Teaching capacity in general practice: results from a survey of practices and supervisors in South Australia

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ABSTRACT

Objective: To ascertain the teaching load of general practices, the capacity for expansion of general practice-based teaching and the support required to achieve this.

Design, setting and participants: Questionnaire-based survey of general practitioners and practices who were teaching medical students, junior doctors or GP registrars in partnership with the Adelaide to Outback GP Training Program or the Discipline of General Practice at the University of Adelaide in South Australia in 2007.

Main outcome measures: Current teaching load of general practices; GPs' reasons for teaching; capacity of practices to increase teaching loads; and support required to realise practices' full teaching capacity.

Results: In 2007, the 76 practices involved in the survey taught, in total, 326 medical students, 39 junior doctors and 84 GP registrars. Exposing students and doctors to general practice was cited most often by the 194 GP respondents as the reason for teaching. Few practices rated the support payments for teaching as adequate or fairly adequate. A number of practices were able to increase their teaching load within their current levels, with most being able to teach more medical students (39% of practices) or registrars (42% of practices). All practices able to increase their teaching load stated that their capacity to expand was conditional on extra resources, including more physical space, subsidies and teachers.

Conclusion: Scope exists to increase teaching in the general practices surveyed and is related to the level, or levels, of teaching undertaken by the practices. Targeted support seems essential if practices are to increase their teaching load.

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The increase in the number of medical graduates in Australia has been well reported.[1] This will place pressures on medical schools, teaching hospitals and vocational training programs to accommodate an increased teaching load, and more community-based teaching may be one solution. However, there are few data about current teaching loads of community general practices in Australia or their ability to expand their teaching within or across training levels.[2]

We conducted a survey to describe the teaching load of practices involved in undergraduate, prevocational medical training and vocational general practitioner training; the ability of practices to expand their teaching; and the type of supports required to achieve this.

METHODS

We conducted a questionnaire-based survey of GPs who taught medical students, junior doctors (postgraduate years 1–3) and GP registrars within the region covered by the Adelaide to Outback GP Training Program[3] or the Discipline of General Practice at the University of Adelaide, South Australia.

The questionnaire was developed in consultation with a steering group consisting of GP supervisors, universities and support organisations. It covered four areas: attitudes to teaching; current teaching load; capacity to expand; and activities associated with teaching. The questionnaire had two parts: Part 1 sought information about the practice as a teaching environment and Part 2 focused on individual teaching delivered by each GP.

The questionnaire was piloted (six GPs from three practices participated) and revised before formal dispatch, between July and October 2007, to the relevant practices and GPs. Part 1 was sent to the main GP supervisor in each practice and Part 2 to all GPs who taught in the practice. To maximise response rates, two reminders were sent to practices and GPs following the first mail-out.

Ethics approval was provided by the University of Adelaide Human Research Ethics Committee.

Descriptive analysis of the survey results was undertaken using SPSS, version 15.0 (SPSS Inc, Chicago, Ill, USA).

RESULTS

A total of 325 questionnaires were disseminated to GPs in 102 practices in urban, rural and remote SA. Responses were received from 60% of GPs (194/325) and 75% of practices (76/102). The characteristics of participating practices are summarised in Box 1.

Student numbers and training levels

In 2007, the responding practices taught, in total, 326 students, 39 junior doctors and 84 GP registrars. Most practices were involved in teaching medical students (79%) and GP registrars (62%) (Box 1). Most practices taught at one level only, either medical students (38%) or registrars (18%). Almost a third (29%) taught both medical students and registrars, while a small percentage of practices (12%) taught at all three levels.

Reasons for teaching

GPs' most common reasons for involvement in teaching were exposure of students and junior doctors to general practice (84%), enjoyment of teaching (77%) and assisting the profession (77%) (Box 2). Practices involved in registrar training placed more importance on the variety that teaching added to their practice and on the benefit to the teaching GPs of learning through teaching.

Adequacy of current support for teaching

Practices rated the adequacy of the support provided to a practice for teaching at each level on a scale of 1–5, with 5 being adequate. The Practice Incentives Payments for teaching a medical student were rated as adequate or fairly adequate (score, 4–5) by 22% of practices (13/60). Of 11 practices involved in teaching prevocational junior doctors (Prevocational General Practice Placements Program [PGPPP]), five (46%) rated the support payment package as adequate or fairly adequate. The two payments for GP training — Practice Reimbursements and Teaching Allowance — were rated as adequate or fairly adequate by 35% (14/40) and 22% (10/46) of practices, respectively.

Capacity to increase current level of teaching

Thirty-nine per cent (23) of practices teaching medical students, 18% (2) of those teaching junior doctors and 42% (20) of those teaching registrars could increase their current levels of teaching. The estimated increases per year were: 53 medical students, two junior doctors and 32 GP registrars.

1 Characteristics of general practices that participated in the survey (*n* = 76)

Characteristic	Frequency (%)*
Practice size (no. of GPs)	
Solo	10 (13%)
2–3	16 (21%)
4–5	12 (16%)
6–10	22 (29%)
> 10	16 (21%)
Mean no. of GPs in practice (range)	6.3 (1–16)
Practice location†	
Urban (RRMA 1–2)	42 (55%)
Rural (RRMA 3–5)	32 (42%)
Remote (RRMA 6–7)	2 (3%)
Mean no. of years practice involved in teaching (range)	13.6 (1–40)
Mean no. of GPs involved in teaching in each practice (range)	3.6 (1–16)
No. of practices where other staff involved in teaching‡	57 (75%)
Types of teaching	
Medical students	60 (79%)
Junior doctors (PGY1–3)	11 (15%)
GP registrars	47 (62%)
Levels of teaching	
Medical student only	29 (38%)
Junior doctor only	0
Registrar only	14 (18%)
Medical student + registrar	22 (29%)
Junior doctor + registrar	2 (3%)
Medical student + junior doctor + registrar	9 (12%)

GP = general practitioner.
PGY1–3 = postgraduate year 1 (intern) to postgraduate year 3.
* Unless otherwise indicated.
† Stratified by Rural, Remote and Metropolitan Areas (RRMA) classification.
‡ For example, nurses, allied health practitioners, Aboriginal health workers and practice managers. ◆

Support requirements for increasing teaching capacity

GPs were asked whether their ability to increase teaching required additional resources. Of the 73 GPs who could increase their capacity to teach within 6–12 months, 81% of those teaching medical students, 100% teaching junior doctors and 68% teaching registrars required some type of additional resources. Extra teaching time, enabled by increased subsidies, was the most common type of resource needed by GPs in this group, regardless of the level of teaching undertaken (Box 3).

For the 96 GPs who reported that they could increase their level of teaching in the long term (more than 12 months), extra space was the most common type of resource required, followed by more teachers in the practice (Box 3). A small number of supervisors (8%) indicated that even with more resources they could not increase their teaching load.

DISCUSSION

Our findings on the reasons GPs teach concur with those of other research where GPs stated that teaching added variety to their week[4,5] and was enjoyable,[6] although in our study respondents placed greater importance on the exposure of students and junior doctors to general practice.

We also identified the level of teaching occurring in the general practice environment across the medical training continuum, from medical students to GP registrars. Forty-three per cent of the practices surveyed were involved in two or more levels of teaching.

The support provided for practices to undertake teaching was frequently seen as inadequate for medical students and GP training. The payments for junior doctor training were most often rated as adequate (the PGPPP Practice and Teaching support package).

Findings from other research suggest that innovative ways of organising the teaching at medical student level can increase the numbers taught without necessarily requiring additional space.[7] It is clear from this study that, within the teaching practices surveyed, there is a capacity to increase the volume of teaching in the short and long term, but with the caveat of additional resource support.

There is a link between teaching level and the measure of capacity to accommodate more teaching. The largest increase in teaching can occur at the medical student level, as the length of placements is usually 1–5 weeks. On the other hand, GP registrars are placed with a practice for 6–12 months. Even so, half of the practices involved in GP training could take on at least another registrar in the short and long term.

The capacity of practices to increase their teaching load is linked to the provision of adequate resources. Differences existed in the priority given to some resources between GPs who could expand their teaching within 6–12 months versus those who could do so in the longer term. However, increased teaching subsidies, more in-practice teaching GPs and extra space or rooms are the top three.

This study shows a high percentage of practices are involved in multiple levels of teaching. Various models of vertical integration of teaching may have the potential to reduce demand on resources. However, more research on the costs and benefits of current and potential teaching models is required.

This study had several limitations. It focused on practices and supervisors already involved in teaching and assessed their capacity to increase teaching. It did not target practices uninvolved in teaching nor investigate what types of support would enable non-teaching practices to change their status. This is worth investigation. The study also represents the views of supervisors in one training region in SA. However, the region included urban, rural and remote teaching practices and also all levels of

2 General practitioners' reasons for teaching (*n* = 194)

Reason	Frequency (%)
Exposes students and doctors to general practice	162 (84%)
Enjoy teaching	150 (77%)
Assists the profession	150 (77%)
Helps me learn through teaching	132 (68%)
Adds variety to my practice	126 (65%)
A good role model	99 (51%)

3 Resources required by general practitioners who stated they could increase their teaching loads ($n = 169$)*

	Immediately† ($n = 73$)			Long term† ($n = 96$)		
Resources required	Medical students ($n = 43$)‡	Junior doctors ($n = 6$)‡	GP registrars ($n = 38$)‡	Medical students ($n = 88$)‡	Junior doctors ($n = 17$)‡	GP registrars ($n = 59$)‡
Increased teaching subsidies	29 (67%)	5 (83%)	18 (47%)	49 (56%)	11(65%)	35 (59%)
Space/extra room	20 (47%)	5 (83%)	15 (39%)	60 (68%)	11(65%)	51 (86%)
Computer/software	17 (40%)	5 (83%)	16 (42%)	26 (30%)	8 (47%)	26 (44%)
Recognised staff time	16 (37%)	3 (50%)	16 (42%)	44 (50%)	7 (41%)	24 (41%)
More in-practice supervisors	10 (23%)	3 (50%)	16 (42%)	51 (58%)	11 (65%)	41 (70%)
Equipment	7 (16%)	3 (50%)	6 (16%)	7 (8%)	4 (24%)	9 (15%)
Other (eg, accommodation, books)	5 (12%)	1 (17%)	2 (5%)	11 (13%)	3 (18%)	8 (14%)

* *n* represents the number of GPs able to increase their teaching load.
† Immediately = within 6–12 months. Long term = after 12 months.
‡ *n* represents the number of GPs who responded at that teaching level. ◆

teaching, so it is likely that similar results would be found elsewhere. Information about training of junior doctors is limited because the opportunity for teaching practices to be involved in this level of teaching is contained by the number of places funded nationally.

The GP response rate for our questionnaire was 60%, which might limit the study's generalisability. The rate may have been improved by the use of incentives and telephone follow-up. However, it was higher than that found in other recent postal surveys of GPs in Australia.[8-11]

To our knowledge, this is the first attempt to quantify the types of teaching being undertaken in Australian general practices and the capacity of these practices to increase their teaching load. Scope exists to increase current teaching within general practice, in both the short and long term, but the volume varies depending on which of the training levels the practice is engaged in. Targeted teaching support seems essential if practices are to expand their teaching.

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COMPETING INTERESTS

None identified.

AUTHOR DETAILS

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