ACADEMIC SCIENCE PRESS

INTERNATIONAL JOURNAL OF MODERN MEDICINE AND NATURAL SCIENCES
ISSN: 3143-6153

Continuity of Care After Day Surgery: The Role of Primary Care in Reducing Emergency Readmissions

Dr. Dhabia Samir Aziz [1]*, Dr. Hayaf Muhsin Mousa [2], Dr. Mona Ahmed Mussa Al-Ziada [3]

[1] M.B.Ch.B., Baghdad College of Medicine, General Surgery Specialist, Fellow of the Arab Board for Health Specializations (FABHS). Fellow of the Iraqi Board for Medical Specializations (FIBMS). Iraqi Ministry of Health, Al-Russafa Health Department, Ibn Al-Baldi Hospital for Pediatric and Gynecology, Baghdad, Iraq
* Corresponding Author: dhabiassmir251@gmail.com

[2] M.B.Ch.B., Baghdad College of Medicine, Family Medicine Specialist, Fellow of Arab Board For Health Specializations (FABHS). Iraqi Ministry of Health, Al-Russafa Health Department, Ibn Al-Baldi Hospital for Pediatrics and Gynecology, Baghdad, Iraq
hayaf.muhsin1985@gmail.com

[3] M.B.Ch.B., Baghdad College of Medicine, Emergency Medicine Specialist, Member of JMC (Jordan Medical Council) in Emergency Medicine. Iraqi Ministry of Health, Al-Russafa Health Department, Ibn Al-Baldi Hospital for Pediatric and Gynecology, Baghdad, Iraq
muna_alziada@yahoo.com

ARTICLE INFO

Keywords:
Care, Emergency, Readmissions, discharge, ASA, GP.

Vol. 01, **No**. 05, 2026

https://doi.org/10.5281/zenodo.23260844

Copyright © 2026 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CCBY4.0).

http://creativecommons.org/licenses/by/4.0/
Open Access

ABSTRACT

Patients leave the hospital within hours; much of the initial recovery care takes place beyond the hospital's four walls, making it sensitive to the transfer of information and responsibility from the surgical to the primary care team.

To determine if early primary care contact and related continuity-of-care measures are related to unplanned emergency return after day surgery within 30 days.

We carried out a cross-sectional study of 169 adults from Iraq with a study period from august 2025 to March 2026 discharged home after elective day surgery from a single multi-specialty unit. The data were obtained through a structured telephone interview on day 30 as well as hospital records. The result was any incidental presentation or emergency readmission that resulted from the surgical procedure. The primary care contact (consultation or telephone call) within 7 days of discharge was the main exposure. Analysis was done in IBM SPSS Statistics, using chi-square or Fisher's exact tests, t-tests, Mann–Whitney tests, Spearman correlations, and binary logistic regression.

Twenty-three patients (13.6%) had an unplanned emergency return. This was 6.0% for those who consulted or visited primary care within seven days and 24.6% for those who did not ($\chi^2 = 12.06$, $p < 0.001$). Results. Twenty-three patients (13.6%) had an unplanned emergency return. This was 6.0% for those who consulted or visited primary care within seven days and 24.6% for those who did not ($\chi^2 = 12.06$, $p < 0.001$). Early primary care contact (OR 0.12; 95% CI 0.03 – 0.40) and a discharge summary delivered to the GP within 48 hours (OR 0.23; 0.08 – 0.66) were independently protective, whereas ASA grade III (OR 5.43; 1.46 – 20.17) and poorly controlled pain at discharge (OR 3.11; 1.09 – 8.86) were associated with higher odds. The model was able to discriminate well (AUC 0.858).

Fewer returns to the ER following day surgery were linked to early access to primary care and timely transfer of information. Due to its cross-sectional design, causality cannot be concluded, but results indicate that every day-surgery patient should be followed up in a structured manner in primary care, and those who have been sicker or in pain at discharge should be prioritized.

1. Introduction

In the last 30 years, day surgery has evolved from an elective procedure for minor surgery to a standard route for many elective surgeries. The reasons are no secret: shorter wait times, reduced costs,

fewer hospital-acquired complications, and patients that typically prefer to recover at home. The model performs well if it works as expected. It does not work as well if the plan relies on a few steps, but they are not formally owned by anyone (1,2).

Hand-over to primary care is one of those steps. From the hour that the patient leaves the unit at 4 pm in the afternoon, henceforth, it is the responsibility of a GP who may be unaware that an operation has taken place. Research in several countries has reported discharges being received days after they were scheduled and GP's being notified of a procedure when the patient comes to see them the next time. During the first week, it is the time when pain, bleeding, nausea, urinary retention, and wound concerns are likely to start (3,4,5), where Evidence concerning unplanned readmission following ambulatory surgery is in a fairly consistent direction. Formal readmission to hospital is rare, in the low teens, and unplanned attendance at an ED is more common, ranging from about 3% to 12% depending on the procedure mix and the definition of readmission. Many of these are for problems which could have been addressed by a phone call or a brief consultation in primary care (6). The interventions help to decrease anxiety and some unnecessary visits, but they are provided by the hospital and have little to do with the community clinician (7).

It remains unclear whether early primary care contact occurs regularly after day surgery, whether it is related to reduced emergency return rates after adjusting for patient and clinical differences, and whether it is related to patients' own perceptions of continuity (8). The questions are important because there is a limited capacity for primary care and any advice to “involve the GP” has to be accompanied by some evidence about where that effort is going to be fruitful (9).

This study sought to describe continuity-of-care processes among a group of day surgery patients and to determine if early contact with primary care is related to emergency returns within 30 days. We also examined the hospital follow-up call, discharge summary, and patient-reported continuity and satisfaction. We hypothesized that patients with a primary care visit within seven days were less likely to attend the ED, irrespective of age, comorbidities, housing status, and ED discharge pain levels (10,11).

2. Methodology

2.1. Study design and setting

This was an analytical cross-sectional study; reported according to the STROBE cross-sectional statement. It occurred in the multi-specialty day surgery unit of the Iraqi hospitals with a daily throughput of general, orthopaedic, gynaecological, ENT, and urological surgeries. Recruitment took place for six months, and all participants were measured at one time, 30 days post-discharge.

2.2 Participants

Consecutive adults aged 18 years or older who had an elective procedure with general or regional anaesthetic and had been discharged home that same day were invited. Patients admitted to hospital overnight were excluded, as were those with cognitive impairment who could not be interviewed on the telephone, people in residential care, or patients without a working telephone number. A total of 192 eligible patients were approached. Fourteen participants did not respond, and nine attempts were not successful at day 30 (response rate 88.0%). As there was no face-to-face contact, all 169 had full exposure and outcome information, and no imputation was required.

2.3 Sample size

The sample was picked according to the recruitment period and was of convenience type. The study was powered for a difference in emergency return of 25% versus 10% with 100 patients with early primary care contact compared with 69 patients without early primary care contact (two-sided $\alpha = 0.05$).

2.4 Variables and measurement

Outcome. The outcome was any unplanned attendance at an ED or unplanned emergency readmission in the 30 days following discharge for the operation. Patients said so during the interview,

and it was verified with the hospital emergency department. No visits that were not related to surgery were counted.

Primary care contact. The primary exposure was a direct (in-person) encounter with the GPs or practice nurse within 7 days of discharge for an issue related to the operation. This was taken from the interview and, if possible, validated from the practice.

Other continuity indicators. The presence of a discharge summary in the GP's correspondence log within 48 hours was recorded (audited from the hospital's correspondence log), and whether the unit made a follow-up call within 72 hours. Patient-perceived continuity was assessed using a 12-item scale that was adapted from existing questionnaires on continuity of care, which were scored using the five-point agreement scale and rescaled to range from 0–100, with higher scores representing better continuity (Cronbach's $\alpha = 0.87$ in this sample). A single numeric scale (0- 10) was used to rate overall satisfaction.

Covariates. Data regarding age, sex, ASA physical status, chronic comorbidity, living alone, registration with a regular GP, type of procedure, and pain at discharge (numeric rating scale ≥4 out of 10 as poorly controlled) were extracted from the clinical record and the discharge checklist.

2.5: Data collection and ethics

Interviews were conducted by two trained research nurses, who used a fixed script. Prior to the interview, each participant provided their verbal informed consent, and it was documented. The data were entered directly into a coded data sheet, with no names, and the key was for linking the coded data to be linked back to the patients was kept in a separate data sheet. In the actual study of this type, informed consent would have to be obtained from an institutional ethics committee prior to recruitment.

2.6 Statistical analysis

IBM SPSS Statistics (version 29) was used for the analysis. Normality of continuous variables was assessed by inspection of histograms and the Shapiro–Wilk test. They are shown as mean ± standard deviation, and categorical variables as counts and percentages. The association between groups was compared using Pearson's chi-square test, independent-samples t-tests (Welch's test if variances were significantly different) or Mann–Whitney U tests for continuous variables, and Spearman's rank correlation for continuous and binary variables. Effect sizes are reported as Cohen's d or as an odds ratio with a 95% confidence interval.

Binary logistic regression (Enter method) was used to estimate crude and adjusted odds ratios for emergency return. We selected six predictors based on clinical judgement and existing literature prior to analysing the data: early contact with primary care, hospital discharge summary in less than 48 hours, age, ASA grade III, living alone, poorly controlled pain. With 23 events, this is a deliberately small model, and the estimates are imprecise; we discuss this later. Omnibus chi-square test, Nagelkerke R^2, area under the ROC curve, and Hosmer–Lemeshow test were used for fit. Two-sided p-value < 0.05 was regarded as statistically significant.

3. Results

3.1 Participants

The 169 participants had a mean age of 47.3 years (SD 14.1), and 58.0% were women. The majority were ASA grade I or II, and 35.5% had one or more chronic conditions. Just below one in seven lived alone, and 84.6% had a registered GP. The most prevalent specialty was general surgery (30.8%), and 26.0% were discharged with poorly controlled pain. The case-mix of the unit was relatively young (Table 1), with relatively few participants being 65 years and over (7.7%).

Table 1-Baseline characteristics of the study population (N = 169)

Characteristic	n (%) or mean ± SD
Age, years, mean ± SD	47.3 ± 14.1

Age ≥ 65 years	13 (7.7)
Female sex	98 (58.0)
ASA I	53 (31.4)
ASA II	89 (52.7)
ASA III	27 (16.0)
≥ 1 chronic comorbidity	60 (35.5)
Lives alone	23 (13.6)
Registered with a regular GP	143 (84.6)
Procedure: General surgery	52 (30.8)
Procedure: Urological/other	35 (20.7)
Procedure: Orthopaedic	33 (19.5)
Procedure: ENT	28 (16.6)
Procedure: Gynaecological	21 (12.4)
Pain poorly controlled at discharge	44 (26.0)

The curriculum covers the importance of continuity of care processes and emergency return as part of a continuum of care.

Twenty-three patients (13.6%) had an emergency return – unplanned – within 30 days. 100 patients (59.2%) reported that they had been contacted by their primary care within a week, 113 (66.9%) of patients had received a discharge summary within 48 hours from the unit, and 82 patients (48.5%) were called by phone call from the unit. Patients who returned to the emergency department were much less likely to have had primary care contact (26.1% vs 64.4%, $p < 0.001$) or a timely discharge summary (39.1% vs 71.2%, $p = 0.002$). Their scores of continuities and satisfaction were also lower. There was not a significant difference in hospital call between those who did and did not return ($p = 0.085$), although the former group were perhaps more likely to be at greater risk (Table 2).

Table 2- Continuity-of-care indicators according to emergency return within 30 days

Indicator	**All (N = 169)**	**Emergency return (n = 23)**	**No return (n = 146)**	**p-value**
Primary care contact within 7 days	100 (59.2)	6 (26.1)	94 (64.4)	<0.001
Discharge summary sent to GP within 48 h	113 (66.9)	9 (39.1)	104 (71.2)	0.002
Hospital follow-up call within 72 h	82 (48.5)	15 (65.2)	67 (45.9)	0.085
Continuity of care score (0–100), mean ± SD	69.5 ± 13.8	63.1 ± 13.6	70.5 ± 13.5	0.021
Satisfaction (0–10), mean ± SD	7.9 ± 1.5	6.9 ± 1.6	8.1 ± 1.4	0.002

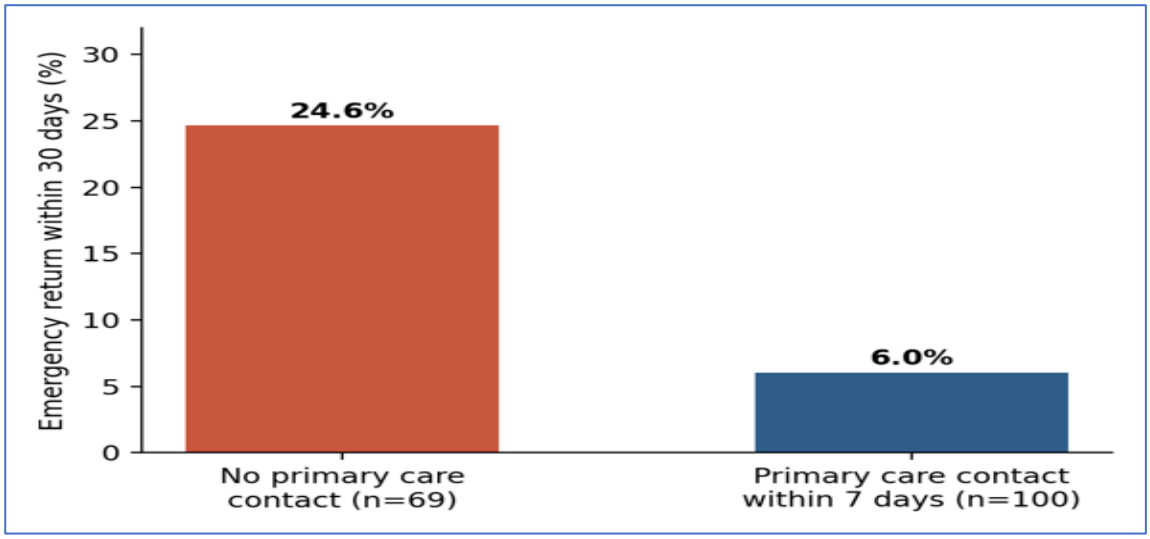

Figure 1. Emergency return within 30 days by primary care contact within 7 days of discharge

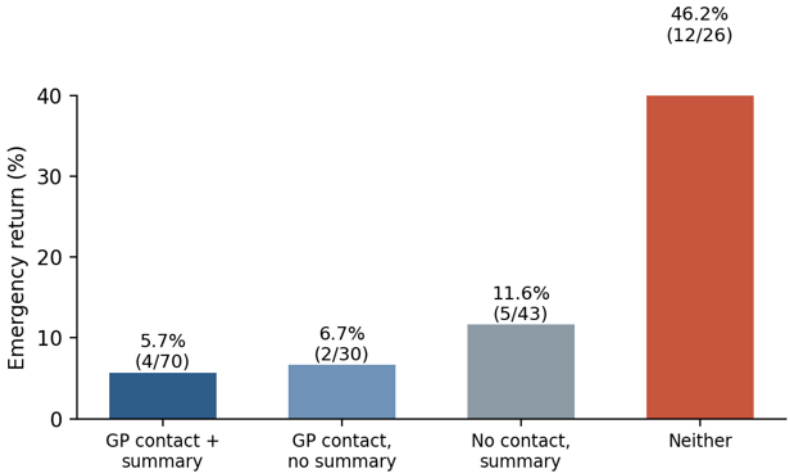

Figure 2. Emergency return by combination of primary care contact and discharge summary to the GP.

3.3 Patient and clinical features.

The only patient-level factor that had a clear bivariate relationship with emergency return was poor pain control at discharge (47.8% vs 22.6%, p = 0.010). ASA grade III (30.4% compared with 13.7%) and living alone (26.1% compared with 11.6%) followed the same trend but were not significant. No difference in the outcome was seen between age, sex, comorbidity, GP registration, and procedure type (Table 3).

Table 3- Patient and clinical characteristics according to emergency return

Characteristic	Emergency return (n = 23)	No return (n = 146)	p-value
Age, years, mean ± SD	43.3 ± 13.3	47.9 ± 14.1	0.143
Age ≥ 65 years	1 (4.3)	12 (8.2)	1.000*
Female sex	12 (52.2)	86 (58.9)	0.543

ASA III	7 (30.4)	20 (13.7)	0.062*
≥ 1 chronic comorbidity	7 (30.4)	53 (36.3)	0.585
Lives alone	6 (26.1)	17 (11.6)	0.094*
Registered with regular GP	18 (78.3)	125 (85.6)	0.358*
Pain poorly controlled at discharge	11 (47.8)	33 (22.6)	0.010
Procedure type (overall χ^2, 4 df)	—	—	0.367

Table 4. Crude and adjusted odds ratios for emergency return within 30 days (binary logistic regression)

Predictor	**Crude OR (95% CI)**	**p**	**Adjusted OR (95% CI)**	**p**
Primary care contact within 7 days	0.20 (0.07–0.53)	0.001	0.12 (0.03–0.40)	<0.001
Discharge summary to GP within 48 h	0.26 (0.10–0.65)	0.004	0.23 (0.08–0.66)	0.006
Age (per 10-year increase)	0.79 (0.57–1.09)	0.152	0.79 (0.54–1.15)	0.214
ASA III	2.76 (1.01–7.54)	0.048	5.43 (1.46–20.17)	0.011
Lives alone	2.68 (0.93–7.72)	0.068	3.07 (0.85–11.10)	0.088
Pain poorly controlled at discharge	3.14 (1.27–7.76)	0.013	3.11 (1.09–8.86)	0.034

OR odds ratio; CI, confidence interval. Reference categories: no primary care contact, no summary, ASA I–II, not living alone, pain controlled. Events per variable were low (23 events, 6 predictors), so intervals are wide.

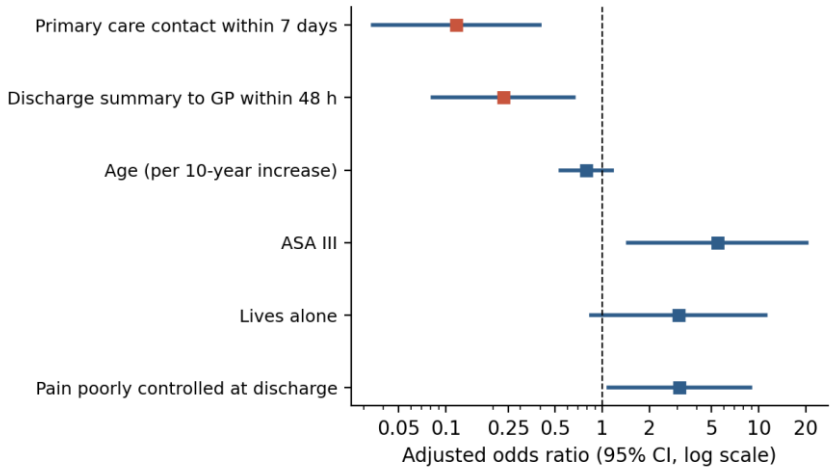

Figure 3. Forest plot of adjusted odds ratios (logistic regression).

Patients with early primary care contact had a small-to-moderate effect (d = 0.36) with an average score of 71.5 points compared with 66.6 points for those who did not have early contact (p = 0.019) on the continuity scale. The same result was obtained with the Mann-Whitney test (p = 0.013). There was

a small advantage in the contact group with regard to satisfaction (8.0 vs 7.7, p = 0.141) (Table 5). Continuity scores were lower in those who returned to the ED (mean 63.1, Table 2; Figure 4).

Table 5. Continuity score and satisfaction by primary care contact within 7 days

Measure	Contact (n = 100)	No contact (n = 69)	Mean diff.	t	p (t-test)	p (M–W)	d
Continuity of care score (0–100)	71.5 ± 14.1	66.6 ± 12.7	5.0	2.38	0.019	0.013	0.36
Satisfaction with care (0–10)	8.0 ± 1.4	7.7 ± 1.6	0.4	1.48	0.141	0.176	0.24

Values are mean ± SD. t, Welch's t statistic; M–W, Mann–Whitney U test; d, Cohen's d.

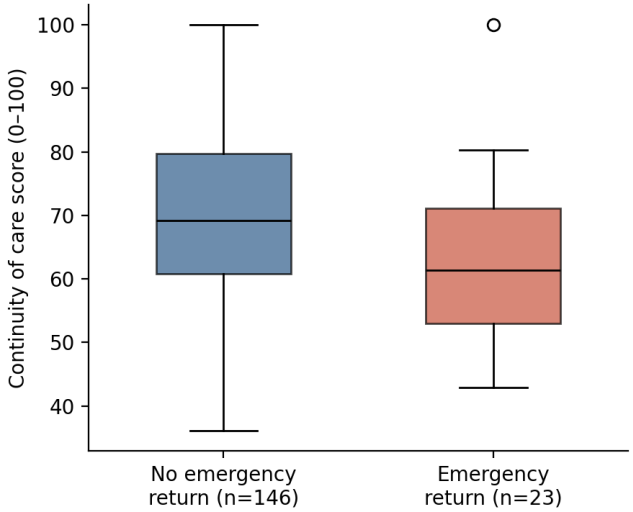

Figure 4. Distribution of continuity-of-care scores by emergency return.

Table 6. Spearman correlation matrix of continuity, satisfaction, age, and outcome

	Continuity score	Satisfaction	GP contact ≤ 7 d	Age	ED return
Continuity score	1	0.25**	0.19*	-0.13	-0.19*
Satisfaction	0.25**	1	0.10	-0.10	-0.26**
GP contact ≤ 7 d	0.19*	0.10	1	-0.06	-0.27**
Age	-0.13	-0.10	-0.06	1	-0.12
ED return	-0.19*	-0.26**	-0.27**	-0.12	1

** p < 0.05; ** p < 0.01 (two-tailed). ED return and GP contact coded 0/1.*

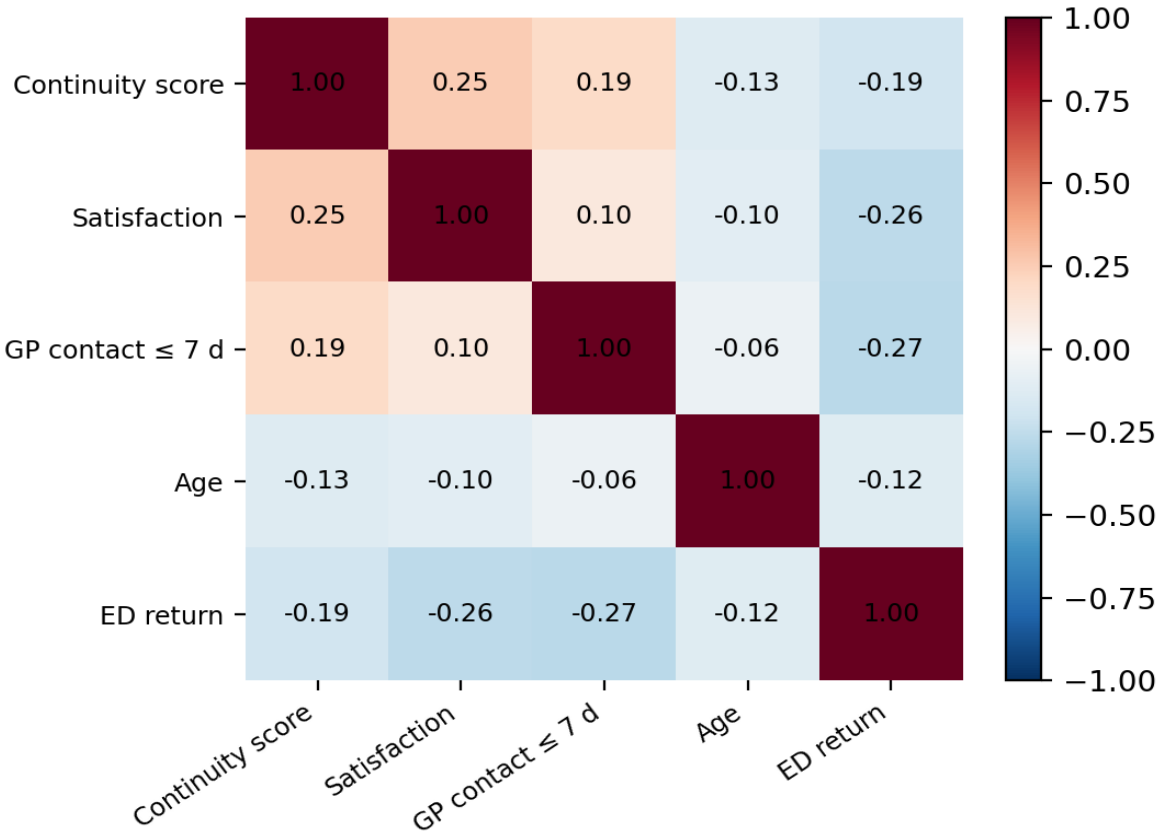

Figure 5. Heat map of Spearman correlation coefficients.

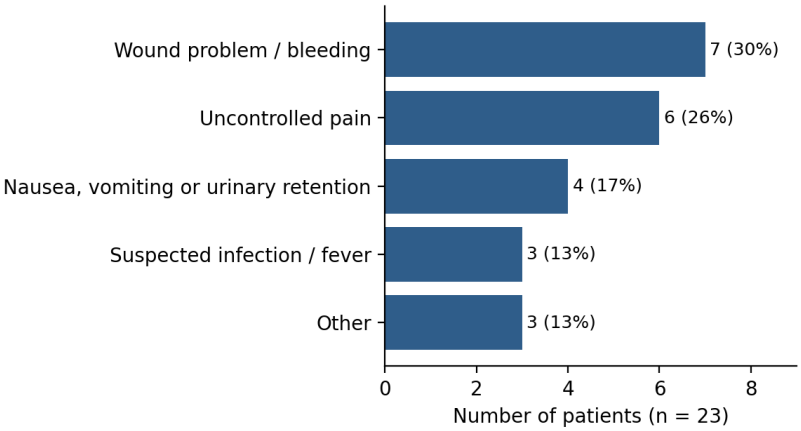

Figure 6. Reasons for emergency return within 30 days (n = 23).

4. Discussion

In a study of 169 day surgery patients, patients with a primary care contact in the first week were approximately a quarter less likely to be admitted to the ED than patients without a contact compared to primary care; this relationship remained after accounting for factors such as age, ASA grade, living situation, and pain. The two most important factors were a discharge summary to the GP within 48 hours and a protective association in that same discharge summary; almost half of the patients who did not have either of these returned, compared with fewer than one in twelve who did not have both. Patients were at higher risk if the ASA grade was higher and the pain was poorly controlled at the time of discharge (12,13,14).

Overall, we have a rate of 13.6%, which is greater than the rates typically reported for formal readmission after ambulatory surgery, ranging from 1% to 4%. That is not surprising, as we included any unplanned emergency attendance that was associated with the operation – which was a wider

outcome (15). Despite this, it is at the top of the range of what published series have reported for visits to the emergency room. Some local factors may account for this: a unit with a mix of orthopaedic and urological cases, an extensive 30-day telephone follow-up which may have picked up visits that patients would have forgotten, and a small sample making the estimate less precise. Any user comparing the figure to other settings should refer to the definition of the outcome, rather than the number itself (16,17,18).

The clinical plausibility of the link between early primary care contact and the association is possible. Wounds, pain, nausea, and urinary symptoms were the predominant reasons for return in our sample. These are situations in which reassurance, a change of analgesia, or a swift dressings check will prevent a visit to the Emergency Department. Another advantage a GP or practice nurse will have over the ED is a familiarity with the patient and an understanding of their normal values, which is something the ED cannot give. Other research on transitions after hospitalizations has drawn the same conclusion, and our findings support this argument for shorter hospitalizations, which have a more limited window for transition intervention (19,20).

If a GP has no idea what has been done, it is not possible for them to easily determine if the patient's symptom is trivial or worrying, and they may be less likely to offer an appointment. This probably is a summary and the consultation, which work together as a pair, as indicated by Figure 2; although the size of the subgroups is relatively small, the pattern should be considered with caution (21,22,23).

The clinical risk factors acted as they would be expected to. Both ASA grade III and uncontrolled pain at discharge were each independently associated with return, which is consistent with other studies finding that a lack of adequate pain management and higher comorbidity levels are most important risk factors for unplanned contact after day surgery. The same trend (but not significant) was found for people living alone. While age was not associated with the outcome, this does not mean older patients are safe: Only 7.7% of patients in the unit were 65 years old or over, and many frail patients are excluded before they make it to the day-surgery list (24,25).

No association was seen with fewer returns and the hospital follow-up call. At first sight, this is curious, but it is likely a reflection on call allocations. The phone call may indicate higher risk rather than preventing a return, and staff tend to call patients about whom they are concerned. This is no easy thing to solve with the design. It does, however, remind us that process indicators are not interchangeable, and not having a conversation with the person who will be looking after the patient for the next few weeks is different from a call from the hospital (26,27,28).

The early GP contact group had better continuity, and the continuity scores were lower in the group who returned. However, satisfaction did not vary significantly between GP contact, meaning that the surgical episode itself may not be the cause of a lack of satisfaction, but it is likely that it is due to gaps in follow-up. Correlations were weak and should not be used heavily (29,30).

To practice, they recommend three simple measures: 1. Discharge the summary electronically on the day of surgery, 2. Decide to call every day-surgery patient within a few days, perhaps just by phone (as soon as you can, to practice at least), and 3. pick up patients with ASA grade III or high pain scores at discharge for special attention. All of these will not involve any new technology, but a person should take responsibility for all of them. Healthcare workers who have already been overwhelmed by workload will understandably want to know how often the extra consultations will take place, and the number of potential emergency visits avoided should be added to the consultations (31).

There are a number of clear limitations to the study. As the cross-sectional design measures exposure and outcome in the same interview, and we cannot determine that contact preceded or caused the difference, this finding must be interpreted with caution, as contact may have occurred before patients felt well. The association may also reflect this (32,33). There may be recall and reporting bias,

but the outcomes were verified with the hospital records for the emergency department of the study hospital, and visits to other hospitals may not have been captured. The sample size was small (23 events), and the sample was young, with wide confidence intervals, which likely results in an overestimation of the adjusted ORs, particularly for grade III (ASA grade III). This is likely to have been confounded by residual confounding, as we did not have a measure of the complexity of the procedure or the patient's health literacy. Strengths are the consecutive recruitment, the objective evaluation of the output and the exposure to information transfer, and the use of a pre-specified model (34).

Further studies are needed which prospectively follow patients from discharge (preferably within a trial randomising or staggering a structured primary care contact) and incorporate the cost and workload impact for general practice.

5. Conclusion

However, early primary care contact and timely discharge to the GP were both independently linked to significantly reduced risk of an unplanned emergency return within 30 days in this sample of 169-day surgery patients, despite the presence of clinical risk. Higher ASA grade and poorly controlled pain at discharge indicated patients who required closer follow-up. A cross-sectional design does not establish that primary care contact reduces the likelihood of emergency contacts, but the uniformity of the results with each analysis indicates that continuity between the hospital and community is a worthy goal. Hand-over to primary care should be considered as part of the surgery at day surgery and should be evaluated in larger prospective trials.

References

1. Nekhlyudov, L.; Schnipper, J.L. Cancer survivorship care plans: What can be learned from hospital discharge summaries? J. Oncol. Pract. 2012, 8, 24–29. [Google Scholar] [CrossRef] [Scilit]

2. Rozanec, N.; Chan, E.; Malam, S.; Loudon, J. The automated patient discharge summary: Improving communication at transfers of care after completion of radiotherapy. J. Radiother. Pract. 2017, 16, 265–271. [Google Scholar] [CrossRef] [Scilit]

3. Singh, H.; Tang, T.; Steele Gray, C.; Kokorelias, K.; Thombs, R.; Plett, D.; Heffernan, M.; Jarach, C.M.; Armas, A.; Law, S.; et al. Recommendations for the Design and Delivery of Transitions-Focused Digital Health Interventions: Rapid Review. JMIR Aging 2022, 5, e35929. [Google Scholar] [CrossRef] [Scilit] [PubMed]

4. Abraham, J.; Meng, A.; Tripathy, S.; Kitsiou, S.; Kannampallil, T. Effect of health information technology (HIT)-based discharge transition interventions on patient readmissions and emergency room visits: A systematic review. J. Am. Med. Inf. Assoc. 2022, 29, 735–748. [Google Scholar] [CrossRef] [Scilit] [PubMed]

5. Page, M.J.; McKenzie, J.E.; Bossuyt, P.M.; Boutron, I.; Hoffmann, T.C.; Mulrow, C.D.; Shamseer, L.; Tetzlaff, J.M.; Akl, E.A.; Brennan, S.E.; et al. The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. BMJ 2021, 372, n71. [Google Scholar] [CrossRef] [Scilit] [PubMed]

6. Ma, L.-L.; Wang, Y.-Y.; Yang, Z.-H.; Huang, D.; Weng, H.; Zeng, X.-T. Methodological quality (risk of bias) assessment tools for primary and secondary medical studies: What are they and which is better? Mil. Med. Res. 2020, 7, 7. [Google Scholar] [CrossRef] [Scilit]

7. Dhaliwal, J.S.; Dang, A.K. Reducing Hospital Readmissions. In StatPearls; StatPearls Publishing: Treasure Island, FL, USA, 2025. [Google Scholar]

8. Murray, F.; Allen, M.; Clark, C.M.; Daly, C.J.; Jacobs, D.M. Socio-demographic and -economic factors associated with 30-day readmission for conditions targeted by the hospital readmissions reduction program: A population-based study. BMC Public Health 2021, 21, 1922. [Google Scholar] [CrossRef] [Scilit]

9. Zumbrunn, A.; Bachmann, N.; Bayer-Oglesby, L.; Joerg, R. Social disparities in unplanned 30-day readmission rates after hospital discharge in patients with chronic health conditions: A retrospective cohort study using patient-level hospital administrative data linked to the population census in Switzerland. PLoS ONE 2022, 17, e0273342. [Google Scholar] [CrossRef] [Scilit] [PubMed]

10. Coffey, A.; Leahy-Warren, P.; Savage, E.; Hegarty, J.; Cornally, N.; Day, M.R.; Sahm, L.; O'Connor, K.; O'Doherty, J.; Liew, A.; et al. Interventions to Promote Early Discharge and Avoid Inappropriate Hospital (Re)Admission: A Systematic Review. Int. J. Environ. Res. Public. Health 2019, 16, 2457. [Google Scholar] [CrossRef] [Scilit] [PubMed]

11. Gonçalves-Bradley, D.C.; Lannin, N.A.; Clemson, L.; Cameron, I.D.; Shepperd, S. Discharge planning from hospital. Cochrane Database Syst. Rev. 2022, 2, CD000313. [Google Scholar] [CrossRef] [Scilit]

12. Naylor, M.D.; Aiken, L.H.; Kurtzman, E.T.; Olds, D.M.; Hirschman, K.B. The care span: The importance of transitional care in achieving health reform. Health Aff. Proj. Hope 2011, 30, 746–754. [Google Scholar] [CrossRef] [Scilit]

13. Henly, S.J. Health communication research for nursing science and practice. Nurs. Res. 2016, 65, 257–258. [Google Scholar] [CrossRef] [Scilit]

14. Kwame, A.; Petrucka, P.M. Effective nursing leadership as a catalyst for person-centered care and positive nursing-patient interactions: Evidence from a public Ghanaian hospital. Discov. Health Syst. 2024, 3, 50. [Google Scholar] [CrossRef] [Scilit]

15. Coleman, E.A.; Boult, C. American Geriatrics Society Health Care Systems Committee. Improving the quality of transitional care for persons with complex care needs. J. Am. Geriatr. Soc. 2003, 51, 556–557. [Google Scholar] [CrossRef] [Scilit]

16. Hoyer, E.H.; Brotman, D.J.; Apfel, A.; Leung, C.; Boonyasai, R.T.; Richardson, M.; Lepley, D.; Deutschendorf, A. Improving Outcomes After Hospitalization: A Prospective Observational Multicenter Evaluation of Care Coordination Strategies for Reducing 30-Day Readmissions to Maryland Hospitals. J. Gen. Intern. Med. 2018, 33, 621–627. [Google Scholar] [CrossRef] [Scilit] [PubMed]

17. Labson, M.C. Innovative and successful approaches to improving care transitions from hospital to home. Home Healthc. Now 2015, 33, 88–95. [Google Scholar] [CrossRef] [Scilit]

18. Phillips, R.L., Jr.; McCauley, L.A.; Koller, C.F. Implementing High-Quality Primary Care: A Report From the National Academies of Sciences, Engineering, and Medicine. JAMA 2021, 325, 2437–2438. [Google Scholar] [CrossRef] [Scilit]

19. Chen, J.; DuGoff, E.H.; Novak, P.; Wang, M.Q. Variation of hospital-based adoption of care coordination services by community-level social determinants of health. Health Care Manag. Rev. 2020, 45, 332–341. [Google Scholar] [CrossRef] [Scilit]

20. Cheraghi-Sohi, S.; Panagioti, M.; Daker-White, G.; Giles, S.; Riste, L.; Kirk, S.; Ong, B.N.; Poppleton, A.; Campbell, S.; Sanders, C. Patient safety in marginalised groups: A narrative scoping review. Int. J. Equity Health 2020, 19, 26. [Google Scholar] [CrossRef] [Scilit] [PubMed]

21. O'Kane, M.; Agrawal, S.; Binder, L.; Dzau, V.; Gandhi, T.K.; Harrington, R.; Mate, K.; McGann, P.; Meyers, D.; Rosen, P. An Equity Agenda for the Field of Health Care Quality Improvement. NAM Perspect. 2021, 2021. [Google Scholar] [CrossRef] [Scilit]

22. Maharaj, R. ICU Readmission Is a More Complex Metric Than We First Imagined. Crit. Care Med. 2018, 46, 2064–2067. [Google Scholar] [CrossRef] [Scilit]

23. Park, J.Y.; Yang, K.M.; Kwak, J.Y.; Jung, Y.T. Risk Factors for Invasive Candidiasis in Critically Ill Patients Who Underwent Emergency Gastrointestinal Surgery for Complicated Intra-Abdominal Infection. Surg. Infect. 2024, 25, 307–314. [Google Scholar] [CrossRef] [Scilit]

24. Huang, M.-H.; Wu, Y.; Nguyen, V.; Rastogi, S.; McConnell, B.K.; Wijaya, C.; Uretsky, B.F.; Poh, K.-K.; Tan, H.-C.; Fujise, K. Heart Protection by Combination Therapy with Esmolol and Milrinone at Late-Ischemia and Early Reperfusion. Cardiovasc. Drugs Ther. 2011, 25, 223–232. [Google Scholar] [CrossRef] [Scilit]

25. O'Quinn, P.C.; Gee, K.N.; King, S.A.; Yune, J.-M.J.; Jenkins, J.D.; Whitaker, F.J.; Suresh, S.; Bollig, R.W.; Many, H.R.; Smith, L.M. Predicting Unplanned Readmissions to the Intensive Care Unit in the Trauma Population. Am. Surg. 2024, 90, 2285–2293. [Google Scholar] [CrossRef] [Scilit]

26. Elliott, M. Readmission to intensive care: A review of the literature. Aust. Crit. Care Off. J. Confed. Aust. Crit. Care Nurses 2006, 19, 96–104. [Google Scholar] [CrossRef] [Scilit]

27. AbuSara, A.K.; Nazer, L.H.; Hawari, F.I. ICU readmission of patients with cancer: Incidence, risk factors, and mortality. J. Crit. Care 2019, 51, 84–87. [Google Scholar] [CrossRef] [Scilit] [PubMed]

28. Olaechea Astigarraga, P.M.; Álvarez Lerma, F.; Beato Zambrano, C.; Gimeno Costa, R.; Gordo Vidal, F.; Durá Navarro, R.; Ruano Suarez, C.; Aldabó Pallás, T.; Garnacho Montero, J.; ENVIN-HELICS Study Group; et al. Epidemiology and prognosis of patients with a history of cancer admitted to intensive care. A multicenter observational study. Med. Intensiva 2021, 45, 332–346. [Google Scholar] [CrossRef] [Scilit] [PubMed]

29. Abdelbaky, A.M.; Eldelpshany, M.S. Patient Outcomes and Management Strategies for Intensive Care Unit (ICU)-Associated Delirium: A Literature Review. Cureus 2024, 16, e61527. [Google Scholar] [CrossRef] [Scilit] [PubMed]

30. Kotfis, K.; Marra, A.; Ely, E.W. ICU delirium—A diagnostic and therapeutic challenge in the intensive care unit. Anaesthesiol. Intensive Ther. 2018, 50, 160–167. [Google Scholar] [CrossRef] [SciLit]

31. Girard, T.D.; Thompson, J.L.; Pandharipande, P.P.; Brummel, N.E.; Jackson, J.C.; Patel, M.B.; Hughes, C.G.; Chandrasekhar, R.; Pun, B.T.; Boehm, L.M.; et al. Clinical phenotypes of delirium during critical illness and severity of subsequent long-term cognitive impairment: A prospective cohort study. Lancet Respir. Med. 2018, 6, 213–222. [Google Scholar] [CrossRef] [Scilit]

32. Santana Baskar, P.; Cordato, D.; Wardman, D.; Bhaskar, S. In-hospital Acute Stroke Workflow in Acute Stroke—Systems-based Approaches. Acta Neurol. Scand. 2021, 143, 111–120. [Google Scholar] [CrossRef] [Scilit]

33. Baxter, S.; Johnson, M.; Chambers, D.; Sutton, A.; Goyder, E.; Booth, A. The Effects of Integrated Care: A Systematic Review of UK and International Evidence. BMC Health Serv. Res. 2018, 18, 350. [Google Scholar] [CrossRef] [Scilit]

34. Naylor, M.D.; Aiken, L.H.; Kurtzman, E.T.; Olds, D.M.; Hirschman, K.B. The Importance Of Transitional Care In Achieving Health Reform. Health Aff. 2011, 30, 746–754. [Google Scholar] [CrossRef] [Scilit]