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The supervisory encounter and the senior GP trainee: managing for, through and with

Abstract

Purpose

Help-seeking supervisory encounters provide important learning experiences for trainees preparing for independent practice. While there is a body of expert opinion and theorising on how supervisor encounters should happen, supporting empirical data is limited. This is particularly true for the senior general practice (GP) trainee. Without knowing what happens during these encounters, we cannot know how to maximise their educational potential. This study aimed to understand what happens when senior GP trainees call on their supervisor in caring for patients and how learning can be enhanced when this occurs.

Methods

This is an analysis of data from a multi-case study of five GP supervisory pairs each with a GP registrar and their supervisor. The data are recordings of 45 supervisory encounters, 78 post-encounter reflections and six interviews. We used Wenger's Communities of Practice theory and Rhetorical Genre Theory as analytic lenses.

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Findings

The supervisory encounters followed a consistent format which fitted the form of a genre. Within this genre, three dominant interactional patterns were identified which we labelled: 'managing for', 'managing through' and 'managing with'. Each pattern presented different opportunities and drew on different skills. The primary agenda was always developing a plan for the patient. Education agendas included acquiring knowledge, developing skills and achieving independence. Other agendas were issues of control, credibility and relationship building. Both supervisor and trainee could be purposeful in their supervisory engagement.

Conclusions

For supervisors and trainees to achieve the educational potential of their supervisory encounters they require flexibility. This depends on understanding the genre of the supervisory encounter, the agendas at play, the options they have in engaging and having the skills to utilise these options. Educators can facilitate supervisors and trainees in acquiring this understanding and these skills. We recommend further research into the genre of the supervisory encounter.

Introduction

Ad hoc supervisory encounters are important to the senior medical trainee's preparation for independent practice. These encounters usually occur in response to a trainee's request for help such as when they are responsible for a patient's medical care and want to verify a finding or seek support in determining a management plan. They also typically arise in settings where trainees have a high degree of independence and in the context of a longitudinal supervisory relationship(1). Our current understanding of this social space, that is both complex and rich in learning opportunities, comes from a mix of literature. These include literature related to social theories of workplace learning, empirical research and expert opinion based publications. Taken together, the existing literature has identified concerns with the quality of clinical supervision(2, 3) and with our understanding of the phenomena itself. Key gaps include: a focus on what should occur, not how it occurs; an oversimplification of the social space that does not take into account heterogeneity of practice; a lack of attention to the senior trainee-supervisory encounter - most studies have focused on more junior trainees and; an over-reliance on interview and self-report as opposed to observational research. Without addressing these gaps and developing a better understanding of what happens during these ad hoc supervisory encounters, we cannot know how to support quality in supervision and maximise the educational potential of ad hoc supervisory encounters.

When a trainee engages their supervisor for help in the context of patient care, a complex social space is created. This social space can be seen as dynamic with explicit and implicit agendas at play driven by the participants and by their cultural context. Social theories of workplace learning provide insight into the nature of this social space and how learning might occur within it(4-6). Wenger's Community of Practice theory (CoP)(4) is one such theory and has already proven to be a useful lens for understanding this space(7). Wenger gives central position to participation in the work at hand, in this case the care of the patient. Also at stake is the need for the trainee to gain the knowledge and skills (a regime of competence) required to progress towards assuming the role of a qualified practitioner (a full member of the community). A less explicit but powerful agenda is that of the practicing community moulding its future membership into practitioners who conform to the community's cultural norms (identity formation). The relationship of established practitioners (old timers) with trainees (new-comers) is fundamental to granting the trainee credibility (legitimacy), enabling them to develop the required skills and to become the type of practitioner that is demanded by the practicing community (identity formation and ownership of meaning). The way that this evolves is impacted on by the way that the trainee and experienced practitioner choose to engage (individual agency).

Empirical studies also provide insight into this complex social space and reinforce key theoretical considerations. The primary agenda of this social space is to enable the trainee to meet the needs of patient care(8, 9). Trainee learning is a secondary agenda and may be in tension with patient care(10). There may be other agendas also in tension, including: the impact on supervisor time (11, 12); the trainee's need for credibility with their supervisor(13) and patient(14); the work of relationship building(14, 15); and maintaining the status quo of cultural norms(16). Taken together, both theory and empirical studies draw our attention to: the importance of balancing work related tasks and educational ones; recognizing and accommodating other competing agendas; ensuring that learning is optimally targeted to trainee needs; and building a supervisory relationship. They do not however tell us how to achieve these things.

Attempts have been made to fill this gap through expert opinion. Chief among these are tools that supervisors and trainees might use to enhance learning (17) including 'one minute preceptor' (18) and 'SNAPPS' (19). These tools are based on the cognitive apprenticeship 20) model, which emphasises the skills of making cognitive processes visible so that they can be understood and learned. Expert opinion exists around other aspects of supervisory practice but most assume a "right way" of supervising and do not sufficiently consider the heterogeneity of practice (21, 22).

While the complex social space that is created when the trainee calls for help is well theorised and on which there is a body of expert opinion, this social space has not been well studied. Reviews of the literature on clinical supervision have criticised the lack of observational data supporting current expert opinion (1, 21, 22). Of the published observational studies, the focus has been on either the act of calling for help - rather than the subsequent interaction(11, 13) - or on the supervision of medical students(10, 23) who do not have the independence and development of a senior trainee.

In order to know how learning can be supported when the senior trainee calls for help from their supervisor and to address concerns of sub-optimal supervision, it is essential to understand what actually happens in the social space created subsequent to the call for help. With this understanding, supervisors and trainees could be more purposeful and better equipped to achieve more with their supervisory encounters. We therefore ask: What happens when the senior trainee calls on their supervisor for help in their care of patients and how can trainee learning be enhanced when this occurs?

Methods

Study design

The study was an exploratory multi-case design (24) where each case was a supervisor/trainee pair. Qualitative data was collected including auditory recordings of supervisory encounters, post-encounter reflections by the supervisor and the trainee and interviews of each of the registrar and trainee.

A constructivist approach was taken in order to foreground participant perspectives and to build on insights from the research team in their interaction with the data (25). JB is a supervisor and a medical educator in general practice (GP) vocational training. MG is a physician whose program of research focuses on genres of communication and reasoning in clinical training environments, DN is a scholar in health professions education and TC is a social scientist. At the time of the study, both JB and TC were employed by the organisation the participants were recruited from. Their responsibilities included supervisor professional development and program quality assurance.

This study was approved by the Monash University Human Research Ethics Committee project number CF13/1225 – 2013000592. Participation was voluntary and each participant signed an informed consent form. Confidentiality was maintained.

Setting and sample

We investigated ad hoc supervisory encounters between Australian GP trainees and their supervisors in community based placements where the encounter occurred after a trainee's request for assistance in patient care. Community-based Australian GP trainees are senior clinical trainees who are in at least their third post-graduate year. Five GP supervisor-trainee pairs were purposefully selected (25) from a pool of over 150 accredited rural supervisors. Selection was based on the criteria that the supervisors were experienced; there was an established supervisory relationship; and the trainees were at a level of being responsible for their own case load and still accessing their supervisor on an 'as needed' basis. We chose trainees in their second six-months of a one-year GP placement. We first approached supervisors from identified suitable pairs, if the supervisor consented, their trainee was approached for consent until we had recruited five pairs. This was achieved after approaching seven pairs.

Data collection

The primary data were weekly real-time audio-recordings of supervisory encounters following the trainee's request for assistance over a ten-week period. One day of the week was designated for recording encounters, patients attending the trainee on this day were consented on making their appointment. Then, if the trainee chose to call on their supervisor, consent was confirmed with the patient and a digital audio-recorder was activated. Trainees and supervisors also recorded ad hoc supervisory encounters that occurred in the absence of the patient. Forty-five encounters were recorded. These data were augmented by audio-recorded reflections by each of the trainee and supervisor separately recorded immediately after each encounter for which we provided a prompt sheet (Appendix S1). A semi-structured interview with each participant was also undertaken by a research assistant before recording of the supervisory encounters commenced. The interview protocol was based on the extant literature and our own knowledge of supervision (Appendix S2). In total, we collected 13 hours 31 minutes of recorded data. The data were transcribed verbatim and anonymised.

Data analysis

This analysis was preceded by two previous analyses which were used to frame this analysis. The first analysis examined the interview data alone and explored participants' perceptions of the purpose of supervisory encounters (9). This sensitised us in understanding what was happening in the supervisory encounters themselves. The second analysis focused on one of the five cases and provided a naturalistic presentation of a single supervisory encounter. That analysis explored the application of Wenger's social theory of learning (4) to the data(7). Wenger's 'Community of Practice' theory was subsequently used to frame this analysis. This paper reports on our analysis of the complete data set with a focus on the recordings of the supervisory encounters and using the post-encounter reflections and interview data to add analytical depth.

As we explored the encounter data, we identified recurring patterns of dialogue. This led us to engage MG in the analysis and write up for his expertise in the language of supervision (26, 27). With his insight and guidance we applied Rhetorical Genre Theory (RGT) (28, 29) as a second analytic lens and tool. RGT has been used to understand the talk of medical education by other researchers inspired by the work of Lingard (30, 31). She positions RGT as a social theory of learning (31). RGT proved a good fit with Wenger's CoP theory as both theories focus on the interface between the individual and the social structure that they work within.

According to RGT, a genre is a form of typified social action that arises in response to recurrent situations (28). Genres can be written, such as a clinic visit note, and they can be oral, such as the interaction that occurs when a trainee seeks help from their supervisor in the care of their patient. Genres are typified social action in that the genre users – in this paper trainees and their supervisors – through the recurrence of situations, learn how to use particular communication strategies to achieve their purposes (social motives) (28). Within a given genre, participants are influenced by culture and context (29). They are also influenced and constrained in their actions by their knowledge of the situation, the actions of others and their repertoires for handling that situation (29). In the situation of help seeking, a trainee's understanding of what they are trying to achieve, the expectations and actions of their supervisors and the strategies (repertoire) that they have developed for achieving their purposes all impact what can and cannot be achieved as a result of the encounter. The social action of genre often extends beyond the current situation (28). For trainees and supervisors, the actions taken during one encounter will influence their subsequent encounters and these effects are cumulative.

We first read all transcripts and then coded for themes. We coded by individual statement, by supervisory encounter and by case. We used an iterative process between emerging concepts and the primary data (32). Our first endeavour was to describe the genre features of the supervisory encounters. In order to explore what was happening within this genre and the way that trainee learning occurred, we drew on both RGT and Wenger's CoP social theory of workplace learning as sensitising frameworks. Thus, we identified candidate explanatory themes both deductively and inductively. To test candidate explanatory themes, we applied them to the primary data, both within and between cases (32), seeking congruence. Our final analytic framework is detailed under findings and in Table 1. Discrepant encounters were used to develop theoretical depth. Interpretive rigour was achieved by: employing a constant comparative approach (25); triangulating (33) between our three sources of data; drawing on the experiential and theoretical backgrounds of the researchers(33); and memoing (34). JB and MG undertook a series of coding meetings where interpretation of the data was discussed. Once a conceptual model had taken shape, DN and TC were engaged to develop analytic depth and for further theorising.

Findings

We found both a common structure (genre) to the supervisory encounter and patterns of difference that helped to explain practice variability. In reporting our findings, we first describe the overarching genre of the supervisory encounter. We then explore three discrete patterns in the way the genre was exhibited drawing on three explanatory themes. Next, we describe two additional explanatory themes: the impact of context on the encounters and; the impact of purposeful initiatives (agency) taken by trainees and supervisors on the way the encounter played out.

The genre of the ad hoc supervisory encounter

Analysis revealed that the supervisory encounter genre followed a common structure with the shared social motive of creating a plan of care for the patient.

The reason I was seeking help was to clarify what the best referral pathway for a patient I had was. It was a patient who needed relatively urgent investigation. (TAR5)

And what we achieved was a plan. (TDR12)

(Quotes are annotated as follows: Trainee 'T' or supervisor 'S'; supervisory pair 'A','B','C','D' or 'E'; source of data - interview 'I', encounter 'E' or reflection 'R'; and the encounter number.)

Structurally, the genre had four distinct components: invitation and case presentation; further data collection; creation/confirmation of a plan; and handing back to the trainee. Box 1 demonstrates a supervisory encounter as example of this structure.

Invitation and case presentation

Trainee I've just seen [patient name]

Supervisor Yes

Trainee He's come in with a good story for unstable angina, which he's putting down to a flu or virus or something like that. But he's basically had three weeks of exertional band-like pains across his chest, shortness of breath...

...So I'm just wondering, I mean he's pain-free really at the moment, but I think he needs fairly urgent investigation...

Further data collection

Supervisor Is it daily?

Trainee Any time he exerts himself, he gets the pain. He said he felt okay this morning when he woke up. He didn't have it, but he feels like his Weet-Bix [an Australian breakfast cereal] got a bit stuck, but he said that's a normal thing for him. So I don't know whether to read that, into that too much....

Supervisor So what do you want to do?...

Creation of a plan

Supervisor Well if he's got private health insurance you can zip him into [town] private – you know the private admission thing?

Trainee Via the direct access?

Supervisor Which I used yesterday...

Supervisor Send him in...unstable angina

Trainee Yeah...

Handing back to the trainee

Supervisor Yeah, I reckon....the story aligns, sounds good.

Trainee Okay thank you.

Supervisor Ciao.

Box 1: Pair A, Encounter 5 (abridged) mapped to the proposed genre of the supervisory encounter

Differences within a genre

While the overarching genre structure was stable across encounters and the creation of a plan for the patient was always achieved, there were meaningful differences in how the genre was enacted and what other agendas were addressed. We identified three dominant patterns in the way that the genre of the ad hoc supervisory encounter was enacted and have characterised these by the position taken by the supervisor. We have labelled these patterns: 'Managing for'; 'Managing through'; and 'Managing with'. While each pair predominantly used one of these three patterns, we identified changes in use of pattern within pairs and sometimes within encounter.

In our exploration of the three patterns and the ways these were enacted, we used our analytic lenses of RGT and Wenger's CoP theory. We identified three explanatory themes for understanding the difference within the three patterns and two explanatory themes for understanding how these differences occurred across the three patterns. The within pattern explanatory themes were: individual actions; trainee learning; and other secondary agendas. The across pattern explanatory themes were context and agency. The five themes are detailed in Table 1. The way these explanatory themes contribute to understanding the supervisory encounter within its overarching genre is illustrated diagrammatically in Figure 1.

Explanatory theme	Definition
Individual actions	Individual actions are the actions of the participants in the supervisory encounter taken in the context of the shared social action that constitutes the supervisory encounter.
Trainee learning	Trainee learning is both gaining a repertoire of knowledge and skills to engage effectively in practice (regime of competence) and the process of becoming a fully recognised practitioner (identity formation).

Other secondary agendas	Agendas include private intentions and social motives which may be explicit or implicit. 'Other' refers to 'other than creating a plan' and 'other than trainee learning'. They include issues of credibility (legitimacy), control and relationship building.
Context	Context includes context of situation, the background of the individuals and the context of culture.
Agency	Agency is volitional, purposeful, engagement driven by individual intention.

Table 1: Explanatory themes and definitions.

Figure 1: Conceptual diagram of the supervisory encounter.

In the next sections, we describe the three patterns of interaction and their characterisation using the first three explanatory themes. Following this, we describe the explanatory themes of context and agency and the impact of these on how the supervisory encounter was enacted.

Three patterns

'Managing for'

'Managing for' was typified by the supervisor responding to the trainee's invitation by taking over the consultation in directly engaging with the patient, collecting further data from the patient, developing a plan for the patient and then giving this plan to the trainee to execute.

The **individual actions** of the supervisor included questions for elucidating matters of fact; attending to either the trainee or the patient in a two-way interaction; articulation of their thinking, statement of a diagnostic opinion and direct instruction in the execution of a plan. **Individual actions** of the trainee included an invitation where a proposed management plan was absent; input to the data collection restricted to interjections; and input to the formulation of a plan consisting of agreeing with the supervisor.

The main **trainee learning** opportunities were the supervisor modelling skills and providing statements of fact:

I learned from the way Supervisor C, you know, approached the child. (TCR3)

I think I got what I want from Supervisor C – he gave me a more broad opinion about how to approach those vague symptoms. (TCR1)

Identified **secondary agendas** included moving responsibility for the consultation outcome from the trainee to the supervisor and retention of patients' position (legitimacy) as the centre of the interaction. By taking control, the supervisor was able to articulate information and points of view that the supervisor considered important to communicate. One supervisor saw this approach as time-saving, although this was not evident in the time taken by encounters in this pattern compared to the time taken by encounters from other patterns.

'Managing through'

'Managing through' was typified by the supervisor indirectly controlling the encounter by leading the trainee and the patient to a supervisor-determined outcome.

...yet I'm really guiding Trainee B to a certain end. (SBR4)

In the presence of the patient, the interaction was sometimes three-way, with the supervisor, trainee and patient all actively engaged. Sometimes it was two-way with the supervisor and trainee engaged, and the patient as an observer.

The **individual actions** of the supervisor included interrupting the case presentation to collect information relating to either the clinical issue or understanding the trainee's thinking. 'Cognitive

apprenticeship' style (35) leading questions were used during the data collection and plan development phases. Supervisors' questions in the data collection phase diagnosed the trainee as well as the patient (35). For example:

You're...wondering about the look of the ear. So what do you reckon? (SAE1)

Leading questions in the plan development phase achieved a plan for the patient while also crafting an educational experience for the trainee:

Where do you think he got his campylobacter from? (SEE7)

The supervisor engaged the trainee and the patient in either two or three-way interactions, serving agendas that were clinical, educational and relational.

Individual actions of the trainee included an invitation without a clear statement of the problem or a proposed management plan; trainees were often able to articulate these on probing by the supervisor. The trainee also used interjection to demonstrate their knowledge:

Patient *And then it spread over here and then it's gone up to here and then it's up usually in my eyebrows and around my eyes. Oh and a little bit here, it's just started...*

Trainee *And Novasone helps to clear it up after about four or five days but then three-days later it comes back and we're getting a bit sick of it. (BE6)*

Trainee input to the data collection and the formulation of a plan occurred in response to leading questions by the supervisor. At times, the trainee's credibility appeared to be at stake in the context of being questioned. This was evidenced by **individual actions** that served to recover the trainee's credibility including the trainee interjecting to demonstrate the trainee's knowledge and the supervisor making efforts to affirm the trainee:

Supervisor *You don't need me at all do you!?* (SBE1)

Trainee learning was a dominant agenda in this pattern with an emphasis on clinical reasoning skills. Other **secondary agendas** included moving control over the consultation outcome from the trainee to the supervisor and building the relationship between supervisor, patient and trainee.

Relationship-building could include the use of humour:

Supervisor *It will take ages to come back. I think, yeah, I've got a strategy in mind which I expect will win on this one.*

Patient *Amputation?*

All laugh

Supervisor *That's brilliant. That's brilliant. Unfortunately, our amputation clinic is booked, so it would take us probably three to four months to get you in.*

Trainee *[laughing] The long-term outcome is not helpful! (BE2)*

'Managing with'

'Managing with' was typified by the supervisor responding to the trainee's invitation in the manner of a colleague. In the presence of the patient, the interaction was often three-way with the supervisor, trainee and patient all actively engaged. Sometimes it was two-way with either the supervisor or the patient as the observer.

Individual actions by supervisors involved constraining their engagement to responding to leadership provided by the trainee. If the supervisor asked questions, these were for information gathering rather than for leading. Diagnostic and management input was shared as an opinion rather than a directive:

No, I was just wondering whether it makes any difference or whether doing them both at the same time is reasonable. (SEE3)

Often the main input by the supervisor was to affirm the trainee's plan.

So really my task was to provide affirmation. (SBR3)

Individual actions exhibited by the trainees kept the trainee as the primary clinician in the care of the patient. Case presentations were well-structured and included proposed diagnosis and management and a clear question:

I'm thinking shingles, but it doesn't really fit the classic presentation. And I just wanted a second opinion because if it is shingles then obviously it's different management, yeah, so if you could come and look? (TEE6)

Trainees approached the supervisor either for affirmation of their plan or as a resource in developing a plan. They engaged the supervisor and the patient in a conversational way with a three-way style of interaction.

The agenda of **trainee learning** was evident in the trainees' requests for matters of fact:

Trainee *Do they have to have been a patient there before?*

Supervisor *Don't think so, they've just got to have private health insurance. (AE5)*

Skills of clinical reasoning were imparted through articulation of thinking:

I think the question you have to ask is what's actually going to change based on the CT scan?
(SEE10)

Sometimes the educational agenda served more than just the trainee:

We took the opportunity to educate in three directions... in using Dermnet [a web-based dermatology resource] which I think also led us to a clearer direction of what was going on and treatment options. (SBR6)

Trainee learning emphasised supporting the trainee's development of identity as a competent independent clinician. Because this pattern was characterised by a high level of trainee autonomy, supervisor influence was sometimes constrained.

...which in some ways is unfortunate because if I'm in the room there are things I might not say. (SEI)

There was one encounter where there was no clear evidence that the trainee was intending to act on a supervisor's concern:

So I think essentially I was...trying to encourage Trainee E to monitor that patient, albeit by telephone and so on, which she seemed fairly reluctant to do. (SER5)

Impact of context

While the broader cultural context was shared across all pairs and encounters contributing to the overarching common genre, there were differences in situational context between pairs and between encounters. The situational context of each pair was shaped by the backgrounds of the individuals within the pair, which provided an explanation for the way they interacted and the range of educational and social tools used. Two of the supervisors had completed post-graduate training in education. The use of Cognitive Apprenticeship tools (35) by these supervisors was more apparent. The two trainees from the pairs that predominantly used the 'managing with' pattern, were both more senior trainees with prior training in other areas of medicine.

The situational context differed between encounters within pairs, including: the particular patient and their issue; and the configuration of the trainee, the supervisor and the patient. Three configurations were observed: 1) supervisor, trainee and patient together; 2) trainee and patient together and supervisor on the telephone; and 3) supervisor and trainee together without patient. Each of these three configurations appeared to have different constraints and different opportunities - affordances (Table 2). When the supervisor, trainee and patient were together in the room, the interaction was more complex with a dynamic engagement with the patient and their issues. Tensions of credibility were evident and at times, the patient and the trainee competed for the supervisor's attention:

Supervisor	<i>Feels a bit blocked?</i>
Patient	<i>And it echoes a bit. It feels like you've got water in your ear, which I have.</i>
Trainee	<i>Yeah, and so it got more blocked and feeling like it was um, ah...</i>
Patient	<i>(cuts in) Well since I used the, when I'm using oil and having water in my ear I feel like I can't hear properly. And I can't hear properly...</i>
Trainee	<i>(cuts in) Yeah, since the olive oil you haven't been able to get the hearing back...</i>
Patient	<i>(cuts in) But I haven't noticed my left ear causing a problem</i>
Supervisor	<i>(cuts in, and to the trainee) So you're worried about, wondering about the look of the ear, what do you reckon? (AE2)</i>

This dynamic could be seen to constrain the educational dialogue which might highlight the trainee's areas of ignorance in the patient's eyes. Without the patient present, trainee case presentations were clearer in their diagnostic conclusions and more commonly included a proposed plan. There was also a greater propensity to position the patient as an outsider as the trainee and supervisor met the **secondary agenda** of building their relationship:

Supervisor	<i>...sometimes the consultation is a toss-up between keeping them happy, letting them down or corroding your own philosophical stance...</i>
Trainee	<i>I feel like it's bad medicine to give him what he wants</i>
Supervisor	<i>And it is. It is bad medicine (AE3)</i>

In the absence of the patient, a pair who typically adopted a 'managing for' or a 'managing through' pattern might shift to a 'managing with' pattern. In all pairs, when the patient was absent, the agenda of **trainee learning** was more prominent:

She didn't have a patient so it was a... it's a different interaction to one with a patient and it allows you to sometimes waffle sideways and go into random points a bit more... (SBR5)

Encounters that involved the supervisor remaining on the telephone appeared to take a middle ground between the other two configurations. Not being in the room could compromise the supervisor's insight into the situation. A particular example of this was a supervisor giving advice over the phone about smoking in the home where he inadvertently offended the patient's mother:

Supervisor *[over the phone] So chest x-ray, see her tomorrow and if mum and dad are smokers make sure they don't smoke inside the house.*

Mother *[speaks out loudly] I don't smoke around my kids...*

Supervisor *Good, good, well [laughs]...*

Mother *I even wash my hands and change my clothes. (AD13)*

	Trainee, supervisor and patient present together	Supervisor by phone	Patient absent
Constraints	<ul style="list-style-type: none"> • Constrained educational dialogue • Tensions of credibility 	<ul style="list-style-type: none"> • Compromised supervisor insight into the situation 	<ul style="list-style-type: none"> • Compromised supervisor insight into the situation • Propensity to 'other' the patient
Affordances	<ul style="list-style-type: none"> • Patient-centred • Socially rich • Immediate 	<ul style="list-style-type: none"> • Trainee remains the primary clinician • Immediate 	<ul style="list-style-type: none"> • Freedom to engage in educational dialogue

Table 2: Impact of configuration of supervisory encounter

Agency within the genre

Consistent with Wenger's theorising, we defined agency as volitional purposeful **individual action** that is driven by deliberate intention (4, 36). Agency was active within the genre to achieve particular intentional outcomes. It was exerted in determining the pattern of the encounter, in taking educational initiatives, choosing context and protecting credibility. Supervisor D, who predominantly engaged in the 'managing with' pattern, explicitly and consistently exerted agency to shape his encounters to that pattern, framing the encounter as a discussion between colleagues:

...when I go in I'll say 'well we're having a conference here' or something, trying to put everybody at ease, because we all do that occasionally, bring in colleagues to help.(SDI)

We identified instances of trainees or supervisors exerting agency to shift an existing pattern. For example, in Pair D, who normally engaged in a 'managing for' pattern, there was an instance when the trainee made a point of looking up guidelines prior to contacting the supervisor and then delivered an uncharacteristically well-developed case presentation. The more sophisticated

presentation positioned the trainee as the primary clinician, changing the pattern to 'managing with'. The intentionality of this action was evident in the post-encounter reflection:

I did a very good research before calling Supervisor D. I went through all these letters from the specialist, recommendations, previous MSU [mid- stream urine]. I printed them out and did a bit of a statistics – which ones were working, which was resistant, all of this, and see what we could do. So, I had a fair bit of idea what we [were] actually dealing with before calling...I felt that it was very, very satisfactory the whole consultation with Supervisor D (TDR7)

Agency in enhancing **trainee learning** through taking particular educational initiatives was evident. Supervisor B indicated in his interview that he chose to use the one minute preceptor model' (18) as a teaching tool; its use was clearly present in his encounters. Deliberate attitudinal education was also expressed:

Flexibility is something I'm, in a wider sense, trying to instil. (SBR4)

Supervisor D spoke about the intention of fostering independence for their trainee:

We want them to be building confidence and making decisions. (SDI)

He then at times chose the context of remaining on the phone for an encounter to encourage the trainee to be more independent:

...I didn't go in there which I think was probably good for Trainee D (SDR5)

Agency in choosing context to protect trainee credibility was also evident. Supervisor E described postponing "big teaching issues" for times outside of the encounter:

So, if I have got big teaching issues I might...try and bring that up some other time. (SEI)

Discussion

We asked 'what happens when the senior trainee calls on their supervisor for help in their care of patients and how trainee learning can be enhanced when this occurs?'. Our findings provide insight into: the agendas at play in these supervisory encounters both individual and social; the form of the encounter and how it is enacted as a genre; how this genre is impacted on by secondary agendas, context and agency; how trainee learning might happen within the encounter; and how the supervisor and trainee could act purposefully in these encounters. These findings can be used as means of supporting supervisors and trainees to effectively address the agendas of their supervisory encounters and to do more with their encounters.

The agendas that we identified included creating a plan for the patient, transfer of control, protection of credibility, education and relationship building. These fit with Miller's typology of the social motives of genre which are to address danger, ignorance or separateness (Table 3). They are also consistent with the agendas of the clinical supervisory encounter identified by others. We identified that the universal and primary agenda for the supervisory encounters was to create a plan for the patient.

Miller's typology of social motives	To address danger	To address ignorance	To address separateness
Agendas of the supervisory encounter	<ul style="list-style-type: none"> • Creating a plan for the patient • Trainee relinquishing responsibility • Protecting credibility • Protecting supervisor time 	<ul style="list-style-type: none"> • Education of: <ul style="list-style-type: none"> ○ the trainee ○ the patient ○ the supervisor 	<ul style="list-style-type: none"> • Relationship-building with the patient • Relationship-building between the doctors

Table 3: The agendas of the senior trainee supervisory encounter mapped to Miller's typology (28)

In order to understand the form of the supervisory encounter we drew on Rhetorical Genre Theory and identified a common genre. This genre which arose from the recurring situation of the senior trainee requiring assistance in the care of patients appeared to be driven by the agenda of needing a plan for the patient. The identified genre was found to have three dominant interactional patterns which we labelled 'managing for', 'managing through' and 'managing with'. Which pattern a pair used appeared to result from how pairs navigate their secondary agendas through their repertoires of possible actions within the genre.

These patterns of interaction each have different assets and are characterised by the use of different social and educational tools (Table 4). The 'managing for' pattern places the care of the patient under the supervisor's direct management, keeps the patient at the centre of the encounter and offers learning by modelling. It might be conceived that this pattern offers most when there is a large discrepancy between the trainee's skills and the patient's needs. The 'managing through' pattern transfers responsibility to the supervisor while keeping the trainee engaged under guidance and providing the trainee with an experience that enables acquisition of cognitive clinical reasoning

skills. It requires the supervisor to utilise ‘cognitive apprenticeship-type’(20, 35) educational tools. The ‘managing with’ pattern places the trainee as lead clinician thus supporting the development of trainee independence while constraining the supervisor’s clinical and educational input. This pattern requires the trainee to take leadership in the encounter starting with a well-developed presentation and for the supervisor to take the position of advisor rather than leader. This pattern would seem to be most suited when the trainee’s skills are close to sufficient to meet the patient’s needs.

	‘Managing for’	‘Managing through’	‘Managing with’
Characterisation	<ul style="list-style-type: none"> • Supervisor assumes overt management of the patient • Dyadic with trainee as observer • Patient-centred 	<ul style="list-style-type: none"> • Supervisor guides trainee to a determined outcome • Both dyadic and triadic • Patient sometimes an observer 	<ul style="list-style-type: none"> • Supervisor and trainee interact in a collegial style with the trainee remaining the lead clinician • Both dyadic and triadic and directed by trainee • Patient sometimes an observer
Educational affordances	<ul style="list-style-type: none"> • Learning by Modelling 	<ul style="list-style-type: none"> • Cognitive skilling of the trainee 	<ul style="list-style-type: none"> • Development of trainee independence
Tools and skills		<ul style="list-style-type: none"> • Supervisor uses cognitive apprenticeship skills 	<ul style="list-style-type: none"> • Trainee provides a well-developed presentation • Trainee leads, supervisor is led • Skills of triadic engagement

Table 4: Three patterns of the supervisory encounter with each pattern’s particular characteristics, affordances and required tools and skills

Our identified patterns of supervisory encounters builds on the work of Goldszmidt et al (27) in the setting of hospital internist teaching teams. They identified styles of supervision adopted by particular supervisors. These styles of supervision have parallels with our patterns of supervisory encounter. Their ‘direct care’ style, where patient care is prioritised, parallels our ‘managing for’ pattern; their ‘mixed practice’ style, where the focus is on trainee education, parallels our ‘managing with’ pattern; and their ‘empowerment’ style parallels our ‘managing with’ pattern. Goldszmidt et al’s styles offer a lens on the supervisor, our patterns provide a view on the supervisory encounter which is determined by both the supervisor and the trainee.

Interestingly, during the ten-week period of data collection, we saw each pair operating predominantly in a single pattern. This suggests that the pattern of the supervisory encounter is more a feature of a particular supervisory relationship than being determined by the situational context. Rather than having a fixed pattern of supervisory encounter, it would be advantageous for a supervisory pair to be more adaptable in their pattern of encounter in order to achieve different goals depending on the situation and on the development of the trainee. Devitt postulates that genres both constrain and enable creativity (29). Awareness of genre enables individuals to act more purposefully and to be more creative (29). While our findings suggest that trainees and supervisors can be purposeful within their encounters, this was without an explicit awareness of the genre in which they were operating.

We therefore contend that for the full potential of supervisory encounters to be fulfilled it is necessary for supervisors and trainees to know there is a choice, know the consequence of the choice and have the skills to execute that choice. We contend that this requires: the agendas of supervisory encounters to be explicit; the options for pattern of supervisory encounter to be known; and the participants to have the skills to navigate between these patterns. Trainees need to understand the impact of the way they deliver their case presentation and learn how to position themselves to lead the encounter. Supervisors need to recognise the way they engage in the social space of the supervisory encounter and the choices they have in this. They also need to be equipped with techniques that facilitate trainee thinking. The trainee and the supervisor need to know how to undertake a three-way engagement with the patient. They also need to be aware and purposeful in their choice of the configuration of the encounter; whether to meet in the patient's presence or absence; or with the supervisor on the phone. In these ways the supervisor and trainee can achieve greater flexibility with their encounters and therefore achieve more with each encounter. Enabling supervisors and trainees to develop these understandings and skills is an important imperative for educators who support the development of supervisors and trainees.

The strength of our findings is the depth of insight they give to supervisory encounters after senior trainee' request help. This was achieved by exploring recorded actual encounters and augmenting this with post-encounter reflections and interviews. In doing so, we limited ourselves to a small number of participants in a particular setting in a limited range of contexts and over a limited period of time. The degree to which our findings can be transferred to other settings must be determined by how the reader judges them to resonate with their own setting (33). We selected experienced supervisors, it would be valuable to know whether supervisors deemed otherwise used other

patterns of engagement. We do not know the impact of recording an encounter on the encounter itself or to what degree the participants were selective in the encounters they chose to record. We acknowledge that as researchers we brought our own perspectives into the analysis. This is particularly pertinent for the lead author who is involved intimately in GP supervision. While our perspectives provided a rich resource for interpreting the data, they undoubtedly influenced our direction of inquiry so that we necessarily attended to some things and not others. We took a constructivist rather than a critical stance and so did not focus on the implicit ideological agendas identified by others (16, 37).

The findings raise questions and provide insights. The supervisors and the trainees in our study differed in the range of educational and social skills they exhibited. We do not know whether this was by choice or because they were limited in their range of skills, or because they had the skills, but were unaware of their potential use and value. We identified three patterns of supervisory encounter, there may be others. We pose that different patterns of supervisory encounters have different assets depending on the situational context and that supervisors and trainees can be purposeful in determining the pattern of their encounter. Whether these propositions actually hold is worthy of further research. Our exploration of the patient experience was limited and so the patient story remains largely untold. It would be valuable to investigate patients' perspectives to understand the degree to which patients are empowered or disempowered by the patterns that doctors use to engage in supervisory encounters.

In conclusion

We describe the senior trainee supervisory encounter in a longitudinal supervisor relationship as following a consistent format. Within this format there are three identifiable patterns. Each pattern calls on different skills and exhibits different assets and constraints. We propose that for the supervisory pair to maximise the educational potential of these ad hoc encounters, they need to recognise the pattern of supervisor encounter that they are engaging in and to have the skill-set to modify this to match the circumstances and the trainee's development. We recommend further examination of the genre of the senior trainee ad hoc supervisory encounter and the patterns that supervisory pairs might adopt. Faculty development for trainees and supervisors should include: enabling trainees and supervisors to identify the use of genre during the supervisory encounter; use the genre flexibly; and have the educational and social skills to do this.

Contributors

JB, TC and DN together with a researcher conducted the primary project development and data collection. The analysis for this study was then undertaken by JB under the close oversight of MG. MG and JB together developed the conceptual model and theorised the findings. These were then reviewed and elaborated in collaboration between all four authors. JB led the writing of the manuscript and the other authors contributed significantly through the iterative cycles of revision. All authors approved the final version of the manuscript.

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Conflicts of interest

JB is a PhD candidate, GP supervisor and a medical educator in GP vocational training. TC is Manager of Educational Quality for a GP vocational training provider. Both JB and TC were employed by the training organisation that received the grant for this research and from where the supervisors and trainees were recruited. Both JB and TC had participated in the supervisor professional development program. Funding for this project contributed to remuneration of DN as a senior academic consultant.

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