ED Administration

Noncompletion of referrals to outpatient specialty clinics among patients discharged from the emergency department: a prospective cohort study

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ABSTRACT

Objective: We sought to characterize patients who are referred from the emergency department (ED) to specialty clinics but do not complete the referral, and to identify reasons for their failure to follow up.

Methods: A prospective cohort study was carried out over 3 months of patients who were discharged from the ED of a teaching hospital with referral to internal medicine, cardiology or neurology clinics, but who did not complete the referral. Information on demographics, barriers to care and reasons for not completing the referral was obtained through a standardized telephone interview.

Results: Of 171 ED referrals, 42 (24.6%) were not completed. Interviews were completed for 71.4% (30 patients). Of the nonattenders, 80% were functional in English and most had high school (73.1%) or university (60.7%) education. Virtually all (93.0%) interviewees could get to hospital by themselves or have someone take them. Only 42.9% (12 patients) understood why the emergency physician (EP) requested consultation, and 42.9% (12 patients) described EP instructions as poor or fair. Primary reasons for noncompletion of consult were patient choice (46.7%, 95% confidence interval [CI] 27.1%–66.2%), physical or social barriers (13.3%, 95% CI 0.0%–27.2%), communication failure (20%, 95% CI 4.0%–36.0%) and consultant's refusal of the consultation (20% [95% CI 4.0%–36.0%]). All consultant refusals were from one internal medicine clinic, representing 42% (8/19) of ED referrals to that clinic. None of the 6 patients interviewed who were declined consultation was aware that their consultation had been refused.

Conclusion: Patients discharged by the EP with referral to specialty clinics frequently do not complete the consultation. Causes for failure to follow up relate to patient decision, inadequate or poorly understood discharge information, and system factors. Institutional audits of patients who fail to complete follow-up may reveal unanticipated barriers to care.

Keywords: outpatient referral, consultation, continuity of care, emergency department, discharge, comprehension, compliance

RÉSUMÉ

Objectif : Nous avons cherché à caractériser les patients qui, à leur congé de l'urgence, sont référés à des cliniques spécialisées, mais ne s'y présentent pas, et à déterminer quelles en sont les raisons.

Méthodes : Nous avons réalisé une étude de cohorte prospective de 3 mois auprès de patients qui ont été référés, à leur congé de l'urgence d'un centre hospitalier universitaire, à une clinique de médecine interne, de cardiologie ou de neurologie, mais qui n'y sont pas allés. Nous avons recueilli, lors d'entretiens téléphoniques, des renseignements sur la démographie, les obstacles aux soins et les raisons pour lesquelles ils n'ont pas donné suite à la demande de consultation d'un spécialiste.

Résultats : Des 171 demandes de consultation d'un spécialiste faites par le service d'urgence, 42 (24,6 %) n'ont pas été respectées par les patients. Des entretiens téléphoniques ont été réalisés pour 71,4 % (30) des patients. Parmi les patients ne s'étant pas présentés chez le spécialiste, 80 % avaient une connaissance fonctionnelle de l'anglais et la plupart avaient terminé leur secondaire (73,1 %) ou fait des études universitaires (60,7 %). Presque toutes les personnes interrogées (93 %) pouvaient se rendre à l'hôpital d'elles-mêmes ou s'y faire reconduire par quelqu'un. Seulement 42,9 % (12) des patients avaient compris pourquoi le médecin d'urgence avait demandé qu'ils consultent un spécialiste, et 42,9 % (12 patients) ont dit que les instructions du médecin étaient mauvaises ou passables. Les principales raisons de ne pas avoir respecté la demande de consultation étaient les suivantes : choix du patient (46,7 %, intervalle de confiance [IC] à 95 %, de 27,1 à 66,2 %); obstacles physiques ou sociaux (13,3 %, IC à 95 %, de 0,0 à 27,2 %); problèmes de communication (20 %, IC à 95 %, de 4,0 à 36 %); refus du spécialiste de voir le patient (20 %, IC à 95 %, de 4,0 à 36 %). Tous les refus du spécialiste provenaient

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d'une clinique de médecine interne, ce qui représente 42 % (8/19) des références faites à cette clinique. Aucun des 6 patients interrogés à qui la consultation a été refusée n'était conscient de ce fait.

Conclusion : Il est fréquent que les patients à l'urgence qui sont référés à des cliniques spécialisées ne respectent pas cette consigne. Les raisons sont la décision du patient, l'insuffisance ou la médiocrité des informations communiquées au congé et des facteurs liés au système. La tenue de vérifications en milieu hospitalier relatives aux patients qui sont référés à des cliniques spécialisées, mais qui ne s'y présentent pas, peut révéler des obstacles imprévus aux soins.

INTRODUCTION

In the current era of hospital overcrowding and cost containment, emergency department (ED) patients who might previously have been admitted to hospital are increasingly discharged home with instructions for urgent or semiurgent specialist assessment in an ambulatory setting. As the acuity of discharged patients increases, the consequences of failure to follow up become greater. Potential implications of nonattendance include negative impact on patient health outcomes, and misused resources and personnel time.

Physical barriers and poor communication have been previously identified as factors that prevent patients from attending their appointments.[1–4] Older patients have been found to have higher compliance rates.[5,6] Sarver and Baker[7] reported that language barriers did not significantly impact compliance with appointments. Clarke and colleagues[8] found that patient compliance was correlated with comprehension of discharge instructions. Kyriacou and colleagues[4] found that lack of access to a primary care provider and lack of insurance were associated with lower follow-up in the United States. Thomas and colleagues[9] found that not having an appointment made before leaving the ED was independently associated with missing follow-up appointments, and lack of insurance and dissatisfaction with discharge instructions were independently associated with not filling prescriptions. We found only 2 Canadian studies that explore adherence to clinic follow-up after ED discharge, but neither investigated reasons for clinic nonattendance.[6,10]

The objectives of this study were to characterize patients who are referred from a Canadian ED to specialty clinics, but do not complete the referral; to quantify referral noncompletion rates; and to identify reasons for failure to follow up.

METHODS

Setting

The study was conducted at University Health Network, a Canadian 2-site quaternary care downtown teaching centre with 2 EDs. The University Health Network has a combined ED census of approximately 60 000 visits per year. Emergency physicians (EPs) frequently discharge patients with referral to the hospital's specialty clinics for investigation of semiurgent problems that are manageable in an ambulatory setting but beyond the scope of a primary care physician. Some referrals are made if the EP feels that management by the primary care physician has not been ideal. Although these clinics also accept referrals from the community physicians, priority is given to referrals from the ED. If an outpatient referral is desired, the EP provides the patient with verbal and/or written information regarding the requested consultation on ED discharge. A consultation request form that includes reason for referral and patient contact information as well as any translator requirements is completed by ED staff and the form is faxed to the clinic by an ED clerk along with a copy of the ED chart. The specialty clinic receiving the consultation request subsequently calls the patient to book an appointment, and makes a reminder telephone call several days before the scheduled appointment.

Data collection

A prospective cohort study was conducted over a 3-month period, from January through March 2007, on patients discharged from the ED to any of the following hospital outpatient clinics: the ambulatory internal medicine clinic at each of the 2 hospital sites, the neurology clinic or the cardiology clinic.

Staff at the clinics prospectively documented patients who declined an appointment when contacted by the clinic, cancelled their booked appointment and did not schedule a later appointment, failed to inform the clinic that they would not attend their booked appointment ("no show") or were declined an appointment by the consulting physician. Clinic staff also obtained information on patients' language status and need for a translator.

Patients who were referred from the ED to a study clinic but did not complete the referral were contacted

by telephone by 1 of 2 researchers (J.V., K.H.) and invited to participate in a telephone survey. At least 8 attempts were made at telephone contact, including both daytime and evening calls. Patients were read a standardized script explaining the study, and, for those who consented, the survey was administered in a standardized fashion. Patients were excluded if they were less than 18 years of age, unwilling to participate or unable to provide informed consent.

Before implementation, the survey was piloted among physicians and non–health care providers for clarity, and for ability to assess reasons for clinic nonattendance and to capture demographic data. In cases where health records indicated that patients did not speak English, a translator was available to conduct the survey if a family member translator who had accompanied the patient to the ED was not available.

This study was approved by our hospital research ethics board.

RESULTS

During the study period, 42 of 171 ED referrals to one of the 4 clinics were not completed (24.6%). Telephone interviews were completed in 71% of cases (30/42). Twelve patients were not interviewed because they were unreachable (5), refused participation (3), were out of the country (2), were confused and unable to consent (1) or were incarcerated (1).

Demographics

The mean age of clinic nonattenders was 56 (range 28–92) years; 52.4% were female and 47.6% were male. Of the nonattenders, 80% were functional in English and most had high school (73.1%) or university (60.7%) education.

Noncompletion of referrals

Table 1 provides a categorization of nonattendance among those patients who were referred to an outpatient clinic by the EP who treated them. Table 2 outlines the specific reasons for nonattendance, as obtained from the 30 patients who were interviewed.

Communication with EP

Table 3 provides information on the reasons for nonattendance identified through patient interviews. A large proportion (42.9%, 12 patients) of interviewees rated the clarity and completeness of discharge instructions as fair or poor. Only 57.1% (16 patients) indicated that the EP advised them that the clinic would call them to book an appointment. Less than half of interviewees (42.9%,

Table 1. Categorization of nonattendance* for 42 patients discharged from the emergency department with referrals to outpatient specialty clinics, based on clinic process

Category	No. (%) of patients	95% CI
Patient did not return clinic's calls	6 (14.3)	2.5–26.1
Refused appointment when called by clinic	8 (19.0)	6.0–32.1
Cancelled appointment	7 (16.7)	4.2–29.1
No show at clinic	12 (28.6)	13.7–43.4
Deemed inappropriate referral by consultant	8 (19.0)	6.0–32.1
Other	1 (2.4)	0.0–8.2

CI = confidence interval.
*Information recorded by clerical staff at the clinic.

Table 2. Reasons for nonattendance among patients discharged from the emergency department with referrals to outpatient specialty clinics, based on interviews with 30 patients

Reason	No. (%) of patients	95% CI
Patient's decision	14 (46.7)	27.1–66.2
Waited too long in ED	0 (0.0)	0.0–1.7
Negative ED experience	1 (3.3)	0.0–11.4
Thought it wasn't important	2 (6.7)	0.0–17.3
Unexpected schedule conflict	1 (3.3)	0.0–11.4
Saw different MD	8 (26.7)	9.2–44.2
Condition improved	2 (6.7)	0.0–17.3
Forgot about appointment	0 (0.0)	0.0–1.7
Physical and social barriers	4 (13.3)	0.0–27.2
Job commitments	4 (13.3)	0.0–27.2
Transportation problem	0 (0.0)	0.0–1.7
Dependant child/family member	0 (0.0)	0.0–1.7
Too far from home	0 (0.0)	0.0–1.7
Couldn't find parking	0 (0.0)	0.0–1.7
Too sick to go	0 (0.0)	0.0–1.7
Communication	6 (20.0)	4.0–36.0
Patient was not aware of appointment	4 (13.3)	0.0–27.2
Patient unable to reach live person at clinic	1 (3.3)	0.0–11.4
Language barrier	1 (3.3)	0.0–11.4
Didn't know where to go	0 (0.0)	0.0–1.7
Consultant		
Consultant deemed referral inappropriate	6 (20.0)	4.0–36.0

CI = confidence interval; ED = emergency department; MD = medical doctor.

12 patients) stated they understood why they were being referred to an outpatient specialist clinic.

Refusal by consultant

In 19% of cases (8 of 42), noncompletion of a referral was due to the consulting physician deeming the referral inappropriate. All such refusals occurred at one of the 4 clinics (a general internal medicine clinic), and comprised 8 of 19 referrals (42%) from the ED to this clinic. Six of the 8 patients whose referrals were declined completed the survey (one declined participation, and one was out of the country for a prolonged period). At the time of interview, which occurred approximately 2 to 3 weeks postrefusal, all were unaware that their referral had been declined.

In follow-up with the clinic, the physician director indicated that referrals were vetted and declined if the perception was that the patient had previously seen a specialist for matters relating to the problem in question or if the case was felt to be more appropriate for a family physician. In the latter situation, a letter was faxed back to the central ED fax (and to the family physician, if listed in the electronic patient record) indicating that the referral had been declined.

The director indicated that it was not clinic policy to telephone patients to tell them of the decision to decline assessment if the review of the patient's medical records indicated that the patient had subsequently seen another hospital physician or visited the ED again — the assumption being that a subsequent physician had addressed the medical concern for which the referral had been made.

Table 3. Patient communication with emergency physicians about referrals to outpatient specialty clinics, based on interviews with 28* patients

Communication	No. (%) of patients	95% CI
Did the emergency doctor tell you that the clinic would call you to book an appointment?		
Yes	16 (57.1)	37.0–77.3
No	9 (32.1)	13.1–51.2
Unsure	3 (10.7)	0.0–24.0
How clear and complete were the instructions given to you by the emergency doctor?		
Poor	4 (14.3)	0.0–29.0
Fair	8 (28.6)	10.1–47.1
Good	5 (17.9)	1.9–33.8
Excellent	6 (21.4)	4.4–38.4
Unsure	3 (10.7)	0.0–24.0
N/A	2 (7.1)	0.0–18.5
Did you understand why the emergency doctor wanted you to go to the specialist clinic?		
Yes	12 (42.9)	22.7–63.0
No	11 (39.3)	19.4–59.2
Unsure	5 (17.9)	1.9–33.8

CI = confidence interval; N/A = not applicable.
*Two interviewed patients did not complete these questions.

DISCUSSION

Sample and population characteristics

During the study period, approximately one-quarter of referrals to the outpatient clinics under study were not completed. Patients who did not complete their referrals were generally educated, competent in English and able to attend the hospital. Two prior Canadian studies have explored adherence to clinic follow-up after discharge from the ED. Wojtowicz and colleagues[10] found an 89.6% attendance rate at a cardiac evaluation and risk assessment clinic after ED referral. Murray and LeBlanc[6] found that 81.7% of patients followed up at surgical specialty clinics after ED discharge. The authors noted a compliance rate higher than that found in studies of similar US hospitals, and attributed this to Canadian patients having their clinic appointment booked before leaving the ED, and not having to pay for their outpatient clinic visits. In our study location, patients do not have prebooked appointments made at the time of leaving the ED.

Barriers to care: the referring physician

Patients frequently described the instructions from the EP as poor or fair, and reported not understanding why the EP referred them to see another specialist. Patient comprehension of discharge instructions has been found to be correlated with future compliance.[8] Engel and colleagues[11] reported that patients discharged from the ED were not only lacking in comprehension of their ED care and discharge instructions, but also demonstrated poor awareness of their deficient comprehension and inappropriate confidence in their understanding and recall. Many studies have demonstrated improved compliance with computerized discharge instructions, and with providing patients with an actual consultant appointment before discharge from the ED.[6,8,12,13]

Barriers to care: the consultant

Our finding that a significant proportion of the failure of patient follow-up was attributable to the consultant was unanticipated, and to our knowledge has not been described previously. The process by one clinic of vetting referrals and sometimes declining them was a deviation from typical practice in our institution and a deviation from the typical practice understood by ED staff. Assumptions by clinic staff regarding the appropriateness of follow-up based on review of the hospital record are potentially subject to error, as a return of the patient to the ED (or to another hospital clinic) fails to establish whether the initial problem leading to referral has been addressed.

Closing the loop: uncompleted consultation requests

The presentation of these findings to the medical director of the involved clinic resulted in a review of the clinic practice of communicating with patients' primary care physicians regarding consults deemed inappropriate, and a launch of a 3-month case–control study exploring nonattendance at the clinic. However, no substantial change in practice was initiated.

Emergency physicians were informed of the study results, with emphasis on the importance of confirming with patients that they understand the reason for referral, and advising patients to follow up with their primary care physician or the consulting clinic directly if they do not hear from the clinic within a week. Modalities available for communicating with patients with language barriers were reviewed with EPs. However, we suspect that the majority of EDs do not have a mechanism in place for determining whether patients referred for outpatient consultations actually complete the consultation, and this raises a potential quality and safety issue that merits further investigation.

Limitations

Several limitations should be kept in mind when interpreting this study. Our findings, which relate to 4 clinics at one institution, may not be generalizable to other locations. In addition, our relatively small sample size resulted in wide confidence intervals and limited our ability to do further statistical analysis. Although interviews were completed for approximately three-quarters of eligible patients, the possibility of selection bias cannot be excluded.

We did not compare reason for noncompletion of referral recorded by clinic staff with the reason as recorded by the study interviewers. It is possible, for example, that the clinic may have recorded "Did not return clinic's call," and the patient informed the study interviewer that no one called them. However, a scenario of this nature would still be appropriately categorized in Table 2 as a communication barrier (patient not aware of appointment).

The use of clinic attenders as a control group for comparative purposes would have strengthened our study. However, we note that the English-language functionality and education of our sample were similar to those of the base population of ED patients. Moreover, clinic nonattenders were documented to have high levels of education, English-language functionality and available transportation to hospital, suggesting that these may not have been significant barriers to care.

CONCLUSION

Patients discharged by the EP with referral to specialty clinics frequently do not complete the consultation. Causes for failure to follow up relate to patient decision, inadequate or poorly understood discharge information, and system factors. Institutional audits of patients who fail to complete follow-up may reveal unanticipated barriers to care.

Competing interests: None declared.

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