

Possible reasons for the poorer performance of GPs in research and publishing are many. GPs are relatively poorly represented in universities, with higher teaching loads per academic.¹² This results not just from academic GPs being the “newest kids on the block”, but also from the grander and more dominant status of biomedicine. There are not enough high-profile academic GPs to lead the discipline.¹³ In the competitive environment of academia, the rich get richer.

How can we solve the problem?

Solutions are probably many and complex. Simple responses from government, such as substantially increasing the remuneration of GPs, seem unlikely. However, overt inequities should be addressed, by paying the same amount to doctors of the same seniority for the same services. The costly Relative Values Study reported in 2001,¹⁴ but solutions have become mired in politics.

Some very attractive ideas for empowering GPs were initiated in the United Kingdom.¹⁵ Firstly, fund-(budget-) holding, and then Primary Care Trusts, put GPs at the core of health resource allocation. Similar schemes were introduced in the Netherlands and New Zealand.¹⁶ A crucial feature of these systems was their encouragement of professional autonomy, but GPs were less enamoured, and professional morale slipped further.¹⁷ In the UK and the Netherlands this may have been because more responsibility was forced on GPs than they wanted,¹⁷ and because resources for general practice decreased while expectations rose. Similarly in the United States, where “managed care” strengthened the gatekeeper role of primary care, a disproportionate share of unpopular cost containment fell to GPs.³ In the UK, the proposed new GP contract offers stepped increases in primary care investment,¹⁸ but the profession is still digesting its implications.

Divisions of General Practice are an Australian solution.¹⁹ They have helped GPs collaborate to improve local health services and to conduct ambitious projects such as the Coordinated Care Trials.²⁰ This activity will probably continue to improve the status of GPs.

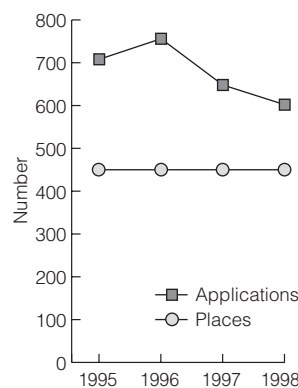
However, we believe that another essential for improving the status of general practice is strengthening its intellectual aspects, through promoting more and better critical thinking among GPs. How can we make that happen?

Supporting general practice research

For the individual GP, becoming active in research — clearly a marker for critical thinking — is an obvious solution. Several research initiatives are in train in Australia or overseas (Box 3).

■ The multifaceted Primary Health Care Research, Evaluation and Development program is the most important Australian initiative, with federal government funding of

1: Applicants for general practice registrar positions in Australia relative to places*



*R Coote, *General Practice Education Australia Ltd, Canberra, personal communication, Feb 2003.*

\$50 million over 5 years.²¹ It provides for a research institute and funds for conducting research, for research positions and for research-support positions in universities.

■ “Protected time” for GPs to undertake research, cordoned off from clinical demands, is provided in Australia through individual funding (eg, bursaries, fellowships, scholarships and grants for “novice researchers” in primary care).

■ Research networks allow GPs to participate actively not just in collecting data, but also in planning what data to collect, and why. In the UK, about 3800 general practices (36%) are linked to academic departments, increasingly through primary-care research networks.²² Even more impressively, in the Netherlands over 50% of GPs are engaged with their local medical school or the Dutch College of General Practitioners through either research networks,²³ teaching (undergraduate and postgraduate) or both. In Australia, no data are available on the proportion of GPs involved in research networks, but it is likely to be fewer than 4%.

■ Embracing more *clinical* research might result in greater research uptake by GPs, as it is often more interesting to them. More clinical research is sorely needed in its own right, as most illness and disease is encountered in general practice.²⁴ The Netherlands now has a special research fund for common clinical problems.²⁵

■ Young GPs can be attracted to research through academic registrar positions, which provide a clear career route to general practice academia. However, there is currently less than one academic GP registrar position per 1000 practising GPs in Australia.

2: Comparison of general practice characteristics between Australia and other countries⁷

	Netherlands	United Kingdom	Australia
Workforce numbers crisis	1960s	1960s	2000s
Total numbers of GPs (FTE)	9500	32 430	20 000
Population	16 million	60 million	20 million
GPs per head of population	1684	1850	1000
Patient registration with GPs	Yes	Yes	No
Vocational registration	1970s	1970s	1990s
Substantial government investment in building GP research capacity	1980s	1990s	2000s
Postgraduate training and teaching workforce in continuity with universities	All	None	Rare and recent*
GPs in research networks	> 50%	< 36%	< 4%?

FTE = full time equivalent.

* For example, in North Queensland, Melbourne and Western Australia.

3: Strategies for improving critical thinking among Australian general practitioners (GPs)

Strategy	Achievements in Australia (and overseas)	What is still needed
Research		
Increased research in general practice	Primary Health Care Research, Evaluation and Development (PHC-RED) program	More dedicated funding
Increased relevance of research in general practice	Special research fund for common clinical problems (Netherlands)	Greater focus (and funding) on clinical research, as well as health services research
Continuity between university departments and postgraduate general practice teaching	In some centres (North Queensland, Melbourne, Western Australia)	
Research networks	Australian Sentinel Practice Research Network (ASPREN), based on the American Sentinel Practice Research Network (extensive research networks in the UK and Netherlands)	More local networks centred on university departments of general practice and rural health
More “bag-carrying” GP researchers	“Protected time” (fellowships, and bursaries); higher degree opportunities	More networks, closer links between academia and GPs (Divisions)
Research training courses and workshops	Available in many parts of Australia at different levels of expertise	
Critical thinking		
Increased critical thinking among GPs	<i>n</i> -of-1 trials; uptake of evidence-based medicine workshops	More interventions to increase use of research by GPs
Increasing critical thinking in clinical general practice	Establishment of National Centre for Clinical Studies (NICS) (comparable to National Institute for Clinical Effectiveness [NICE] in the UK; college–university links in the Netherlands)	
Links between university and clinical GPs (research into practice)		
Career path into academic general practice	Academic registrars (< 1 per 1000 practising GPs)	More positions

Applying research to clinical practice

In promoting intellectual solutions in general practice, we need to avoid focusing too much on primary research. Not all GPs need to participate in research to enhance their practice, far less to lead it. Perhaps more important to critical thinking than generating research is *using* it.

In Australia, the National Institute for Clinical Studies has the responsibility of spinning the straw of research into the gold of improved clinical practice. It is turning its focus on to general practice. There is amazing collaboration between Dutch universities and GPs: universities create the research evidence and assist the Dutch College of General Practitioners to transform it into evidence-based guidelines “owned” by the discipline. These are widely respected and used, or rejected — for intellectual rather than territorial reasons.²⁶ However, delivering evidence only in the form of guidelines is dangerous to critical thinking if the guidelines are more “cookbook recipes” for what to do than systematised summaries of the evidence that can inform decisions, as they should be.²⁷

GPs can be encouraged to handle data and apply them to their practice routinely in several ways. Evidence-based medicine is clearly an important way of thinking critically every day, especially when it emphasises the *process* — application of properly interpreted research findings for individual patients — rather than simply doing the “right” thing. Thinking critically is not the only reason for practising this way; patients will increasingly demand this approach.²⁸ There are other ways of applying evidence-based medicine

in general practice,²⁹ such as the use of individual medication effectiveness tests. These are a clinical application of *n*-of-1 trials, in which doctors help patients collect data about their illnesses to decide optimal management.³⁰

GP access to research training and support at reasonable cost would also increase critical thinking enormously. This is now available across most of Australia, but more important than availability seems to be the incentive to take it up.

Some initiatives might be subtle. Increasing the “critical mass” of academic GPs by amalgamating postgraduate and undergraduate teachers into single departments has been achieved already in several parts of Australia. Divisions of General Practice are beginning to see the value of critical thinking among their member GPs, and are forming closer relationships with suitable university departments.

Conclusions

When individual GPs feel that their peers command the intellectual basis of their discipline, see GP-generated research improving the care they deliver, and feel confident about finding the best information to help solve patient problems, then self-esteem, self-reliance and status will surely improve. Establishing a stronger intellectual basis for general practice will take time. We hope that the seeds are now sown. We have powerful role models to follow, and some exciting options to pursue, although we still need innovations. Which will prove most useful?

Competing interests

None identified.

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time capsule

The changing scene in general practice

In the short space of a mere eighteen months, doctors in Australia have come to understand the meaning of medical politics and how these problems affect every aspect of their professional existence. In this short time, the medical profession in Australia has come to face the harsh realities of medical economics when the Government is meeting the major part of the cost of providing medical care in the community.

... the profession has been jolted into the realisation that many of its previously-held attitudes either were myths, or were at best quite unsuited to assist them in their new-found situation. As might well be expected with such a conservative group as the medical profession, these changes have resulted in enormous internal pressures to the fabric of organised medicine in Australia, which have produced, in their turn, obvious cracks in the façade of unity which the profession strives to maintain.

Splinter groups have sprung up particularly in general practitioner ranks, all having essentially the same purpose, but all speaking with discordant voices...

For some years now, the student of health-care delivery has realised that, in common with most of the Western world, the pattern of delivering health care to the Australian community has been undergoing considerable changes. In particular, the role of the general practitioner in Australian urban communities has been changing. While the profession's leaders have been aware of these changes, a largely uninterested rank-and-file has been no stimulus for them to experiment or initiate remedies.

It was not until the economic pressures mentioned above provided the necessary stimulus that general practitioners in Australia began to take stock of what was happening. The future role of the general practitioner (and in particular his place in the hospital environment), the place, if any, for the "health centre" in the delivery of health care to the Australian community, and even the role of the general practitioner in the provision of obstetrics services are some of the issues which, only two years ago... would have seemed unreal, but are now matters of common debate.

Lionel L Wilson, *Med J Aust* 1972; 1: 30