

ERG2024-01: Telehealth and GP registrar education: Final report

Aim and objectives

Telehealth (TH) refers to the use of a virtual medium, such as a phone or video, to conduct a health consultation.¹ Since 2020 (COVID-19), TH consultations have been remunerated by the Medicare Benefits Scheme, with uptake in general practice rapidly increasing. In 2020, 36% of remunerated GP consultations were for TH, and for registrars across 2020-2021, 21% of consultations were by TH.²⁻⁶ Registrar TH consultations are associated with shorter consultation duration, fewer problems addressed per consultation, less recourse to supervisory assistance, more frequent generation of learning goals and scheduling of follow-up consultations.²⁻⁶ These associations suggest a profound effect if a substantive proportion of an individual registrar's consultations are via TH. This project aimed to '*provide a granular understanding of multiple aspects of GP registrars' and GP training practices' engagement with, and experience of, TH.*' The research questions were:

- 1) Investigate the effects of COVID-19 related lockdowns on GP registrar's telehealth consultations in Australia.
- 2) What is the temporal pattern in frequency of telehealth use within registrar?
- 3) What is the temporal pattern in frequency of telehealth use within program (2020-25)?
- 4) What is the inter-practice variability in telehealth use?
- 5) What are the teaching practice's procedures relating to telehealth?
- 6) What is the frequency of physical examination and observations in telehealth consultations compared to face-to-face consultations?
- 7) What are registrars' and supervisors' comfort with providing care by telehealth?
- 8) Do registrar responses to uncertainty modify registrar comfort/confidence in performing consultations via telehealth?
- 9) Are telehealth (compared to face-to-face) consultations associated with more 'questionable' in-consultation clinical actions?
- 10) Is there an association of GP registrars performing telehealth consultations (rather than face-to-face consultations) and registrars' culturally and linguistically diverse (CALD) status?

Method

This study included two components: (i) a component nested in the Registrar Clinical Encounters in Training (ReCEnT) cohort study, and (ii) a stand-alone questionnaire component. ReCEnT is an inception cohort study of in-consultation clinical and educational experiences and actions of Australian GP registrars. Data obtained for this project were from 2020-2025. The questionnaire was electronically distributed to registrars, supervisors and practice managers of practices hosting AGPT registrars in Semester 1, 2025. It contained items regarding practices' TH policy and procedures, and registrars' and supervisors' comfort level in performing different types of TH consultations, utilising vignettes. A range of statistical analysis were utilised (including descriptive statistics, correlations, and regressions).

Results

Research question 1. During COVID-19 lockdowns, 41% (n=6,053) of consultations were conducted via TH (96% by phone), compared with 22% (97% by phone) during non-lockdown periods. Lockdowns were associated with increased TH use (univariable OR 2.11, P<.001; adjusted OR 1.26, P=.003).

Research question 2. TH use increased modestly across training terms, with Term 2 (OR 1.10) and Term 3 (OR 1.12) showing higher odds of TH use compared with Term 1 (mean proportion of TH use was 18.4%). The proportion of TH consultations in Term 1 (higher than anticipated) is notable.

Research question 3. Yet to be analysed multivariably. Descriptive statistics suggest a halving in TH 2020-2025.

Research question 4. A substantial practice-level variability in TH use was observed, with Median ORs (MORs) of 2.09 in the empty practice model. There was little change with adjustment for confounding (MOR 2.08) and in the fully adjusted model (MOR 2.04). This suggests that the large variability may likely to be due to the unmeasured confounding such as practice policy and procedures and practice culture.

Research question 5. Between 94% and 99% of registrars, supervisors, and practice managers (PMs) reported that their practice conducted TH consultations; however, formal TH policies were inconsistently reported (PMs 77%, supervisors 51%, registrars 32%, with wide confidence intervals), and booking without triage varied widely (always: 11–14%; never: 13–24%).

Research question 6. For registrars conducting ≥ 10 of their 60 encounters each term by TH, most perform examinations for <15% of problems seen via TH compared to ~50% for face-to-problems. For problems seen by phone, 1.4% (n=483) involved an examination, when problems were seen by video, 7.1% involved an examination (n=70).

Research question 7. Currently being analysed.

Research question 8. Currently being analysed.

Research question 9. Via TH, the odds of registrars performing a 'low value', 'questionable' action are 20% lower than during face-to-face consultations (adjusted OR 0.80, 95% CI [(0.73, 0.86]).

Research question 10. Our hypothesis that 'CALD registrars perform less TH than non-CALD registrars' was not supported at the $p < 0.05$ level, despite a clinically significant effect size (OR 0.91, 95% CI [0.81, 1.03]; $p = 0.139$).

Discussion

Our study provides several take-home messages including:

- TH use increased during periods when practices were affected by COVID-19 lockdowns showing the importance of utilising a COVID-19 lockdown variable during this period.
- GP registrars in training Terms 2 and 3 were significantly more likely to use TH than those in Term 1. Even though there is this difference, the levels of telehealth use in Term 1 registrars is high and raises the question of if term 1 registrars are doing too much telehealth; should the change between term be more significant?
- Our findings suggest that practice culture may play a role in the very large intra-practice variability of registrar TH use.
- Almost all GP practices reported providing TH services. Practice managers were more likely to identify their practice as having a formal TH policy, supervisors were less likely, and GP registrars were the least likely.
- Only a small proportion of TH consultations involved clinical examinations, although examinations were more common in video-based than telephone-based consultations.
- CALD registrars are not statistically significantly less likely to undertake TH consultations. The lack of clear-cut association may represent lack of agency on the part of registrars in determining whether consultations are TH or face to face – a potential issue in the support we provide to CALD registrars.

Implications

The substantial variability in telehealth use between practices suggests that registrars' exposure to TH is heavily influenced by their training environment. More consistent TH exposure across practices is needed to ensure equitable registrar training and to support the development of essential TH skills.

The increased uptake of TH during COVID-19 lockdowns demonstrates how TH offers accessibility and continuity of care for patients, reinforcing the importance of embedding TH readiness into routine practice planning and policies.

A higher use of TH in later terms, may suggest increasing comfort in TH practice. However, current TH training is minimal and embedding training into the program would improve competency and skill development. Further TH GP training guidelines would also improve training outcomes.

The fact that very few TH encounters involve examinations, particularly in telephone consultations, highlights the need for clearer clinical guidelines around when and how physical examinations should be incorporated, including increased support and infrastructure for video consultations. Finally, given that almost all practices provide TH but many lack a formal TH policy, there is a clear opportunity for policy development to clarify practice processes and triage pathways. These implications add to the need of strengthening TH training, infrastructure and governance, to enhance quality and consistency in registrar education, and patient care and safety.

Future research

Some future research ideas following on from the current study would include identifying the specific GP practice attributes which affect the large variability seen in registrar telehealth use across practices. Also, the establishment of a telehealth curriculum for GP registrars and an evaluation of such a program. Finally, research to identify the range of proportion of telehealth consultations that is optimal to learn about TH and not impact learning skills dependent upon face-to-face consultations. All of these would further inform GP training guidelines.

References

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