Predictors of rural practice for graduates from Australia’s first regional medical school

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Aim: This presentation describes the pre-medical, undergraduate and postgraduate factors that predict James Cook University (JCU) MBBS graduates’ likelihood to practise rurally (ASGC-RA 3 to 5) in their fourth postgraduate year (PGY4).

Relevance: Maintaining an adequate medical workforce in rural and remote areas of Australia is challenging. To address this challenge, the regionally located JCU medical school was established in 2000 with a mandate to select and educate medical students prepared to work as doctors in rural and regional locations. By 2011, 194 JCU MBBS graduates had completed PGY4. Of these, 80 (41%) were practising in an ASGC-RA 3–5 town (outer regional, remote or very remote locality) during PGY4. This study describes the factors associated with JCU graduates’ choice of rural practice location in PGY4.

Methods: Multivariate analysis was undertaken on the collated data of JCU MBBS graduates at application (age, gender, location of hometown, school leaving score, interview score, ethnicity), during undergraduate years (scholarships, honours program, academic achievement, location of rural placement), and post-graduation (internship location, practice location, specialty training).

Results: Multiple logistic regression analysis of 191 JCU MBBS graduates identified that practise in a ‘rural’ town (ASGC-RA 3–5) in PGY4 was predicted by:

- internship in an ASGC-RA 3–5 location (p<0.001)
- postgraduate training as a general practitioner or rural generalist (p=0.001)
- hometown at application in an ASGC-RA 3–5 location (p=0.035).

Conclusions: The new JCU medical school appears to have produced graduates who tend to practise in rural areas over the medium term, with many choosing careers as general practitioners or rural generalists. This study provides the first Australian evidence that likelihood of rural medical practice is enhanced by:

- establishing a medical school in a regional location
- selecting students with a rural origin at application
- having a selection process orientated towards choosing students with a genuine desire for rural practice
- providing regionally located internship places.
This early evidence supports the proposition that investment in rural medical education will produce an appropriately trained medical workforce to meet the needs of rural Australia. However, findings also suggest that regional workforce may be further enhanced with additional training opportunities in regional tertiary hospitals for specialties other than general practice and rural generalism.