Rural placement training outcomes

Rural medicine is not urban medicine practiced in a rural context. The economic and social situation of rural communities, their health issues, differences in access to health services, and health professionals change the way medicine is practised. The learning opportunities provided by rural prevocational placements is different from urban and regional hospital placements:

- broad caseload (ambulatory, undifferentiated, acute, chronic and perioperative care)
- holistic health care
- continuity of care and continuity of supervision
- more hands on, authentic clinical role.

Rural clinical experiences offer prevocational doctors an opportunity to further develop their clinical skills, better understand the impact of rural context on the health issues affecting a community, and differences in access to health services and health professionals. Effective communication, clinical handover and advocacy skills are required to ensure timely access to secondary, tertiary health and quaternary health services when required.

Rural community and hospital based educational experiences provided by rural clinicians, educators, supervisors, mentors and role models are well documented success factors for prevocational training and for Rural Generalist workforce development in Queensland[1]. They reinforce the vocational intent and commitment by embedding trainees in the Queensland rural community of practice. The importance of these placements to ensure the Australian prevocational training system provides a balanced output of graduates with the skills needed and career intent to work where they are most needed cannot be understated.

Learning objectives

Rural community of practice

RG prevocational doctors need to experience and become increasingly involved with the rural community of medical practice. Learning activities include:

- rural GP or rural hospital clinical placements
- mentoring by rural clinicians (Rural Generalist Training Advisors)
- annual QRGP prevocational training workshop facilitated by RG educators
- preparatory AST workshop facilitated by RG educators
- increasing involvement with the Queensland RG community of practice
- encourage attendance at annual Rural Doctors Association of Queensland conference
- early engagement with Rural Generalist training colleges (ACRRM and RACGP).

Three types of rural clinical experiences can be provided by QRGP training hospitals:

- primary care/John Flynn Prevocational Doctor Program (MMM 2 and above)
- rural hospital (e.g. Rural hospital, Rural ED, PIERCE, jDocs)
- blended community-based care/rural hospital.

Queensland Government

Primary care (MMM 2 or above)

RG prevocational doctors should gain experience of living and working in a rural community, and:

- consolidate commitment to a career in rural general practice/rural generalism
- develop skills in the provision of whole-of-person care in a community context, including the assessment, investigation, and management of undifferentiated patients of all ages and genders presenting with acute or chronic medical conditions
- develop the experience, judgement and confidence required to provide medical care in a rural context with limited access to health care resources.

Rural general practice experience is highly desirable if available.
This placement would be suitable for an undifferentiated or chronic care experience.

Rural hospital care

RG prevocational doctors should gain experience of living and working in a rural community, and:

- consolidate commitment to a career in rural general practice/rural generalism
- develop skills in the provision of hospital care in a rural context
- develop the experience, judgement and confidence required to provide medical care in a rural context with limited access to health care resources
- understand how systemic issues and social context affect health, wellbeing, and the delivery of healthcare in a rural context.

Rural hospital experience is highly desirable if available.
This placement would be suitable for an acute care experience.

Prevocational Integrated Extended Rural Clinical Experience (PIERCE)

RG prevocational doctors should gain experience of living and working in a rural community, while gaining anaesthetic, O&G and paediatric experience in a rural context, and:

- consolidate commitment to a career in rural general practice/rural generalism
- develop skills in the provision of hospital care in a rural context
- understand how systemic issues and social context affect health, wellbeing, and the delivery of healthcare in rural communities
- experience a broad inpatient caseload in a rural context
- have an authentic role as a member of staff of a rural hospital
- gain first-hand experience and clinical skills as required by the ACRRM Core curriculum in anaesthetics, obstetrics and paediatrics.

Rural hospital experience is highly desirable if available.
This placement would be suitable for acute and perioperative care experience.
PIERCE is a 15-week placement.

Note: Rural emergency medicine (outlined below) and PIERCE placements have been successfully combined in one RG prevocational training hospital, creating a blended 6-month rural placement in which the authentic hands-on rural clinical experience, broad case load and continuity of care and continuity of supervision is greatly appreciated by RG prevocational trainees.

Blended primary care and hospital-based care

RG prevocational doctors should gain experience of living and working in a rural community, and:

- consolidate commitment to a career in rural general practice/rural generalism
- develop skills in the provision of whole-of-person care in a community context, including the assessment, investigation, and management of undifferentiated patients of all ages and genders presenting with acute or chronic conditions
- develop the experience, judgement and confidence required to provide medical care in a rural context with limited access to health care resources
- understand how systemic issues and social context affect health, wellbeing, and the delivery of healthcare in rural communities
- experience a broad ambulatory caseload in a rural context
- develop skills in the provision of hospital care in a rural context.

Prevocational logbook

The broad caseload, the nature of the work, the accommodating nature of rural patients, the work environment and the relative lack of peer competition for clinical experience, mean that proactive prevocational trainees find rural clinical training a particularly rich opportunity to gain procedural experience.

The Prevocational logbook assists trainees and their supervisors to capitalise on any opportunities that arise during a rural placement. Logbook items suitable for an Entrustable Professional Activity (EPA) are indicated. While it is not a requirement, trainees seeking out a supervisor to sign off these logbook items, may wish to consider asking their supervisor to undertake an EPA at the same time as this would substantially enhance the learning obtained from this episode of care. Some logbook items are Class C activities. College standards require that they must be undertaken on real patient under direct clinical supervision. In this scenario, it would be a wasted opportunity if the case was not discussed with the supervisor and feedback provided (i.e. an EPA undertaken).

Minimum standard required - procedure class
A: Practitioner operating independently - performed on a real patient.
B: Performed to a pass standard in a certified course in a simulated environment
C: Practitioner under supervision - performed on a real patient.
D: Practitioner assisting an independent practitioner - performed on a real patient.

Adult internal medicine

Procedure	Suitable for EPA	Minimum standard required
Non-rebreather mask		A
Spirometry & Peak Flow Measurement		A
Nebulisation therapy		A
Arterial blood sampling		A
Glasgow Coma Scale		A
Urethral catheterisation on male		A
Initiate insulin therapy	3	A
Facilitate a family meeting for discharge planning	4	A

Conduct a patient focused medication review prior to discharge	3	A

Anaesthetics

Procedure	Suitable for EPA	Minimum standard required
IV access		A
Blood transfusion		A
Oxygen saturation monitoring		A
Digital nerve block		A
Conduct pain management review for chronic pain patient	3	A
Oropharyngeal airway		B
Nasopharyngeal airway		B
Laryngeal mask		B
Endotracheal intubation		B
Bag/mask ventilation		B
External cardiac massage		B
Defibrillation		B
Synchronised DC cardioversion		B
Adult sedation		B
Rapid sequence induction	2/3	C

Child and adolescent

Procedure	Suitable for EPA	Minimum standard required
Use of respiratory med delivery devices	3	A
Use of spacer devices	3	A
Nebulisation therapy	3	A
Local anaesthesia		A
Repair of superficial skin laceration	3	A
Venous blood sampling		A
Conduct a developmental assessment	1	A
Write an asthma management plan	3	A
HEADSS assessment		A
Endotracheal intubation		B
Intravenous access		B

Mental health

Procedure	Suitable for EPA	Minimum standard required
Suicide risk assessment and safety planning	1/4	A

Mini-mental state examination	1	A
Psychiatric mental state examination and formulation	1	A
Assess a patient experiencing a mental health emergency	1/2	A

Musculoskeletal medicine

Procedure	Suitable for EPA	Minimum standard required
Soft tissue injury strapping		A
Fracture splinting		A
Fracture plaster cast	3	A
Reduction of fracture	3	C

Obstetrics and women's health

Procedure	Suitable for EPA	Minimum standard required
Urethral catheterisation in female		A
Perform urine pregnancy test *and manage the finding*	1	A
Perform foetal heart sound detection		A
Fundal height assessment		A
Conduct ante-natal visit	1/2	A
Conduct post-natal visit	1	A
Conduct well baby check	1	A
Manage post natal mental health issues	1	A
Manage shoulder dystocia		B
Manage normal delivery	1/3/4	B

Opthamology

Procedure	Suitable for EPA	Minimum standard required
Visual acuity & field assessment		A
Use ophthalmoscope		A
Topical anaesthesia of cornea		A
Staining of cornea with Fluorescein		A
Removal of corneal foreign body		A

Palliative care

Procedure	Suitable for EPA	Minimum standard required
Nasogastric tube insertion		A
Complete advanced care plan	1	A

Surgery

Procedure	Suitable for EPA	Minimum standard required
Incision & drainage of abscess		A
Repair of skin laceration including LA administration & wound debridement		A
Management of epistaxis (including anterior nasal cautery)		A
Wound dressing		A
Drainage of subungual haematoma		A
Ear toilet		A
Management of a chronic wound	3	A

EPAs

As in any 10-week clinical placement, the Australian Medical Council (AMC) requires 2 EPAs: EPA1 plus one of either EPAs 2, 3 or 4.

Longer placements should have the appropriate number and type of EPAs in keeping with the duration of the placement and the appropriate mix of EPAs for the year (i.e. a minimum of 10 EPAs over the year, 4 EPA1, and 2 EPA 2, 3 and 4).

Rural EPAs should address the social and clinical context in which rural generalist medicine is practiced and the wholistic, community-based, continuity of care medical paradigm it embodies.

EPA	Description
EPA 1: Clinical Assessment	Conduct a clinical assessment of a patient, incorporating history, examination, investigation, and formulation of a differential diagnosis. Negotiate and communicate a management plan, cognisant of the patient's context, values and priorities.
plus one of either:	
EPA 2: Recognition and care of an acutely unwell patient	Recognise and assess clinical and situational risk. Provide immediate management of deteriorating, unstable and acutely unwell patients. Escalate, and when necessary, facilitate specialist support and timely transfer of care to an appropriate secondary or tertiary facility.
OR	
EPA 3: Prescribing	Prescribe drugs, fluids, blood products and inhalational therapies, including oxygen, tailored to the patient's condition, needs, values and priorities.
OR	
EPA 4: Handover	Communicate timely, accurate and concise information to facilitate high quality continuity of care within a health care team and between health care professionals and facilities at key transition points in care.

Effective communication and advocacy are particularly important when transferring rural patients to regional or urban specialist services. We recommend trainees take the opportunity to undertake EPA4 during their rural placement. However, this is not a program requirement.
Trainees are also encouraged to assess and care for all their patients as a rural generalist medical practitioner regardless of the placement they are undertaking at the time (urban, regional, rural, community or general practice). With this in mind, we recommend trainees consider seeking an opportunity to undertake a clinical assessment (EPA1) of a rural patient they have cared for in a regional or urban facility, focusing on how the patient's environmental and social context and the availability of health services in their community have impacted on their presentation and how this effects a holistic approach to care of the patient while they are in hospital and after they are discharged from hospital.

Effective communication is particularly important when handing over care of a hospitalised patient back to their community. The handover should address the key diagnostic, investigative and management information that the patient's normal service providers need to take over care of the patient. The proposed management plan also needs to be appropriate to the patient's social environment and the availability of health services in their community. We recommend trainees consider seeking an opportunity to undertake an EPA concerning the handover of care of a patient from an urban or regional facility back to their community (EPA4).

EPA 1: Clinical assessment	For example: • *Rural facility*: Clinical assessment of a patient in a rural context. • *Referral facility*: Clinical assessment of a rural patient presenting to an urban or regional referral hospital (ED, OPD or Inpatient unit)
EPA 4: Team communication	For example: • *Rural facility*: Discharge from hospital. • *Referral facility*: Discharge of a rural patient from an urban or regional hospital back to their community or local health facility

These EPAs are not a program requirement, nor are they expected to be undertaken in addition to the AMC's normal EPA requirements. Rather, we recommend trainees and supervisors make a point, on a couple of occasions, of specifically considering how the social context of a rural patient affects their presentation, their care in hospital and on discharge from hospital when choosing and undertaking EPAs as required during their clinical placements in an urban or regional hospital placement.

Four examples of suitable rural EPAs are provided below to assist trainees and supervisors to identify suitable cases and understand the standard that is expected.

EPA1: Clinical assessment of a patient in a rural facility

Conduct a clinical assessment of a patient presenting to a rural general practice or hospital including history, examination, formulation of a differential diagnosis, appropriate investigations, and a management plan.

Focus and context	This EPA applies to rural GP consultations, rural hospital ED presentations, admissions, or reviewing a patient in response to a particular concern, ward-call tasks, and ward rounds.
Description	This activity requires the ability to, where appropriate or possible: • clarify the concern(s) if the request for assessment has been made by a colleague or team member • identify relevant information in the patient record • obtain consent from the patient • obtain a history. • examine the patient • consider and integrate information from the patient's social circumstances and support, clinical record, clinical assessments, relevant facility protocols, locally available services, guidelines or literature • develop provisional and differential diagnoses and/or problem lists • produce a management plan, confirm as appropriate with a senior colleague, and communicate with relevant team members and the patient implement the management plan, initiate or perform appropriate investigations and procedures, and document the assessment and next steps, including indications for follow-up.

EPA4: Referral of a rural patient to specialist or referral hospital

Facilitate transfer of a patient from a rural health facility (GP clinic or hospital) to a specialist clinic or referral hospital (ED, OPD or inpatient unit) providing an accurate written and/or verbal handover of care, appropriate support to the patient and their family.

<table>
<tr><td>Focus and context</td><td>This EPA applies to the referral of a patient from a rural facility to a specialist health practitioner or referral hospital. Critical aspects are to:
• communicate timely, accurate and concise information to facilitate transfer of care from a rural health facility to a private specialist, urban or regional hospital ED, OPD or inpatient unit
• provide and effective accurate and concise verbal handover of care
• produce timely, accurate and concise documentation
• provide appropriate administrative and social support for the patient and their family, and where indicated, expedite retrieval and/or transport.

This activity in multiple rural settings, including general practice, hospital emergency department, outpatient clinic or inpatient unit.</td></tr>
<tr><td>Description</td><td>This activity requires the ability to:
• Communicate effectively to:
  ○ ensure continuity of care
  ○ share patient information with other health care providers and multidisciplinary teams in conjunction with referral or the transfer of responsibility for patient care
  ○ use local agreed modes of information transfer, including oral, electronic and written formats to communicate:
    – patient demographics
    – a concise medical history and relevant physical examination findings
    – current problems and issues
    – details of relevant and pending investigation results
    – medical and multidisciplinary care plans.
• Document effectively to:
  ○ enable other health professionals to understand the issues and continue care
  ○ produce written summaries of care, including admission and progress notes, team referrals, discharge summaries, and transfer documentation
  ○ produce accurate records appropriate for secondary purposes
  ○ complete accurate medical certificates, death certificates and cremation certificates
  ○ enable the appropriate use of clinical handover tools.</td></tr>
</table>

EPA1: Clinical assessment of a rural patient presenting to a referral hospital.

Conduct a clinical assessment of a rural patient presenting to urban or regional referral hospital incorporating history, examination, formulation of a differential diagnosis, appropriate investigations, and a management plan.

<table>
<tr><td>Focus and context</td><td>This EPA applies to the assessment and management of a rural patient presenting to an urban or regional referral hospital.

This activity can occur in multiple rural settings including an emergency department, hospital ward, or an outpatient clinic.</td></tr>
</table>

Description	This activity requires the ability to, where appropriate or possible: • obtain a history • examine the patient • consider and integrate information from the patient's social circumstances and support, clinical record, clinical assessments, relevant facility protocols, locally available services, guidelines or literature • develop provisional and differential diagnoses and/or problem lists • produce a management plan, confirm as appropriate with a senior colleague, and communicate with relevant team members and the patient implement the management plan, initiate or perform appropriate investigations and procedures, and document the assessment and next steps, including indications for follow-up.

EPA4: Discharge of rural patient from an urban or regional hospital back to their community or local health facility

Facilitate the transfer of a rural patient from an urban or regional hospital back to their community or local hospital, providing an accurate written and/or verbal summary of their hospitalisation and handover of care.

Focus and context	This EPA applies to the discharge of a rural patient from an urban or regional referral hospital back to their community health services. Critical aspects are to: • communicate timely, accurate and concise information to facilitate transfer of care from an urban or regional health facility back to a rural hospital or GP clinic • produce timely, accurate and concise documentation. *This activity can occur in multiple urban or regional hospital such as emergency department, outpatient clinics or inpatient units.*

Description	This activity requires the ability to:
	• Communicate effectively to:
	  ○ ensure continuity of care
	  ○ share patient information with other health care providers and multidisciplinary teams in conjunction with referral or the transfer of responsibility for patient care
	  ○ use local agreed modes of information transfer, including oral, electronic and written formats to communicate:
	    – patient demographics
	    – a concise medical history and relevant physical examination findings
	    – current problems and issues
	    – details of relevant and pending investigation results
	    – medical and multidisciplinary care plans
	    – planned outcomes and indications for follow up.
	• Document effectively to:
	  ○ enable other health professionals to understand the issues and continue care
	  ○ produce written summaries of care, including admission and progress notes, team referrals, discharge summaries, and transfer documentation
	  ○ produce accurate records appropriate for secondary purposes
	  ○ complete accurate medical certificates, death certificates and cremation certificates
	  ○ enable the appropriate use of clinical handover tools.

References

1. Hanson D, Carey E, Harte J, Bond D, Manahan D, O'Connor P. Prevocational Integrated Extended Rural Clinical Experience (PIERCE): cutting through the barriers to prevocational rural medical education. Rural and Remote Health. 2020;20(1).