

## Research

# Older patients' consultations in an apprenticeship model-based general practice training program: A cross-sectional study

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**Objective:** *To investigate older patients' encounters with general practice registrars (GPRs) to inform training and clinical practice.*

**Methods:** *Cross-sectional analysis of data from GPR consultations across five regional training providers in Australia. Data were analysed using simple and multiple logistic regression models.*

**Results:** *Our analysis included details of 118 831 consultations, 20 555 (17.6%, 95% CI 17.4–17.8) with patients aged ≥65 years. Older patient encounters had an increased likelihood of including chronic disease (OR 1.77, 95% CI 1.70, 1.86) and more problems (OR 1.24, 95%*

*CI 1.20, 1.27). However, in-consultation information or advice was less likely to be sought (OR 0.92, 95% CI 0.88, 0.97), and consultations were briefer (OR 0.99, 95% CI 0.99, 1.00).*

**Conclusion:** *Our results suggest relatively limited GPR exposure to older patients coupled with less complex consultations than expected. Solutions will need to be carefully constructed not only to increase caseloads, but also to address training and supervision concerns.*

**Key words:** *aged care, family practice, general practice, graduate, medical, vocational education.*

## Introduction

The ageing population poses significant challenges to health-care systems internationally [1]. With increasing age, there is increasing risk of developing chronic disease: both individual chronic conditions and multimorbidity [2]. Older patients' health-care needs thus become more complex, require greater utilisation and co-ordination of health-care services and are more prone to fragmentation [3]. General practice is tasked with providing the first point of access to, and the co-ordination of, care for this cohort of complex patients [4]. In Australia, 32.5% of general practitioners' (GPs) consultations are with patients aged 65 and older [5]. The responsibility of caring for older patients is a key focus of health-care reform, seeking to improve integration of care while limiting health-care expenditure [6]. Those training to enter the general practice workforce need to be appropriately equipped for this clinical context [4]. General practice trainees (in Australia, termed 'general practice registrars') should also have sufficient depth of understanding of the complexity of this environment to constructively engage in the health system changes occurring in response to the older patient demographic.

Despite our ageing population, the quantity and nature of encounters between older patients and general practice registrars (GPRs) during vocational training is largely unknown. Research from the Netherlands demonstrated GPRs saw significantly fewer patients aged 65–74 years than their trainers [7]. The limited data from similar training systems in Australia and the UK also suggested their GPRs' exposure to older patients was less than that for established GPs [8,9]. A number of reasons for this have been proposed, including older patients' desire for continuity of care with their usual GPs [10], older patients not understanding the role of GPRs [11] and older patients not

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being aware of GPRs' previous training or experience [10], supervision arrangements or time they will spend in a practice [10,11]. Reduced exposure to older patients may also result from structural factors within training practices which result in GPRs being allocated lower complexity presentations [12]. Of further concern is evidence that even when GPRs do consult older patients, the consultation content may be superficial. Patient-based interview and survey data suggest that older patients may treat GPR consultations as a stop-gap measure, for example for a prescription repeat, until they can consult their regular GP to address management concerns [10,11]. In addition, it appears that patients' desire to keep chronic disease management with their regular GP increases with the complexity of older patients' health problems [13], supported by data demonstrating reduced rates of consultation between GPRs and patients with chronic disease in comparison with established GPs [7,14].

While it is clear that older patients will constitute a large proportion of future GPs' caseloads [1], understanding the factors associated with GPRs' exposure to older patients, and the content and outcomes of older patients' consultations with GPRs, remains a complex challenge. However, such an understanding is important in order to optimise GP training to prepare future GPs for their work environment and ensure the safety and quality of clinical care provided by GPRs to older patients. With the intent of providing robust, contemporaneous data to inform general practice training and future research, we sought to describe the pattern of older patients' encounters with GPRs; the prevalence and associations of GPRs seeing older patients, and the content and outcomes of these encounters.

## Methods

This cross-sectional analysis uses data from the Registrar Clinical Encounters in Training (ReCEnT) study, which is an ongoing multisite cohort study of GPRs [15]. The ReCEnT study was approved by the University of Newcastle Human Research Ethics Committee (H-2009-0323). In common with other programs internationally, GPRs in Australia practice within an apprenticeship-like model [16]. GPRs learn experientially while working independently, but under the general clinical supervision of experienced GPs (GP supervisors or trainers) and within a broader educational program delivered by a regionalised national system of regional training providers (RTPs). Participants in ReCEnT were GPRs enrolled with five of Australia's seventeen RTPs across five of the six Australian states. The detailed methodology has been described previously [15]. Briefly, GPRs undertake data collection once in each of their three six-month training terms (or per twelve-month term for part-time GPRs). Initial data collection includes demographic data from participating GPRs, and practice characteristics are recorded by each GPR, each training term. GPRs also record detailed data of 60 consecutive

clinical consultations per term via a paper-based encounter form. Data collection is performed approximately midway through the GPR's term. Only office-based consultations are recorded. The in-consultation data encompass four broad areas: patient demographics, diagnoses/problems managed, investigations/management and educational training aspects.

Problems managed/diagnoses are coded according to the International Classification of Primary Care, second edition classification system (ICPC-2) [17] by specifically trained data entry staff interpreting the description of the problem/diagnosis recorded by the GPR. Problems/diagnoses were also classified as being chronic diseases or not (via a classification system derived from ICPC-2) [18]. GPRs complete data collection as a component of their training program. They may also provide consent for the data to be used for research purposes.

## Statistical analysis

Cross-sectional analysis was performed on ten rounds of ReCEnT data from 2010 to 2014. Individual RTPs contributed from two to ten rounds of data, depending on when they joined the project. The proportion of GPRs' consultations involving an older patient was calculated with 95% confidence intervals. 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. An exchangeable correlation structure was assumed. Initially, all independent variables with  $P < 0.20$  in the univariate analyses were included in the adjusted multiple regression model. Variables which were no longer significant (at  $P < 0.05$ ) in the multivariate model were removed from the final model as long as the removal of the variable did not substantively change the resulting model.

The dependent variable for the analyses was the binary outcome of the consultation being with a patient aged 65 years and older ('older patient') or less than 65 years of age (referent). Independent variables related to the GPR, patient, practice and consultation. GPR variables were age, gender, training term, place of medical qualification (Australia/International), having worked at the practice during a previous term and full-time or part-time status. Patient variables were gender, indigenous (Aboriginal or Torres Strait Islander) status, new patient to the practice and new patient to the GPR. Practice variables were the rurality of the practice location, practice size (number of GPs), area-level socio-economic status, the RTP with which the practice was associated and whether the practice routinely bulk-billed (that is there was no financial cost to the patient for the consultation). Practice postcode was used to define the Australian Standard Geographical Classification-Remoteness Area (ASGC-RA) [19] classification (the degree of rurality) of the practice location and to define the

practice location's Socio-Economic Indexes for Area (SEIFA) Index of Relative Socio-economic Disadvantage (IRSD) decile [20]. IRSD deciles are ranked from most disadvantaged (1) to least disadvantaged (10) [20]. Consultation variables were duration of consultation, the number of diagnoses/problems dealt with, whether the problem/diagnosis was new or existing, whether the problem/diagnosis was a chronic disease, whether pathology or imaging was ordered, whether follow-up was organised and whether specialist referral made. Further educational consultation variables were whether the GPR sought clinical advice or information during the consultation (from their supervisor/trainer, from a specialist or from electronic or hard copy resources) and whether the GPR generated personal learning goals during the consultation to be pursued later.

To examine our research questions, three models were built. The likelihood of an older patient consulting a GPR could plausibly be associated with patient, GPR and practice factors, which were included in the first model. The second model controlled for these factors to evaluate whether variables within the consultation were independently associated with the consultation being with an older patient. Additional independent variables in this model included consultation duration, the number of problems dealt with in the consultation, chronic disease being seen in the consultation and information-seeking by the GPR during the consultation. The third model examined the question of whether actions arising from consultations involving older patients differed from those arising from other consultations. All variables entered in the previous two models were entered in a new model along with the following additional variables: learning goals generated by the GPR, specialist referrals made, follow-up ordered, imaging ordered, pathology tests ordered and medication prescribed. Predictors were considered statistically significant if  $P < 0.05$ . Statistical analyses were programmed using STATA 13.1 and SAS v9.4. All participating GPRs

give informed, signed consent to their data being used for research purposes. Participants are not identified in the study.

## Results

Eight hundred and eighty-four individual GPRs contributed 1996 training rounds of data, including details of 118 831 consultations. Of all eligible GPRs in the five RTPs, 95.3% collected data and consented to its use for research purposes. Of the GPRs' consultations recorded, 20 555 (17.6%, 95% CI 17.4–17.8) were with an older patient. Characteristics of the participating GPRs and selected features of their training rounds are presented in Table 1.

The results of the univariate analyses demonstrating the associations of a consultation being with an older patient are presented in Table 2.

A number of variables were found to be associated with the GPR consultation being with an older person in the multivariable analyses. GPRs' older patients were more likely to be of non-English-speaking background (OR 1.72, 95% CI 1.54, 1.94) and less likely to be female (OR 0.89, 95% CI 0.86, 0.93) or Aboriginal or Torres Strait Islander (OR 0.30, 95% CI 0.24, 0.38) patients. Female GPRs were less likely to consult with older patients than their male counterparts (OR 0.83, 95% CI 0.76, 0.92). Practice variables associated with reduced GPR exposure to older patients included whether the practice routinely bulk-billed Medicare (i.e. no charge to patient) (OR 0.59, 95% CI 0.52, 0.68), larger practice size (0.81, 95% CI 0.75, 0.89) and the GPR's RTP (e.g. OR 0.68, 95% CI 0.59, 0.78 for one RTP compared to the referent RTP). The practice being in an inner regional (OR 1.40, 95% CI 1.20, 1.63) or outer regional/remote/very remote area (OR 1.47, 95% CI 1.22, 1.78) area were associated with increased likelihood of consulting with older patients.

**Table 1: Characteristics of the participating registrars ( $n = 884$ ) and their training rotations ( $n = 1996$ )**

	Description	$n$ † (%)	95% CI	Mean $\pm$ SD
Registrar variable				
Registrar gender	Female	586 (66.3)	63.1–69.3	
Qualified as a doctor in Australia	Yes	685 (78.4)	75.5–81.0	
Registrar age (years)	—	—	—	32.4 $\pm$ 6.3
Training rotation variable				
Training term	Term 1	795 (39.8)	37.7–42.0	
	Term 2	713 (35.7)	33.6–37.9	
	Term 3	488 (24.5)	22.6–26.4	
Registrar worked at the practice previously	Yes	538 (27.3)	25.4–29.3	
Registrar worked fulltime	Yes	1533 (78.5)	76.7–80.3	
Practice routinely bulk bills	Yes	348 (17.6)	15.9–19.3	
Number of GPs working at the practice	1–5	658 (33.8)	31.7–35.9	
	6+	1289 (66.2)	64.1–68.3	
Rurality of practice	Major city	1157 (58.0)	55.8–60.1	
	Inner regional	545 (27.3)	25.4–29.3	
	Outer regional or remote	294 (14.7)	13.2–16.4	
SEIFA IRSD decile of practice	—	—	—	5.5 $\pm$ 2.9

†Numbers may not total 884 or 1996 due to missing data. —, Not applicable; CI, confidence interval; GPs, general practitioners; IRSD, Index of Relative Socio-economic Disadvantage; SD, standard deviation; SEIFA, Socio-Economic Indexes for Area.

**Table 2: Associations of registrar consultations with patient age group (n = 118 831)**

Independent variables	Description	Dependent variable – consultation with patient aged 65+ years		P
		<65 years (n = 96 275) n (%)	65+ years (n = 20 556) n (%)	
Patient gender	Male	36 065 (38.1)	8355 (41.4)	<0.001
	Female	58 614 (61.9)	11 811 (58.6)	
Aboriginal or Torres Strait Islander	No	89 985 (98.6)	19 270 (99.5)	<0.001
	Yes	1318 (1.4)	98 (0.5)	
Non-English-speaking background	No	86 059 (93.7)	17 939 (91.9)	<0.001
	Yes	5818 (6.3)	1587 (8.1)	
Patient/practice status	Existing patient	37 341 (39.7)	10 492 (52.5)	<0.001
	New to registrar	49 529 (52.7)	8926 (44.6)	
	New to practice	7177 (7.6)	583 (2.9)	
Registrar gender	Male	33 879 (35.2)	8362 (40.7)	<0.001
	Female	62 396 (64.8)	12 194 (59.3)	
Registrar full time or part time	Part time	20 402 (21.7)	3977 (19.9)	0.004
	Full time	73 826 (78.3)	16 054 (80.1)	
Registrar term/post	Term 1	38 347 (39.8)	8078 (39.3)	0.73
	Term 2	34 403 (35.7)	7422 (36.1)	
	Term 3	23 525 (24.4)	5056 (24.6)	
Worked at practice previously	No	69 569 (73.2)	14 132 (69.9)	0.024
	Yes	25 500 (26.8)	6093 (30.1)	
Qualified as doctor in Australia	No	20 769 (21.8)	5095 (25.1)	0.005
	Yes	74 430 (78.2)	15 210 (74.9)	
Practice size	Small (<6 GPs)	30 573 (32.5)	8032 (40.2)	<0.001
	Large	63 421 (67.5)	11 941 (59.8)	
Practice routinely bulk bills	No	77 811 (81.4)	17 838 (87.2)	<0.001
	Yes	17 801 (18.6)	2622 (12.8)	
Rurality	Major city	57 576 (59.8)	10 150 (49.4)	<0.001
	Inner regional	25 405 (26.4)	6462 (31.4)	
	Outer regional, remote or very remote	13 294 (13.8)	3944 (19.2)	
Regional training provider	1	26 687 (27.7)	6853 (33.3)	<0.001
	2	12 773 (13.3)	3229 (15.7)	
	3	11 453 (11.9)	2419 (11.8)	
	4	43 579 (45.3)	7616 (37.1)	
	5	1783 (1.9)	439 (2.1)	
Sought in-consultation information/advice	No	76 136 (79.1)	16 429 (79.9)	0.005
	Yes	20 139 (20.9)	4127 (20.1)	
Chronic disease	No	72 741 (75.6)	12 058 (58.7)	<0.001
	Yes	23 534 (24.4)	8498 (41.3)	
Imaging ordered	No	85 851 (89.2)	18 060 (87.9)	<0.001
	Yes	10 424 (10.8)	2496 (12.1)	
Follow-up ordered	No	43 939 (45.6)	8110 (39.5)	<0.001
	Yes	52 336 (54.4)	12 446 (60.5)	
Learning goals generated	No	72 359 (77.0)	15 352 (76.8)	0.044
	Yes	21 588 (23.0)	4645 (23.2)	
Referral ordered	No	82 740 (85.9)	17 829 (86.7)	<0.001
	Yes	13 535 (14.1)	2727 (13.3)	
Pathology ordered	No	74 776 (77.7)	15 890 (77.3)	0.36
	Yes	21 499 (22.3)	4666 (22.7)	
Medication ordered	No	40 662 (42.2)	7468 (36.3)	<0.001
	Yes	55 613 (57.8)	13 088 (63.7)	
		Mean (SD)	Mean (SD)	P
Registrar age		32.6 (6.4)	33.3 (6.6)	<0.001
SEIFA IRSD decile		5.5 (2.9)	5.2 (2.8)	0.016
Consultation duration		17.2 (9.0)	17.5 (9.8)	0.003
Number of problems		1.5 (0.8)	1.7 (0.9)	<0.001

GPs, general practitioners; IRSD, Index of Relative Socio-economic Disadvantage; SEIFA, Socio-Economic Indexes for Area.

Within consultations with older patients, compared to those of other patients, it was more likely that chronic disease was managed (OR 1.77, 95% CI 1.70, 1.86) and that an increased number of problems were addressed (OR 1.24, 95% CI 1.20, 1.27), although information or advice was less likely to be sought (OR 0.92, 95% CI 0.88, 0.97) and the encounters were associated with reduced consultation length (OR 0.99, 95% CI 0.99,

1.00). Among the significant consultation outcomes, older patient encounters were associated with a lower likelihood of generating learning goals (OR 0.84, 95% CI 0.80, 0.88).

Results of the two regression models, each with the dependent variable of 'a consultation being with an older patient' are presented in Table 3.

**Table 3: Simple (univariate) and adjusted (multivariate) logistic regression analyses: associations of a consultation involving an older patient (65+ years); consultations with patients aged <65 years as the referent category**

Independent variables	Description	Univariate		Adjusted	
		OR (95% CI)	P	OR (95% CI)	P
Registrar, patient and practice variables					
Patient gender	Female	0.90 (0.87, 0.93)	<0.0001	0.89 (0.86, 0.93)	<0.001
Aboriginal or Torres Strait Islander	Yes	0.30 (0.24, 0.39)	<0.0001	0.30 (0.24, 0.38)	<0.001
Non-English-speaking background	Yes	1.59 (1.43, 1.77)	<0.0001	1.72 (1.54, 1.94)	<0.001
Patient/practice status	New to practice	0.34 (0.31, 0.37)	<0.0001	0.32 (0.29, 0.35)	<0.001
Referent: existing patient of the practice	New to registrar	0.70 (0.67, 0.73)	<0.0001	0.70 (0.68, 0.73)	<0.001
Registrar gender	Female	0.79 (0.72, 0.86)	<0.0001	0.83 (0.76, 0.92)	0.002
Registrar FT or PT	Part time	0.86 (0.78, 0.95)	0.0036	0.92 (0.84, 1.01)	0.098
Worked at practice previously	Yes	1.07 (1.01, 1.14)	0.0245	0.99 (0.93, 1.05)	0.68
Qualified as doctor in Australia	Yes	0.86 (0.77, 0.95)	0.0048	1.05 (0.92, 1.19)	0.46
Practice size	Large	0.79 (0.72, 0.86)	<0.0001	0.81 (0.75, 0.89)	<0.001
Practice routinely bulk bills	Yes	0.67 (0.59, 0.76)	<0.0001	0.59 (0.52, 0.68)	<0.001
Rurality	Inner regional	1.38 (1.21, 1.58)	<0.0001	1.40 (1.20, 1.63)	<0.001
	Outer regional, remote or very remote	1.47 (1.27, 1.70)	<0.0001	1.47 (1.22, 1.78)	<0.001
RTP	2	1.02 (0.88, 1.18)	0.8245	1.02 (0.86, 1.20)	0.84
Referent: 1	3	0.82 (0.72, 0.93)	0.0016	0.68 (0.59, 0.78)	<0.001
	4	0.69 (0.63, 0.77)	<0.0001	0.93 (0.82, 1.05)	0.26
	5	0.91 (0.65, 1.27)	0.5780	0.81 (0.57, 1.16)	0.252
Registrar age		1.02 (1.01, 1.02)	<0.0001	1.01 (1.00, 1.02)	0.013
SEIFA Index		0.98 (0.96, 1.00)	0.0156	0.97 (0.96, 0.99)	0.003
Consultation variables (adjusted for above registrar, patient and practice variables)					
Sought help any source	Yes	0.94 (0.90, 0.98)	0.0046	0.92 (0.88, 0.97)	0.001
Chronic disease	Yes	2.04 (1.96, 2.12)	<0.0001	1.77 (1.70, 1.86)	<0.001
Consultation duration		1.00 (1.00, 1.01)	0.0003	0.99 (0.99, 1.00)	<0.001
Number of problems		1.35 (1.32, 1.38)	<0.0001	1.24 (1.20, 1.27)	<0.001
Consultation outcome variables (adjusted for above registrar, patient, practice and consultation variables)					
Imaging ordered	Yes	1.12 (1.07, 1.18)	<0.0001	1.13 (1.07, 1.19)	<0.001
Follow-up ordered	Yes	1.27 (1.22, 1.32)	<0.0001	1.11 (1.06, 1.16)	<0.001
Learning goals	Yes	0.96 (0.92, 1.00)	0.0427	0.84 (0.80, 0.88)	<0.001
Referral ordered	Yes	0.92 (0.87, 0.96)	0.0001	0.90 (0.85, 0.95)	0.002
Medication ordered	Yes	1.25 (1.20, 1.30)	<0.0001	1.11 (1.06, 1.16)	<0.001

CI, confidence interval; FT, full time; OR, odds ratio; PT, part time; RTP, regional training provider; SEIFA, Socio-Economic Indexes for Area.

## Discussion

We found that GPRs saw older patients in less than one in five consultations. These encounters were more likely to involve chronic conditions, a greater number of problems and patients from non-English-speaking backgrounds. Other significant associations with exposure to older patients included GPR demographics, practice size, location and billing practices. Compounding this relatively low and variable exposure, our findings indicated encounters with older patients were associated with lower likelihood of generating learning goals, less help-seeking from supervisors and reduced consultation length. Our results suggest a dynamic of reduced GPR exposure to older patients coupled with encounters that were less complex than would be expected in the clinical context.

The proportion of GPR consultations with older patients (17.6%) was considerably less than that reported for established Australian GPs (32.5%) [5], consistent with much earlier, although limited, data from the UK [9]. Female GPRs were significantly less likely to see older patients, which is also consistent with the pattern reported in their established female GP colleagues [21]. This is possibly due to an increased proportion of age- and gender-congruent presentations, such as pregnancy and family planning

consultations [21]. The reduced likelihood of seeing Aboriginal or Torres Strait Islanders in this older group is likely to be partly explained by the reduced life expectancies of this cohort of patients [22]. Consistent with research concerning established GPs, and reflecting the greater multimorbidity of older patients, more problems were addressed and chronic disease was more likely to be seen in GPR consultations with older patients [5]. However, our findings extend those of previous research by describing paradoxical associations with GPR consultations with older patients. There was no subsequent increase in consultation length between older patients and GPRs, as reported in consultations between established GPs and older patients [23]. Furthermore, information or advice from supervisors was less likely to be sought and learning goals less likely to be generated by GPRs during older patient consultations. To our knowledge, these findings are novel and reinforce previous concerns that due to a combination of influences, including patient [10] and practice [12] factors, GPR consultations with older patients address less clinical complexity than expected.

The strengths of the study include the wide geographical scope, the large sample size and high response rate. The study is limited by its cross-sectional design, which does



not allow attribution of causation for the outcomes. Our methodology, which excluded nursing home visits, may have underestimated the overall GPR clinical exposure to older patients. However, the modest nursing home workload of Australian GPRs [8] suggests that our findings are robust.

The characteristics of GPR consultations with older patients we have described are contrary to the medical education literature which encourages engagement in complex problems for health professional trainee development [24]. Reflective practice, considered important for effective lifelong learning in health professionals [24], is thought to be stimulated by complexity of clinical content [25]. A varied case mix has been shown to enhance self-assessed learning outcomes, particularly when combined with good supervision [26], and international standards for postgraduate medical education require trainees to experience an appropriate range of clinical presentations for the trainees' professional context [27]. We believe that if the status quo suggested by our data is maintained, important training opportunities for future GPs will be missed. Our findings also raise questions concerning the comprehensiveness of care provided by GPRs. Even experienced family physicians find consultations with older patients challenging [28]. The lower likelihood of in-consultation help-seeking associated with these consultations raises concerns that GPRs may not recognise potential problems during these encounters and hence not seek advice from their supervisors [29].

Our findings demonstrate that GPRs have substantially reduced caseloads of older patients in comparison with the caseloads of established GPs. However, increasing the exposure of GPRs to older patients will be insufficient to address training needs unless GPRs are also actively engaged in the clinical complexity of this cohort of patients. Solutions to improve GPR engagement with older patients will need to be carefully constructed in order to ensure training needs are met, patients are satisfied and the supervision model is sustainable. Previous research has demonstrated that maintaining continuity of care with their regular GP around GPR consultations increases the acceptability of GPR consultations for older patients [10], which may also enhance the quality of training supervision. However, further research is required to evaluate whether such structured 'shared care' translates into an increased caseload of older patients for GPRs and whether the enhanced supervision improves the in-consultation measures we described in this current study, such as help-seeking, generation of learning goals and consultation length. Further research into registrars' attitudes and observation of older patient-GPR interactions is also required if improved models of care for older patients by GPRs are to be constructed. In the meantime, the data indicate that trainers and training providers need to pay attention to what is occurring in GPRs' encounters with older patients.

Our findings have clear implications for countries with similar GP training models, such as the UK and the Netherlands. This study provides a benchmark against which strategies to enhance GPR interactions with older patients can be evaluated. As the global trend for an ageing population is well established, this represents an immediate and important challenge.

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### Key Points

- Older patients will constitute a very significant proportion of future caseloads in general practice, for which general practitioners need to be equipped.
- The quantity and nature of encounters between older patients and general practice registrars (GPRs) during vocational training is largely unknown.
- This study demonstrated fewer consultations with older patients compared with studies of established general practitioners, with less help-seeking and learning goals compared to other consultations, despite the expected clinical complexity.
- Our findings highlight the need to increase the volume of encounters of older patients with GPRs coupled with support for greater engagement by GPRs in the complexity of older patients' clinical care.

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