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MEDICAL EDUCATION

Learning from the learners: What do trainees want from general practice vocational education?

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Abstract

***Background and Aim*:** The Royal New Zealand College of General Practitioners offers a two stage General Practice Education Programme, which prepares doctors for general practice in New Zealand. This paper focuses on Stage 1, the Intensive Clinical Training Program.

***Method*:** This paper uses Shipengrover and James' model, which describes quality in practice based general practice education and suggests methods for evaluating teaching in attachments. The data included in this paper are drawn from two sources – evaluation data collected from 1996 to 1999 and qualitative research data. The data include trainees' perceptions of aspects of vocational education, which contributed most to their learning.

***Results*:** Registrars consistently note that the most useful aspects of practice attachments include adequate numbers and a good variety of patients, teacher availability and approachability, informal corridor teaching, supportive positive work environment and high quality practices. Learning opportunities during practice attachments would be improved with explicit individual learning goals, guaranteed uninterrupted teaching time each week, more constructive, specific feedback, more involvement with chronic health problems, as well as better information for practice staff. Trainees perceive experience as the primary source of learning for general practice, in particular new experiences that are coupled with reflection on feedback from those experiences. They note the structured support provided by general practitioner teachers, which enhance learning through experience.

***Conclusions*:** Evaluation and research data about practice attachments reinforce the importance of trainees' clinical experiences, supported by interactions with their teacher, in learning general practice. These data provide feedback to teachers, as well as forming the basis for quality improvement measures over time.

Key words: evaluation, experiential learning, general practice, quality practice based education, trainees' perceptions.

Preparing for New Zealand general practice

The Royal New Zealand College of General Practitioners (RNZCGP) offers a General Practice Education Program (GPEP), which prepares doctors for general practice in New Zealand. This is a two-stage program: Stage I, Intensive Clinical Training Program and Stage II, Advanced Vocational Education. This paper focuses on Stage I general practice education and draws on the Intensive Clinical Training Program's research and evaluation data from 1996 to 1999. The data include trainees' perceptions of aspects of vocational education, which contributed most to their learning.

Stage I: Intensive Clinical Training Program

Doctors apply to enter Stage I of the Program after having completed 2 years of approved hospital based experience and education. Trainees may participate in the program on a full-time or part-time basis and can apply for a government-funded position, in which they receive a training allowance. These trainees

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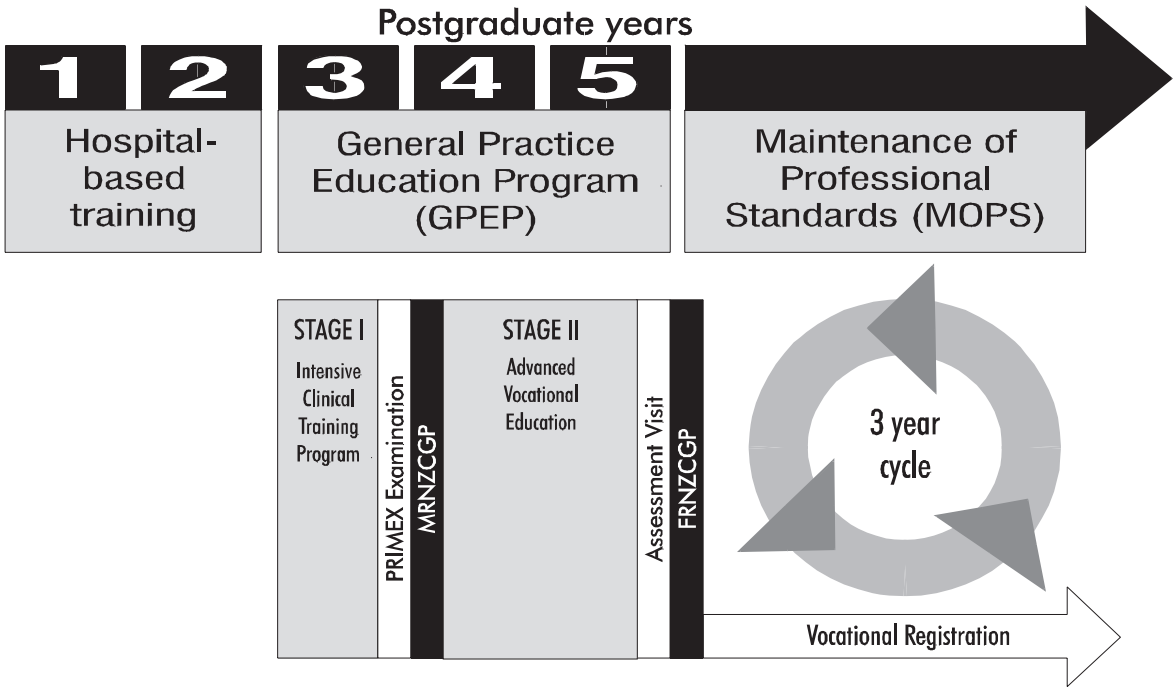

Figure 1 Educational pathway to Fellowship and Vocational registration. FRNZCGP, Fellow of the The Royal New Zealand College of General Practitioners (RNZCP); MRNZCGP, Member of the RNZCP, PRIMEX, RNZCP primary membership examination.

are known as registrars. Alternatively, trainees may self-fund to attend only the seminar day-release program. They are known as seminar attenders.

Registrars are attached to training practices for two, 20-week attachments and see patients under the supervision of their general practitioner (GP) teacher. They receive one-on-one teaching from their teacher and assistance in making the most of the learning opportunities that the practice provides. In the absence of a GP teacher, seminar attenders are strongly encouraged to work under the guidance of trained mentors. Seminars and workshops offer a range of learning experiences related to general practice including simulations and role plays, review of videos of consultations, lectures and small group discussions. The seminars provide trainees with the opportunity to share their knowledge with others and to be part of a supportive peer group. Figure 1 shows the overall education pathway offered by the College.

Quality in general practice education programs

This paper uses Shipengrover and James' model, which describes quality in practice based general practice education and suggests methods for evaluating teaching in attachments.[1] The model fits in a context of increasing insistence for accountability of the use of public funds. Programs which, in the past, may have been seen as self evident, necessary and worthwhile are now required to provide evidence that supports claims about their effectiveness and efficiency.

In the case of higher education programs, accountability has been paired with a conceptual shift towards students being customers or clients of a service. Both trends have led to calls for evaluating performance from many groups and sectors.[2] This is also true for postgraduate medical education programs.

The model (Fig. 2) draws on published reports of quality improvement, clinical teaching effectiveness and experiential learning theory.[3] The 'black box' or 'process' component links directly to evaluation published reports, which specify one form of evaluation as 'process evaluation'.[4] The purpose of process evaluation is improvement, focusing on the delivery or implementation of a program. Getting feedback from trainees to gauge their level of satisfaction is an integral part of evaluating the processes of an educational program.

For the Intensive Clinical Training Program, the rationale for gathering evaluation data from trainees arises from both external accountability requirements and the conceptualization of trainees as internal customers for the delivery of instruction. The data included in this paper are drawn from two sources. The first source is from evaluation data collected during the period 1996–99. The second is from a qualitative study of trainees' perceptions of learning general practice.[5]

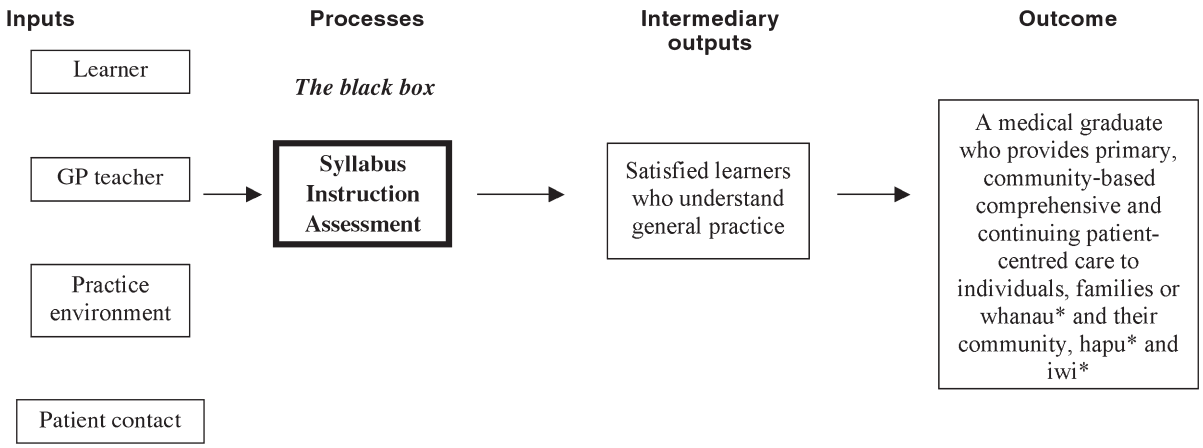

Figure 2 A model for community based medical education. *Whanau, hapu and iwi are Maori (the indigenous people of New Zealand) words. Whanau means family, hapu means clan and iwi means tribe.

Registrars' learning experiences in practice attachments

Registrars complete an evaluation form about each of their two practice attachments. During the 1996–99 period, data were collected on eight separate occasions, from 372 forms, representing an average return rate of 83% (range 69–92%). There have been four constant features of the form, reflected in the main sections. Registrars are asked to respond on a likert scale to statements, as well as provide open responses regarding patient contact, teaching, the practice as a teaching practice and the overall rating of the value of the attachment. The comments that follow represent those most commonly noted for each attachment evaluation.

Patient contact

The majority of registrars see mainly children, women and acute presentations. Patients are often casual and/or first contact patients. Nearly all registrars see between five and 13 patients per session (half day). Having a good number and a variety of patients are helpful aspects of teaching attachments. Registrars commonly note that having more patients and a greater variety of patients, for example older people and more chronic disease conditions, would improve the learning opportunities during the attachments.

Teaching

Registrars report that teachers are readily approachable and available to discuss issues as they arise. This informal corridor teaching is seen as one of the most useful aspects of teaching attachments. Other useful aspects include having individual learning needs addressed, reviewing video-recorded consultations, observing the teacher's consultations and receiving specific and constructive feedback on consulting skills. Every year, registrars note that scheduled formal teaching is often interrupted or eroded, superseded by other demands. The most frequently noted teaching improvements needed include protecting formal teaching time, planned and well-structured teaching sessions, more observation of the registrar/teacher and more quality feedback.

Teaching practice

Registrars report that teaching practices are high-quality, well-organized general practices offering high standards of care. Practice staff are reported to be friendly, helpful and supportive, most having a good understanding of the trainee's role in the practice. It is noted that practice staff have some involvement in the registrar's training and include the registrar as part of the practice team.

Changes that would improve the learning opportunities during the attachment include better orientation to the practice for the registrar. This would involve formal introductions to all staff members, computer training, introduction to charging procedures and paperwork requirements, and more information to staff about the registrar's role in the practice. Registrars note that a more team-based approach to teaching, which includes input from the other doctors, as well as teaching from the nursing staff, would also help improve the learning opportunities during a practice attachment.

Overall rating of value

Registrars are asked to give an overall rating of value for each teaching attachment, on a five-point likert scale. On average, over the 3-year period of 1996–99, 48% of trainees rated their teaching attachments as 'excellent', and 40% of trainees rated their attachments as 'very good'.

Improving learning during practice attachments

In summary, the most useful aspects of practice attachments noted by registrars include:

- adequate numbers and good variety of patients
- teacher availability and approachability
- informal corridor teaching
- supportive positive work environment
- high-quality practices.

Registrars suggest the following changes would improve learning opportunities during the practice attachments:

- explicit individual learning goals for each attachment
- guaranteed 'uninterrupted' teaching time once per week
- more constructive, specific feedback
- more involvement with chronic health problems
- better information to practice staff about the registrar's role.

Trainees' perceptions of learning general practice

The purpose of the qualitative research study was to explore and understand the trainees' perceptions of learning, particularly the processes of learning associated with their clinical experiences. Semi-structured interview schedules were developed on the basis of a pilot focus group interview. Focus group interviews with both groups of trainees (nine registrars, seven seminar attenders) on two different occasions were carried out. An inductive approach was used for data analysis.

Three main themes emerged from the interview transcripts. First, the trainees perceived 'experience' as the primary source of learning:

> 'You learn . . . by your own experience . . . you get thrown at the situation and you try something out' (Seminar attender).

This experience was not just a matter of 'sitting and consulting all day'. The experiences perceived as the best learning experiences were those that were new to the trainees, described as 'new challenges' or 'first time' experiences:

> 'Actually being with people and having new challenges, different people from different backgrounds, trying to get a feel for it as you go' (Registrar).

According to the trainees, new experiences led to learning when they were coupled with reflecting on feedback from those experiences:

> 'I think that the bottom line is that you have got to be in the situation and if you muck it up then you can reflect on it, "I've mucked it up. What can I change next time?" ' (Registrar).

Second, the registrar group reported that teachers enhanced learning through experience when they provided back-up knowledge, encouragement and options:

> 'It is a lot nicer when the [teacher] can confirm or support . . . that you are on the right track . . . encouragement and another perspective' (Registrar).

Third, in addition to experience and reflection on experience, trainees identified learning from observing other doctors:

> 'You often find yourself . . . becoming a bit like them [the teachers]; not a lot . . . some of the ways that they do things you certainly do pick up. *Hopefully their good bits'* (Registrar).

In summary, the trainees considered 'experience' as the primary source of learning general practice, especially new experiences coupled with reflection on feedback. Registrars noted the structured support provided by their teachers, which enhanced learning from experience. Another source of learning for both registrars and seminar attenders was from observing other doctors.

Implications for general practice vocational education

Registrars attribute clinical teaching effectiveness to their patient contact, the teaching practice context as well as the interaction between the learner and GP teacher. These three main components add to the overall value of the practice attachment. Shipengrover and James report similar components in the Med IQ instrument (Medical Instructional Quality).[6] They note that the instrument can provide benchmarks for improvement over time and may be used to provide feedback to clinical teachers.[1]

Evaluation and research data about practice attachments reinforce the importance of the registrars' clinical experiences, supported by interactions with their teacher, in learning general practice. This implies that the teacher's primary role is to provide experiences from which trainees gain knowledge and skills. Maximizing learning from experience requires structured support from the teacher. This support includes orientating the registrar into the practice context, setting individualized goals with the registrar, providing feedback on their performance and discussing further learning options with the registrar.

Adequate orientation ensures that the registrar is more quickly integrated into the practice team, actively involved in providing clinical services to patients in

Table 1 Checklist of registrars' wants

Practice staff and patients to be familiar with the registrar's role.
To be quickly orientated into the practice environment.
To see an adequate number and variety of patients in order to have new experiences, which lead to learning.
Feedback in order to reflect on the clinical experiences provided in the practice attachment.
Access to the practical knowledge of experienced general practitioners through discussion of issues as they arise, observation of their clinical work and planned teaching sessions.

ways that minimize disruption to patient care. Providing quality feedback, that is, descriptive, specific and constructive feedback, on the basis of observation is perceived positively by trainees.[7] Without feedback, reflection on experience is not focused and less likely to lead to further learning. A secondary role for teachers is to provide access to their practical knowledge. According to registrars, teachers' practical knowledge is accessible when teachers arrange for the registrar to 'sit-in' on their consultations, are available to discuss issues as they arise and plan teaching sessions.

Therefore, two actions are pivotal to teaching quality in general practice vocational education. First, effective teachers maximize learners' experience through structured support. Second, effective teachers provide access to practical knowledge of experienced GPs (Table 1).

Conclusion

The Intensive Clinical Training Program is the first stage of an education programme that prepares doctors for general practice in New Zealand. An integral part of the Program is evaluation for improvement. Feedback from registrars is gathered in order to gauge their level of satisfaction with teaching in attachments. It includes registrars' perceptions of aspects that contributed most to their learning. These data provide feedback to teachers, as well as forming the basis of quality improvement measures over time. Finally, the data provide evidence that supports claims about the Program's effectiveness in achieving its aim of providing quality practice based education for all trainees.

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