main reasons given by GP surgeons for doing less operations than they would prefer

Reasons	Number of respondents	Discussion
Area Health Service restrictions	9	A number of different issues were raised, including lack of facilities and equipment, budgetary constraint, access to theatre, appropriate nursing staff and limitations on some procedures. <i>"Have had my lists halved as a cost saving measure. Waiting time now 4 months."</i>
Shortage of other procedural GPs to assist	7	This is most critical where there is a shortage of anaesthetists, and is most likely to occur after hours.
'Competition' with specialist surgeons	3	This can apply to both visiting specialist and to specialists in nearby towns.
Referrals	3	Patients have a greater expectation of being referred to a specialist; some GP surgeons feel under pressure to refer to specialists and less referrals from other GPs
Competency/up-skilling	2	Issues include a lack of skills and the need to do more procedures to maintain competency

From another perspective (that of the specialist surgeon inadvertently sent this questionnaire):

I have answered this questionnaire even though I am not a GP as I feel when I retire in approximately 5 years time, I will have trouble attracting a specialist surgeon to replace me and the above operations will have to be either done by GPs or referred to metropolitan areas.

3.9 Intentions

GPs were also asked directly about their plans to stop practising advanced procedural skills in the foreseeable future (Table 3.20).

3.9.1 Those stopping between July 2000 and June 2001

During the twelve month period from 1 July, 2000, 19 GPs ceased obstetrics, 10 ceased doing LSCS, 7 ceased anaesthetics and 7 ceased surgery (Tables 3.1 & 3.20). In all 17 GPs had ceased all procedural work and 11 were still practising some advanced procedural skills as of 30 June, 2001. Seven GPs ceasing to practice obstetrics were younger than 45 and at least one of those had been practising for less than one year. This compares with one GP anaesthetist and no GP surgeons in the same age bracket and a minimum of 7 years and 16 years as fully qualified GPs practising their procedural skills.

By far the most common reason given by those GPs who ceased practising advanced procedural skills in 2000/01 was concern about litigation and the cost of medical indemnity insurance (14 respondents). A number of other reasons were also mentioned, including AHS budgets/lack of support (4 respondents), less demand for skills (3 respondents), age/retirement, changing patient expectations, withdrawal of facilities at hospital, difficulty of major re-skilling, poor remuneration, workload, issues around peers and worry (2 respondents).

Table 3.20 Future intentions of GPs practising advanced procedural skills

Advanced procedural skill	GPs stopping between July 2000 and June 2001 (% of all respondents) ¹	Intention to stop practising advanced procedural skills (% of procedural GPs practising at 30 June, 2001)				Unsure (%)	Total (numbers responding to this question)
		Yes			Not within 5 years		
		<1 yr	1 - 3 yrs	3 - 5 yrs			
Obstetrics	11	9	9	15	50	18	152
LSCS	16	7	7	11	60	15	55
Anaesthetics	6	7	7	6	64	14	98
Surgery	11	9	2	9	67	9	53

1. See Table 3.1

Those indicating they were likely to cease practising within the next 5 years represented 33% of obstetricians, 25% of those doing LSCS, 20% of anaesthetists and 20% of surgeons practising at 30 June, 2001. This proportion may increase due to the relatively high number of GPs who were unsure of their intentions (Table 3.20). Despite being older, surgeons indicated they were more likely to continue to practice beyond 5 years. Obstetricians were the least certain, with only 50% indicating a clear intention to continue beyond 5 years.

3.9.2 Future workforce requirements based on survey

Comparing the number of procedural GPs required over the next 5 years to replace those indicating an intention to leave (excluding those who were unsure) with those in the workforce with less than 5 years experience as a fully qualified GP practising advanced procedural skills gives an indication of the adequacy of the future workforce (Table 3.21).

Whilst this is an over simplified calculation, it does give rise to concern about the adequacy of the future workforce.

Table 3.21 Potential workforce shortages

Advanced procedural skill	Number of procedural GPs required over next 5 years to replace those indicating an intention to leave	In workforce with up to 5 years experience
Obstetrics	48	13
LSCS	14	5
Anaesthetics	20	10
Surgery	11	1

3.9.3 Respondent's comments

Respondents were given the opportunity to comment on their intentions: Sixty two explained why they planned to stop practicing advanced procedural skills within the next 5 years (Table 3.22). This compared with 69 who commented on what could be done by the various peak bodies representing doctors' interests (Table 3.23).

Table 3.22 Reasons given for expressed intention to stop practising any advanced procedural skills within 5 years

Explanations	Number of respondents ¹	Discussion
Medical indemnity	43	The two major themes were the rising cost of indemnity cover and the increasing fear of litigation. The increased costs of maintaining insurance cover were associated with issues like a falling case load, decreasing remuneration from hospital work, high workload associated with doing procedural work and increasing stress levels. Age, lifestyle and patient expectations were also mentioned. <i>"Procedural work exposes me more and more to litigation without offering me anything. The increased stress has markedly reduced satisfaction and sustainability of my obstetric work"</i>
Age/retirement	17	Age/retirement alone, or in conjunction with desire to reduce workload, especially out of hours on call work, indemnity, support from hospital and financial considerations. The majority did not think the actions of any other organisations would change their mind.
Area Health Service/hospital administration	13	Downgrading facilities, limiting opportunities of procedural work, followed by lack of support, funding and support staff from the hospital and an increase in rules, regulations and paperwork associated with procedural medicine.

Table 3.22 continued

Explanations	Number of respondents ¹	Discussion
Workload	13	The after hours workload associated with procedural work (especially obstetrics) is very tiring and stressful and impacts on the quality of life. <i>"The procedural work after hours is wearing me out: to get out of bed three times a week for 10 years is making me tired and probably inefficient. The main factor in this is obstetrics. I feel if I was less tired I would be more efficient and more able to handle the increase of workload."</i>
Workforce issues	11	Lack of adequate anaesthetic support, inadequate hospital staffing and issues around workload/caseload in relation to other practitioners. One respondent intending to stop because a new procedural GPs moved into town. More generally it is <i>"The pressures of after hours medicine and the daily workload in general practice due to insufficient doctors ..."</i>
Skill maintenance	11	Workload too small to maintain skills, in some cases due to cutbacks at the hospital. Costs and difficulty of maintaining anaesthetic/ultrasound equipment and the required continuing medical education.
Family	10	Move for children's education is the most common reason for stopping, followed by 'lifestyle', the cost of boarding school and disruption to family life caused by after hours workload, health of family members and spouse employment.
Financial	6	Inadequate pay. Five of the six respondents mentioned inadequate pay along with other factors such as long hours, medico-legal pressures, inadequate anaesthetic support, quality of life and professional development requirements.
Personal	4	Respondents no longer want the worry or responsibility, and would not be influenced by what organisations might do.
Stopped	3	All mention litigation, one mentions falling numbers, changed patient expectations and less experienced midwives.
Patient expectations	2	Patient expectations are changing. <i>"As before people's attitudes to what is appropriate care is changing. Both the patient and the profession having changing expectations."</i>

Explanations	Number of respondents ¹	Discussion
Relationship with specialists	2	Changes in relationship with specialists leading to reduced procedural work <i>"Existing resident obstetric specialist support about to cease - do not wish to practice other than low risk obstetrics."</i>

1. Some respondents gave more than one reason

Respondents were then asked if there was anything that organisations such as RDN, RDA, Divisions of General Practice, Commonwealth or State Departments of Health, rural clinical schools, ACRRM or the Royal Australian College of General Practitioners (RACGP) could do to help influence their decision. There were 69 responses (Table 3.23).

Most of the reasons put forward to influence intentions to cease were not ascribed to a particular organisation. The majority who did identify a particular organisation directed their comments at NSW Health Department, in particular the need to recognise the impact of procedural medicine and hospitals, and to stop rationalising the system, particularly downgrading facilities at small centres.

Table 3.23 Suggestions about what medico-political organisations could do to influence procedural GPs to continue to practise procedural skills

Explanation	Number of respondents ¹	Discussion
Medical indemnity	44	The majority of comments related to containing the costs of medical indemnity. Four respondents suggested that the State Government pay indemnity for public patients, especially for those working in non RDA package hospitals. The other concern was for a reduction in the risk of litigation. Most suggested Tort Law reform, and several respondents also mentioned educating the public as a way of reducing the likelihood of litigation. Very few comments related to a specific organisation.
Area Health Service/hospital administration	15	Several respondents commented that local AHSs need to understand the importance of having procedural medicine available in smaller communities. A number of things they could do to retain procedural GPs were mentioned, including reducing bureaucracy, improving hospital staffing, equipment, facilities, case numbers, funding and working conditions. Particular attention was given to reducing the burden of after hours work, mainly through re-organising rosters. (For example by increasing the number of VMO positions and searching for extra help such as CMO/locums.)

Table 3.23 continued

Explanation	Number of respondents ¹	Discussion
CME/up-skilling	15	Comments were around the costs and difficulty of getting enough CME points, or learning new procedural skills. A wide range of concerns from the need for and opportunities to upskill and/or maintain skills. Over-arching this is the difficulty of getting locum cover while away from the practice, and if locums are available, the costs of leaving the practice can be prohibitive (locums, travel, course costs, accommodation ...).
Workforce	11	These respondents wanted more rural GPs to reduce the workload, They wanted those with similar procedural skills to fill vacancies, some of which had existed for as long as 4 years, and they wanted action now to maintain service provision as the present workforce ages and retires. Several respondents also called for more trained nurses.
Remuneration/ recognition	10	Most comments reflected the desire to be recognised as a valuable supplier of services by NSW Health and to be paid adequately for those services. <i>"Doing a day's list of anaesthetics earns less than a day in General Practice and you still have the cost of your practice to run."</i> Additional costs include increased cost of insurance and ongoing training, and locums. A strong tie with medical indemnity was identified as the cost of insurance can be a crippling factor in practicing procedural medicine – extra work and lose money at the same time ² .
Training	2	Continue to supply advanced skills posts
Infrastructure	2	Two distinct issues were raised. One was the need to expand hospital infrastructure in rural areas, enabling GP surgeons to continue practising. Secondly <i>"Running a small 1-2 doctor practice is very expensive and the availability of a community facility to lease without the capital development costs would encourage me to stay..."</i>

1. Some respondents had more than one suggestion

2. The NSW government now covers public liability insurance costs for VMOs, but not costs for private practice.

RDN could become more active inworking with the Commonwealth, NSW Health and the GP training program and GPs to make sure that we are training adequate numbers of procedural doctors and that the courses are adequate and able to give our rural registrars appropriate procedural skills for rural practice.

3. 10 Future of procedural medicine according to procedural GPs

Eighty nine procedural GPs commented on issues related to procedural medicine, which they did not think had been adequately covered in the questionnaire. It is apparent from the comments that procedural GPs are concerned about the long term viability of procedural medicine outside base hospitals. Concerns were expressed about the level of recognition and support, particularly from within the regional administration of health services (NSW Health Department and AHS) – “*Need (from them) a commitment to maintaining services to rural communities*”.

A number of respondents echoed the feeling that unless the NSW Health Department commits to a level of procedural service in rural and remote NSW and changes its policies accordingly, there will be no more.

The threat to procedural general practice comes not from a lack of training or CME but through financial pressure neglect & active discouragement by area health services in NSW. In addition our practices (private) are increasingly complex & time consuming to run, & usually better remunerated for time involved relative to procedural work.

I have tried to remain positive but see only a diminution of service. I wonder at commitment of RDN, RDA, AMA and especially RACGP to procedural practice. Maybe it is all too big and the problem will fix itself. IE procedural medicine will contract to Base Hospitals, maybe that is what should happen anyway!

An example of reduced services -

Complexity of anaesthetics reduced ...limited to day surgery. Also numbers reduced GP surgery has been ceased (by administration). All out of hours, non-booked surgery had been ceased. Obstetric complexity greatly reduced - no longer have caesarian service therefore all but lowest risk obstetrics sent away.

The majority view was that procedural work in district hospitals is a valuable and worthwhile activity.

Rural Hospitals need to stop counting the cost of procedural medicine & count the cost of stopping: poor access to rural care, no incentive to practice in rural area and ongoing GP shortages

In addition to the role of district hospitals in communities, a number of respondents drew the link between competency in procedures and the ability to deal with emergencies. For example,

I believe GP anaesthetists provide a safe, effective and essential service for rural hospitals. Without their skills base in airway management and resuscitation (neonatal/trauma/obstetrics etc), health care in the country would be much less comprehensive.

However,

In anaesthetics there is a trend toward reducing the amount of elective work going on at district hospital level while maintaining demands for on call & emergency work.

The need for more procedural GPs, particularly surgeons, was reiterated. Pessimism around finding replacements for recently retired surgeons (GP surgeons and also general surgeons) and GPs to do LSCS was expressed.

In some areas workforce has reached critical levels.

I am very pessimistic for the future of procedural GP. The country workforce in our area is getting older & less willing to put in the hours or take the increasing responsibility.

It's important to bring about change rapidly. We are already close to a point of minimal manpower leaves us on the edge of collapse of existing services.

In some areas workforce shortages have exacerbated the workload of individual GPs, while in others the level of service has dropped.

Currently the biggest issue is finding time to go away for CME (apart from the cost). Work loads have become excessive (in the extreme).

Several other issues have also attracted attention as being pivotal in maintaining a procedural workforce. Thirteen respondents commented directly on medico-legal issues as a disincentive to procedural medicine, for both practising GPs and trainees and a number of others commented indirectly. This includes both the implications of the fear of being sued as well as the impact of rising medical indemnity fees of the viability of procedural practice and the impact of these of future trainees.

I feel that with increasing patient expectations and increasing litigation, it may be easier for everyone to let procedural medicine fade out. Sounds pessimistic but I can't see many young doctors wanting to take it on.

Unless NSW substantially reforms medical indemnity insurance I am pessimistic that much procedural medicine will occur within a few more years.

For this type of medicine to continue will require a massive change in societies attitude to health care. That is the only way that the needed legal and governmental attitude reform will happen. Otherwise the Drs who care will walk away, and the others will become so thick skinned they will be useless.

Remuneration:

Although money is not of the utmost importance it is in my opinion the constant which may attract more procedural Drs to rural areas. There should be a significant increase in remuneration for procedural medicine to compensate for loss of income from consulting rooms and to cover litigation costs as those involved in procedures are increasingly more susceptible to litigation.

As well as the cost of medical indemnity, the other financial concern is the poor fee for service fees under the RDA package. Several respondents reported earning less for a day in theatre than in their surgery, and still have practice overheads to pay.

Inadequate payment for being on call for procedural medicine has been an issue in losing GP proceduralists in our area. The subsequent introduction of expensive sessionally paid locums seems unfair and further alienates the resident medicos, and is not efficient in the long term either.

Other respondents also commented on the inadequacy of the RDA package, particularly for anaesthetics.

I feel RDA package for fee for service has fallen behind true cost of what it costs to continue with procedural work. I feel anaesthetics is most underpaid and should be paid as a session or fee substantially increased.

Similar concerns were also expressed by GPs working in non RDA package hospitals, who saw themselves as even more disadvantaged.

Training issues were covered thoroughly in Section 3.5. Several respondents commented on the need to encourage students and give them the opportunity to see procedural GPs at work. There was some optimism that through the newly established clinical schools, students will get more exposure to rural medicine and see procedural GPs at work. This could encourage them to undertake training in procedural skills. Qualified GPs should also be encouraged to undertake training and perhaps a role for ACCRM in supporting them as well as the other specialist colleges.

Some respondents expressed the need for more hands on training in a sympathetic environment.

It is surprising the number of graduates with both FRACGP and DRANZCOG and periods of training in surgery and anaesthetics who are graduating do not "feel confident" to practice their skills. A tragic waste of enthusiasm and training, and I believe is a major reason why doctors wont go bush.

GPs also re-iterated the need for recognition and peer support from specialist colleges in regard to CME and medico-legal support.

Remote communities can't work in isolation, there needs to be more opportunity for GPs to practice procedural skills in large rural towns and urban practice.

4. Discussion

4.1 Size of the workforce

At 30 June, 2001 there were 166 GP obstetricians, 67 GPs doing LSCS, 118 GP anaesthetists and 62 GP surgeons in NSW (RRMA 4-7). Of these 153 GP obstetricians (92%), 56 GPs doing LSCS (84%), 105 anaesthetists (89%) and 55 GP surgeons (79%) responded to the procedural medicine questionnaire.

4.2 Changes to the workforce over the past decade

Studies by Woollard and Hays (1993) and Collett and Carroll (1994) have provided a benchmark for obstetricians and anaesthetists, in the early 1990's and RDA (NSW) surveyed rural doctors in 1994 and 2001 (unpublished).

4.2.1 Obstetrics

At 30 June, 1991, there were 263 doctors practising obstetrics in 86 communities (Woollard and Hays, 1993). This compares with 166 GP obstetricians practising in 74 communities at June 30, 2001. An unspecified (small) number of the 263 doctors counted by Woollard and Hays (1993) may have been specialists and several communities outside RRMA 4-7 were included. However, the comparison highlights a reduction of approximately one third of the GP obstetrician workforce and up to 12 communities who are no longer able to offer obstetrics services locally over a 10 year period. The proportion of obstetricians doing LSCS has not changed appreciably over the last 10 years. The number of deliveries recorded in the 1990/01 financial year (5 950) was slightly less than those recorded in the 2000/01 financial year (7 060) and the proportion of caesarean sections (10.6%) was similar, though slightly higher than that noted in Western Australia by Welch and Power (1994).

4.2.2 Anaesthetics

A study of GP anaesthetics in rural areas in 1991 by Collett and Carroll (1994) identified 190 GP anaesthetists working in rural public hospitals (including at least 4 in RRMA 2 areas). This compares with our best estimate of 118 GP anaesthetists practising at 30th June, 2001. Again this comparison highlights a reduction of around one third of all GP anaesthetists during the past 10 years. Those working in NSW fee for service public hospitals had average experience 12.9 years, an average age of 42.3 years and 24% has post graduate qualifications (Collett and Carroll, 1994). This compares with 14.2 years, 45.4 years and 47%, respectively for the cohort of 105 who responded to the RDN survey in 2001, indicating that over this time the workforce has become smaller and better qualified, but is of a similar average age and level of experience.

In 1991 190 anaesthetists carried out 28 500 anaesthetics at an average of 150 per GP anaesthetist. This compares with 105 anaesthetists (who responded to the questionnaire) doing a total of 29 690 anaesthetics at an average of 290 per GP anaesthetist in the financial year to June 30, 2001. In 1991 there were 33 GPs doing more than 250 anaesthetics each, compared with 47 in 2000/01. There were also 17 GP anaesthetists doing < 100 anaesthetics in this year. A similar study was done by Watts and Bassham (1994) in South Australia.

4.2.3 Surgery

There were no available published data on the level of surgical activity in rural and remote NSW to compare with the data collected in this questionnaire. However, the surgical workforce is the oldest and longest serving workforce, and has the lowest number of new recruits. Activity levels varied widely and only 55% of GP surgeons did more than 3 surgical procedures. Concern about the adequacy of the specialist workforce was also clear from the survey.

4.3 Implications for the future workforce

General practice is becoming irrelevant as practical (ie procedural) medicine is dying for GPs. If GP work consists of counselling, acupuncture & alternative medicine then let the nurse practitioner do it.

4.3.1 Intentions

Approximately one third of GP obstetricians and anaesthetists have stopped practising in the past 10 years. During the 2000/01 financial year 11% of GP obstetricians, 16% of those performing LSCS, 7% of GP anaesthetists and 9% of GP surgeons stopped practising. A third of GP obstetricians, 25% of those doing LSCS, 20% of GP anaesthetists and 20% of GP surgeons think they will cease practicing within 5 years. To maintain even the current workforce, at least 48 GP obstetricians, 14 GPs doing LSCS, 20 GP anaesthetists and 11 GP surgeons would need to take up practice over the next 5 years.

At present the corresponding figures for GPs who have been practising these skills for less than 5 years are 13, 5, 10 and 1. There were 24 GPs out of 222 who reported they were not practising procedural medicine 7 years ago (representing 11% of the workforce at 30 June, 2001). Whilst these figures are based only on the survey, they indicate a serious and ongoing shortfall. The situation appears to be particularly serious for GP surgeons, where 44% have worked as GP surgeons for more than 20 years (compared with 27% for those doing LSCS, 22 % for obstetricians and 20% for anaesthetists). This scenario has led procedural GPs to be very concerned about succession planning. A lack of successors often tips the balance for proceduralists to retire earlier than they might have if they thought someone was going to take over, which can further exacerbate workforce shortage.

A number of reasons were given by those intending to stop procedural medicine within the next 5 years, reflecting a quite a high level of dissatisfaction among the current workforce with their working environment. Issues around medical indemnity were cited more than twice as often as any other issue. Other issues commented on by 10 or more respondents, in order of frequency, were age/retirement, AHS/hospital administration, workload, workforce issues, skill maintenance and impact on the family. Issues GPs felt government or GP bodies could do something about were also overwhelmingly dominated by medical litigation, which was mentioned three times as often as AHS/hospital administration. CME/up-skilling, workforce and remuneration/recognition were also mentioned frequently.

4.3.2 Major concerns

The issues identified by Woollard and Hays during their 1991 survey seem equally pertinent a decade later.

Rural hospitals are being downgraded due to cost-cutting, medical malpractice insurance is rising rapidly obstetric services are relatively poorly remunerated, and intending rural doctors find it difficult to gain the necessary skills and experience to practise obstetrics away from specialist support.

Procedural GPs usually have a good relationship with specialists, and value them as an important source of advice. Around half also update their skills by working with specialists. Where the relationship breaks down it is usually because of mistrust/competition, lack of communication and lack of recognition of professionalism of procedural GPs. The Commonwealth government, through the Medical Specialist Outreach Assistance Program, is seeking to boost specialist services to rural and remote areas of the State.

Training GPs in procedural skills requires a high level of commitment by both specialist colleges and GP organisations. AHSs need to recognise the importance of procedural skills and provide training places in regional hospitals as well as a period of preceptorship when new GPs start to practice newly acquired skills in their own towns (especially surgery and LSCS).

Other issues raised in this context were the number of training places available and/or access to up-skilling in an affordable way, which places pressure on existing procedural GPs when they are unable to recruit. Other factors include a reluctance on the part of new graduates to train in procedural medicine and social change in attitudes and expectations of patients to medical care. NSW Health is looking at a proposal to ensure an additional 30 training positions each year to train GPs and prospective GPs in procedural practice.

The most pressing issue in relation to retaining a viable procedural general practice workforce is medical indemnity. At the time this survey was distributed (August, 2001) there were concerns about the rapidly rising cost of medical indemnity insurance, particularly following the collapse of the medical re-insurer HIH. In January 2002 the NSW State Government undertook to pay medical indemnity for all doctors providing services to public patients in public hospitals. The State Government is also considering tort law reform. The situation was further complicated when the main provider of medical indemnity cover to GPs in NSW, United Medical Protection, went into provisional liquidation in May, 2002. The Commonwealth government is still negotiating to try to find a long term solution.

The downgrading of existing rural hospitals has emerged as a major concern in retaining doctors in regional areas (Alexander, 1998, General Purpose Standing Committee No. 2, 1999) and is again an important concern in this survey.

Initially with NSW Govt's policy of managing the elective surgical procedures - reduction in funding and resulting in loss of surgical sessions - and in turn resulting in loss of anaesthetic sessions for me. Now one of our 3 surgeons took on early retirement ... - have found no replacement yet - resulting in further loss of elective sessional work for me in anaesthetics. I can only hope that this situation to change in the very near future!!

The longer term viability of procedural medicine relies on the continued availability of procedural GPs with complementary skills, adequate equipment and funding and skilled nursing staff, throughput levels sufficient to maintain expertise, access to adequate CME and other quality assurance measures. Strategies such as working in regional or tertiary centres to increase case experience are essential for more isolated GPs to maintain competence.

Conclusions

The contraction of the procedural GP workforce documented over the past decade is likely to continue into the future, at a faster rate. Age and retirement was the second most common reason for GPs intending to stop practising within 5 years (after medical indemnity) and there is a serious shortfall in the number of GPs prepared to practise procedural medicine.

The continuation of procedural medicine in NSW (RRMA 4-7) is based on the assumption that district hospitals will continue to need procedural GPs (for minor, medium and diagnostic procedures as well as provision of an emergency service), and the NSW Health Department will continue to provide adequate facilities and support staff and credential GPs to carry out procedures.

Performing procedural skills requires appropriate training and a career-long commitment to up-dating skills. The most significant barriers identified in this survey were:

- Medical indemnity - both the cost of cover and its impact on the viability of offering procedural services, and a fear of litigation, which can act as a stressor and behavioural change agent. (This was very definitely the major concern of GP proceduralists in 2001, and since this survey was carried out the NSW Government has agreed to pay medical indemnity costs for public patients in public hospitals and is looking at tort law reform) but the situation has been further complicated by the failure of United Medical Protection)
- Availability of infrastructure, funding and support from AHS (downgrading of existing hospitals is limiting procedural practice). Withdrawal of procedural medicine could result in the loss, not only of those skills and services, but of the practitioners too.
- GP willingness to be involved where long hours and much on call is necessary, intensified by workforce shortages in some areas, and the impact this has on family and lifestyle
- Adequate opportunities and encouragement to acquire advanced procedural skills in an environment encouraging hands on experience, followed by a transition period from trainee to independent practitioner which fosters confidence in using skills learned.
- Costs and difficulty of getting enough CME points, or learning new procedural skills
- Concerns about skill maintenance in areas where the caseload is low
- Support from specialist colleges in training and up-skilling, and a clear recognition of the role of the procedural GP
- Remuneration/recognition.

If women are to be able to continue to give birth in their rural towns there needs to be many more fully competent GP surgeons, GP obstetricians and GP anaesthetists trained and these people need to be supported once they are in their rural towns.

It will require commitment from all sectors of the health industry to attract and train sufficient GPs to replace the existing workforce. This will include both providing opportunities for appropriate training and re-defining the way in which procedural GPs work is structured to cater for changed perceptions of "lifestyle" by more recent graduates. Otherwise communities will be forced to depend on fly in fly out specialist services and transfers to large centres for even simple procedures.

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Appendix 1

Questionnaire

**[sent to all recognised GPs practising advanced procedural skills in NSW
(RRMA 4-7) - August, 2001 - January 2002]**

Questionnaire on Procedural Medicine

Section 1. All Procedural GPs

To be completed by all GPs who have practised advanced procedural skills in obstetrics, anaesthetics and/or surgery after 1 July, 2000

If this does not apply to you, please answer questions you feel are relevant in the orange section and return this orange section in the envelope provided. Thank you.

Please tick boxes or write on lines - using the back of the form where there is not enough space

1.1 Last name:

1.2 First name(s):

1.3 How does the number of GPs practising advanced procedural skills in your town now compare with 7 years ago? (Please record separately for any other towns you have practised in)

About the same

More - how many more? _____

Less - how many less? _____

Unsure

1.4 How does your average procedural work load compare with what you were doing 7 years ago?

Not practising procedural medicine 7 years ago

About the same

Increased

Decreased

Unsure

1.5 If your procedural workload has changed over the past 7 years, please explain?

1.6. Respond to the following statement by circling the appropriate number

"Procedural medicine is an important part of why I continue to work in rural practice"

Strongly Disagree

Disagree

Neither Disagree
nor Agree

Agree

Strongly Agree

1

2

3

4

5

1.7 If procedural medicine became unavailable in your practice would you:

- continue to practice in the same location
- move to another rural location requiring procedural skills
- leave rural practice
- unsure
- other, please explain

1.8 Do you plan to stop practising some or all advanced procedural skills in the foreseeable future?

a. Obstetrics

Not applicable

Unsure

No

Yes, in what time frame? <1 year 1-3 years 3-5 years > 5 years

Have stopped since June 2000

b. LSCS (obstetrics)

Not applicable

Unsure

No

Yes, in what time frame? <1 year 1-3 years 3-5 years > 5 years

Have stopped since June 2000

c. Anaesthetics

Not applicable

Unsure

No

Yes, in what time frame? <1 year 1-3 years 3-5 years > 5 years

Have stopped since June 2000

d. Surgery

Not applicable

Unsure

No

Yes, in what time frame? <1 year 1-3 years 3-5 years > 5 years

Have stopped since June 2000

1.9 If you plan to stop practising any advanced procedural skills within 5 years, please explain?

1.10 If you plan to stop practising any advanced procedural skills within 5 years, is there anything that organisations such as RDN, RDA, Divisions of General Practice, NSW Health Department, DHAC, rural clinical schools, ACRRM or the RACGP could do to help influence your decision?

Interaction with Specialists

1.11 Respond to the following statement by circling the appropriate number.

"Specialist services (including outreach services) are adequate in my area"

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
1	2	3	4	5

1.12 Please indicate which of the following you agree with:
{Tick as many boxes as you feel are appropriate}

- I seek advice from specialists in my chosen skills area
- I update my skills by working with specialists
- I would like more contact with specialist outreach services
- I do not interact with specialists, except to refer patients
- I have other issues with specialists I would like to comment on

Training

{Respond to the following statements by circling the appropriate number}.

1.13 "Upskilling and continuing medical education in procedural skills is adequate for the current GP workforce"

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
1	2	3	4	5

1.14 "Postgraduate training in procedural skills is adequate for the future GP workforce"

Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
1	2	3	4	5

1.15 Please comment on training in advanced procedural skills for the present and future GP workforce:

Conclusion

1.16 Are there any issues related to procedural medicine you would like to comment on, which you think have not been adequately covered in this questionnaire?

1.17 What is a reasonable time frame to repeat this questionnaire?

1 year

3 years

5 years

Never

Other, comment _____

Thank you for completing this section of the questionnaire. Now please complete the relevant sections on procedural skills.

If you have only answered questions 1.1-1.5, please return this orange section in the envelope provided, or to:

Janet Dunbabin
Research Officer, NSW Rural Doctors Network
Suite 19. Level 3
133 King Street
Newcastle NSW 2300

(02) 4929 1811

jdunbabin@nswrdn.com.au

Questionnaire on Procedural Medicine

Section 2. Obstetrics

To be completed by all GPs who have practised obstetrics (including LSCS) after 1 July, 2000

Please tick boxes or write on lines - using the back of the form if there is insufficient space

2.1 List your post graduate qualifications in obstetrics: _____

2.2 How many years experience have you had as a fully qualified GP practising obstetrics? _____

2.3 Number of deliveries you performed from **1 July 2000 to 30 June 2001**:

Deliveries, excluding LSCS _____

Elective LSCS _____

Emergency LSCS _____

2.4 How many deliveries/year would you prefer to do?

About the same

More

Less

Unsure

2.5 If you are not doing your preferred number of deliveries, please explain?

Thank you for completing this section of the questionnaire.

Please return, together with other sections you have completed in the envelope provided, or post to:

Janet Dunbabin
Research Officer, NSW Rural Doctors Network
Suite 19. Level 3
133 King Street
Newcastle NSW 2300

(02) 4929 1811

jdunbabin@nswrdn.com.au

Questionnaire on Procedural Medicine

Section 3. Anaesthetics

To be completed by all GPs who have practised anaesthetics after 1 July, 2000

Please tick boxes or write on lines - using the back of the form if there is insufficient space

3.1 List your post graduate qualifications in anaesthetics: _____

3.2 How many years experience have you had as a fully qualified GP practising anaesthetics? _____

3.3 Number of anaesthetics you administered from **1 July 2000 to 30 June 2001**:

	Elective	Emergency	LSCS
General	_____	_____	_____
Neurolept	_____	_____	_____
Major regional	_____	_____	_____
Epidural	_____	_____	_____
Spinal epidural	_____	_____	_____

3.4 How many anaesthetics would you like to be doing?

About the same

More

Less

Unsure

3.5 If you are not doing your preferred number of anaesthetics, please explain?

Thank you for completing this section of the questionnaire.

Please return, together with other sections you have completed in the envelope provided, or to:

Janet Dunbabin
Research Officer, NSW Rural Doctors Network
Suite 19. Level 3
133 King Street
Newcastle NSW 2300
(02) 4929 1811
jdunbabin@nswrdn.com.au

Questionnaire on Procedural Medicine

Section 4. Surgery

To be completed by all GPs who have practised surgery after 1 July, 2000

Please tick boxes or write on lines - using the back of the form if there is insufficient space

4.1 List your post graduate qualifications in surgery: _____

4.2 How many years experience have you had as a fully qualified GP practising surgery? _____

4.3 How many operations did you perform from 1 July 2000 to 30 June 2001?

Elective _____

Emergency _____

An operation is defined as a surgical procedure requiring more than a basic infiltration of local anaesthetic

Types of surgery

4.4 List the number of the various types of operations you performed from **1 July 2000 to 30 June 2001**:

Type	Elective	Emergency
Appendicectomy	_____	_____
Tonsillectomy	_____	_____
Endoscopy by type:		
gastro	_____	_____
sigmoid	_____	_____
colon	_____	_____
Hernia	_____	_____
Cholecystectomy:		
Endoscopic	_____	_____
Open	_____	_____
Varicose veins	_____	_____
Tubal ligation	_____	_____
Vasectomy	_____	_____
Pilonidal sinus	_____	_____
Carpal tunnel syndrome	_____	_____
Closed reduction of fractures	_____	_____
Other trauma surgery	_____	_____

Please list any others you feel are significant :

Description	Elective	Emergency
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

4.5 How many operations would you like to be doing?

- About the same
- More
- Less
- Unsure

4.6 If you are not doing your preferred number (or type) of operations, please explain?

Thank you for completing this section of the questionnaire.

Please return, together with other sections you have completed in the envelope provided, or post to:

Janet Dunbabin
Research Officer, NSW Rural Doctors Network
Suite 19. Level 3
133 King Street
Newcastle NSW 2300

(02) 4929 1811

jdunbabin@nswrdn.com.au

Appendix 2

Towns identified as having a GP practising advanced procedural skills at 30 June, 2001 (RRMA 4-7)

Armidale	Lord Howe Island
Balranald	Macksville
Batemans Bay	Maclean
Bathurst	Manilla
Bega	Merimbula
Bellingen	Milton
Berry	Mittagong
Bourke	Mollymook
Bowral	Molong
Bowraville	Moree
Brunswick Heads	Moruya
Byron Bay	Moss Vale
Casino	Mudgee
Cobar	Mullumbimby
Coffs Harbour	Murwillumbah
Condobolin	Muswellbrook
Cooma	Nambucca Heads
Cootamundra	Narrabri
Corowa	Narrandera
Cowra	Narromine
Crookwell	Nowra
Deniliquin	Oberon
Eden	Pambula
Forbes	Parkes
Glenn Innes	Quirindi
Gloucester	Scone
Goulburn	Singleton
Grafton	Temora
Griffith	Tenterfield
Gundagai	Tumut
Gunnedah	Ulladulla
Inverell	Warialda
Kempsey	Wee Waa
Leeton	Wellington
Lithgow	Yass
	Young

Appendix 3

Respondents by Division of General Practice

Division	Number of respondents
South East NSW	37
NSW Central West	35
Barwon	20
Border	5
Mid North Coast	18
Hunter Rural	16
New England	14
Murrumbidgee	11
Northern Rivers	11
Riverina	11
Port Macquarie	10
Shoalhaven	7
Border	5
Murray Plains	5
Outback	5
Southern Highlands	5
Tweed Valley	5
Dubbo Plains	3
Mallee	2
North West Slopes	2

Appendix 4

Other operations

[Procedures listed under the 'other operations' category in the questionnaire]

This is not a complete data set, but has been included to highlight the range of procedures carried out by rural GPs]

Operation ¹	Number of GPs ²	Number of procedures ²	Number of GPs specifying procedure, but not number
D&C (includes a limited number of 'termination of pregnancy')	25	323	4
Operations on limbs (including Calcaneal bursa, Dupuytren's contracture, Keller's, Olecranon bursa, amputations of digits)	8	35	0
Excisions and skin grafts	7	145	3
Haemorrhoidectomy	4	13	0
Abscesses (including Bartholins)	4	25	1
Mastectomy/lumpectomy	3	10	0
Laparoscopy procedures	3	21	2
Other scoping procedures (hysteroscopy, cystoscopy, colposcopy)	3	2	2
Laparotomy	2	2	1
Gynaecological procedures (including hysterectomy, tubal reanastomisis, myomectomy)	2	Not specified	2
Debridement of large wounds	2	17	0
Temporal artery biopsy	2	31	0
Other minor operations (including circumcisions)	3	43	0
Other procedures (including fasciectomy, hemicolecotomy, torsion)	3	18	0

1. 17 out of 62 GPs did not list any 'other' operations
2. These numbers are indications only, derived from self-reported data