Letters

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Bigger practices are associated with decreased patient satisfaction and perceptions of access

The number of GP practices continues to decline year-on-year, while the population grows.[1] This has led to an increasing GP list size, and some practices have merged or been taken over by larger groups. In 2016, the Care Quality Commission chief inspector said the days of single-handed GPs are over.[2]

A colleague and I were recently discussing patient access and our personal experience as service users had become worse after our practices either merged or were taken over by a group. This made me question, 'Is practice list size associated with patient satisfaction or perceptions of access?'

A seminal paper in 1995 concluded that patients preferred smaller practices,[3] but was this still reflected in more recent data? I downloaded the 2022 GP Patient Survey (GPPS) results and the number of patients registered at practices.[4,5] I excluded small practices (list size of <1000) and those where data were not available for the following questions: 1) *'Overall, how would you describe your experience of making an appointment?'* and 2) *'Overall, how would you describe your experience of your GP practice?'*

Data were analysed using Stata (version 17.0) and my code is publicly available.[6] The final analysis included 6389 practices with a mean list size of 9551 (standard deviation 6394, range 1022 to 108 789).

Multilevel mixed-effects logistic regression was used to model the likelihood of patients reporting a 'good' (very good or fairly good) experience to the aforementioned GPPS questions against the number of patients registered at a practice. Adjustments were made for the number of patients per GP and factors reported to impact on patient satisfaction (Table 1).[7]

Increasing practice list size was negatively associated with the likelihood of patients reporting a 'good' experience of making an appointment and overall with their practice (odds ratio [OR] 0.85, P<0.001 and OR 0.89, P<0.001 per increase of 5000 patients, respectively). Table 1 demonstrates this trend when practices were analysed categorically by list size.

Table 1. Patients' overall experience of their practice and making an appointment by practice list size

List size[a]	Freq (*n*)	Mean % reporting 'good'[b]	SD of % reporting 'good'[b]	Odds ratio[c]	95% CI	*P* value
Overall, how would you describe your experience of making an appointment?						
1000 to 9999	4019	63.3	15.7	1		
10 000 to 19 999	2052	56.4	14.4	0.68	0.66 to 0.71	<0.001
20 000 to 29 999	238	53.0	14.1	0.59	0.54 to 0.64	<0.001
30 000 to 39 999	47	50.0	14.9	0.53	0.44 to 0.64	<0.001
40 000 to 49 999	17	49.2	15.3	0.48	0.35 to 0.66	<0.001
50 000 to 59 999	9	45.1	14.0	0.45	0.29 to 0.70	<0.001
≥60 000	7	48.9	14.9	0.64	0.39 to 1.05	0.08
					Wald test across groups	<0.001
Overall, how would you describe your experience of your GP practice?						
1000 to 9999	4019	77.7	12.1	1		
10 000 to 19 999	2052	74.8	11.7	0.76	0.74 to 0.79	<0.001
20 000 to 29 999	238	72.1	11.4	0.65	0.60 to 0.71	<0.001
30 000 to 39 999	47	69.8	11.4	0.59	0.49 to 0.71	<0.001
40 000 to 49 999	17	68.9	15.3	0.54	0.40 to 0.74	<0.001
50 000 to 59 999	9	66.7	11.6	0.53	0.35 to 0.81	0.003
≥60 000	7	65.9	7.9	0.63	0.39 to 1.02	0.063
					Wald test across groups	<0.001

[a]Practices with list size <1000, with missing data, or that reported the number of fully qualified full-time equivalent GPs as 0 were excluded (n = 118 from 2022 GPPS results). [b]'Good' = very good or fairly good in 2022 GPPS. [c]Odds ratios were generated using multilevel mixed-effects logistic regression clustered by GP practice (n = 6389 practices). Adjusted on practice level for 2022 GPPS results for age (% aged ≥75 years), sex (% female), ethnicity (% white), presence of long-term condition (% yes), deprivation (using practice 2019 English Indices of Deprivation),[8] and the number of patients per full-time equivalent fully qualified GP on 31 December 2021.[9] CI = confidence interval. GPPS = GP Patient Survey. OR = odds ratio, SD = standard deviation.

Of course, association does not mean causation. Nevertheless, more research is needed to further assess the impacts of growing list size and practice mergers, as this analysis and my lived experience suggests bigger is not always better.

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Clinical prediction tools to identify patients at highest risk of myeloma in primary care

Koshiaris *et al* presented an equation for predicting 495 patients with myeloma within 2 years, who were aged ≥40 years.[1] Older age, male sex, back, chest, and rib pain, nosebleeds, low haemoglobin, platelets, white cell count, raised mean corpuscular volume, calcium, and erythrocyte sedimentation rate were selected as significant predictors. By using full blood count, an area under the curve (AUC) (95% confidence interval [CI]) was 0.84 (0.81 to 0.87), and sensitivity (95% CI) at the highest risk decile was 62% (55% to 68%). By using the all-test model, the AUC (95% CI) was 0.87 (0.84 to 0.90) and sensitivity (95% CI) at the highest risk decile was 72% (66% to 78%). Regarding the prediction model of myeloma, I understand that the independent variables may be limited for general physicians, and an interval period between medical check and diagnosis of myeloma may be important for the prediction model.

On this point, Blair *et al* conducted a 16-year follow-up study, and reported the significance of anthropometry for contributing diagnosis of myeloma in postmenopausal women.[2] In an age-adjusted model, weight and waist circumference significantly contributed to the risk of myeloma. In contrast, body mass index (BMI) did not relate to the risk of myeloma. This information was partly confirmed by reports by Hagström *et al*.[3] During a median follow-up of 20 years, waist circumference and waist–hip ratio were significant predictors for myeloma, and BMI did not significantly become a predictor of myeloma. Body composition may be a good predictor for long-term risk of myeloma.

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A step towards improving cervical screening uptake

We thank Landy and colleagues for their recent article on non-speculum clinician-taken samples for human papillomavirus (HPV) testing.[1] This article further validates an approach that may improve participation in cervical screening and coincides with the introduction of an option for a self-collected vaginal sample as part of Australia's National Cervical Screening Program. This change, which came in on 1 July this year, enables women to self-collect a vaginal sample within a general practice to screen for 14 high-risk HPV types.

However, rates of cervical screening are lower in Australia compared with the UK. For example, between 2018 and 2020, the estimated 3-year participation rate was 56%, much lower than the 68.9% of women aged 25 to 49 years and 75.0% of women aged 50 to 64 years screened in the UK.[2,3]

This change acts to increase participation in under-screened groups. In Australia, rates of under-screening are greatest for those aged 70–74 years (27% vs 61% in 45–49-year-olds), the same group who may benefit from the option of either self-collected or a non-speculum clinician-collected sample in those who prefer it.[4] Disparities in cervical screening participation occur by remoteness and socioeconomic status, with rates as low as 40% in some regions.[3] Strategies such as mailing out self-sampling kits, as tested in a previous randomised controlled trial (RCT) by the same authors, hold the potential to overcome limitations in access to GPs, particularly in rural areas where difficulties in accessing care have the greatest impact on under-screened groups.

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