QRGP Prevocational Training Program: rural 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 workshops 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 Prevocational Training hospitals:

1. Primary care / John Flynn Prevocational Doctor Program (MMM2 and above).
2. Rural hospital (e.g. rural hospital, rural ED, PIERCE, jDocs).
3. Blended community-based care / rural hospital.

Primary Care
(MMM2 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.
- understand how systemic issues and social context affect health, wellbeing, and the delivery of healthcare in a rural context.

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.

Rural Emergency Medical Care

RG prevocational doctors should gain experience of living and working in a rural community, while gaining experience in emergency medicine to:

- 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 ambulatory caseload in a rural context.
- have an authentic role as a member of staff of a rural hospital.
- assess, prioritise, stabilise, investigate, and provide initial treatment to undifferentiated emergency presentations in hospital and community settings.
- recognise the need to urgently consult with supervisors, senior staff, and external specialist services, and when indicated, expedite retrieval to definitive care.
- perform emergency procedures as detailed in the QRGP Prevocational Training Procedural Logbook.
- perform basic life support, commence resuscitation of a patient following the ABC algorithm, undertake a primary survey.
- assess and manage acutely disturbed mental health patients.

Rural emergency medicine experience is highly desirable if available.
This placement would be suitable for an undifferentiated and/or 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.
  - 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 and PIERCE have been successfully combined in one RG prevocational training centre, creating a 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 medical 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.
- experience a broad inpatient caseload in a rural context.
- have an authentic role as a member of staff of a rural hospital and general practice.

Rural community and hospital-based care experiences are highly desirable if available.
This placement would be suitable for undifferentiated, acute and chronic care experience.
These placements are generally 6-months in duration

QRGP Prevocational Logbook

The broad case load, 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 QRGP Prevocational Logbook is provided to assist trainees and their supervisors to capitalise on any opportunities that arise during a rural placement. Logbook items marked in blue are also suitable for an Entrustable Professional Activity (EPA). 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.

Adult Internal Medicine

A - Prevocational doctor operating independently - demonstrate on a real patient
Non-rebreathing mask
Spirometry & peak flow measurement
Nebulisation therapy
Arterial blood sampling
Glasgow Coma Scale
Urethral catheterisation on male
Initiate insulin therapy Note: This activity is suitable for EPA3
Facilitate a family meeting for discharge planning Note: This activity is suitable for EPA4
Conduct a patient focused medication review prior to discharge Note: This activity is suitable for EPA3

Anaesthetics

A - Prevocational doctor operating independently - demonstrate on a real patient
IV access
Blood transfusion
Oxygen saturation monitoring
Digital nerve block
Conduct pain management review of a chronic pain patient Note: This activity is suitable for EPA 3

B - Performed to a pass standard in a certified course in a simulated environment
Oropharyngeal airway
Nasopharyngeal airway
Laryngeal mask
Endotracheal intubation
Bag/mask ventilation
External cardiac massage
Defibrillation
Synchronised DC cardioversion
Adult sedation

C - Practitioner under supervision - performed on a real patient
Rapid sequence induction Note: As this activity must have taken place under supervision, it would be particularly suitable for either EPA 2 or 3 depending on the scenario

Child & Adolescent

A - Prevocational doctor operating independently - demonstrate on a real patient
Local anaesthesia
Venous blood sampling
Use of respiratory med delivery devices Note: This activity is suitable for EPA3
Use of spacer devices Note: This activity is suitable for EPA3
Nebulisation therapy Note: This activity is suitable for EPA3
Repair of superficial skin laceration Note: This activity is suitable for EPA3
Conduct a developmental assessment. Note: This activity is suitable for EPA1
Write an asthma management plan Note: This activity is suitable for EPA 3
HEADSS assessment Note this activity is suitable for EPA1

B - Performed to a pass standard in a certified course in a simulated environment
Endotracheal intubation
Intravenous access

Mental Health

A - Prevocational doctor operating independently - demonstrate on a real patient
Mini-mental state examination Note: This activity is suitable for EPA1
Suicide risk assessment and safety planning Note: Depending on the scenario, this activity may be suitable for EPA1, 2 or 4
Psychiatric mental state examination, assessment and management Note: This activity is suitable for EPA1
Assess a patient experiencing as mental health emergency Note: Depending on the scenario, this activity may be suitable for EPA1, 2 or 4

Musculoskeletal medicine

A - Prevocational doctor operating independently - demonstrate on a real patient
Soft tissue injury strapping
Fracture splinting
Fracture plaster cast Note: This activity is suitable for EPA3

C - Practitioner under supervision - performed on a real patient
Reduction of fracture Note: As this activity must have taken place under supervision, it would be particularly suitable for EPA 3.

Obstetrics & Women's Health

A - Prevocational doctor operating independently - demonstrate on a real patient
Urethral catheterisation in female
Perform foetal heart sound detection
Fundal height assessment
Perform urine pregnancy test and manage the finding Note: This activity is suitable for EPA1
Conduct ante-natal visit Note: Depending on the scenario, this activity may be suitable for EPA1 or 2
Conduct post-natal visit Note: This activity is suitable for EPA1
Conduct well baby check Note: This activity is suitable for EPA1
Manage post-natal mental health issues Note: This activity is suitable for EPA1

Obstetrics & Women's Health - continued

Conduct well baby check Note: This activity is also suitable for EPA1
Manage post-natal mental health issues Note: This activity is also suitable for EPA1
B - Performed to a pass standard in a certified course in a simulated environment
Manage shoulder dystocia
Manage normal delivery Note: This activity is also suitable for EPA1

Opthalmology

A - Prevocational doctor operating independently – demonstrate on a real patient
Visual acuity & field assessment
Use ophthalmoscope
Topical anaesthesia of cornea
Staining of cornea with Fluorescein
Removal of corneal foreign body

Palliative Care

A - Prevocational doctor operating independently – demonstrate on a real patient
Nasogastric tube insertion
Complete advanced care plan Note: This activity is also suitable for EPA1 or 3

Surgery

A - Prevocational doctor operating independently – demonstrate on a real patient
Incision & drainage of abscess
Repair of skin laceration including LA administration & wound debridement
Management of epistaxis (including anterior nasal cautery)
Drainage of subungual haematoma
Ear toilet
Wound dressing Note: This activity is also suitable for EPA3
Management of a chronic wound Note: This activity is also suitable for EPA1 or 3

EPAs

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

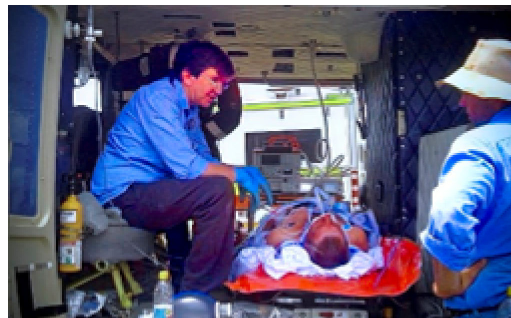
Longer placements should have the appropriate number and type of EPAs in keeping with the duration of the placement and the appropriate mix of EPAs for the year (i.e. a minimum of ten EPAs over the year, four EPA1, and two EPA 2, 3 and 4)

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.

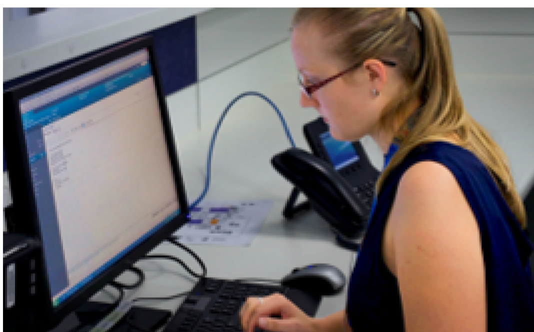
EPA1: Clinical Assessment

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.

EPA2: Recognition and care of the 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.



EPA3: Prescribing

Prescribe drugs, fluids, blood products and inhalational therapies, including oxygen, tailored to the patient's condition, needs, values and priorities.

EPA4: Team communication/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. The QRGP recommends that 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 the QRGP recommends that 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. Accordingly, the QRGP recommends that 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	e.g: *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	e.g.: *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, the QRGP recommends that 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 overleaf 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

Title	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 is based on EPA1 and 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: 1. clarify the concern(s) if the request for assessment has been made by a colleague or team member. 2. identify relevant information in the patient record. 3. obtain consent from the patient. 4. obtain a history. 5. examine the patient. 6. 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. 7. develop provisional and differential diagnoses and/or problem lists. 8. 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

Title	**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.**
Focus and Context	This EPA is based on EPA4 and applies to the referral of a patient from a rural facility to a specialist health practitioner or referral hospital. Critical aspects are to: 1. 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. 2. Provide and effective accurate and concise verbal handover of care. 3. Produce timely, accurate and concise documentation. 4. 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.*
Description	This activity requires the ability to: 1. 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. 2. 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.

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

Title	**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.**
Focus and Context	This EPA is based on EPA1 and 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.*
Description	This activity requires the ability to, where appropriate or possible: 1. Obtain a history. 2. Examine the patient. 3. 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. 4. Develop provisional and differential diagnoses and/or problem lists. 5. 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

Title	**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 is based on EPA4 and 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: 1. 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. 2. 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:
	1. 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.
	2. 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).