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# GP interest in teaching junior doctors

## Does practice location, size and infrastructure matter?

### Background

With the influx of Australian medical graduates into the workforce, new clinical prevocational training rotations within general practice need to be developed. This study describes the relationship between general practitioner teachers' interest in hosting junior doctor rotations, and general practice characteristics including rural location, size and infrastructure.

### Method

All GP teachers of registrars and medical students in the Australian Capital Territory and southeast New South Wales were sent a survey. The features of rural location, size and infrastructure of these teachers' general practices were analysed to determine their influence on teacher interest in hosting junior doctor rotations.

### Results

Factors such as rural location and infrastructure did not influence willingness to host junior doctors significantly. However, those in medium sized practices were less interested than small or large practices.

### Discussion

Rural location and teaching room infrastructure of practices need not be determinants in junior doctor teaching practice recruitment, while medium practice size is a significant determinant of lack of teacher interest in hosting junior doctors. This requires further investigation.

■ **Junior doctors' medical education is venturing from major public teaching hospitals into community based health services.<sup>1</sup> In 2012, the number of medical graduates in Australia will have doubled compared to 2005.<sup>2</sup> The need for adequate training posts may be met by outsourcing teaching and diversifying clinical educational opportunities through general practice rotations.**

The Prevocational General Practice Placement Program (PGPPP) funded by the Department of Health and Ageing (in November 2003) initially supported 280 voluntary, well supervised general practice placements per annum for junior doctors.<sup>3</sup> The program has recently expanded and aims to encourage junior doctors not yet enrolled in a specialty to make well informed career decisions, and provides experience in general practice.<sup>4-7</sup>

Many benefits of general practice rotations for junior doctors have been documented internationally: improved communication skills, experience in common and chronic disease management plus prevention, exposure to incidence and prevalence of disease in the community, and experience in home visits.<sup>8-11</sup> Australian pilot studies showed interns gained autonomy in clinical decision making, experience in development and implementation of management plans, exposure to a large spectrum of patient presentations, and improved feedback on performance, compared to large teaching hospitals.<sup>12</sup> Along with these educational benefits, such rotations increase junior doctors' consideration of a vocational career in general practice.<sup>1</sup>

Previous research has identified barriers to teaching junior doctors in general practice, including a lack of practice infrastructure and teaching space, inadequate funding for teaching, loss of supervisor income, increased liability, time constraints, and difficulties coordinating the organisations involved.<sup>9,13-18</sup> Research has also identified that types of remuneration, infrastructure grants, and service agreements and Practice Incentive Payments influence general

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practitioner willingness to host the PGPPP doctor.<sup>14–16,18,19</sup>

We had a number of hypotheses about which practices would express interest in hosting junior doctor rotations: that large practices were more interested because the teaching load could be shared, creating less strain on clinical work; that rural practices would be keen because the PGPPP concept was originally tested in rural practices and appeared to have more support in rural locations as it was seen as a possible solution to workforce shortages; and that practices with spare teaching rooms would be more likely to be interested.

This study involved analysis of survey data to describe the relationship between GP teacher interest in hosting junior doctor rotations and general practice characteristics including rural location, size and infrastructure. It is anticipated that these findings will inform the planning for increased teaching capacity in general practice.

## Method

A survey questionnaire approved by the Australian National University (ANU) Human Research Ethics Committee was sent to all GP teachers (n=167) of general practice registrars and medical students in the Australian Capital Territory and southeast New South Wales, as listed on the CoastCityCountry Training Ltd and ANU Medical School databases. The questionnaire covered respondents' willingness to host junior doctor rotations, teacher demographics including location, practice size, spare teaching room availability and teaching experience, opinions about remuneration, indemnity, infrastructure, vertical integration, teacher training and support, and any particular concerns to hosting terms. An explanation of PGPPP including its teaching requirements and current remuneration package was included in the survey. The survey was in two parts with the first part designed for respondents who answered 'yes' to hosting junior doctor rotations, and second for those who answered 'no/undecided'. A pilot questionnaire was distributed to five local GP teachers for refining.

Primary analysis focused on classification of respondents into 'yes' and 'no/undecided' categories to hosting junior doctor rotations. Cross tabulation analysis was used to see how practice rural location, size and spare teaching room affected responses. Pearson's chi-squared analysis was performed using Statistical Package for Social Sciences (SPSS) software to test for any statistically significant trends.

Practice rural location was categorised using the Rural, Remote and Metropolitan Area Classification (RRMA) developed by the Australian Departments of Human Service and Health and Primary Industries and Energy. Practice size was broken down into small, medium and large practices based on number of full time equivalent (FTE) GPs working at the surgery, 1–2 FTE GPs, 3–4 FTE GPs, and

<5 FTE GPs, respectively. Presence of a spare teaching room was indicated by a yes or no answer.

## Results

Of 167 GPs surveyed from 68 practices, 102 responded giving a 61% response rate after two follow up mail outs to nonrespondents; 84% of respondents were currently teaching medical students, registrars or both. The characteristics of nonrespondents are unknown except for geographic location; five nonrespondents were in a rural location, the majority in urban. Two respondents did not answer the question: 'Are you interested in hosting a junior doctor rotation?' and were excluded from further analysis.

There were 100 valid responses of which 44 answered yes to hosting a junior doctor, 25 answered no and 31 answered undecided. Responses were then simplified into no/undecided category (56%) and yes category (44%). In the yes category, all were willing to have a postgraduate year 3 (PGY-3) doctor, 43 were prepared to have a PGY-2 doctor, and 18 were prepared to have a PGY-1 doctor.

The RRMA 1 and 2 responses (n=74) were compared against RRMA 4 and 5 (n=26) for teacher interest in hosting rotations (*Table 1*). There were no RRMA 3 locations in the region. There was no significant difference in distribution of yes and no/undecided responses in relation to general practice location (chi-squared,  $p=0.797$ ).

The number of FTE GPs working at the practice was used as an indicator of practice size. In total there were 25 respondents from small practices, 29 from medium practices, and 36 from large practices. Fewer teachers in medium practices (24%) said yes to hosting rotations, compared to 56% yes responses in small, and 53% yes responses in large practices respectively (*Table 1*) (chi-squared,  $p=0.027$ ).

Practice infrastructure was indicated by the presence of a spare teaching room, with 55% of respondents having one available. Of the practices that had a spare teaching room, 48% said yes to hosting a rotation, while 38% without a spare room also said yes (*Table 1*) (chi-squared  $p=0.300$ ).

Table 1. GP teacher interest in hosting junior doctor rotations

Practice characteristics	Interest in hosting junior doctor rotations			
	Yes		No	
	n	%	n	%
<b>Rural location</b>				
RRMA 1 and 2	32	43	42	57
RRMA 4 and 5	12	46	14	54
<b>Practice size*</b>				
Small practice	14	56	11	44
Medium practice	7	24	22	76
Large practice	19	53	17	47
<b>Spare teaching room</b>				
Yes	26	48	28	52
No	17	38	28	62

\* Not all respondents answered this question

## Discussion

Almost half of the GP respondents (44%) were interested in hosting a junior doctor term in their teaching practice. Our study contradicted our hypotheses that rural location and availability of teaching space would influence a teacher's willingness to expand their teaching role to include a junior doctor rotation. Interest was not affected either by the practice RRMA location, or by the availability of a spare teaching room within a practice. Our study did not concur with current literature, including a recent South Australian study<sup>18</sup> that identified lack of space and practice infrastructure as barriers to teaching capacity.<sup>9,14–16</sup>

Our study found that practice size did have a significant effect on GP teacher interest in hosting a junior doctor. Medium size practices had fewer teachers willing to host junior doctors compared to small or large practices ( $p=0.027$ ). The reason for this is unclear. Qualitative analyses of the comments made by GP teachers from medium sized practices found common themes relating to workload and time constraints on teaching. Perhaps GP teachers in small practices were willing to undertake any program that may assist with workforce expansion, and those teachers in large practices had the capacity to undertake additional teaching loads. Or are teachers in medium sized practices at full clinical and teaching capacity and regard junior doctor rotations as an additional burden?

### Limitations of this study

An important limitation of our study was that only 26 respondents were located within category RRMA 4 and 5. Our sample size may have been too small to reveal the influence RRMA location may have had on hosting junior doctor rotations. However, only five nonrespondents were rural so this reflects the majority of our rural GP teachers. We arbitrarily classified the size of a practice based on the respondent's report of the number of full time equivalent GPs in a practice. Although this has face validity these numbers may have been unreliable.

The authors acknowledge that this study is not an assessment of teaching capacity of all GPs in our region, but rather an assessment of the possibility of increasing the teaching role of current teachers. We decided to only survey all our GP teachers given that teaching experience and accreditation requirements for PGPPP are quite onerous, and it was felt that those GPs already involved in teaching would be more likely to have the experience and capability to undertake this additional teaching role.

### Future directions

Our finding that GP teachers in medium practices were less interested in having junior doctor rotations in their practice was unexpected. This warrants further investigation, but for the present, our research indicates that medium sized practices within our region should not be the primary target group for PGPPP placements. Clarification is needed as to why practices with spare teaching rooms chose not to take on additional teaching of junior doctors and why those with none are still

interested in rotations. Further research is needed to explore what other factors, such as education administrative support, would be enablers or barriers for GP teachers expanding their teaching capacity.

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