Effects of inadequate hospital clinical handover on metropolitan general practitioners in Queensland: A qualitative study

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Background and objective
Transition from hospital to community care is well established as a high-risk time for patients. Inadequate clinical handover to general practice puts patients at risk of medical error, adverse events and rehospitalisation. We sought to understand the effects on general practitioners (GPs) of poor clinical handover from the inpatient, outpatient and emergency department settings.

Methods
Qualitative methodology was used through conducting semi-structured interviews with purposively selected GPs. Interviews were undertaken until data reached saturation and no new themes emerged. The interviews were thematically analysed and coded.

Results
Key themes emerging included poor communication leading to patient safety concerns, time taken away from patient care and GPs experiencing a lack of professional respect.

Discussion
Clinical handover from the hospital sector remains a source of frustration for GPs. Poor handover demonstrates a lack of appreciation for the important role of the GP in continuing the care of patients and puts patients at risk of poor outcomes.

CLINICAL HANDOVER refers to the transfer of physical care, information and responsibility of a patient to another person or group.[1] The transition from a hospital setting is a critical period for continuity of patient care and is well established as a high-risk time for patients.[2,3] Inadequate handover communication can lead to errors, adverse events and rehospitalisation.[4] The main modalities of communication between hospitals and general practitioners (GPs) are discharge summaries and outpatient and emergency department (ED) letters. These documents should provide information about the care provided to a patient during an encounter with the hospital service and recommendations on next steps in management.[5] Succinct and accurate information, delivered in a timely manner, is fundamental to preventing adverse patient events.

Although the importance of effective communication during this transition is recognised in the Australian National Safety and Quality in Health Service standards,[1] the literature indicates that consistently achieving this can be challenging. Several Australian studies have highlighted gaps in the transfer of information from hospitals to primary care clinicians following discharge of a patient.[6–8] Such deficits are recognised worldwide.[9,10] A variety of strategies have been used to improve clinical handover processes. Healthcare organisations have implemented checklists in an effort to streamline and improve the process of creating and delivering discharge summaries.[11] The European Union appealed for standardised discharge summary content to be implemented within its borders due to the overt deficiencies of the existing format.[12] Komenan et al proposed an optimal format for clinical handover of older patients.[13] The introduction of electronic delivery systems resulted in some improvements.[1,5] However, there remains dissatisfaction among GPs regarding the timeliness, content and accuracy of discharge summaries.[8,14]

In addition to discharge summaries, clinical handover from encounters in the ED and outpatient settings is also problematic. GPs have indicated that letters from EDs do not arrive in a timely manner, lack essential information and do not contain clear follow-up instructions.[15] Outpatient letters are similarly delayed and devoid of important information, indicating a failure to acknowledge the role of the GP in continuity of care outside the hospital service setting.[16]

Patients accessing hospital services often have complex medical issues, including multiple comorbidities, polypharmacy and conditions associated with an increase in mortality.[17] Therefore, the period immediately following hospital discharge is particularly challenging for the patient as they transition to home. Continuity and optimisation of patient care in the community relies on GPs having timely

access to complete and accurate patient records, including the reason for presentation or admission, treatment administered, medications at discharge and potential future medical issues that need to be addressed.[1] GPs state that the delay in hospitals transferring clinical handover information affects their ability to deliver optimal patient-centred care.[18]

Non-adherence to medication changes made during an admission has been shown to increase the rates of re-presentation to EDs, readmission to hospital within 30 days and death due to suboptimal medical management.[19] Despite global awareness of the importance of well-constructed clinical handover information for safe transition of care, research has shown that approximately 49% of discharge summaries still contain omissions or incorrect information.[4] In addition, studies indicate that only one-third of GPs had a discharge summary accessible prior to the patient's first visit after discharge.[20] A 2017 Australian pilot study outlined that the most significant concerns reported by GPs were related to quality, content and timeliness of discharge summaries.[21]

The current literature highlights a continuing need to improve the quality of clinical handover processes. This work aims to build on the documented inadequacy of clinical handover by obtaining the perspectives of GPs on its effects and strategies that could facilitate its improvement.

Methods

Qualitative methodology was used through conducting semi-structured interviews, and analysis involved a general inductive approach.[22] As this was an exploratory study, thematic analysis was utilised. The standards for reporting qualitative research were used in the development, analysis and reporting of the study.[22,23]

Setting

This research was undertaken within the boundaries of one Queensland metropolitan hospital and health service with reference to clinical handover from two public hospitals delivering inpatient, outpatient and emergency services.

Participants

GPs were recruited through a request for participants in health service and Primary Health Network email bulletins. GPs who work in general practices across the health service region were purposively selected for being currently in active practice and their interest in discussing their experience of clinical handover from the health service. Those who met the inclusion criteria were provided with a copy of the study participant information and consent form, and interview times were arranged with those who agreed to participate. Snowball sampling was used, with interviewed GPs being asked to nominate colleagues who might be interested in participating in the study.

Data collection

A short demographic questionnaire was completed prior to the semi-structured interviews. An interview guide was developed considering the literature and researchers' experience. The interview guide was piloted for content and face validity by a GP and experienced pharmacist researcher. Comments were incorporated as appropriate with the final interview guide consisting of 10 questions with prompts (Appendix 1; available online only). Interviews were conducted between February and April 2022 by two final-year medical students (one female, one male) via Microsoft Teams, transcribed, reviewed for accuracy and saved on a password-protected hard drive. The medical students were supervised by a clinical researcher (PhD, B Pharm) and GP (FRACGP) and undertook trial interviews to receive feedback and refine their interview technique. New interviews were conducted until data saturation was reached and no new themes emerged.[24]

Data analysis

Interviews were thematically analysed using an inductive approach.[22] Interviewers collated field notes and provided a summary to the team after each interview. These were used, together with the transcript, during data analysis. The coding framework was developed and reviewed through an iterative process involving all team members using NVivo software. Final coding was undertaken by one team member (KJ) in consultation with the team until agreement was reached.

Ethics

Ethics approval was obtained from a Hospital and Health Service Human Research Ethics Committee (low and negligible risk application, HREC/2021/QGC/81190).

Results

Twelve GPs were interviewed. The median interview time was 22.5 minutes (range: 17–27 minutes). Participant characteristics are outlined in Table 1.

Three key themes emerged regarding the experiences of inadequate clinical handover for GPs: poor communication leading to patient safety concerns, time taken away from patient care and GPs experiencing a lack of professional respect. GPs also recognised positive examples that improved handover and additional strategies for future improvement.

Table 1. Participant characteristics

Gender	**n (%)**
Male	4 (33)
Female	8 (67)
Age (years)	
21–30	2 (17)
31–40	3 (25)
41–50	4 (33)
51–60	2 (17)
≥61	1 (8)
Years since graduation	
<5	0
5–10	2 (17)
11–15	3 (25)
16–20	2 (17)
20+	5 (41)
University of first medical degree	
Australia	8 (67)
Overseas	4 (33)
Specialist GP qualification	
Yes	10 (83)
No	2 (17)

GP, general practitioner.

Poor communication leading to patient safety concerns

More than half the participants provided examples of inadequate clinical handover compromising patient care. Participants indicated that when clinical handover communication is missing, they attempt to construct the most likely scenario from the patient's recall and the pieces of information they glean from various sources. However, at times:

> *There's been this horrible, dangerous gap where GPs are* (spent) *guessing what to do.* (GP 9)

Of particular concern is the failure to communicate important information with ongoing clinical implications, such as complex medical admissions, investigations or new life-changing diagnoses:

> *You know they've had important procedures or investigations or something done, and you've just got no idea what happened while they were in hospital.* (GP 3)

GPs believed patient care was compromised when follow-up plans were not communicated in a timely manner:

> *If they take two weeks to send the discharge summary and they wanted bloods done a week ago … It's not great … The patient suffers because of that.* (GP 9)

GPs recognised clinical handover as a two-way process and noted patient safety consequences of not liaising with the usual GP and changing medications, with significant ramifications during an admission:

> *They had a seizure. And then instead of recovering from the seizure* (they) *went into* (an) *acute psychotic episode because their anti-psychotic medication was abruptly stopped.* (GP 3)

Participants indicated that poorly curated clinical handover documentation can compromise patient safety:

> *She developed some quite serious adverse effects from the medications … It took us weeks of dismantling to try to work out what had actually happened.* (GP 9)

Beyond clinical safety are psychological sequelae and anxiety generated when a patient realises their trusted GP does not have access to important clinical information to support their ongoing care:

> *She's just been told she has metastatic cancer … how did I find out about it? … Her terribly traumatised daughter came to see me in tears … It was all my GP skills guessing what the hell is going on.* (GP 9)

Time taken away from patient care

Participants indicated that inadequate clinical handover placed a time burden on them to search for the missing information that was needed to continue the care of the patient. They indicated that it could take a significant amount of time to acquire the necessary information, including sourcing signed release of information consent forms from the patient, sending a fax to the hospital to request information, searching alternative systems (eg Health Provider Portal [www.health.qld.gov.au/clinical-practice/database-tools/health-provider-portal] or My Health Record [www.digitalhealth.gov.au/initiatives-and-programs/my-health-record]) or phoning the hospital to speak with the GP liaison officer or treating team. They reported that it can be time-consuming to reconcile changes in medications and that it is a 'mission' to understand why changes have been made:

> *It puts your time backwards by a long time … sometimes even 40 minutes.* (GP 6)

Participants were particularly frustrated by delays with outpatient letters, some taking months from the time of the appointment to be delivered:

> *I've had a letter four months later, which as you can understand … palliative care … not particularly useful.* (GP 7)

In addition, they highlighted that these time-consuming searches were at times non-productive as the handover documentation had not been created and, therefore, was not available. GPs pointed out the opportunity cost incurred in taking their time away from other patients and that this effort was not remunerated:

> *It's always useful for everyone to remember it's all unpaid from our perspective; it's all in our spare time; it's in our love for the job.* (GP 4)

Participants were also concerned about unnecessary duplication of work related to delayed clinical handover and resultant waste and cost to the system. They indicated that if the requisite information was not available at the time of the first post-hospital encounter, it would generally necessitate an additional appointment. Furthermore, participants indicated that when they could ascertain that follow-up testing was required, they might repeat tests rather than wait for the hospital results to be made available:

> *I think a lot of people just go for the easy way out in terms of 'Well, we'll just reorder the tests in the community', but in the end* (that) *costs everyone.* (GP 1)

GPs experience a lack of professional respect

Participants raised various issues related to professional respect (professional respect includes communicating with medical colleagues involved in a patient's care in a clear, effective, courteous and timely manner).[25] A key theme raised by participants is that the role of the GP in continuing care is either dismissed or not considered important:

> *I do not believe that clinical handover is considered a high priority.* (GP 1)

From experience, it feels that:

> *informing the GP wasn't considered in any way, shape or form important.* (GP 1)

When clinical handover documentation does arrive, it is also clear that there is little understanding of the role of GPs:

> *They have unreasonable expectation of what a GP can do in the time frame.* (GP 11)

> *Sometimes you get treated like an intern … They want you to do all of these things.* (GP 11)

Participants were also concerned about the lack of recognition of their role across the lifespan and for the family after a patient has died:

> *One thing that's really appalling … we don't even get told if our patients have died.* (GP 9)

GPs highlighted a double standard in which they are held to strict account in referral processes but for which they are not shown the same courtesy and respect in return:

> *It seems* (a) *bit one-sided.* (GP 1)

Facilitators of optimal handover

Participants indicated that clinical handover could be improved by allocating the task to more senior clinicians and using alternative modalities for urgent communication. Despite frustrations, participants recognised the challenges for hospital interns and junior doctors. They propose that part of the challenge in producing accurate, succinct clinical handover documents might be related to the task falling to the least experienced team member:

> *The system actually is unfair in asking junior doctors to complete this when the senior doctors are really the ones who know what's going on with the patient.* (GP 1)

Additionally, clinical handover would benefit from:

> *more input from registrars or even from the consultants on that day of discharge to make sure that the final plan is clear.* (GP 10)

In addition, participants recognised that junior doctors have an intense workload and discharge summaries probably are a low priority in a long list of daily tasks for them:

> *The least important of the jobs for an intern … You know, you've got a patient that needs fluids written up, they need a med chart done … cannulas … bloods taken … All those things take priority over doing paperwork.* (GP 3)

Furthermore, they acknowledged that some areas have consistently good communication or have made efforts to improve:

> *The emergency department's improved enormously … so that's a big credit to them.* (GP 9)

> *They will have a discharge summary done by … an intern, resident or consultant and that's usually quite timely.* (GP 3)

In addition to providing positive feedback on improvement, participants shared experiences that have proven to enhance clinical handover and could be utilised in the future. Almost all commented that receiving a phone call from a hospital doctor to advise a patient was returning to their care was extremely useful:

> *A phone call from someone … That makes a huge difference … We can actually have a conversation.* (GP 8)

While recognising the challenges of making and taking phone calls during a busy day in a hospital or GP clinic, GPs felt this was a valuable way to convey time-critical information, supported by written communication later:

> *The best instances … You actually get a phone call … This is what we've done … This is what we need you to do. And that's amazing because you know straight away, instantaneously what needs to be done.* (GP 5)

Leaving a message with the practice nurse was also felt to be an acceptable way to communicate information that needed to be addressed promptly.

Discussion

Clinical handover to general practice is critically important for the 11.6 million admitted patients, 8.8 million ED presentations and 55 million non-admitted occasions of service provided annually in Australia.[26] The Royal Australian College of General Practitioners highlights the important role of general practice in providing comprehensive, patient-centred care and warns that failing to communicate with a patient's GP risks disruption of continuity and quality of care.[27] At the time of discharge from hospital, GPs are best placed to combine existing knowledge of their patient with new information from the hospital encounter to arrange follow-up and ongoing care.

General practice is currently under unprecedented stress with workforce, access and funding issues.[28] Failing to provide GPs with a concise and accurate summary, delivered in a timely manner, necessitates GPs taking time from the care of patients to undertake administrative tasks to find the necessary clinical handover information. This time is doubly wasteful when the search reveals the documentation is not available and a patient appointment is not meaningful or of low value because the information is not available and the ability to use the time effectively during the appointment is lost. In addition, poor clinical handover is wasteful to the broader community through unnecessary repeat appointments or investigations, medication misadventure and adverse events, and re-presentations to hospital.[9,17,29]

Failure to provide information about new diagnoses, procedures undertaken, significant test results, medication changes and follow-up plans compromises the ongoing care and safety of the patient. Although lack of clinical handover is a prominent concern, GPs also note that the provision of too little or too much information can be equally as challenging. GPs, patients and their families find it distressing when information about significant diagnoses or the death of a patient is not communicated to the GP. Armed with all relevant clinical handover information, GPs can coordinate the ongoing care of the patient and their family in the community and optimise safety and outcomes.[27]

A new theme that emerged in the context of poor clinical handover is the lack of professional respect demonstrated to GPs by their hospitalist counterparts. GPs feel their specialist skills in patient care are not recognised, and they are reduced to following orders and chasing documentation. There is a general sense that clinical handover to GPs is not considered important and, therefore, not prioritised. Furthermore, there is a general lack of understanding of what GPs can and cannot do.

Although strategies such as the Health Provider Portal have been proposed as a solution to facilitate GPs' access to hospital information, the login process is cumbersome and time-consuming. The platform does not provide a complete record of the patient's encounter nor the nuances of the clinical decision making made by the treating team. GPs might waste time looking for information that does not exist or is incomplete.

GPs understand the challenges faced by junior doctors and call for clinical handover to be led by more senior clinicians, with most recommending that a timely phone call could

facilitate improved handover. Professional courtesy would dictate that a GP should receive clinical handover information directly and not be expected to 'chase' it. An absence of this suggests that the role of the GP is neither understood nor respected by the hospital system.

The limitations of this study include a small sample of respondents; however, saturation was reached with this number as no new themes emerged. It is possible that those who agreed to participate might have had particularly negative experiences they wished to air. As all participants were from one metropolitan area and reported experiences with clinical handover only from the local public health service, the findings might not be representative of experiences in other areas of the health sector, other Australian jurisdictions or internationally. Potential interpretation bias was recognised and minimised through an iterative process involving all team members.

Conclusion

In conclusion, this study supports previous findings that GPs are not continuously receiving timely and accurate clinical handover communication from hospitals. While corroborating previous findings, this study goes one step further to address the effects this has on GPs, notably, compromised patient care, wasted time and resources, and experiencing a lack of professional respect. Further research is required to understand the limitations in the hospital at the point of discharge and to explore new strategies, enabled by digital technologies, for improved communication and patient outcomes in the future.

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References

1. Australian Commission on Safety and Quality in Health Care. Communication at clinical handover. Australian Commission on Safety and Quality in Health Care, 2019. Available at www.safetyandquality.gov.au/standards/nsqhs-standards/communicating-safety-standard/communication-clinical-handover [Accessed 15 March 2023].
2. Forster AJ, Clark HD, Menard A, et al. Adverse events among medical patients after discharge from hospital. CMAJ 2004;170(3):345–49.
3. Krumholz HM. Post-hospital syndrome—An acquired, transient condition of generalized risk. N Engl J Med 2013;368(2):100–02. doi: 10.1056/NEJMp1212324.
4. Moore C, Wisnivesky J, Williams S, McGinn T. Medical errors related to discontinuity of care from an inpatient to an outpatient setting. J Gen Intern Med 2003;18(8):646–51. doi: 10.1046/j.1525-1497.2003.20722.x.
5. Australian Commission on Safety and Quality in Health Care. National guidelines for on-screen presentation of discharge summaries. Australian Commission on Safety and Quality in Health Care, 2017. Available at www.safetyandquality.gov.au/sites/default/files/2019-06/National-guidelines-for-on-screen-presentation-of-discharge-summaries-Sep-2017.pdf [Accessed 15 March 2023].
6. Tong EY, Roman CP, Mitra B, et al. Reducing medication errors in hospital discharge summaries: A randomised controlled trial. Med J Aust 2017;206(1):36–39. doi: 10.5694/mja16.00628.
7. Page AT, Cross AJ, Elliott RA, et al. Integrate healthcare to provide multidisciplinary consumer-centred medication management: Report from a working group formed from the National Stakeholders' Meeting for the Quality Use of Medicines to Optimise Ageing in Older Australians. J Pharm Pract Res 2018;48(5):459–66. doi: 10.1002/jppr.1434.
8. Latimer S, Hewitt J, Teasdale T, de Wet C, Gillespie BM. The accuracy, completeness and timeliness of discharge medication information and implementing medication reconciliation: A cross-sectional survey of general practitioners. Aust J Gen Pract 2020;49(12):854–58. doi: 10.31128/AJGP-04-20-5375.
9. Schwarz CM, Hoffmann M, Schwarz P, Kamolz LP, Brunner G, Sendlhofer G. A systematic literature review and narrative synthesis on the risks of medical discharge letters for patients' safety. BMC Health Serv Res 2019;19(1):158. doi: 10.1186/s12913-019-3989-1.
10. Shepperd S, Lannin NA, Clemson LM, et al. Discharge planning from hospital to home. Cochrane Database Syst Rev 2013;1;2013;(1):CD000313-CD. doi: 10.1002/14651858.CD000313.pub4.
11. Soong C, Daub S, Lee J, et al. Development of a checklist of safe discharge practices for hospital patients. J Hosp Med 2013;8(8):444–49. doi: 10.1002/jhm.2032.
12. Knai C, Footman K, Glonti K, et al. The role of discharge summaries in improving continuity of care across borders. Eurohealth (Lond) 2013;19(4):10–12.
13. Komenan K, Bouveret P, Delecluse C, et al. A qualitative analysis of the optimal discharge summary: Effective communication of medication changes for older patients. J Appl Gerontol 2023. doi: 10.1177/07334648221145847.
14. Kripalani S, LeFevre F, Phillips CO, et al. Deficits in communication and information transfer between hospital-based and primary care physicians: Implications for patient safety and continuity of care. JAMA 2007;297(8):831(11).
15. Lane N, Bragg MJ. From emergency department to general practitioner: Evaluating emergency department communication and service to general practitioners. Emerg Med Australas 2007;19(4):346–52. doi: 10.1111/j.1742-6723.2007.00983.x.
16. Farquhar MC, Barclay SIG, Earl H, Grande GE, Emery J, Crawford RA. Barriers to effective communication across the primary/secondary interface: Examples from the ovarian cancer patient journey (a qualitative study). Eur J Cancer Care (Engl) 2005;14(4):359–66. doi: 10.1111/j.1365-2354.2005.00596.x.
17. Nobili A, Garattini S, Mannucci PM. Multiple diseases and polypharmacy in the elderly: Challenges for the internist of the third millennium. J Comorb 2011;1(1):28–44. doi: 10.15256/joc.2011.1.4.
18. McLean K, Rice M, Tellis N. GPs want clinical handovers, not discharge summaries. InSight+, 19 March 2018. Available at https://insightplus.mja.com.au/2018/10/gps-want-timely-appropriate-hospital-handovers/ [Accessed 15 March 2023].
19. Weir DL, Motulsky A, Abrahamowicz M, et al. Failure to follow medication changes made at hospital discharge is associated with adverse events in 30 days. Health Serv Res 2020;55(4):512–23. doi: 10.1111/1475-6773.13292.
20. Brodribb WE, Mitchell BL, Van Driel ML. Continuity of care in the post partum period: General practitioner experiences with communication. Aust Health Rev 2016;40(5):484–89. doi: 10.1071/AH15144.
21. Mahfouz C, Bonney A, Mullan J, Rich W. An Australian discharge summary quality assessment tool: A pilot study. Aust Fam Physician 2017;46(1):57–63.
22. Patton MQ. Qualitative research & evaluation methods: Integrating theory and practice. 4th edn. SAGE Publications, 2015.
23. O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: A synthesis of recommendations. Acad Med 2014;89(9):1245–51. doi: 10.1097/ACM.0000000000000388.
24. Hennink MM, Kaiser BN, Marconi VC. Code saturation versus meaning saturation: How many interviews are enough? Qual Health Res 2017;27(4):591–608. doi: 10.1177/1049732316665344.
25. Medical Board Ahpra. Good medical practice. A code of conduct for doctors in Australia. Medical Board Ahpra, 2020. Available at www.medicalboard.gov.au/codes-guidelines-policies/code-of-conduct.aspx [Accessed 5 June 2023].
26. Australian Government. Australian Institute of Health and Welfare. Hospital activity. Australian Government, 2023. Available at www.aihw.gov.au/reports-data/myhospitals/themes/hospital-activity [Accessed 5 June 2023].
27. The Royal Australian College of General Practitioners (RACGP). The vision for general practice and a sustainable healthcare system. RACGP, 2023. Available at www.racgp.org.au/advocacy/advocacy-resources/the-vision-for-general-practice [Accessed 15 March 2023].

28. SBS News. Australia's GP system in the 'worst shape' in 40 years, Mark Butler warns. SBS News 18 January 2023. Available at www.sbs.com.au/news/article/australias-gp-system-in-the-worst-shape-in-40-years-mark-butler-warns/iquhpkxx5 [Accessed 15 March 2023].
29. Parekh N, Ali K, Stevenson JM, et al; PRIME study group. Incidence and cost of medication harm in older adults following hospital discharge: A multicentre prospective study in the UK. Br J Clin Pharmacol 2018;84(8):1789–97. doi: 10.1111/bcp.13613 [Accessed 15 March 2023].

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