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The seen and unseen work of general practice: a national diary study of New Zealand General Practitioners

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ABSTRACT

Introduction. General practitioner (GP) work is mostly recognised and funded according to time spent with a patient. However, substantial work occurs outside of patient contacts. This has significant implications for workforce planning and wellbeing, models of care, and resourcing. **Aim.** This study analysed the range of activities of GPs in daily practice. It aimed to identify patient-facing and non-patient facing clinical work as well as other activities that are required to deliver comprehensive, continuous, primary health care in the community. **Methods.** GPs were invited to participate in two daily diary studies, allocating their activities to six categories. Diaries were completed for 2 weeks in summer (late 2023) and 1 week in winter (mid 2024). Data were analysed to identify the volume of patient-facing work and the range of non-patient-facing clinical and non-clinical activities. **Results.** A total of 566 individual GPs completed the diary studies: 417 in summer, 303 in winter, with 154 across both periods. Fifty-six percent of a GP's time was spent on patient consultations, 31% was spent on non-contact clinical work, 7% on training and education, and 7% on clinical governance and running the organisation. **Discussion.** Although it is recognised that patient contact time is not the only activity that GPs perform in the course of their work, this study provides details of the range and volume of work undertaken by GPs. A 40-h week in general practice cannot only recognise patient contact time. Consideration of all other unseen hours must be factored into resourcing and models of care.

Keywords: capitation, full-time, funding policy, general practice, general practitioner, hidden workload, part-time, primary care, workforce, work hours, workload.

Introduction

The role of the general practitioner (GP), as with other specialties, involves many activities beyond those visible in patient consultations. The New Zealand health system largely counts and funds GP activity based on these episodic events, without recognising additional work undertaken outside consultations. Recognising this unrecorded work would have significant implications for workforce planning, wellbeing, models of care, and resourcing in general practice.

GPs are typically engaged to work up to 10 4-h, patient-facing clinical sessions per week. Although the Government contracts for general practice services, the current model has not kept pace with the increasing demand for specialist GP services,[1] population growth,[2] increasing clinical complexity,[3] or evolving models of care, including preventative care, multidisciplinary clinical teams, and technologies such as telehealth. The current funding model,[4] implemented in 2003, is based on 15-min, in-person patient consultations and does not recognise non-contact clinical work, continuing medical education, the supervision and training of GP registrars and other members of the clinical team, clinical governance, or practice management. By contrast, doctors working in the secondary care system receive allowances for all clinical work, education and training, and supervision.[5]

Obtaining information about the unseen work of GPs is not easy through national data sets. Clinical and non-clinical activity outside patient-facing time is often not recorded or billed and is not easily gathered through electronic health records as has been done

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WHAT GAP THIS FILLS

What is already known: The workload for general practitioners has steadily increased over the last 20 years due to the increasing complexity of health conditions, an aging population, and changes in patient expectations. Systems for analysing general practitioner work are based on patient-facing contacts with little or no recognition of work done outside of a patient consultation.

What this study adds: The work of general practitioners outside of patient-facing time is significant and unrecognised. Non-patient-facing time is mostly clinical but also includes teaching, research, staff management, and other activities similar to all other vocationally trained specialists.

elsewhere.[6] To explore the unseen work of GPs, the Royal New Zealand College of General Practitioners (the College) commenced the Your Work Counts (YWC) project[7] in 2023, and this study forms part of that work.

The aim of the study is to explore and analyse the range of activities that are required of GPs to deliver comprehensive, continuous, primary health care in the community, including patient-facing and non-patient-facing clinical work and other activities.[8] More specifically, this study aimed to identify and quantify the types of work that New Zealand GPs currently do, and to characterise what a 40-h work week looks like.

Methods

The sampling frame was College members, particularly vocationally registered fellows and training-to-become-vocationally-registered registrars, who constituted a substantial majority of the doctors working clinically in New Zealand general practice at the time of the study.

A diary-study methodology was selected to capture detailed, context-rich data on how GPs spend their working time. Similar approaches have been used in New Zealand and internationally in a variety of professional contexts, including health.[10–13]

To help scope the study, 45 GPs explored weekly activities, the hours spent working, patient numbers, and contextual factors at a workshop held during the College's 2023 annual conference.

These findings informed the work categories used in an online survey (see Supplementary material) for GPs to record their daily time usage (Table 1). To avoid incorrect data entries, the survey was programmed to warn participants if more than 10 h was entered against any task on a single day. The survey was tested by a small group of GPs working in a variety of practice contexts. Additional resources were created to aid participation, including examples of how various GP activities should be categorised.[7]

The College promoted the YWC project primarily through direct emails and its weekly e-newsletter, using repeated messages across channels to raise awareness and recruit diary-study participants. All members received an email inviting them to register via a registration survey if they were working clinically in general practice. Registered members were then sent the link to the survey for recording their hours on the first day of the recording period, followed by multiple reminders via email and the e-newsletter. The College provided a 'help desk' via email for respondents with issues or queries.

For the summer study, respondents recorded hours across any 14 consecutive days (including weekend days) between 20 November and 3 December 2023. For the winter study, respondents recorded their hours for any seven consecutive days in the period 10–23 June 2024. The shorter duration of the winter study was to make participation easier during a period of high seasonal demand.

A descriptive analysis was conducted of completed diary submissions that included data for all 14 (summer) or seven

Table 1. Work categories used in the diary studies.

Category	Description
Contact time/consultations	Forms of care you provide (appointments, check-ups, minor procedures, etc.) while in contact with patients through any channel (phone, video, portal, etc.), in any setting (in practice, clinics, urgent care, etc.), and in any format (one-on-ones, groups, clinics, etc.).
Non-contact clinical time	Tasks that relate to care but are not carried out while in contact with your patients. This is a broad category that includes in-box management but also extends to liaising with other staff, interactions with the hospital system, and making referrals, letters, and reports.
Training and education	The training you provide to others, the educational tasks you do for yourself, and the less formal peer and relationship activities that strengthen your networks.
Clinical governance and practice improvement	Work required to maintain patient safety and outcomes at a system level, and projects to address specific areas of community risk and maintain relationships with the wider health sector.
Management/running the organisation	Things that have to be done to support the organisation, from human resources and employment issues to information technology and procurement, to financial management and administration.
Other	Activities that are not covered by any of the categories above.

(winter) of the required days. 'Other' hours entries were reviewed and allocated to work categories where appropriate, and data were checked for outliers.

The focus of analysis was on the average proportion of time GPs spent on each of the work categories, allowing comparisons across demographic characteristics (eg gender) and work characteristics (eg clinical sessions per week). The proportion of time spent on each work category was calculated for each respondent, and averages, standard deviations, and 95% confidence intervals (CIs) were then calculated across the sample.

This study was approved by the University of Otago Human Ethics Committee (Reference Number D24/062).

Results

Participant demographics

A total of 566 individual GPs completed diaries: 417 in the summer study (from 655 registrations) and 303 in the winter study (from 502 registrations), including 154 who participated in both. These samples represented 9.3 and 6.7% of the approximately 4500 doctors working clinically in general practice.[14]

The summer and winter samples were very similar across age, gender, ethnicity, and whether the respondents worked in urban or rural practices (Table 2). They were also similar across the proportion of respondents who worked in general practices with different ownership structures, and those whose work included teaching. There were respondents from almost all 20 Health New Zealand districts. Compared with the College's membership profile,[15] the diary study samples were over-represented by respondents who were women, younger, European, and urban based (Table 2).

The sample sizes for a range of categories were too small ($n < 30$) to draw meaningful insights. This was the case, for example, for Māori and Pacific respondents, for GPs who work fewer than four clinical sessions per week, for all practice ownership models other than GP and corporate owned, and for registrar membership categories. Analyses for these categories are not generally reported in this paper.

In many summer cases and in all winter cases, 'other' hours were reassigned to one of the five work categories (Table 1). No data outliers were found.

How do GPs spend their time?

The distribution of GP time was highly consistent across the summer (*N* 417) and winter (*N* 303) studies, with overlapping 95% CIs for all categories (Fig. 1). Patient consultations accounted for the largest share (summer: 56.4%, s.d. 13.6, CI 1.3; winter: 55.4%, s.d. 13.3, CI 1.5), followed by non-patient-facing clinical work (summer: 30.8%, s.d. 10.5, CI 1.0; winter: 31.0%, s.d. 11.0, CI 1.2). Training and education comprised around 6–7% (summer: 6.4%, s.d. 8.4, CI 0.8; winter: 6.6%, s.d. 8.2, CI 0.9), with smaller proportions for clinical governance (2.6–3.3%), management (3.3–3.7%), and activities categorised as 'other' (<1%). Ignoring the 'other category', the average of these summer and winter figures yields an overall percentage breakdown of 56:31:7:3:4 across the work categories. This is used throughout the paper and referred to as the 'time breakdown'.

Table 2. Sample characteristics.

		Summer study	Winter study	Membership profile[15]
Number	*n*	417	303	3356
Age (years)	Median	45	46	52
	Std Dev	10.6	10.7	
	Range	28–73	28–71	26–84
Gender	Women	74.8% (312)	72.9% (221)	58%
	Men	24.5% (102)	27.1% (82)	42%
	PNTS[C]	0.5% (2)	–	1%
	Non-binary	0.2% (1)	–	
Ethnicity[A]	European	82.2% (343)	84.2% (255)	69%
	Asian	13.7% (57)	13.2% (40)	20%
	Māori	3.8% (16)	3.6% (11)	5%
	Pasifika	1.2% (15)	1.0% (3)	2%
	MELAA[B]	0.7% (3)	0.7% (2)	3%
	PNTS[C]	1.7% (7)	2.0% (6)	2%
	Other	–	–	
Urban–Rural	Urban	79.6% (332)	78.6% (238)	75%
	Rural	11.5% (48)	12.9% (39)	16%
	Unclear	8.9% (37)	8.6% (26)	9%

[A]Tallies to greater than 100% because this was a choose all that apply question.
[B]Middle Eastern, Latin American, African.
[C]Prefer not to say; *n* provided in brackets beside percentages.

The over-representation of women in the studies did not make a significant difference to our findings. Applying a simple post-stratification scaling so that the summer and winter samples matched the College's 2025 membership gender profile[16] (54% female, 46% male), the difference between the unscaled and scaled time breakdowns was less than 1% for all categories, with overlapping CIs in all cases. Unscaled data and findings are therefore used for the remainder of this paper.

The time breakdown held across gender, age, practice location, and ownership models, but varied by the number of clinical sessions worked per week. As shown in Fig. 2, consultation time increased with the number of sessions. For example, in winter, GPs working five sessions per week spent 50.1% of their hours in consultations (*N* 44, s.d. 11.5, CI 3.4), compared with 62.3% at eight sessions (*N* 50, s.d. 11.8, CI 3.3).

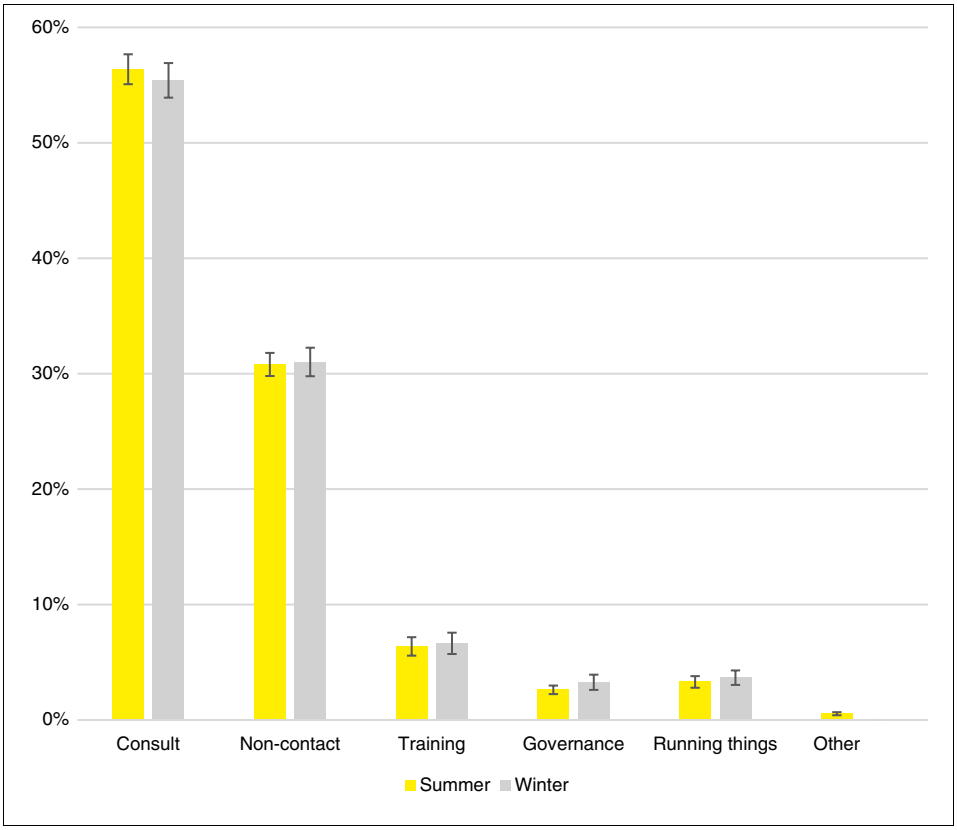

Fig. 1. Average proportion of time on work categories in the summer (*N* = 417) and winter (*N* = 303) studies with the 95% confidence intervals shown as error bars.

The reverse pattern held for non-contact clinical work, which fell from 33.6% (*N* 44, s.d. 9.3, CI 2.8) at five sessions to 27.7% (*N* 50, s.d. 10.0, CI 2.8) at eight sessions. Although there is some variability in the results and despite overlapping confidence intervals, the trend is clear: heavier clinical workloads are associated with a greater share of time in consultations and less in non-contact activities.

Weekend work

Of the 417 summer and 303 winter respondents, respectively 71% and 73% worked during the weekend. Thirty-eight percent of winter respondents worked on both Saturday and Sunday. Proportionately, weekend work comprises more time on non-contact clinical tasks, training and education, and practice management than weekday work.

Hours per week

To work a 36–45-h week, GPs worked seven to eight sessions during the summer and five to seven sessions during the winter (Fig. 3).

Respondents worked approximately 5 h more per week in the winter study than the summer, despite working the same number of clinical sessions. Respectively, summer and winter respondents worked an average of 41.0 h (*N* 303, s.d. 12.4, CI 1.4) and 35.8 h per week (*N* 417, s.d. 11.6, CI 1.1). For both studies, the median number of clinical sessions worked per week was six (summer: s.d. 1.9, CI 0.2; winter: s.d. 1.8, CI 0.2).

Discussion

This study demonstrates that New Zealand GPs spend approximately 56% of their time consulting patients, 31% of their time doing non-contact clinical work, 7% of their time on training and education, 3% of their time on clinical governance, and 4% of their time on managing their organisations.

These findings contribute to an emerging body of work exploring the non-patient-facing workload of general practitioners.[6,8–10] To our knowledge, this is the first comprehensive GP diary study; however, other studies of GP activity have found a similar distribution between patient-facing time and other work.[6,8,17–20] Despite the varied context of general practice internationally, GPs seem to uniformly spend a significant proportion of time on non-contact clinical work that is unseen by many national data gathering processes.

This diary study shows that New Zealand GPs spend 87% (56% patient facing, 31% non-contact clinical) of their time doing clinical work, of which only the patient-facing work is funded. Overall, 44% of GP work is not recognised and therefore unfunded under the current capitation model. It also leads to the misconception that GPs work fewer hours than is the case. Hospital-based specialists in New Zealand

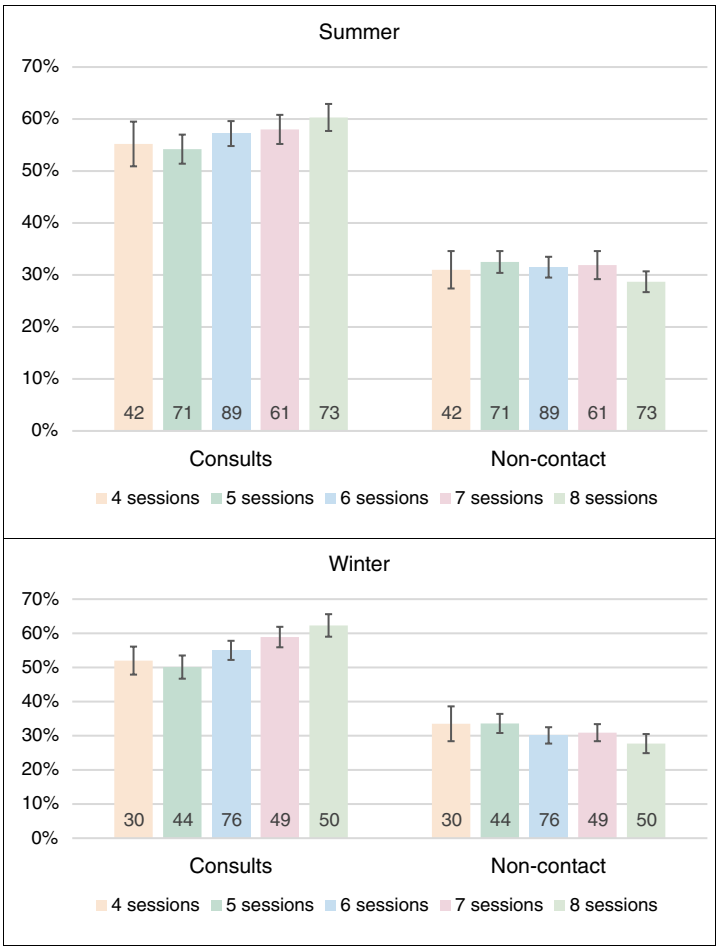

Fig. 2. Average proportion of time on work categories by the number of sessions worked per week in the summer and winter studies, with the 95% confidence intervals shown as error bars and *N* shown at the base of columns.

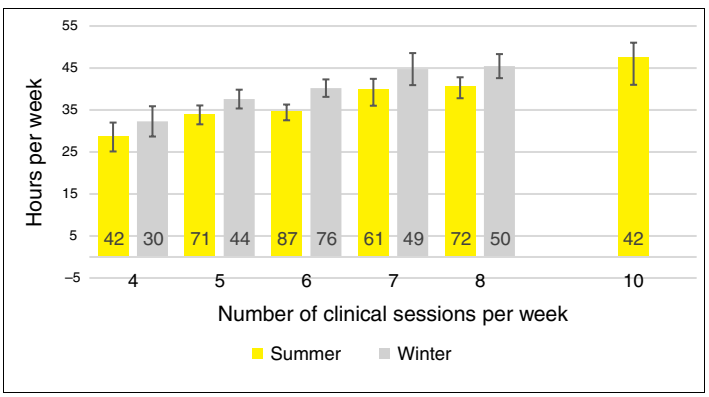

Fig. 3. Weekly hours by number of clinical sessions worked per week, with the 95% confidence intervals shown as error bars. *N* is shown at the column base. Note that columns are not shown for 9 sessions per week in the summer and winter studies, and only for 10 sessions per week in the winter study, due to small sample sizes.

have all aspects of their work recognised: patient contact, non-contact clinical time, and many other professional activities.[5]

GPs themselves recognise that non-patient-facing clinical work, training and education, clinical governance, and practice management are vital to the delivery of high-quality general practice services and to the development of the GP and general practice workforces. Despite the lack of funding, this study demonstrates the high proportion of 'good will' work that is undertaken by GPs. The failure to fully recognise these unfunded hours threatens the sustainability of general practice and contributes to persistent recruitment and retention issues faced by the GP workforce.

A key concern is that as the demand for clinical services increases, the time required for teaching and education, including continuing professional development, and clinical governance, will be further eroded unless these activities are explicitly valued.

According to the College's 2022 Workforce survey, male GPs typically work more sessions per week than female

GPs.[15] Therefore, it is not surprising that males spent, on average, more of their time on consultations and less on non-contact clinical work than women in the diary studies. However, these differences were not significant when comparing men and women working similar numbers of sessions per week.

The findings challenge negative commentary about part-time GPs in general practice and help determine the workload of a 'full-time' GP. A 40-h week for a GP would, based on the time breakdown, comprise 22 h on patient consultations, 12 h on non-contact clinical tasks, 3 h on education and training, 2 h on running the practice, and 1 h on clinical governance. Hodes *et al.*[21] describe similar changes in the National Health Service (NHS), stating that 'eight clinical sessions 20 years ago is probably equivalent to five sessions now'. Based on the study findings, GPs working five to seven sessions per week in the winter should therefore be considered 'full time'. Currently, GPs work, on average, just over a full clinical session (4.5 h) more per week in the winter than in the summer. New ways of recognising and addressing this variable summer–winter demand are needed to protect GPs from overworking and alleviate the need for GPs to use weekends to 'catch up' on non-contact clinical tasks, training and education, and practice management.

An unexpected finding was that GPs who worked four or fewer clinical sessions per week tend to spend proportionately more time on non-contact clinical tasks than GPs who work six or more sessions per week. This difference has resourcing implications. If more GPs decide to reduce their hours to manage overwork and their wellbeing, proportionately more GPs will be needed to cover the same demand. Workforce planning, therefore, needs to move beyond simple headcounts and account for the variability in the number of sessions GPs work per week.

The findings also have implications for the evolving multi-disciplinary-team model of care. Although expanding practice teams can improve access and equity, these models require GPs to spend more time on supervision, coordination, and clinical governance. This work risks adding to the already heavy but hidden GP workload rather than alleviating it. In response, Aotearoa New Zealand needs more GPs and system changes that properly count and value all the tasks required for quality care.

Strengths and limitations

The study's methodology was a first in New Zealand and provided rich data on GP working practises. The study built on previous workforce surveys and supported College members' reports of necessary but unfunded work.

Although the sample sizes were sufficient to estimate the overall time breakdown, some subgroups were too small for meaningful analysis. Further targeted studies are needed to examine the seen and unseen work of general practice in, for example, Māori, Pacific, and rural contexts.

The methodology did not include ways of validating the self-reported hours, and winter estimates may be less accurate due to the shorter collection period and smaller sample size. The findings of our study could be complemented by future studies in New Zealand and internationally.

The study did not record GP break times. This is an area for future research.

Although this study focused on GP activities, the next phase of the YWC project will investigate the services accessed by patients from GPs and other multidisciplinary clinical team members. This will include a breakdown of non-patient-facing clinical activities and enable the College to offer guidance on safe and sustainable patient loads for workforce modelling and the development of a fair and sustainable funding regime.

Conclusion

This study provides strong evidence about the significant time GPs spend on work tasks outside patient consultations that are essential to the delivery of general practice services in New Zealand. With demand increasing for a wide range of services as the population ages and grows, our findings should be used by workforce planners and policymakers to help ensure the long-term sustainability of the GP workforce in all aspects of their work.

Supplementary material

Supplementary material is available online.

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Data availability. The data collected for this project are held by the Royal New Zealand College of General Practitioners and only available to Policy Team of RNZCGP.

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