Prospective Intervention on Discharge Summaries Improves Rates of Patients Following Up with General Practitioners Post Hospital Cardiology Discharge

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INTRODUCTION

General practitioners (GPs) are primary care physicians in Australia. Early GP review after hospital discharge may serve to assist patients with adherence to medications, provide education and support, and help with navigating the healthcare system.¹

In a recent retrospective cohort study, we identified an independent correlation between documentation in discharge summaries recommending early GP follow-up and rates of patients following up with GPs.² Discharge summaries are important transition of care documents³ which are routinely sent to both patients and GPs in our health service. Discharge summaries may therefore potentially serve as reminders for patients and GPs to arrange follow-up after hospital admission. However, the retrospectively identified association might not be causative. In this study, we aim to investigate if a prospective intervention on discharge summaries would lead to improved GP follow-up rates after hospital admissions with cardiac conditions.

METHOD

Patients discharged from Princess Alexandra Hospital (PAH) Cardiology Department in May 2017 and June 2017 were identified. GP follow-up rates were audited by telephone communication with patients' nominated GP practices at least 2 months after date of discharge. A department-wide policy was instituted starting 1st of June 2017 that stipulated all patients who were discharged from the department must have recommendation for early GP follow-up documented on discharge summaries, unless otherwise indicated. May 2017 was designated as the pre-intervention period. June 2017 was designated as the post-intervention period.

RESULTS

There were no significant differences in patient demographics, risk factor profiles and distribution of diagnosis between pre-intervention and post-intervention periods.

Compared with the pre-intervention period, the post-intervention period was associated with a significant increase in the rates of documentation in discharge summaries recommending GP follow-up (Table 1). The post-intervention period was also associated with more frequent documentations in discharge summaries recommending specialist follow-up. Timeliness of discharge summary completions also improved. Documented recommendations for GP and specialist follow-up within the inpatient progress notes were also more frequent in the post-intervention period (Table 1).

Compared with the pre-intervention period, the post-intervention period was associated with higher rates of patients following up with GPs within 7 days and 14 days, and a trend towards more frequent follow-up within 30 days (Table 2).

DISCUSSION

The result of our prospective intervention would suggest that the association between discharge summary recommendations and rates of patients following up with GPs might be a causative one, instead of a bystander association. It is possible that discharge summaries serve as written and posted reminders for patients to arrange GP follow-up since in Australia patients usually make appointments to see GPs. Alternatively, some GPs actively call back patients to arrange appointments after reading discharge summaries. Follow-up rates improved more noticeably in the 14-day period, compared with 7-day period, possibly due to practical difficulties for both patients and GPs to arrange follow-up within a shorter time period.

The narrowly focused policy intervention had led to broader improvements in discharge planning and discharge summaries. Despite the intervention solely focusing on discharge summaries and GP follow-up, we found that the rate of the documentation in inpatient medical records that recommended for GP and specialist follow-up also increased after the intervention. Furthermore, discharge summaries in the post-intervention period were completed sooner compared with pre-intervention period. These changes might have occurred as these components were closely related and had subconsciously affected doctors' behaviours. Quality improvement

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Table 1 Effects of Intervention on Documentation and Follow-Up Rates

	Pre-intervention (<i>n</i> = 364)	Post-intervention (<i>n</i> = 343)	Odds ratio (95% confidence interval)	<i>P</i> value
Discharge summary documented GP follow-up	181 (49.7%)	251 (73.2%)	2.758 (2.013–3.780)	<i>P</i> < 0.001
Discharge summary documented specialist follow-up	210 (57.7%)	249 (72.6%)	1.943 (1.417–2.663)	<i>P</i> < 0.001
Discharge summary completed within 7 days	191 (49.2%)	206 (56.7%)	1.353 (1.015–1.804)	<i>P</i> = 0.023
Medical records documented GP follow-up	94 (25.8%)	129 (37.6%)	1.731 (1.256–2.386)	<i>P</i> < 0.001
Medical records documented specialist follow-up	253 (69.5%)	287 (83.7%)	2.249 (1.564–3.233)	<i>P</i> < 0.001

Table 2 Effects of Intervention on Rates of GP Follow-Up

	Pre-intervention (<i>n</i> = 364)	Post-intervention (<i>n</i> = 343)	Odds ratio (95% confidence interval)	<i>P</i> value
Follow-up within 7 days	190 (52.2%)	202 (58.9%)	1.312 (0.974–1.767)	<i>P</i> = 0.043
Follow-up within 14 days	243 (66.8%)	259 (75.5%)	1.535 (1.105–2.133)	<i>P</i> = 0.006
Follow-up within 30 days	285 (78.3%)	286 (83.4%)	1.391 (0.953–2.030)	<i>P</i> = 0.053

projects in other fields have noted similar unintended improvement in outcomes related to the intervention but not directly asked initially.⁴

Study limitation includes that the pre- and post-intervention groups occur in different months, although we did not notice monthly differences in our previous retrospective analysis.²

In conclusion, an intervention on discharge summary documentation recommending early GP follow-up led to improved documentations and higher rates of patients following up with their GPs. The intervention based on policy change was relatively simple and effective. The results from this study may be potentially applicable to other hospital specialties or health services.

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Compliance with Ethical Standards:

Conflict of Interest: The authors declare that they do not have a conflict of interest.

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