



Random Case Analysis

in General Practice



GPSA

GENERAL PRACTICE SUPERVISION AUSTRALIA

About this guide

In Australia, the acquisition of the knowledge and skills, both personal and professional, that lead to vocational registration as a quality general practitioner occurs within the apprenticeship model. Our GP registrars learn and grow in confidence through consulting with patients in our practices, though unlike the hospital setting, much of this is behind closed doors.

As clinicians, our fundamental responsibility is the safety of our patients. So, it is quite natural to feel a little anxious about what is happening between the GP registrar and their patient behind the consulting room door. GP supervisors employ a range of support mechanisms to ensure both patients (and GP registrars!) remain safe. Case discussions form the basis of many GP supervisor/ GP registrar interactions. There are a number of case based discussion (CBD) tools that can be used to structure these discussions. This guide provides GP supervisors with an explanation of how to incorporate one such mechanism into their supervision toolkit; that of random case analysis (RCA).

In this guide, RCA has been applied to the Royal Australian College of General Practitioners (RACGP) domains, but the model may equally be applied to the Australian College of Rural and Remote Medicine (ACRRM) GP registrars. The use of RCA as a supervision method transcends individual curricula and sits squarely in the domain in which all GP supervisors are guided; that of keeping patients and colleagues safe.

RCA is relevant to GP registrars at all stages of their training and may be particularly useful for supervision of:

- First-term GP registrars.
- Highly performing GP registrars.
- GP registrars identified as being at risk.

All GP registrars, whether ACRRM or RACGP, are required to receive three hours of formal teaching from you as their GP supervisor in their first general practice term. The use of RCA helps to identify and support what the GP registrar knows, and does not know, in a manner that is consistent and non-threatening. We hope you find this resource useful.

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GPSA produce a number of relevant guides for GP supervisors and practices, visit www.gpsa.org.au to view additional guides.

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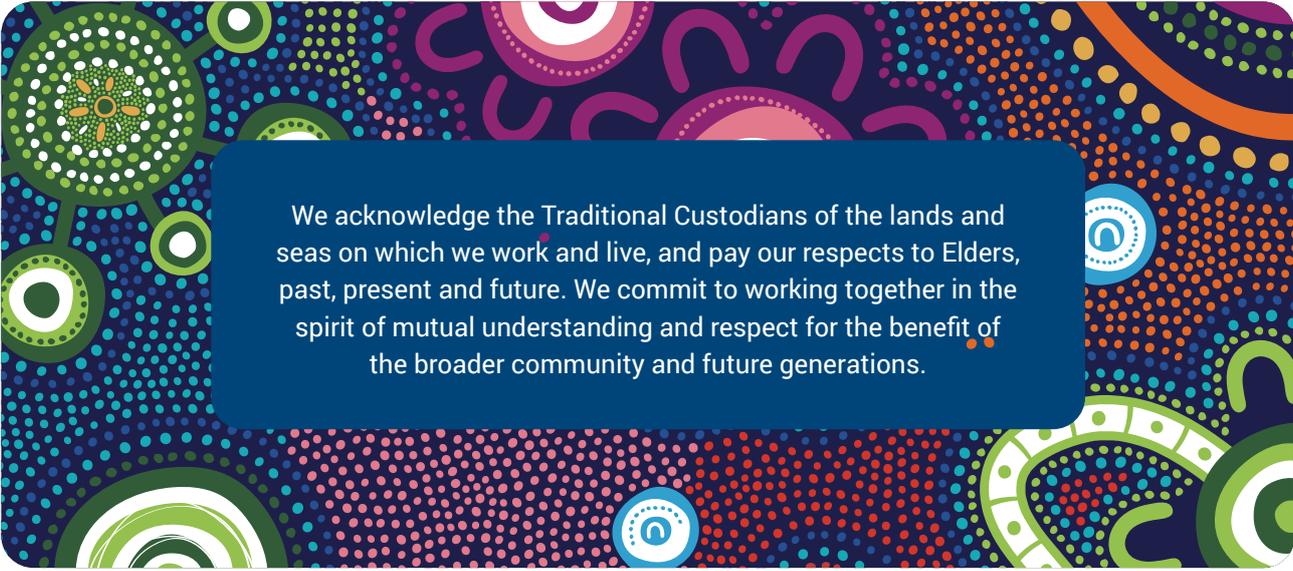
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We acknowledge the Traditional Custodians of the lands and seas on which we work and live, and pay our respects to Elders, past, present and future. We commit to working together in the spirit of mutual understanding and respect for the benefit of the broader community and future generations.

Supervision in Australian GP Training

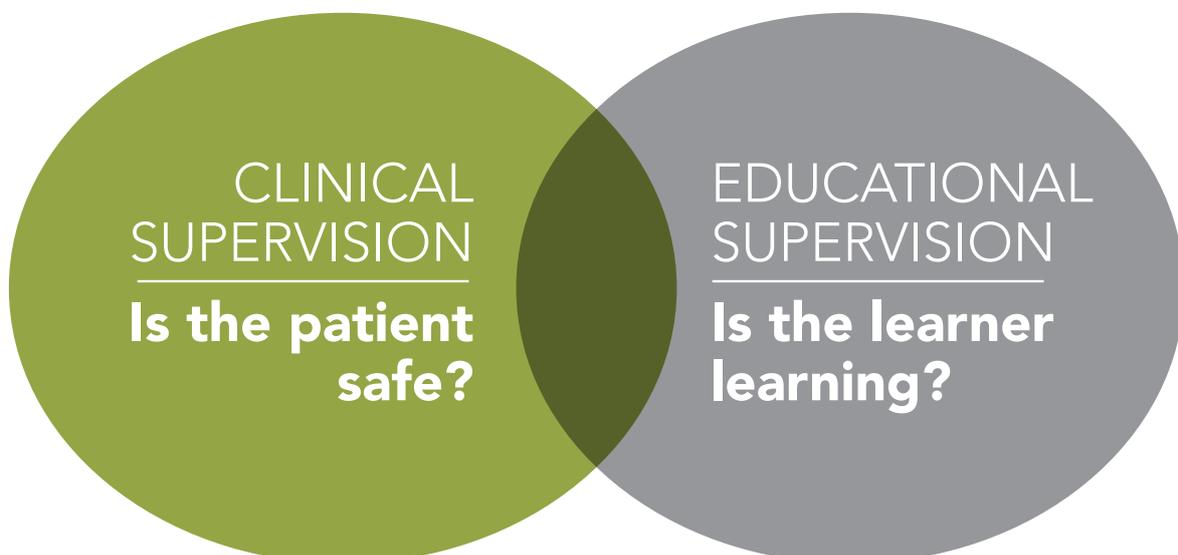
Vocational general practice training in Australia is based on the 'apprenticeship model', where GP registrars consult independently with patients but practice under the supervision of GP supervisors.

The GP supervisor has been defined as '*a general practitioner who establishes and maintains an educational alliance that supports the clinical, educational and personal development of a registrar*'¹.

Broadly speaking, supervision has been defined as '*the provision of guidance and feedback on*

matters of personal, professional and educational development in the context of a trainee's experience of providing safe and appropriate patient care'². It comprises two distinct, but closely related elements – facilitating learning (educational supervision) and monitoring quality of care and patient safety (clinical supervision). These can be characterised by the following questions:

- Clinical supervision – 'Is the patient safe?'
- Educational supervision – 'Is the learner learning?'



Patient safety is the cornerstone of quality care, and monitoring patient safety is the key aspect of clinical supervision³. Above all, GP supervisors must have confidence that the GP registrar is practising competently and that his/her patients are being managed safely. This is reflected in The Royal Australian College of General Practitioners (RACGP) Standards for General Practice Training (2nd edition, 2015), which emphasises the importance of matching supervision of GP registrars to their competence in order to ensure patient safety⁴.

However, in addition, the GP registrar is working in the practice in a training capacity. Educational supervision embraces planning learning, delivery of teaching, coaching, mentorship, and provision of feedback and formative assessment.

Supervision Methods

The GP supervisor can employ a wide variety of methods to monitor the quality of a GP registrar's patient care and ensure that learning is occurring.³

These include:

- Direct observation of patient encounters (GP registrar observing GP supervisors and GP supervisors observing GP registrar).
- Video-consultation review.
- Opportunistic patient review and feedback (seeing a patient the GP registrar has previously seen).
- Audit of test ordering.
- Review of referrals.
- Critical event analysis.
- Feedback from staff.

Case note review

Another commonly used supervision method is case note review based on a review of case notes. Case note review is potentially a very powerful tool for identifying learning needs, teaching, supervision and formative assessment.

Problem case discussion

The most common supervision and teaching method in GP training is problem case discussion, where GP registrars bring challenging cases to the GP supervisor for review. While this is an excellent opportunity for learning and feedback, it is based on a GP registrar identifying their own knowledge and skill gaps, and is likely to miss hidden learning needs, as below.



Random Case Analysis

Random case analysis (RCA) is a specific method of case note review where records are selected at random, not directed by learner selection.⁸ The random nature of RCA allows identification and exploration of areas where the GP registrar either does not recognise a knowledge or skill gap ('unconscious incompetence'), or areas where they recognise a weakness ('conscious incompetence') but may wish to avoid. As a result, RCA has educational utility for all stages of learning, and across all levels of competence. RCA is time efficient, allows provision of timely feedback and encourages reflective practice. Indeed, RCA has been described as *'the most powerful teaching and assessment tool at our disposal'*.⁹

One of the key roles of the GP supervisor is to assess and develop the clinical reasoning skills of their GP registrar.¹⁰ In essence, this means to help GP registrars 'think like a general practitioner'. Another great strength of RCA is the capacity to explore and assess a GP registrar's clinical reasoning and decision-making skills.

A study of GP supervisors from 2015 demonstrated a high level of confidence in their ability to assess their GP registrar's competence.¹¹ This was despite a relatively low frequency of use of supervision methods considered more effective in identifying the GP registrar's unconscious incompetence, such as consultation observation.

The same study also revealed that as GP supervisors became more experienced, they became less confident about their ability to assess a GP registrar's competence. This finding highlights the importance of regularly using appropriate supervision tools to assess every GP registrar's competence, including random case analysis, even in those who seem to be doing well.

Further research has demonstrated that training GP supervisors in the use of RCA increased their confidence in assessing a GP registrar's competence.¹²

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Framework for Using RCA in Australian GP Training

This guide will elaborate on using RCA in the Australian GP training setting. It uses a framework of consultation content analysis based on the five domains of general practice from the RACGP curriculum¹³. This framework encourages further exploration and development of clinical reasoning through consideration of four contextual influences – the doctor, the patient, the problem and the system (figure 1). The following pages will elaborate on these five domains (the hand), the four contextual influences (the circle) and the actual process of RCA.

FIGURE 1. FRAMEWORK FOR RANDOM CASE ANALYSIS



RACGP Learning Domains

Before we examine the process of using RCA, it is useful to consider its scope across the breadth of clinical and educational supervision. This is best demonstrated by considering the RACGP's five domains of general practice.

DOMAIN 1 – Communication skills and the patient-doctor relationship

Developing a GP registrar's skills in communication and patient-centredness is a key element of GP supervision. Patient-centred communication is positively associated with patient satisfaction, adherence, and better health outcomes¹⁴. While it could be argued that communication skills are ideally assessed and taught by direct observation, review of patient records can also give valuable insight into the GP registrar-patient relationship.

Patient-centred communication can be explored through targeted questions, for example "Did the patient have any particular concerns?" or "Do you feel you reached common ground with the patient?" This is particularly relevant in more challenging consultations e.g. breaking bad news.

DOMAIN 2 – Applied professional knowledge and skills

This domain is usually the most prominent in the GP registrar's priorities i.e. "What is the diagnosis and how do I manage it?" Identification of learning needs, assessment and teaching of the GP registrar's applied knowledge and skills is therefore perhaps the most tangible educational application of RCA.

The medical record can provide information on focused information gathering (history taking and physical examination), problem definition (differential diagnosis and probabilities) and development of management plans. Rational pathology testing and prescribing have been found to be particularly challenging areas for GP registrars^{15,16}, and RCA gives an insight into these. Other important areas in this domain include the GP registrar's use of sources of evidence for patient care, and their approach to referral, follow-up, and safety netting.

Undifferentiated presentations are common in general practice and are associated with clinical uncertainty. RCA is an ideal method to explore tolerance of uncertainty and the approach to undifferentiated problems¹⁷.

DOMAIN 3 – Population health and the context of general practice

Practising with a population health perspective is an essential component of quality primary health care. RCA is a useful tool to help explore this domain in the individual consultation. Questions can be used to explore the GP registrar's understanding of epidemiology of disease ("What is the most likely cause of this particular presentation in this particular patient population?"), public health, including notifiable diseases ("What are the potential implications for the patient's family and the wider community?") and prevention ("Which, if any, opportunistic preventive interventions did you discuss?").

WHO?

WHAT?

WHICH?

DOMAIN 4 – Professional and ethical role

Role modelling is arguably the most potent means of instilling professional values in learners¹⁸. However, professionalism must also be explicitly taught¹⁹, with the GP supervisor playing a key role. RCA can contribute to fostering professional practice, especially in the areas of duty of care, patient advocacy and maintenance of professional standards. In appropriate cases, GP registrars may be asked questions like *“Were there any issues related to consent or confidentiality?”* or *“Were there concerns about patient-doctor boundaries?”*

RCA is a true reflective learning exercise and the GP supervisors can assess the GP registrar’s capacity for self-reflection, another aspect of the professional role.

DOMAIN 5 – Organisational and legal dimensions

The Medical Board of Australia’s Code of Conduct states that good medical practice involves *“keeping accurate, up-to-date and legible records that report relevant details of clinical history, clinical findings, investigations, information given to patients, medication and other management”*; and are *“sufficient to facilitate continuity of patient care”*²⁰. Though not as effective as review immediately after direct observation, RCA will indirectly reveal the accuracy and clarity of the GP registrar’s medical records. It can also be used to assess documentation of arrangements for follow-up, including use of recall and reminder systems; billing practice; and certification.



Putting It **All Together**

So, what is the process of RCA? Figure 2 is a summary of the steps, and figure 3 is a detailed elaboration of each step.

FIGURE 2: PROCESS FOR RANDOM CASE ANALYSIS



FIGURE 3. SUGGESTED RCA PROCESS IN DETAIL

ACTION	COMMENTS
Process 1: Set	
Ensure an appropriate environment.	<p>The effectiveness of any supervision tool depends on its level of acceptance. RCA is a method that requires delivery of immediate feedback and therefore an appropriate and 'safe' learning environment is essential.</p> <p>Ensure you meet the GP registrar in a quiet space with adequate privacy, security of records, adequate time and little chance of interruption. Ideally, RCA is conducted as part of quarantined teaching time.</p>
Process 2: Clarify	
GP supervisor to clarify the purpose of the RCA.	<p>An initial negotiation between the GP supervisor and the GP registrar on the focus of the RCA session is useful.</p> <p>You may wish to take a broad 'see what comes' approach but may also wish to focus on specific elements of the consultation. For example, prescribing or test ordering. This may reflect previously identified learning needs or reinforcement of a recent teaching topic.</p> <p>The stage of training of the GP registrar may also help determine which areas are prioritised. For example, clinical management and note keeping may be more appropriate for a junior GP registrar, while management of complexity and care co-ordination might be more suitable for more experienced GP registrars.</p>
GP supervisor selects patient record for random review.	<p>The essence of RCA is random selection of recent patient encounters. Recent cases allow for better recall of the consultation and clinical reasoning. Therefore, the GP supervisor should choose a record for review from earlier in the day, or the day before.</p> <p>Don't let the GP registrar dissuade you from reviewing a particular patient – it might be the most illuminating of all!</p>
GP supervisor and GP registrar to read through case notes together.	<p>This includes the notes from the last encounter, as well as other relevant components of the record (past history, medications, etc).</p> <p>While reading the case notes together, the GP registrar is likely to recall additional information they may not have documented but that is essential to their clinical reasoning and decision making.</p>
GP registrar to provide further recollections of the case.	<p>The GP supervisor should initially ask the GP registrar to provide a brief summary of the case (1-2 minutes), including clarifying what they knew of the patient prior to the consultation. It is good practice for the GP supervisor to take notes as the GP registrar presents the case.</p>

ACTION	COMMENTS
Process 3: Explore	
GP supervisor to explore issues in greater detail.	<p>Once the clinical aspects of the case are discussed, move on to other aspects of the consultation by addressing the other domains. Examples of areas for exploration include:</p> <p>Communication skills and the patient-doctor relationship</p> <ul style="list-style-type: none"> • Did the patient have any particular concerns? • Do you feel you reached common ground with the patient? • What was the patient's agenda? • Do you think s/he was concerned about anything in particular? • What did s/he expect from the consultation? <p>Population health</p> <ul style="list-style-type: none"> • Is this a common presentation in this age/gender/ethnic or cultural group? • Which, if any, opportunistic preventive interventions (screening) did you discuss? • How did the patient's cultural background impact on their presentation and management? <p>Professional and ethical role</p> <ul style="list-style-type: none"> • Were there any issues related to consent or confidentiality? • Were there concerns about patient-doctor boundaries? <p>Organisational and legal dimensions</p> <ul style="list-style-type: none"> • Do you think your notes are a good record of the consultation? • Do your notes contain enough information for another to continue care? • Does your referral letter contain a clear request and adequate information? • Did you review or use recall or reminders in this case? • How was your time management? • What item number did you bill and do your notes justify the billing?

ACTION	COMMENTS
Process 3: Explore cont.	
GP supervisor to pose alternative scenarios.	<p>The next step, and indeed one of the most valuable elements of RCA, is to further explore the GP registrar’s clinical reasoning by posing a range of alternative scenarios, the so-called “What if?” questions. When probing with hypothetical scenarios, consider the various contextual influences of 1. the doctor, 2. the patient, 3. the presentation, and 4. the system, as all impacting on the consultation. For example:</p> <ul style="list-style-type: none"> • What if the patient were 75? Or a minor? • What if the headache was waking the patient from sleep? • What if the patient had demanded a medical certificate? • What if you had been running an hour late? • What if you were working in a remote setting? <p>Discussing such hypothetical scenarios allows exploration of eventualities not directly connected to the case, including clinical, communication, professional and ethical challenges. It is a good way to extend the highly performing GP registrar and to address uncommon but important issues in general practice, like ethical dilemmas.</p> <p>Clearly it is not realistic, nor desirable, to try to address all domains and potential contextual influences with each consultation review. The GP supervisor and the GP registrar should negotiate priority areas for discussion rather than attempting to cover the breadth of learning opportunities available.</p>

“One of the most valuable elements of RCA, is to further explore the GP registrar’s clinical reasoning by posing a range of alternative scenarios, the so-called “What if?” questions. When probing with hypothetical scenarios, consider the various contextual influences of

1. the doctor,
2. the patient,
3. the presentation, and
4. the system,

as all impacting on the consultation.”

ACTION	COMMENTS
Process 4: Assess	
GP supervisor to provide assessment and feedback.	<p>As with any teaching and supervision method, the provision of feedback is a core element of the RCA process. Indeed, one of its great strengths is the immediacy of feedback. Timely, specific and relevant feedback will enhance deeper learning and reflection.</p> <p>It is best practice in delivery of feedback to ask the GP registrar to appraise their performance before giving your own assessment. Allowing the GP registrar to rate their own performance first provides important clues as to their level of confidence in their own abilities and the degree to which this insight puts them or their patients at risk.</p>
GP supervisor and GP registrar to identify learning needs and opportunities, and how they will be addressed.	<p>The GP supervisor and GP registrar should identify learning needs and opportunities arising from the RCA process and how these will be addressed (including specific resources). It is good practice to arrange follow-up of any particularly important areas covered. For example, prescribing.</p>
GP supervisor to discuss expectations and follow-up.	<p>Documenting the agreed actions and follow-up (including a time frame) supports learning.</p>

See figure 4 for an example scenario to illustrate the process.

For more senior GP registrars, the process can be reversed where the GP supervisor's notes are reviewed. This may be a bit challenging for you as a GP supervisor, but the opportunity for this 'two-way learning' can be hugely valuable for the GP registrar.

As you become more familiar with the application of RCA as a supervision method, the process described in this guide will become second nature. Appendix 1 provides a suggested template you can use to guide the RCA discussion. As you become more familiar with RCA you may choose to adapt the suggested format to suit your own style.

FIGURE 4. EXAMPLE RCA SCENARIO

MEDICAL RECORD ENTRY - 41-year-old woman

HISTORY <ul style="list-style-type: none">• Bloating last 6 weeks, no vomiting, occasional diarrhoea• Worse with dairy• Weight OK• No pain	EXAM <ul style="list-style-type: none">• BP 150/85• Abdo soft, non tender REASON FOR ENCOUNTER <ul style="list-style-type: none">• Bloating	PLAN <ul style="list-style-type: none">• FBC, EUC, LFT, coeliac serology• Losec 20mg mane• See 1 week
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DOMAIN 1

- What was the patient's agenda?
- Do you think she was concerned about anything in particular?
- What did she expect from the consultation?



DOMAIN 2

- What was your working diagnosis?
- What else might it be?
- Did you feel uncomfortable with the uncertainty of the presentation?
- Why did you order a coeliac serology test? On reflection, are there other tests you should have ordered?
- Why did you prescribe omeprazole?
- What are the indications for referral in this case?
- Did you safety net? How?
- Did you seek any sources of evidence?



DOMAIN 3

- Should she be screened for bowel cancer?

THE PROBLEM

Was there anything special about the presentation that influenced your approach to management?

WHAT IF THE BLOATING

- Was accompanied by weight loss?
- Settles with PPIs?

THE PERSON

Was there anything special about this patient that influenced your decisions regarding management?

WHAT IF THE PERSON

- Was not known to you?
- Was 65?
- Had diabetes?
- Was Aboriginal or Torres Strait Islander?
- Did not have private health insurance?

THE DOCTOR

Was there anything special about you as a doctor that influenced this consultation?

WHAT IF YOU

- Had not picked up that patient with new coeliac disease 2 weeks ago?
- Had looked up guidelines at the time?

THE SYSTEM

Was there anything special about the health system/ practice setting that influenced your management?

WHAT IF

- You were in a remote community setting?
- You were not running on time?
- You did not have samples in the cupboard?



DOMAIN 4

- What is your duty of care here?



DOMAIN 5

- What plans for follow-up did you discuss?
- Did you document this?
- Do you think your notes are a good record of the consultation?

Appendix

Appendix 1: Random Case Analysis Template

Registrar name:	Date:
Term:	
Supervisor name:	
Practice:	

SECTION 1 – CASE DISCUSSION	
CASE 1	Complexity: <input type="checkbox"/> high <input type="checkbox"/> med <input type="checkbox"/> low
Problems managed (list all):	
Points noted in this case:	
CASE 2	Complexity: <input type="checkbox"/> high <input type="checkbox"/> med <input type="checkbox"/> low
Problems managed (list all):	
Points noted in this case:	
CASE 3	Complexity: <input type="checkbox"/> high <input type="checkbox"/> med <input type="checkbox"/> low
Problems managed (list all):	
Points noted in this case:	
CASE 4	Complexity: <input type="checkbox"/> high <input type="checkbox"/> med <input type="checkbox"/> low
Problems managed (list all):	
Points noted in this case:	
CASE 5	Complexity: <input type="checkbox"/> high <input type="checkbox"/> med <input type="checkbox"/> low
Problems managed (list all):	
Points noted in this case:	

SECTION 2 – LEARNING NEEDS IDENTIFICATION	
<i>Document strengths and any identified learning needs for each domain.</i>	
DOMAIN 1 – Communication Skills and the Patient-Doctor Relationship	<ul style="list-style-type: none"> • Uses a patient-centred approach. • Appreciates the nature of the doctor-patient relationship.
	Comments
DOMAIN 2 – Applied Professional Knowledge and Skills	<ul style="list-style-type: none"> • Demonstrates a knowledge of common and serious medical conditions. • Demonstrates an approach to undifferentiated problems. • Demonstrates skills in clinical decision making. • Applies rational prescribing and investigation ordering. • Demonstrates appropriate use of evidence.
	Comments
DOMAIN 3 – Population Health and Context of General Practice	<ul style="list-style-type: none"> • Implements appropriate screening interventions. • Considers the impact of patient's family, workplace and cultural background in their care. • Demonstrates a public health perspective where relevant.
	Comments
DOMAIN 4 – Professional and Ethical Role	<ul style="list-style-type: none"> • Demonstrates duty of care to patients and clear doctor-patient boundaries. • Maintains professional standards. • Demonstrates reflective practice and self-appraisal.
	Comments
DOMAIN 5 – Organisational and Legal	<ul style="list-style-type: none"> • Implements follow-up and safety netting. • Documents accurate and comprehensive medical records which are adequate to enable continuity of care. • Appreciates the importance of recall and reminder systems.
	Comments

SECTION 3 - FORMATIVE ASSESSMENT AND FEEDBACK

Keep doing:

Do more of / try doing:

Do less:

Stop doing:

Points noted in this case:

SECTION 4 – ACTIONS

In what specific ways will the GP registrar address the learning needs identified by this activity? Comment:

References

1. Wearne SM, Dornan T, Teunissen PW, Skinner T. General practitioners as supervisors in postgraduate clinical education: an integrative review. *Med Educ* 2012;46:1161-1173.
2. Kilminster S, Cottrell D, Grant J, Jolly B. AMEE Guide No. 27: Effective educational and clinical supervision. *Med Teach*. 2007;29(1):2-19.
3. Byrnes PD, Crawford M, Wong B. Are they safe in there? - Patient safety and trainees in the practice. *Aust Fam Physician* 2012;41(1-2):26-9.
4. Royal Australian College of General Practitioners. Standards for general practice training. 2nd edition. Melbourne: RACGP, 2015.
5. Tugwell P, Dok C. Medical Record Review. In: Neufeld VR, Norman GR, eds. *Assessing Clinical Competence*. New York: Springer, 1985:142-82.
6. Jennett P, Affleck L. Chart Audit and Chart Stimulated Recall as Methods of Needs Assessment in Continuing Professional Health Education. *J of Cont Educat Health Prof* 1998; 18: 163-71.
7. Maatsch JL, Huang R, Downing SM. Predictive validity of medical specialty examinations: executive summary for National Center of Health Services Research. Grant No. HS02038-04. Office of Medical Education, University of Michigan. 1983.
8. McEvoy P ed. *Educating the Future GP: the course organizer's handbook*. Oxford: Radcliffe Publishing Limited, 1998.
9. Sackin P HJ, Leete R, Seiler R, Terry J. Trainee-centred assessment. ACO working party report. *J Assoc Course Org*. 1988;4 37-51.
10. Atkinson K, Ajjawi, Cooling N. Promoting clinical reasoning in general practice trainees: role of the clinical teacher. *Clin Teach* 2011; 8:176-80.
11. Ingham G, Morgan S, Kinsman L, Fry J. Are GP supervisors confident they can assess registrar competence and safety, and what methods do they use? *Aust Fam Physician* 2015;4:154-158.
12. Morgan S, Ingham G, Kinsman L, Fry J. Clinical Supervision using Random Case Analysis in General Practice Training *Educ Prim Care*. 2015 Jan;26(1):40-6.
13. The Royal Australian College of General Practitioners 2016 curriculum <https://www.racgp.org.au/education/education-providers/curriculum/curriculum-and-syllabus/home> Accessed 16 Nov 2021.
14. Stewart M. Effective physician-patient communication and health outcomes: a review. *Can Med Assoc J* 1995; 152:1423-33.
15. Ajjawi R, Thistlethwaite JE, Aslani P, Cooling NP. What are the perceived learning needs of Australian general practice registrars for quality prescribing? *BMC Med Educ* 2010; 10: 92.
16. Bubner T, Laurence C, Tirimacco R. Assessing pathology training needs. Results from a survey of general practice registrars. *Aust Fam Phys* 2012; 41(9): 721-4.
17. Guenter D, Fowler N, Lee L. Clinical Uncertainty: Helping our learners. *Can Fam Phys* 2011; 57:120-23.
18. Kenny NP, Mann KV, MacLeod H. Role Modeling in Physicians' Professional Formation: Reconsidering an Essential but Untapped Educational Strategy. *Acad Med* 2003; 78 1203-10.
19. Cruess R, Cruess S. Teaching professionalism: general principles. *Med Teach* 2006; 28: 205-208.
20. Medical Board of Australia website <http://www.medicalboard.gov.au/Codes-Guidelines-Policies/Code-of-conduct.aspx> Medical Board of Australia. Good Medical Practice: A code of Conduct for Doctors in Australia (2014) Code of Conduct. Accessed May 5 2016.

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