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Vertical integration

Reducing the load on GP teachers

Background
With the increased medical student numbers in Australia there is an expectation that general practice will train students, junior doctors and registrars, and the teaching burden for busy general practitioners will rise.

Objective
We discuss the model of vertical integration of general practice education set up at the Australian National University Medical School in the Australian Capital Territory and southeast New South Wales.

Discussion
This model of vertical integration is unique. It could be adapted in a range of vocational settings and spans medical student, prevocational doctor, registrar and international medical graduate teaching. A key aim of these strategies is to reduce the load on the clinical GP teacher as sustaining their contribution is crucial to the future of training in general practice.

'Vertical integration of general practice education and training is the coordinated, purposeful, planned system of linkages and activities in the delivery of education and training throughout the continuum of the learner's stages of medical education'.[1]

Medical workforce scarcity is confronting all areas of health professions in Australia. General practice has an acute shortage in rural and many urban areas, and the latest Australian Institute of Health and Welfare (AIHW) report shows that there has been further decline in general practice numbers.[2] At the same time, we are facing an increase in domestic graduates of 81% between 2005–2012, and by far the largest proportion of these graduates will be entering general practice.[3,4] Therefore, there will be a high expectation placed on general practitioners to teach.[5,6]

The aim of vertical integration (VI) is to have a clear pathway across the learning continuum from undergraduate to postvocational training.[7] The implementation of VI is a way to reduce the load on our GP clinical teachers and improve the training experience for both teachers and learners.[8]

Development of the vertically integrated model

The model of VI of general practice education set up at the Australian National University Medical School in the Australian Capital Territory (ACT) and southeast New South Wales (NSW) is unique. It could be adapted to a range of vocational settings and spans medical student, prevocational doctor, registrar and international medical graduate teaching.

Ideally, Australian National University medical students will have a positive experience in general practice, return to the region's teaching practices as registrars, and then stay on postfellowship.[9]

All strategies outlined here fit within the framework for VI developed by General Practice Education and Training (GPET) and the requirements of universities and medical boards. They have been specifically developed to reduce the load and burden of

teaching on the busy local GP while not compromising patient care, quality of teaching or the small business environment.[10,11]

The integrated teacher

The GP clinical teacher may teach in many ways (*Figure 1*). The amount of teaching by GPs outside their practice is often unrecognised. In the ACT and southeast NSW region, an estimated 25% of supervisors are involved in teaching roles external to their practice such as student tutoring, junior medical officer lecturing, registrar workshops, international medical graduate education or other teaching commitments to the profession. Many of the GP lecturers/educators have concurrent teaching roles from undergraduate to vocational GP. Integration is contributing to sustainability and spreading the load. It has also created a supportive peer network of educators that has encouraged more GPs to take up roles as part time GP educators.

Integrated teaching within the practice

Reducing the load involves improving efficiency of teaching models within the practice situation so that GPs have more time for direct patient care.[12] Simple strategies to improve the impact of teaching for the individual GP teacher are outlined in *Table 1*.

Decreasing the perception of the load is a more subtle and ultimately empowering strategy.[13] With GP supervisors interested in expanding their teaching role into junior doctor teaching, it will be important to address their concerns about increasing that role. To be motivated to do this, GP supervisors indicate that they need to feel supported, learn new things and gain new expertise. Further research is needed to look at the critical motivating factors for GP teachers. Many supervisors enjoy a stimulating mentoring relationship with learners in which the exchange is reciprocated. If GPs feel valued and enthused in the context of teaching they will generally rise to the challenge and give generously of themselves.[13]

Integrated teaching between practices

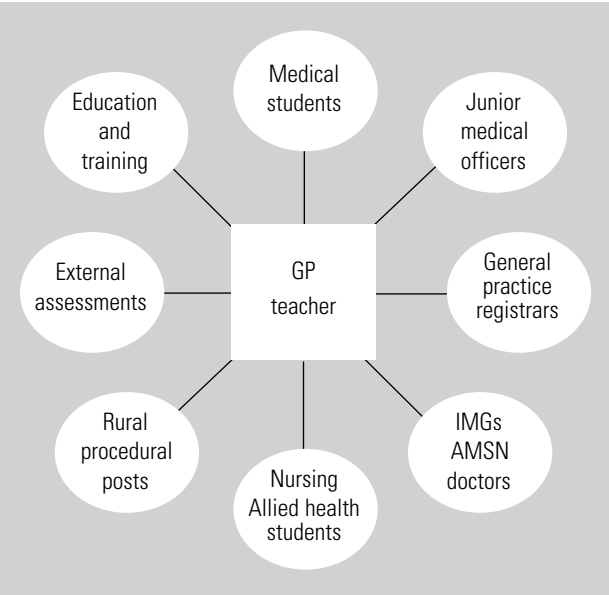
In the ACT and southeast NSW region there are a number of innovative ways in which practices integrate. Importantly, supervisors themselves have come up with models for what works in their situation. Some of the innovative models typical of the way practices are responding to integration are highlighted in *Case study 1–3*.

Good organisational support by practice staff is essential to coordinate the doctors. There are possibly fewer appointments available for patients when registrars and supervisors are involved in small group learning. However, rotating responsibility for facilitating these sessions among supervisors lessens each individual's teaching load. Registrars and students can have different learning needs and are meeting the requirements of a different curriculum, so choosing topics can be challenging and requires negotiation. However, our evaluation of such sessions

Table 1. Reducing the impact of teaching within a practice

Sharing teaching roles across all the doctors in the practice
Involving registrars in teaching of medical students and junior doctors
Joint teaching sessions for both medical students and registrars
Sharing teaching resources between supervisors
Small group learning situations facilitated by a range of supervisors on a rotating basis
Reducing the expectation that teaching and learning be done after hours

Figure 1. The educational demands placed on GP teachers



AMSN = areas of medical service need

Case study 1

In one rural town there are two medium sized practices that have up to two registrars each, two long term rural students (1 year placements), 2–3 short term students (6 week rotations) and an IMG training under the Rural Outreach Vocational Education Program (ROVE) program. Both practices have a range of skilled GP proceduralists as supervisors. Two GPs also hold fractional senior lecturer positions. Every Tuesday morning, all the learners come together for a group teaching session. Students and registrars report that they find this small group learning interesting and interactive. The supervisors share the facilitation of these tutorials on a rotating basis over 6 weeks, so the registrars and students enjoy working with a range of role models who expose them to different skill areas. The group also helps connect the registrars to the students so that they get more involved in student teaching.

Case study 2

In another rural town there is a medium sized teaching practice and a solo practitioner teaching practice that support each other. They are involved in the education of two long term medical students (1 year), short term students (6 weeks), junior medical officers (rotating every 10 weeks to the local hospital), advanced rural skills post registrars in anaesthetics, and registrars in general practice. A small group tutorial connecting all these learners is held at the local hospital every week with supervisors sharing the teaching load. They also wear different teaching hats as senior lecturers, rural medical educators and director of clinical training. In this situation, junior doctors are added into the mix and encouraged to become involved in student teaching while they benefit from support by a GP supervisor and registrar teachers.

Case study 3

In a number of large urban general practices there are registrars at various stages of training, PGPPP interns rotating every 10 weeks and medical students who attend the practice for a 6 week rotation. In most of these practices the load of teaching is shared by a team of GP supervisors. Weekly joint teaching sessions involve the registrars, intern and the medical student with a different supervisor taking responsibility each week for facilitation. In each practice, individual teaching with all levels of trainees is shared among a team of about 6 supervisors. In one of these practices two of the supervisors also work outside the practice in formal medical education roles for ANUMS. In another urban practice the supervisors, registrars, students and intern all attend grand rounds together at the regional teaching hospital as an educational activity.

indicates that case based learning is useful for all stages of training and students often benefit from the practical management focus of the registrar, while registrar learning can be enhanced by first principles and the evidence based focus of the student. The range of supervisors with different interpersonal and teaching styles and expertise enhances the learning, particularly in an environment of self directed learning. The small group situation leads to efficiency in teaching common general practice problems while at the same time creating enthusiasm and lateral thinking in learners.

Anecdotal feedback has also suggested that rural hospital team work is improved. Registrars and students feel more comfortable to ask for advice from GP visiting medical officers they encounter at the hospital, which increases their opportunistic learning.

Integration at workshop level

Integrated 2 day training workshops for registrars and students are delivered twice yearly in different rural towns in the region. Through these compulsory workshops the learners are exposed to an even broader range of rural GP role models and integration has enabled us to access more GP educators and use integrated resources.

Further researching the benefits and risks of such combined different level learning could inform future clinical teaching best practice.

GP grand rounds

Another key innovation to enhance integrated learning is GP grand rounds. These monthly meetings are hosted by a teaching practice with support by GP academics. The format is a half hour case presented by a GP, registrar or student followed by 30 minute presentation on latest evidence in general practice around a topic. Our urban supervisors attend in person with their registrars and students, while our rural practices use a web interface.

Integration of supervisor education

Supervisor education traditionally held after hours is another burden for our GP teachers. Our response has been to hold integrated training so that teaching skills for all levels of training are met within one workshop. Self care retreats and indigenous health workshops are optional extras for enhancing supervisor learning and are a forum for registrars and supervisors to engage together as colleagues in a learning environment.

Integrated organisation structures

As well as key philosophical overlap, physical collocation of undergraduate and vocational regional training organisations has been essential to coordinate and integrate all levels of training, particularly for GP supervisors to access university technology and teaching resources. It has enabled the expansion of GP clinical teaching through delivery of the Prevocational General Practice Placement Program (PGPPP) into the region. The Australian National University Medical School organises all three levels of training and is the central teaching agency for the support and development of GP teachers in the region.

Future challenges

Supervisors in the region are currently being paid by four different funding sources for teaching related work. At a bureaucratic level this can be confusing and time consuming, and it would be advantageous if this were streamlined.

For students planning a career in general practice there is no clear path even if they stay connected educationally with the university throughout their training. The entry points to training stages along the way are controlled by different stakeholders at the intern and the registrar level. Streamlining this pathway for those committed to a career in general practice is crucial as it creates uncertainty for both students and their supervisors.

Prevocational GP placements were introduced into the region in 2008 and the number of placements will continue to expand in urban and rural settings over the next few years. Rotating interns and junior doctors into general practice is a crucial step within the VI framework.

Conclusion

Vertical integration has provided an opportunity to develop the GP clinical teacher as the central contributors to regional and community based GP education in the ACT and southeast NSW region, while at the same time reducing their potential teaching load. It has also improved stakeholder connections and helps to facilitate competing stakeholder needs in a workforce shortage environment. Vertical integration of GP training appears to have raised the status and recognition of general practice within the region.

Conflict of interest: none declared.

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