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Assessment of a pilot pathway redirecting low acuity emergency department patients

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Abstract

Aim

This quality improvement project aimed to safely divert low acuity patients to in a local GP practice.

Methods

Tallaght University Hospital emergency department and a local GP practice agreed a standardised operating procedure. A retrospective descriptive review, including triage details, patient demographics and discharge letters of all patients referred on the pathway was conducted.

Results

175/803 (22%) of possible slots were filled. Of these 175 patients, 20 (11%) returned to the ED with the same presentation within 28 days. 4 patients subsequently required admission to the hospital. Patient and staff satisfaction surveys yield positive feedback.

Discussion

A care pathway redirecting low acuity patients from an emergency department to a local GP clinic is safe and delivers quality alternative patient care. Utilisation of GP slots was low with perceived barriers to include delayed nature of GP appointment and distance from the emergency department.

Introduction

Emergency departments (ED) are challenged with crowding and prolonged patient experience times. Diverting low acuity patients away from the ED has been proposed as a potential solution.[1] Co-location of a GP practice with an ED has been shown to lead to efficient

redirection of self-referrals.[2] Physicians believe such models could lower waiting times and increase care quality.[3,4]

Tallaght University Hospital Emergency Department completed a pilot project aimed at safely diverting low acuity ED patients to a local GP practice. This evaluation was conducted to determine if the pathway was safe and acceptable to patients and staff.

Methods

This single centre quality improvement initiative took place in Tallaght University Hospital ED which has approximately 55,000 annual presentations. Funding was secured to fund a small number of ring fenced GP appointments in a local (non co-located) GP practice. A multidisciplinary team involving our hospital executive management team, emergency medicine consultants, GPs from a local GP practice, ED clinical nurse facilitators and ED administrators were convened. A standardised operating procedure was agreed between all stakeholders (Figure 1). The GP practice which participated in the care pathway was located 2.5km from the emergency department. The GP practice was remunerated for slots in the practice by the hospital and the agreement was underpinned by a service level agreement.

In the period 03/08/2022 to 31/12/2022, there were three slots available daily between 9:00 and 12:00 on weekdays. In the period between 01/01/2023 and 31/12/2023 there were two daily slots available between 10:00 and 12:00 on weekdays. There were no appointments available on bank holidays.

Patients were deemed suitable for inclusion if their early warning score was 0. Patients were excluded if they were already referred by a GP, had any injuries, acute neurological symptom, suspicion of Covid-19 illness, psychiatry presentation or likely to require any acute investigation such as electrocardiogram, laboratory or radiological investigations. Triage nurses discussed suitability with a senior emergency medicine physician on suitability for a patient to be discharged on the pathway. A patient information leaflet with all of the details pertaining to the pathway were given to patients to support decision making. The GP practice could refer a patient back to be seen if deemed required and these patients were prioritised to be seen on return.

Patients who were seen by the GP and deemed to require emergency medicine review were fast tracked for review on return to the ED. In all cases the GP issued a discharge letter to the ED and to the patient's own GP.

A retrospective narrative review of pathway was conducted.

Results

175 patients have availed of the ED GP link pathway in the study period. 22% (175/803) of possible slots were filled (Figure 1). The mean age of patients availing of the pathway was 35 years (range of 16-79 years). Twenty seven (15%) of patients were noted to register a refugee reception centre as their address. Fifty-nine (34%) of patients did not have a GP. The broad categories of ED presentations diverted to the GP are depicted in figure 1.

Of the 175 patients that were diverted to the GP, 20 returned to the ED with the same presentation within 28 days (11%). Of the 20 patients that returned to the ED, 4 did not wait to be seen by an emergency medicine clinician, 2 were referred back to GP practice post review, 8 were discharged to their own GP, 2 were discharged to a follow-up clinic and 4 were admitted to hospital (figure 1).

Discussion

This paper presents an evaluation of a pathway redirecting low acuity patients from our ED to a local GP clinic. Overall, it was found that there a low utilisation of the GP slots. For the patients who did avail of the pathway, it has been shown to be safe and deliver quality alternative patient care.

The low uptake from ED patients of deferred GP slots was attributed to a number of factors. The GP practice is not co-located with the ED and patients were often asked to avail of next day appointments. It is suspected that patients' expectations who self-present to the ED may include getting same day laboratory and radiological investigations. Another perceived barrier to the utilisation of the GP slots is the burden on the triage nurses to take the time to council patients regarding the pathway.

Our ED has over 4000 attendances per month and there was no anticipation that this pilot that it would impact our patient experience times. In the Netherlands, van Veelan et al in study looking at the effects of a GP cooperative co-located with an ED found that diverting low acuity had no impact on ED throughput.[2] Kirkland et al in a systematic review examining the impact of redirecting low-acuity care seeking ED care found that there was no conclusive impact on ED utilisation or subsequent healthcare utilisation.[1]

The national Emergency Medicine Programme (EMP) in Ireland, defines a re-attender as any patient re-presenting to the Emergency Department (ED) within 28 days with the same chief complaint.[5] Our study found a 11% return rate. This is above the maintaining unplanned reattendance rate within 7 days within a range of 1%–5% previously recommended by the Royal College of Emergency Medicine in the UK.[6] A previous study from Connolly Hospital Emergency Department reported a re-attendance rate within 28 days of 13%.[7] The high re-

attendance rate may in part be attributable perceived lack of access to primary care in our catchment area.

In this small sample study, it is noted that approximately a third of the included patients had no registered GP. This indicates an access issue to GPs in the area which was previously noted in the 2014 Tallaght Health Assets and Needs Assessment report.[8] It is possible that expansion of local timely accessible GP services would obviate some attendances to the ED.

The anecdotal feedback has been positive satisfaction from ED staff and patients who have availed of the service. Similar to findings by Ablard et al, it was felt that creating a service alongside the ED in which GPs can use their distinct skills can add value.[3] For example, in this evaluation we found that patients who were seeking medication for essential hypertension or management of chronic dermatological issues, benefitted from the expertise of our GP colleagues.

This is a single center pilot project and may not be generalizable due to local specific close collaboration of all the stakeholders. It is noted that in other studies, use the model of GP practices were co-located with the ED or GPs embedded within the ED.[3,4] Later this year, Tallaght University Hospital plans to employ GPs for sessions to see ED patients in an area co-located to the ED. We plan future studies to see if this model will have an impact on ED key performance indicators.

Declarations of conflict of interest:

None declared.

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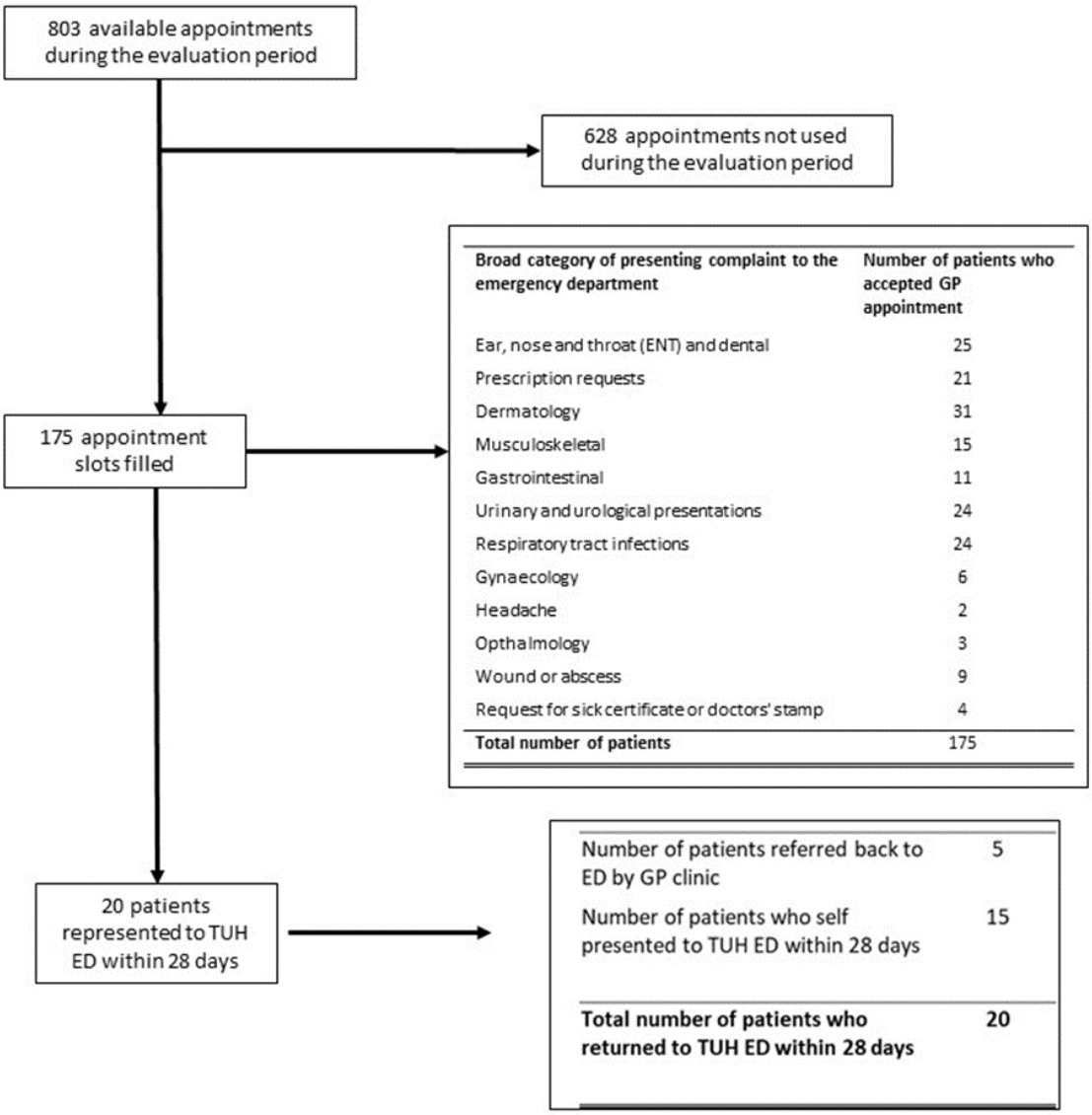

Broad category of presenting complaint to the emergency department	Number of patients who accepted GP appointment
Ear, nose and throat (ENT) and dental	25
Prescription requests	21
Dermatology	31
Musculoskeletal	15
Gastrointestinal	11
Urinary and urological presentations	24
Respiratory tract infections	24
Gynaecology	6
Headache	2
Opthalmology	3
Wound or abscess	9
Request for sick certificate or doctors' stamp	4
Total number of patients	175

Number of patients referred back to ED by GP clinic	5
Number of patients who self presented to TUH ED within 28 days	15
Total number of patients who returned to TUH ED within 28 days	**20**

Case series of patients who were admitted on return to TUH ED from GP clinic

Case 1 Triage note blood sugar level 8, BGL 8 c/o lethargic, urinary frequency. Was referred back to ED and was admitted under medical team for management of diabetes mellitus

Case 2 Patient presented with infected eczema. This patient was sent in error to GP clinic appointment as it transpired they had been referred by their own GP in the first place. GP clinic referred patient back to ED for review. The patient Required admission for intravenous antibiotics. Patient made a good recovery.

Case 3 48 year old man presented with abdominal pain and cramping for thee days, own GP unavailable. Patient was seen in the GP clinic and diagnosed with non specific abdominal pain and discharged with appropriate safety net advice
Patient returned to ED and was diagnosed with a intusseption on CT. He required surgery as part of his surgical admission. He made a good recovery.

Case 4 Patient presented to ED with new symptoms consistent with new diagnoses of type 2 diabetes. Patient was admitted under medics for diabetic management

Figure 1: Study population