# A qualitative evaluation of the Prevocational Integrated Extended Rural Clinical Experience (PIERCE)

## Mareeba, Proserpine and Stanthorpe 2015 pilot

Report Summary | April 2018

The Generalist Pathway

Queensland Government

> *'PIERCE was excellent for hands-on experience and excellent for knowing what you want to do for your career… I came away knowing absolutely that a Rural Generalist is what I want to be.'*
>
> PIERCE Trainee

# Report summary

## Prevocational Integrated Extended Rural Clinical Elective (PIERCE)

PIERCE is a junior doctor clinical placement that was piloted at three Queensland rural hospitals (Mareeba, Proserpine and Stanthorpe) in 2015.

## Objective

PIERCE aimed to increase the training capacity of the Queensland Rural Generalist Pathway (QRGP) and strengthen trainee commitment to rural practice by providing an authentic integrated extended rural clinical experience in suitably accredited rural hospitals that meet QRGP anaesthetic, obstetrics and gynaecology (O&G) and paediatric prevocational training requirements.

## The study

This translational qualitative study explored the experiences and perceptions of QRGP trainees who undertook a PIERCE placement in 2015 with a matched cohort of trainees who undertook regional hospital placements.

## Outcomes

PIERCE:

- established trainee mentoring relationships with senior rural colleagues that consolidated or strengthened trainee commitment to a rural career.
- provided an enjoyable and valued rural training experience that promoted trainee engagement with, and contribution to, a rural community of practice.
- provided broad clinical exposure, continuity of care and increased clinical responsibility, addressing the abilities, knowledge and skills articulated in the Australian Curriculum Framework for Junior Doctors (ACFJD) and the ACRRM and RACGP curriculums.

Transcripts identified a number of learning mechanisms that enhanced the effectiveness of PIERCE (Figure 1):

- Continuity of care & supervision
- Quality of participation (hands-on learning and increased clinical responsibility)
- Learning environment (broad caseload with sufficient duration to provide clinical and procedural exposure in anaesthetics, O&G and paediatrics)
- Equity in learning and assessment.

Important aspects of the learning context focused learning on the desired outcome – rural and remote medical practice (Figure 1):

- Supportive social and administrative environments
- Communities of practice
- Role models
- Identity formation

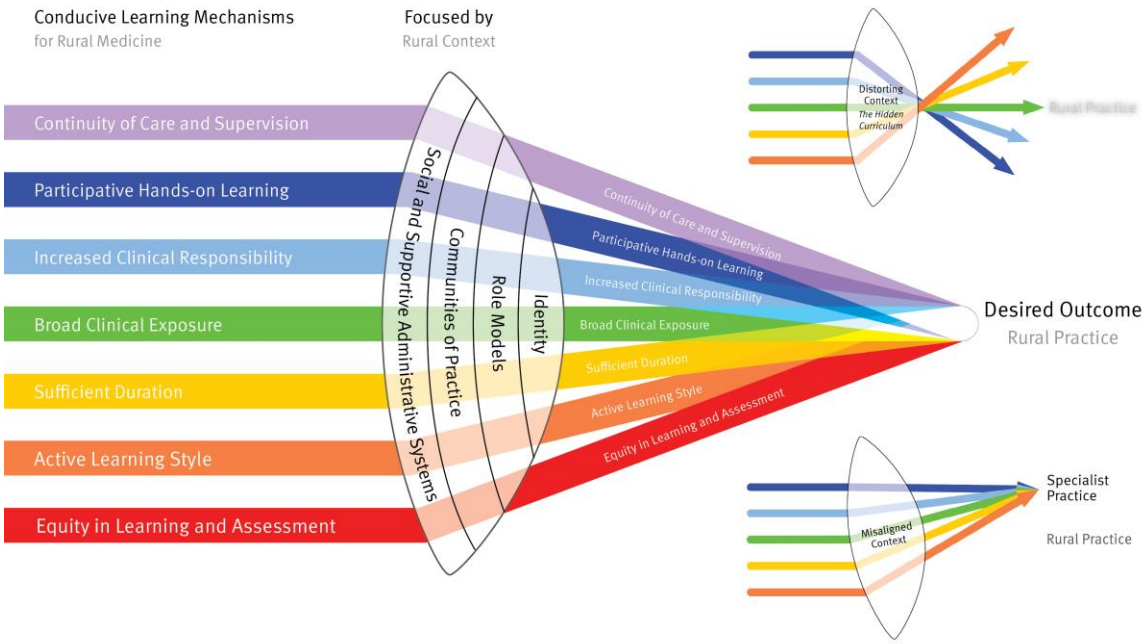


**Figure 1: Learning mechanisms and contextual factors contributing to PIERCE**

Significant variability in the learning experience was evident, not only between PIERCE and regional hospital placements, but within study arms. This variation was particularly marked in the regional hospital placements. Three groups of contextual factors were identified:

- Hospital factors: regional vs rural placements, caseload, training opportunities, training capacity, competition for access to clinical experience, rostering, duration, inter-professional politics, staffing
- Supervisor factors: accessibility, engagement, commitment to education, understanding of learning objectives, tenure (permanent vs locum staff)
- Trainee factors: proactivity, seniority, previous experience, ability, interest (Figure 2).

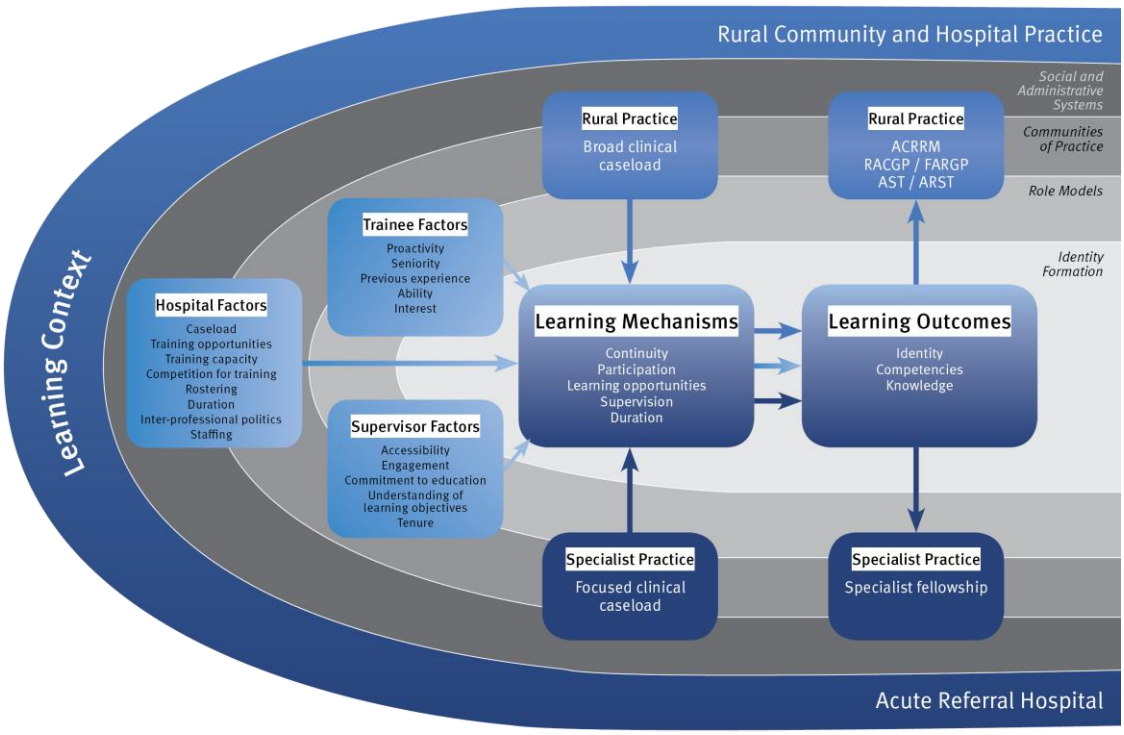


**Figure 2: Contextual determinants of QRGP learning experience**

> *'The learning opportunities are really different. I think you learn a wide variety of things there (PIERCE hospital). … When you're in a speciality you're more in depth with that specialty.'*
>
> PIERCE Trainee

Trainees do not accept that PIERCE provided a satisfactory alternative to anaesthetic, O&G or paediatric placements in regional hospitals. Rather, trainees believed PIERCE and regional hospital placements offered complementary experiences:

- PIERCE offered integrated hands-on rural clinical experience in which trainees had more autonomy and responsibility backed up by highly engaged and supportive generalist supervisors. Proactive trainees extracted the greatest benefit from the placement.
- Regional hospital placements offered a more structured experience focused in the domains of anaesthetics O&G and paediatrics that was less reliant on trainee capacity to seek out learning opportunities, but dependent on the commitment of specialist supervisors.

Generally speaking:

- PIERCE offered excellent hands-on experience for proactive trainees, especially in obstetrics at PIERCE hospitals where trainees gained access to labour ward.
- One PIERCE hospital provided comparable exposure to a five-week anaesthetic placement. Other hospitals varied depending on the term and trainee.
- Gynaecology and paediatrics experience was largely gained via the ED.

Trainees did not accept that the most directly comparable strategy to increase QRGP training capacity, five-week regional hospital placements, provided adequate training. It is also evident that the "gold standard" 10-week anaesthetic, O&G and paediatric terms did not reliably meet all trainees' learning aspirations.

Trainees' subjective assessments, coupled with a lack of clearly articulated learning objectives for anaesthetic, O&G and paediatric prevocational placements, impaired the study's ability to assess relative merits of PIERCE versus regional hospital placements against a defined curriculum outcome.

## Conclusions

Learning context had a profound impact on learning, presenting opportunities and threats to the achievement of prevocational learning objectives in both arms of the study. An effective rural generalist prevocational training program is contingent on strategic alignment of the curriculum with supportive learning mechanisms focused by the learning context on the desired outcome - well trained medical practitioners with a commitment to and propensity for rural medicine.

Given the recent changes in junior doctor training, trainee numbers and increasing competition for, and variability in, training experience, it would be helpful to document clinical and procedural exposure of QRGP trainees in all prevocational placements (PIERCE terms, other rural terms, 5 and 10-week regional hospital terms), to allow a more informed assessment of what can realistically be accomplished.

The prevocational training experience can be optimised by exposing junior medical officers to a suite of placements that exploit the contextual advantages of different learning environments.