

Chapter 4.3.4

PARALLEL CONSULTING IN RURAL MEDICAL EDUCATION

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Introduction

Providing medical students with meaningful clinical experiences which bring students into 'close and active relation with the patient' is essential for them to develop clinical competence (1). The medical profession has a collective responsibility to ensure students are prepared to contribute meaningfully to their community's health care needs through the provision of primary and ambulatory care services (2). In recent times many medical schools have recognised this priority and sought opportunities to increase community-based medical education placements to provide students with more experiences in managing patients with undifferentiated illnesses and chronic diseases (3). Parallel consulting has become a familiar way of managing students within these clinical contexts.

Parallel consulting involves providing students with an opportunity to consult with patients in parallel with their experienced clinician supervisors. Routinely this involves students having their own consulting room or other clinical space where they can start the consultation with the patient before being joined by their supervising clinician who continues, provides quality assurance and concludes the interaction with the patient.

This chapter seeks to summarise the current evidence around parallel consulting, and draws on case scenarios to provide a practical approach to parallel consulting in community-based medical education, in a rural private general practice environment.

While parallel consulting can happen in many different environments, rural general practitioners are likely to find it a valuable approach to use for clinical supervision of students.

What's the evidence?

Time

In the Australian rural General Practice (GP) context, patients tend to be booked with a GP every ten to 15 minutes. A recent study (4) found that the average time a GP spends with the patient was 13½ minutes. In this context, where a medical student had access to their own consulting room to see patients before being joined by the GP, there was no increase in the time the GP spent with the patient (4).

In this study the time the GP spent with the patient in a teaching consultation was not affected by: GPs' previous experience (after one year of precepting experience); their reported interest in clinical teaching; nor the student's opinion of the effectiveness of the clinical teaching they received. Student teaching occurred mainly with the patient in the room, and the GP rarely spent time between consultations providing additional clinical teaching to the student. Time-motion study results of the non-consulting time spent by doctors in this study found that non-consulting time during a half-day session was not significantly different ($p=0.093$) with solo consulting sessions having estimated marginal mean non-consulting time¹ of 36 minutes 43 seconds (95% CI = 28min 41sec to 44min 44sec) and parallel consulting sessions having estimated marginal mean non-consulting time of 41 minutes 55 seconds (95% CI = 33min 54sec to 49min 57sec) (5). The time the patient spent within the clinic was usually doubled, however, as they had a part-consultation with the medical student, usually followed immediately by a joint teaching consultation with their student and the GP.

Although parallel consulting has been shown to be time efficient, many doctors describe that it takes more work. The activities which supervising doctors engage in, when they participate in parallel consultations were different in a recent study (6). Exploring the patient's history took a longer process (average additional 39 seconds $p=0.002$) as the doctor compared and contrasted the student report with the patient story. Once student competence with basic clinical examination skills was established, physical examination time could be reduced (average 37 seconds less,

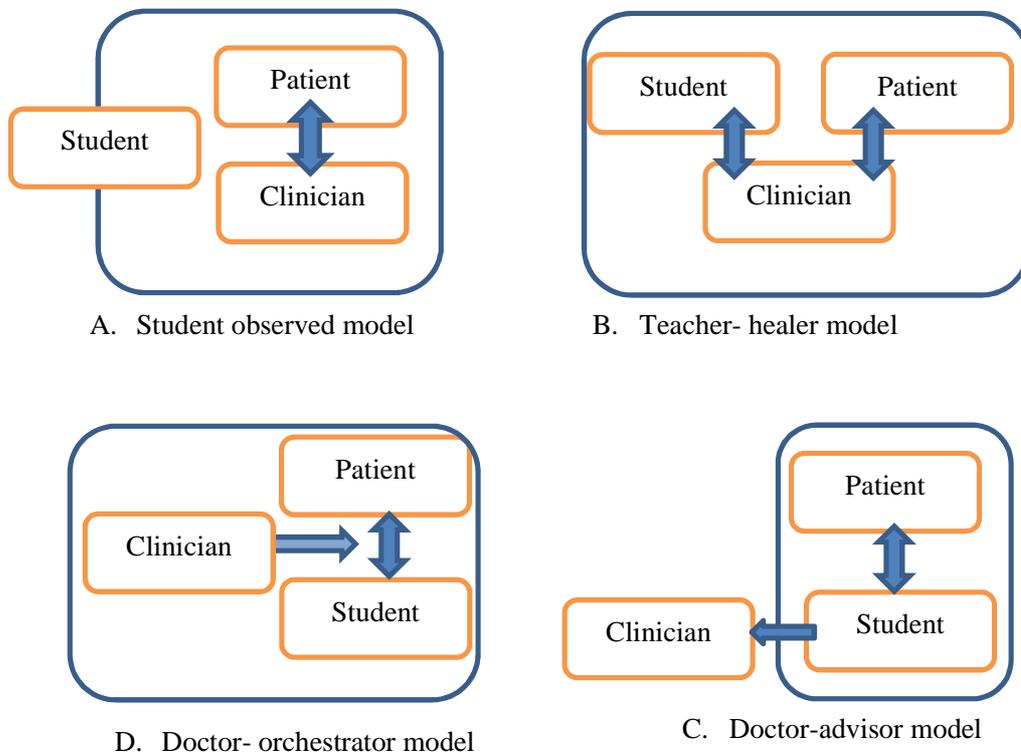
¹ The 'estimated marginal mean non-consulting time' is the time a GP spends on teaching students outside of the consultation during a particular period (in this case, a half-day session), estimated using a calculation of marginal means.

p=0.001) as the experienced clinician sought to confirm key physical findings only, rather than repeating the entire patient examination. Reduced time spent performing patient management (average 41 seconds less, p=0.007) and clerical duties (average is 1 minute 31 seconds less, p<0.001) was possible by delegating tasks to the student or occasionally deferring activities such as referral letters to another time. This provided additional time (average 1 minute 8 seconds, p<0.001) which is used for direct student teaching and indirect patient education (6).

Dynamics

In a study which looked at the interactions between student, patient and clinician in parallel consulting, it was clear that student competence, and supervisor familiarity with the student resulted in different dynamics within the teaching consultation. These dynamics were fluid, changing from moment to moment within a single consultation, and included the student-observer model, the teacher-healer model, the doctor-orchestrator model and, very occasionally, the doctor-advisor model (Figure 1) (7).

**Figure 1:
Models of dynamics within parallel consulting**



Patients

Most clinics seek to manage the logistics of having students engaged in parallel consulting by ensuring patients are prepared for, and provide consent for, the parallel consulting experience. This involves highlighting sessions where clinicians will be parallel consulting, so that appointments are made explicitly. Figure 2 details the appointment scheduling and patient consent processes utilised in one clinic.

Figure 2:

**Case scenario 1:
Reception staff role in patient bookings and consent**

As she walked past the front desk of the clinic Dr Marie overheard her receptionist on the phone to her patient, Mrs Liu.

"Hello Mrs Liu, who do you wish to make an appointment with?"

"Ok, Dr Marie is booked up for 3 weeks, but if you are happy to consult with the medical student Albert before Dr Marie joins the consultation, I can offer you an appointment at nine thirty on Thursday. You will need to allow half an hour for the appointment"

The patient's appointment is then entered onto the booking system:

Wednesday: Dr Marie Solo consulting session		Thursday: Dr Marie Parallel consulting session with Arthur	
0900	F Summers	0900	J Boyd
0915	T Joyce	0901: student	D Ross
0930	N McNaughton	0930	S Nobes
0945	B Shahi	0931: student	S Liu
1000	F Jones	1000	L Heaven

On Thursday Dr Marie again overheard her receptionist

"Good morning Mrs Liu. If you take a seat our medical student Albert will see you

Space

When planning for parallel consulting, it is recommended that clinic personnel work to provide students with access to an equipped consulting room. Consulting room space can be created through rostering of sessions to maximise utilisation of consulting rooms in each half-day period. Medical students also require access to student study space in order that they do not interfere with the patient care activities of other clinic staff, or impact on patient flow (8). Infrastructure investment may be required if parallel consulting is planned as a routine part of clinic activity.

Parallel consulting can be arranged in different ways, in order to balance the needs of student learning, patient flow and the doctor's cognitive load. Some doctors have the physical space and supervision expertise to supervise two students at the same time in what is known as a 'wave schedule' (9), while other doctors adapt their programme to see their own patients (see Figure 3).

Discussion

Social learning theory frames parallel consulting as allowing students to take on a legitimate peripheral role in patient care which progresses to a more central role in the clinical team as their knowledge and skills develop (10).

The RIME (Reporter-Interpreter-Manager-Educator) framework proposes that students move through different competency levels as they develop their clinical competence: from reporter, to interpreter, to manager, to educator (11).

When students need to progress beyond simply reporting a patient's personal story to interpreting this into the language and schema that is symbolic of Western medical clinical diagnoses, it is helpful for them to observe an experienced clinician to develop an understanding of what information is required from the patient and how to collect it. Students should be encouraged to actively observe by focussing their attention on specific skills, and providing them with an opportunity to report and reflect on what they saw (9). The teacher-healer model can then be used to provide students with an opportunity to interpret patient stories, and receive critique and feedback regarding their interpretations. This is particularly important in ensuring students are not blinded by one well-formed clinical schema, and fail to consider alternate diagnoses in interpreting their findings.

**Figure 3:
Case scenario 2:
Adaptations of parallel consulting appointment schedule**

Dr James has agreed to take on some additional teaching, however clinical space is at a premium, so he plans to utilise 2 consulting rooms with two students and move between the rooms. He will be consulting on Tuesday with two proficient students Melody and Susan.

The reception staff arrange his Tuesday appointments

Tuesday Consulting room 1: Dr James Parallel consulting session with Melody		Tuesday Consulting room 2: Dr James Parallel consulting session with Susan	
0900	Patient 1 consults with Melody	0900	First appointment for the session is left unbooked
0915	Patient 1 consults with Melody and Dr James	0915:	Patient 2 consults with Susan
0930	Patient 3 consults with Melody	0930	Patient 2 consults with Susan and Dr James
1000	Patient 3 consults with Melody and Dr James	0945:	Patient 4 consults with Susan
1015	Last appointment for the session is left unbooked	1000	Patient 4 consults with Susan and Dr James

At the beginning of the next semester Dr James is asked to take two less experienced students. Clinical space is more available and he has access to three consulting rooms at this time.

The reception staff arrange his appointments two months in advance to prepare for this time

Student 1 booking schedule (consulting room 1)		Dr James booking schedule (consulting room 2)		Student 2 booking schedule (consulting room 3)	
0900	Patient B	0900	Patient A	0900	Preparation or sit in with Dr
0915	Patient B	0915:	Patient B (join student)	0915:	Patient C
0930	Write notes	0930	Patient C (join student)	0930	Patient C
0945	Patient E	0945:	Patient D	0945:	Write notes
1000	Patient E	1000	Patient E (join student)	1000	Patient F
1015	Write notes	1015	Patient F (join student)	1015	Patient F
1030	Finish or sit in with Dr James	1030	Patient G	1030	Write notes

As students move from the interpreter phase of clinical reasoning to the manager phase, doctors are able to step back to an orchestrator role, with their primary purpose being one of quality assurance rather than having the primary therapeutic relationship with the patient. Experienced supervisors will feel confident to entrust professional activities to the student - such as history, examination or patient education - while ensuring patient comfort and safety (12). Some doctors report finding it difficult to allow the doctor-orchestrator consultation to take a slightly different course to the one they would have taken. If they are able to overcome the urge to intervene, however, doctors report that this phase of parallel consulting is perceived as less work and takes no more time than consulting alone.

Broader applicability and implementation

Recent studies have demonstrated that clinical placements allow students gradually to develop identities as novice members of specific interest groups within the medical profession (10, 13). Year-long rural community placements influence students' future career choices towards rural practice (14). Also the opportunity for career variation through clinical teaching in community practice has been demonstrated to be an effective retention tool for rural primary care physicians (15).

Practice pearls

- Parallel consulting requires infrastructure investment so students have access to clinical space.
- Parallel consulting enhances learning by allowing students to take an active role in clinical care with responsibility graded to their level of development of clinical reasoning.
- Students can progress from sitting in on a consultation, to being allocated appropriate patients by their clinical supervisors, to taking the next patient on the list.
- Parallel consulting does not take more time for the supervising clinician, but it can mean more work.
- Parallel consulting requires clinicians to understand where students are on their learning journey and manage the student-patient-supervisor triangular relationship accordingly.

Conclusion

Parallel consulting can be an effective method of actively involving medical students in authentic clinical activities. Preparation for parallel consulting must include consideration of infrastructure resources, and appointment timing to ensure smooth patient flow.

Experienced clinicians describe finding parallel consulting enjoyable, educational and financially and logistically feasible.

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