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Research Article: Common reasons patients are being referred from primary to secondary care, their journey and its impact on patient flow in the Emergency Department

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Introduction
A longstanding issue common to all Emergency Departments (ED), worldwide, is that of crowding. In recent years, prior to the CoVid-19 pandemic this was a national problem with trolleys lined up in ED corridors and waiting rooms filled with acutely unwell patients who have only received basic triage and no other clinician assessment.

Many solutions have been put forward such as the concept of "reverse queueing", the use of urgent treatment centres [1-4] and the use of ambulatory areas, particularly for medical patients.

A clearly recognized strategy in managing overcrowding in the emergency department is prehospital assessment and judicious use of secondary care by primary care colleagues. "Initial Assessment" and referral to the correct area of secondary care promotes good patient flow and directs the patient to an appropriate area of the hospital, avoiding the emergency department altogether.

One of the busiest clinical specialty within most hospitals is General Medicine. This specialty generally receives twice (if not more) the referrals than any other specialties but often has the same level of staffing.

We undertook an audit of a cohort of patient referred by their GPs to acute specialties over a 2-week period to see if there are lessons to be learnt in order ease pressure on the emergency department and acute medical take.

Method
The audit was undertaken from the 15 May 2019 to 28 May 2019. GP referral letters were collected at A&E reception. 139 letters were received. A proforma was used to evaluate each letter.
The evaluation was completed by a consultant in acute medicine and emergency medicine.
Both consultants evaluated each proforma together (appendix 1).

Result
Of the 139 referrals, 43 were to General Medicine and 96 to other specialties. Of the 96 non-medical referrals 54 cases were to the Emergency Department and 20 to other specialties. and 23 did not state a specialty.

Non-Medical referrals
Of the 96 non-medical referrals, 2 letters were handwritten with an age range of 6 weeks to 91 years. 63% were female and 37% male. 80% of cases were new. 20% of cases were readmissions.
The breakdown of referrals is shown in (Fig 1 and 2). The majority fell into the category of GI / abdominal pain (30%) with the next largest category being chest infection (16%).

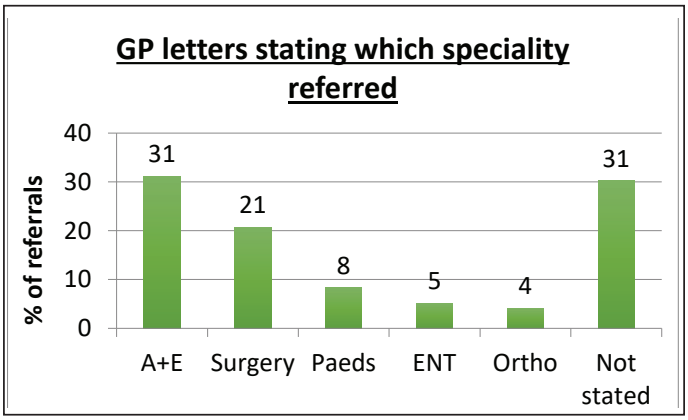


Figure 1.

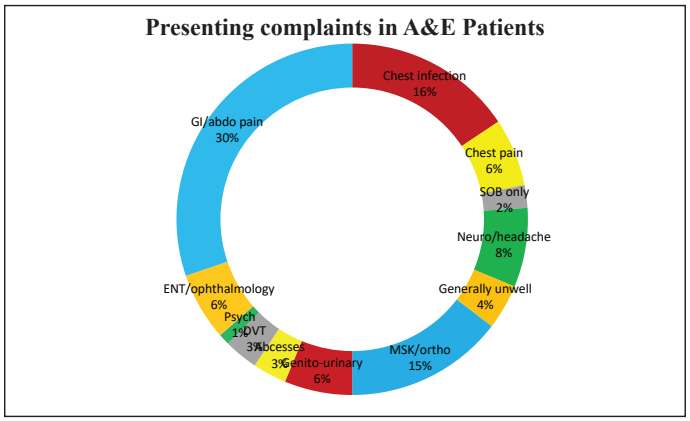


Figure 2.

Of the non-medical referrals 51% stayed in for under 4 hours, 25% under 24 hours and 24% over 24 hours (Fig 3)

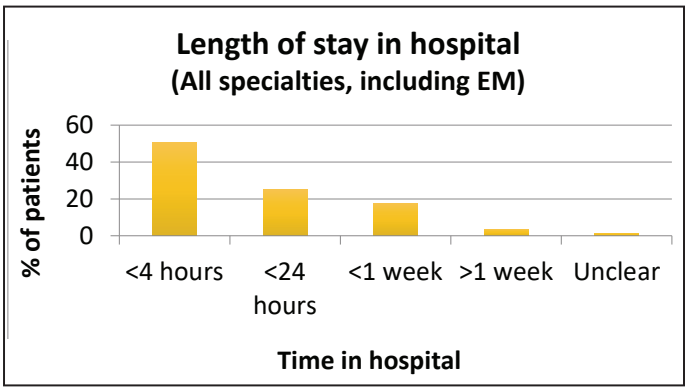


Figure 3.

Of those discharged in under 4 hours 21% required no investigation. 42% required no treatment in the ED and 37% required no prescription or follow-up after discharge.

The assessing acute and emergency physician evaluated the 96 non-medical referrals to see if an alternative referral option was available. 76 cases were felt to be appropriate for the ED and 20 were felt to have alternative options.

The 20 referrals considered appropriate for other referral alternatives are:

Ambulatory Assessment Area (AAA)– 12, outpatients ENT –2, outpatients radiology– 4, GP led investigation and treatment - 2

91% of patients referred were made by a GP, 4% by a Nurse Practitioner or Advanced Nurse Practitioner (ANP). In 5% of cases, the grade of referring clinician was not clear.

Reasons for directly referring patients to the Emergency department were as follows.

1. No hot clinic appointment
2. Speciality did not answer bleep or did not return call
3. Discharged patient by specialty to GP to have CT arranged and GP unable to, so sent back.
4. Patient wished to be seen in the ED

Of these cases, 21% were discussed with the relevant specialty prior to sending to hospital.

Referrals to Acute Medicine

The referrals to medicine were 43 in total (1 was from eye clinic, the rest from primary care). 41 from primary care were seen by a GP, 1 by an ANP.

The age range was from 17-88 years. 5 were from care homes (3 nursing homes, 1 rest home and 1 sheltered accommodation). 7 were sent by ambulance while 34 came by their own transport. 3 patients had dementia and of these, 2 were re-admissions within 24 hours.

4 referral letters were handwritten while 3 very difficult to read.

15 patients were over 75 years of age.

46% were male, 54% female with 70% presenting with a new problem.

None had advanced care planning in place. DNACPR (do not attempt resuscitation) was mentioned in 2 referrals.

30% were discharged in under 4 hours and 40% in under 24 hours (Fig 4).

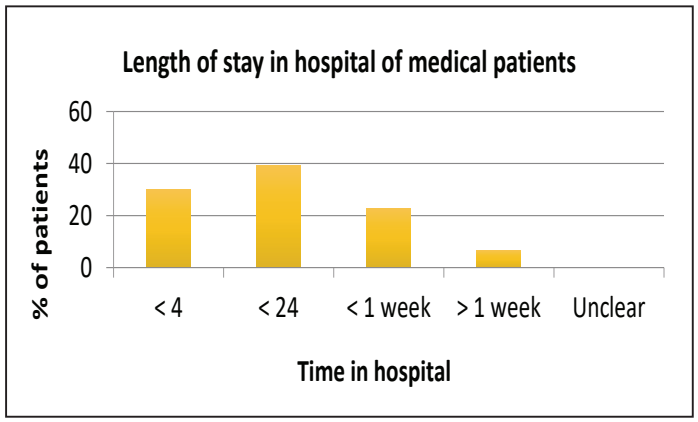


Figure 4.

23% of letters identified the ambulatory assessment area (AAA) as the area for referral. 51% were identified for the medical team and 26% stated neither (Fig 5).

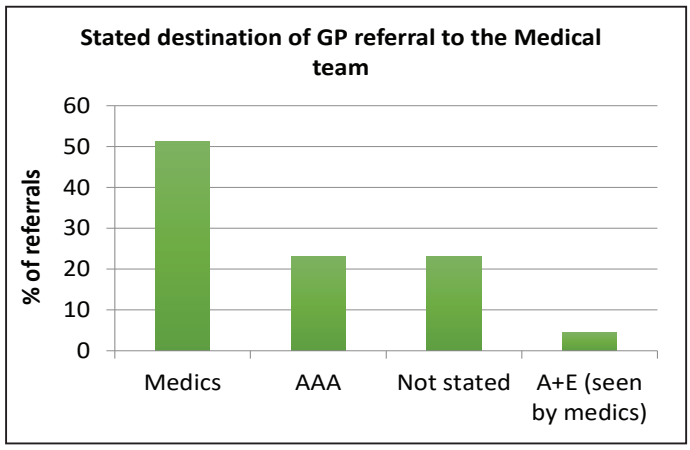


Figure 5.

Chest infection made up 21%, GI/Abdo pain 18%, chest pain 14% and neurological conditions including headaches 14% (Fig 6).

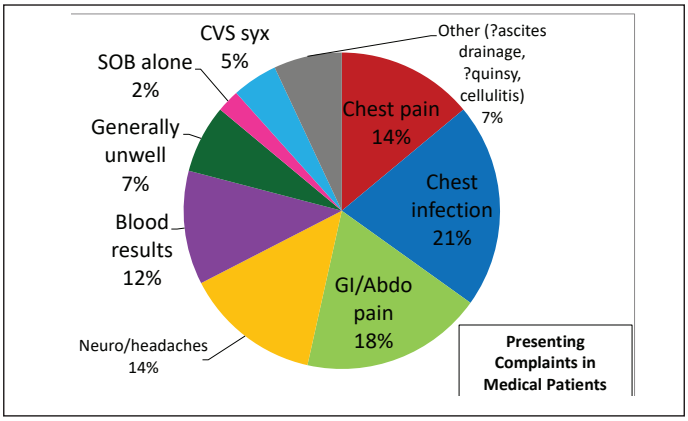


Figure 6.

Of the 43 referrals to the Acute and General Medicine, 14 were appropriate for the emergency department, 5 letters were unclear about the team one was not relevant to medicine.

Of the 29 cases where the emergency department was not felt to be the right referral area for the assessment, the following were felt to have been alternative avenues:

• GP led investigation and treatment (6)
• Ambulatory assessment referrals (13)
• outpatient clinics or planned investigation unit (3)

In 7 cases, GPs attempted to refer to a specialty other than the emergency department, the patients ended up being referred to be seen in the Emergency department.

For the 5 cases from the care homes, there was no alternative (community response team, hospital at home).

Discussion

From both patient cohorts, it is clear that some service re-organisation with collaborative working between primary and secondary care could ease crowding, improve flow and allow the acute medical team to focus more on the emergency department patients.

Just under half of the medical referrals that could have avoided the emergency department and be seen in the Ambulatory assessment area.

12 of the referrals to the emergency department could have been streamed to Ambulatory area also.

The better use of the ambulatory assessment area would reduce crowding pressure on the emergency department. It could also ease the pressure on emergency department triage services and improve the patient experience by reducing the waiting time for emergency department patients.

Given that 40 patients in total were discharged without any need for investigation or treatment in under 4 hours, this is an interesting observation but not an unusual finding.

Identification of these patients in primary care will be important in order to refer these patients to the appropriate specialty.

There was positive response from our primary care colleagues who are ready to streamline these patients by introducing ambulatory care services in the community.

Allan et al in their review, discuss a 6-point triage score to identify high likelihood of admission at time of triage [5]. This tool was developed because of the increased attendances seen in Scottish emergency departments but the authors are confident that their data applies to England also. Their score could be applied to Wigan because they used NEWS and Manchester Triage, both of which are used at Wigan. The probability use of the score may result in a disproportionately lower streaming of patients to the urgent care area and in this circumstance the binary use of the score would be better applicable

Cowling et al from London looked at the outcomes of a GP led urgent care center in Charing Cross Hospital [6]. Their approach was that all walk-in patients were assessed first by a GP to one of 6 different streams, one of which included the emergency department. They, like Allan et al, noted older patients were more likely to be referred to the ED. We also propose that all patients should be initially assessed by urgent care centers and then streamed to Emergency department or other specialties as the case may be.

Cooper at al studied the impact of GPs working alongside Emergency Physicians [7]. They concluded that when streaming, close working of ED Physicians and GPs was essential (in keeping with Cowling). They noted that GPs often overrode nursing decisions to stream patients (an observation also made in Wigan) and this was postulated to be due to the different skill set amongst GPs. They cautioned against using GPs as a "gatekeeper" in the ED - redirecting patient to specialties without assessment. Evidence on redirection with assessment (e.g., vital signs, focused history) is reported to be safe and to reduce attendances.

Triage itself can of course cause issues with flow. Lyons at al noted that triage of patients expected by specialties took longer and this was felt to be because of the need to inform the specialty by phone [8]. They suggested not repeating observations, if these had been satisfactory by the GP, they could be repeated by specialtyward staff. Ordering of X rays at triage was not found to cause delays, though "see and treat" did. At Wigan, there is a separate area for "see and treat" allowing a clinician's initial assessment, blood tests, electrocardiograms and even referral to occur. We are of the view that patients should be referred directly from these "see and treat"area to specialties rather than waiting in Emergency departments for assessments by specialties. Ameh et al. intheir review, came to the conclusion that initial senior assessment and treatment process significantly improved the patient journey[9].

Yar mohammadian et al defined overcrowding as "the situation where the ED function is impeded primarily because of the excessive numbers of patients waiting to be seen, undergoing assessment and treatment, or waiting for departure comparing to the physical or staffing capacity of the ED" [10]. They suggested that streaming, as done at Wigan triage to a UCC (urgent care centre) is an evidence-based approach to the reduction of overcrowding and suggested this is most typically done with those with less serious symptoms. They noted that laboratory testing increase time by up to 80 minutes.

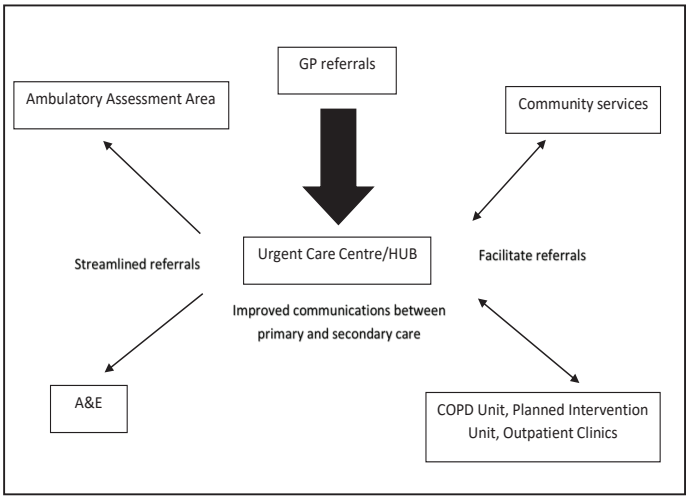
Walley et al postulate that "unmet primary care demand can flow into the emergency care system which in turn can slow down the emergency care system as it struggles to deal with higher demand" [11]. Their study suggest that patients do not want to use the emergency system but must because of lack of facilities such as outpatients or problems not being addressed in non-urgent fashion.

The acute and emergency medicine study has shown that better primary care use of facilities such as ambulatory assessment

or urgent care center could decrease referrals to acute medical and emergency take. Most Emergency departments are already working at maximum capacity and cannot absorb more patients who are unable to find other sources of care. Urgent care centers can be a part of the solution. Some authors have demonstrated that urgent care centers can decrease non-urgent Emergency department use without a concomitant increase in hospitalization [12]. Introducing urgent care centers can potentially reduce the pressure of non-urgent patients on the Emergency Departments. It may also be cost effective and lead to better outcomes [13]

A new electronic referral system has been introduced by primary care colleagues, as a result of the lessons learnt from this study. This will hopefully improve the quality of referrals to the hospital.

We recommend a single point of access (HUB) in the urgent care center where all GP referrals should be streamlined. One of the feedbacks from our primary care colleagues was regarding difficulty to get in touch with different specialties and hence increase number of referrals to Emergency departments. The referrals for specialties should bypass A&E and similarly patients can be diverted to social care or hospital at home from the Hub rather than first seen in the A&E and then admitted for social care assessment (Flow chart).



Flow Chart

Conclusion

This study has identified real opportunities for acute trusts to ease emergency department overcrowding and pressure on acute medical staff.

Planned and defined use of urgent care centres can help with the emergency department patient through put to address flow. However, strong intervention at the primary care level (more GP appointments and better, quicker access to outpatients) would have a big impact on input.

Urgent care centers can see many of patient with non-emergency condition and reduce crowding in Emergency departments.

References

1. Graham J, Aitken ME, Shirm S. Correlation of measures of patient acuity with measures of crowding in a pediatric emergency department. PediatricEmerg Care. 2011; 27: 706-709

2. Cunningham PJ, What accounts for differences in the use of hospital emergency departments across U.S. communities? Health Aff. 2006; 25: 324-336

3. Institute of Medicine, IOM report: the future of emergency care in the united states health system. AcadEmerg Med. 2006; 13: 1081-1085

4. Howard MS, Davis B, Anderson C, Cherry D, Koller P, Shelton D, Patients' perspective on choosing the emergency department for nonurgent medical care: a qualitative study exploring one reason for overcrowding. J EmergNurs. 2005; 31: 429-435

5. Camron A, Rodgers K, Ireland A. A simple tool to predict admissions at the time of discharge. Emerg Med J 2015; 32:174-179

6. Cowling TE, Ramzan F, Ladbrooke T. Referral outcomes of attendances at general practitioner led urgent care centers in London, England: retrospective analysis of hospital administrative data. Emerg Med J 2016;33:200-207

7. Cooper A, BMJ Open 2019,9:e024501.doi: 10:1136/bmj-2018-024501

8. Lyons M, Brown R, Wears R. Factors that affect the flow of patientsthrough triage. Emerg Med J; 24: 78-85

9. Ameh V, Nasir H, Ahmed Sarah, Abbasi A, Improving patient flow in an emergency
department. British journal of healthcare management 2018, Vol 24 no 10: 486-490

10. Yarmohammadian MH, Rezael F, Hagshenas A, Tavakoll N. Overcrowding in emergency departments: A review of strategies to decrease future challenges. J Res Med Sci 2017; 22-23

11. Walley P, Found P, Williams S. Failure demand: a concept evaluation in UK primary care.International Journal of Health Care Quality Assurance Vol 32 No 1, 2019 pp. 21-33

12. Merritt B, Naamon E, Morris SA. The influence of an Urgent Care Center on the frequency of ED visits in an urban hospital setting. Am J Emerg Med. 2000;18(2):123-125. doi:10.1016/s0735-6757(00)90000-7

13. Systematic Review of Emergency Department Crowding: Causes, Effects, and Solutions
Hoot, Nathan R. et al.Annals of Emergency Medicine, Volume 52, Issue 2, 126 – 136, August 2008