Prevalence and associations of GP registrars' consultations with older patients in rural and remote practice: a cross-sectional analysis from the ReCEnT project.

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advancing medical training

ReCEnT
Registrar Clinical Encounters in Training

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Background

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Registrars' experience with older patients

- Experience of older patient care is essential for GP registrar education and training

- Challenges of older patient care
  - Complexity
  - Multi-morbidity

Registrars' experience with older patients

But, evidence from the Registrar Encounters in Training (ReCEnT) study:

- Registrars see considerably less chronic disease than established GPs (29.5% of consultations versus 38.7-40.7%)
- Registrars see considerably fewer patients older than 65 than established GPs (17.6% of consultations versus 32.5%)

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Registrars' experience with older patients

There is marked inter-practice variability in the amount of older patient care that registrars experience

Registrars' experience with older patients

- Registrars also seem to engage less with the care of older patients than would be expected

  - Generate fewer learning goals than in consults with patients <65 years
  - Have shorter consultations
  - Have less recourse to in-consultation supervisor advice or help

  - Older age and chronic disease associated with review by another doctor in the practice rather than the registrar

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Registrars' experience with older patients

BUT

- Rural practice is associated with greater exposure to care of chronic disease
  - Major city: 28% of patients
  - Inner regional: 31% of patients
  - Outer regional, Remote, Very remote 33% of patients

$p<0.001$

Registrars' experience with older patients

Rural practice is associated with greater exposure to care of older patients

- Major city: 15.0% of patients
- Inner regional: 20.3% of patients
- Outer regional, Remote, Very Remote 29.7% of patients

$p<0.001$

Multivariable analysis

A patient being older than 65 years (compared to major city practice)

- Inner regional

  OR 1.40

  95%CIs: 1.20, 1.63; p<0.001
- Outer regional, remote or very remote

  OR 1.47

  95%CIs: 1.22, 1.78: p<0.001

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Thus…

These findings represent a potentially important educational advantage for registrars training in areas away from major cities

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Aims

- To further explore the associations of registrar consultations with older patients in rural areas.

Methods

- A cross-sectional analysis of the ongoing ReCEnT cohort study of Australian GP trainees' consultations.
- Once each 6-month training term, trainees record detailed data of 60 consecutive consultations
- Five RTPs (in NSW, Qld, SA, Victoria, Tasmania)
- Paper-based recording
- Problems/diagnoses coded with ICPC-2 (allowing further coding as chronic disease)
- Analysis confined to Outer regional, Remote and Very remote locations

Methods

Outcome factor

- Consultation with a patient aged 65 years or older

Independent variables related to:

- Patient
- Registrar
- Practice (e.g. size, billing policy, location socioeconomic status)
- Consultation (e.g. duration)
- Outcomes (e.g test ordering, referrals, prescriptions)
- In-consultation recourse to advice, information or assistance

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Statistical Methods

- To test associations of a consultation involving an older patient, simple and multiple logistic regression models were used
  - within a generalised estimating equations (GEE) framework to account for clustering of patients within GPRs

- Three models were built
  - The likelihood of a consultation involving an older patient could plausibly be associated with patient, registrar and practice factors, which were included in the first model

  - variables in the second model included consultation duration, the number of problems dealt with, chronic disease being seen and information-seeking by the registrar: did the content of older patient consultations differ

  - learning goals generated by the registrar, specialist referrals made, follow-up ordered, imaging ordered, pathology tests ordered and medication prescribed: actions arising from consultations involving older patients differed

Results

- 10 rounds of data collection, 2010-2014
- 164 registrars recorded data for 17,238 consultations in RA 3-5 areas.
- There were 3,944 consultations with patients >64 years (23% of all consultations)
- Outer Regional 23.3%
  Remote 26.5%
  Very remote 20.6%

Multivariable results

Significant associations of a consultation being with an older patient (compared with being with a younger patient) included

- patient male gender (OR 0.79 for females; 95%CI [0.72,0.86]; p<.001)
- smaller practice size (OR 0.71 for larger practices; 95%CI [0.70,0.9]; p=0.0129)
- chronic disease (ORs 1.65; 95%C [1.49, 1.81] p,.001)
- more problems being addressed (OR1.22; 95%C [1.15, 1.30] p<.001)

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Multivariable results

But also

- the registrar *not* seeking in-consultation information (OR 0.83; 95%CIs [0.74, 0.93] p=0.001)
- and *not* generating learning goals (OR 0.86; 95%CIs [0.76,0.97] p=0.012).

There was no association with ASGC-RA classification

Discussion

- We found that
  - While RA 3-5 located registrars see more older patients than RA 1-2
    - There is no difference in exposure between RA 3 and RA 4 and RA 5
- Thus, there are considerable advantages in terms of exposure to older patient care across the rural/remote spectrum

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But…

There remains a concern regarding the ‘educational utility’ of these consultations.

> There being less in-consultation information- and assistance-seeking and generation of learning goals in older patient consultations

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Thus

While rural practice provides greatly increased exposure to older patient care we need to explore the educational ‘quality’ of this experience

And explore ways of optimising the educational utility of our registrars’ older patient care in rural training settings