

ED Attendances And Role Of Urgent Care Centers. An Experience From A Major Incident At A District General Hospital.

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ABSTRACT

Background

High attendances at Accident and Emergency departments cause stress on health care providers. Overcrowding is due to the lack of primary care, its access to people and patients presenting with non-urgent complaints. This study aims to review a specific major incident and consider changes to reduce reliance on Accident and Emergency departments. Urgent care centers can reduce the overcrowding in ED by taking most of urgent care cases away from ED.

Methods

A retrospective cohort study was performed at the Royal Albert Edward Infirmary (RAEI), Wigan after the Wrightington, Wigan and Leigh NHS Trust declared a major incident on 5th February 2020 lasting till 6th of February externally due to failure of internal systems including PACS (imaging) and HIS (electronic patient record). The Trust continued to operate on an internal major incident as part of the recovery phase until 11th February. During this period, a total of 93 walk-in patients were advised to seek care elsewhere. These patients were contacted by the A&E department and the Clinical Audit Department regarding where they had sought care after being diverted. Amongst this group, 23 patients did not respond, 10 patients had no available contact numbers and 6 patients had provided incorrect details. All these patients were contacted thrice. One patient could not recall attending. The Patient Advice and Liaison Service (PALS) were also given the patient details.

Results

Of the 53 patients who were able to recall their A&E visit and provide information; 2 patients were reviewed at Wigan Infirmary and discharged; 8 patients presented to their GP whilst 2 self-treated at home. 5 patients went to Leigh Walk-In Centre and 2 patients returned to WWL A&E the following day. 1 patient was referred to the Fracture Clinic at Wigan Infirmary. 1 patient was referred to the Urgent Treatment Centre. 32 patients went to a total of nine alternative trusts (60%) amongst which 38% went to Royal Bolton Hospital. 29 out of the 32 patients were discharged from the A&E departments. Three patients were admitted. One patient was admitted at a

psychiatric hospital and 2 patients were admitted at Royal Bolton Hospital. None of the 53 patients died. Patient advice and liaison service (PALS) were given the names of the 93 patients. There were no complaints made through PALS till 28th February 2020.

Conclusion

Many patients presenting to the A&E have non-emergency conditions and require only advice. Results were similar to those observed during major sporting events and the COVID-19 pandemic. Urgent care centers can be cost-effective alternatives to hospital Emergency Departments for people with non-life-threatening complaints. Patient education and awareness regarding their use will be crucial in determining their positive impact. Considering that 40% of our patients did not require hospital intervention, we recommend urgent care centers alongside the Emergency departments to reduce congestion and overcrowding.

Key Words

Emergency attendance; Major incident; Urgent Care Centre

Introduction

Overcrowding in Accident and Emergency departments is multifactorial. A major contributor to overcrowding is the lack of primary care use and access for patients. Patients need alternatives to emergency departments for their primary care needs [1-4]. High attendances at Accident and Emergency departments cause great pressures on the NHS in terms of both time and cost. Demands on frontline health services have never been more emphasized than during the current COVID-19 outbreak and never was the need for self-evaluation as great [5]. Overcrowding places extreme strain on providers as they become overwhelmed by the volume of care needed. A contributor to overcrowding is the number of patients with non-urgent complaints who present to the Emergency Department. Attendances at Accident and Emergency Departments are highly variable and can be potentially influenced by multiple factors [6-15]. The aim of this study is to review a specific major incident and consider changes to reduce reliance on Accident and Emergency departments. At Wrightington, Wigan and Leigh (WWL) NHS Trust; a

major incident was declared on Wednesday 5th February 2020 at approximately 08:30 and stood down externally at 12:15 on Thursday 6th February 2020. The Trust continued to operate on an internal major incident as part of their recovery phase until Tuesday 11th February 2020. The incident was a combination of several internal system failures involving PACS (imaging) and HIS (electronic patient record) across all three sites. During the major incident on 05/02/2020 and the associated IT failures, 93 patients who attended WWL A&E as 'walk-ins' could not be seen and were advised to seek care elsewhere. We subsequently reviewed data and contacted patients could be seen. Our data was also compared to other factors such as sporting events and their impact on Accident and Emergency department attendances. Detailed investigations revealed that outcomes were like the impact of a football game on the local A&E. The impact of self-implemented restraint shown at major sporting events on Emergency department attendances and during the current COVID-19 outbreak is remarkably similar to the major incident declared at our Trust. We contest that if public awareness were raised, a positive effect of self-constraint on NHS essential services could be significant. However, without patient education and a fundamental behavioral change the effects will remain variable, unpredictable and unquantifiable.

Materials and Methods

Royal Albert Edward Infirmary Wigan took details of the 93 patients, including name, date of birth and phone number. The patients were contacted by the A&E department and the Clinical Audit Department by phone later and asked where they had sought treatment and care, after being diverted due to major incident declared at RAEI. We were able to contact 54 patients (59%). Amongst this group, we were unable to contact 39 patients. 23 patients did not answer, 10 patients had no available contact numbers and 6 patients had provided incorrect contact details. All these patients were contacted thrice. Of the 54 patients could be contacted, only one patient could not recall attending. The Patient Advice and Liaison Service (PALS) were given the details of all our patients and no complaints were reported. Throughout this period efforts were made to ensure patient safety and follow up to better understand the outcomes of our patients.

Results

A total of 53 patients were able to recall attending and were happy to give details of where they sought advice (Figure 1). 2 patients were reviewed at Wigan Infirmary and discharged. 8 patients presented to their own GP whilst 2 of our patients self-treated at home. 5 patients went to Leigh Walk-In Centre and 2 patients were noted to return to WWL Emergency Department

the following day. 1 patient was referred to the Fracture Clinic at Wigan Infirmary. 1 patient was referred to the Urgent Treatment Centre and 32 patients went to other hospitals (60%).

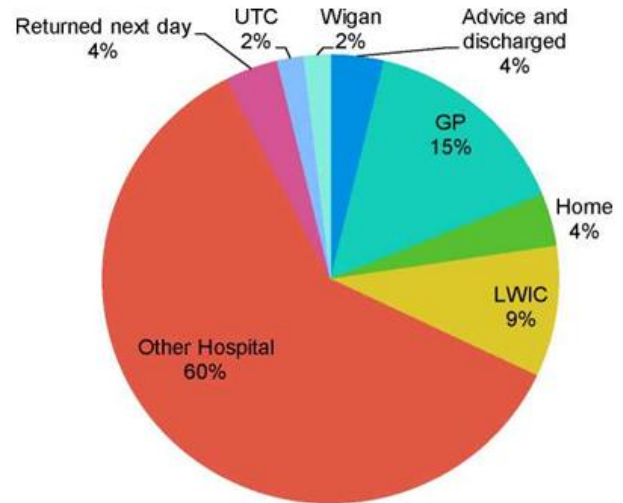


Figure 1

There were 32 patients who went to an alternative Trust. There were nine different Trusts amongst which 38% of patients were seen to go to Royal Bolton Hospital (Figure 2).

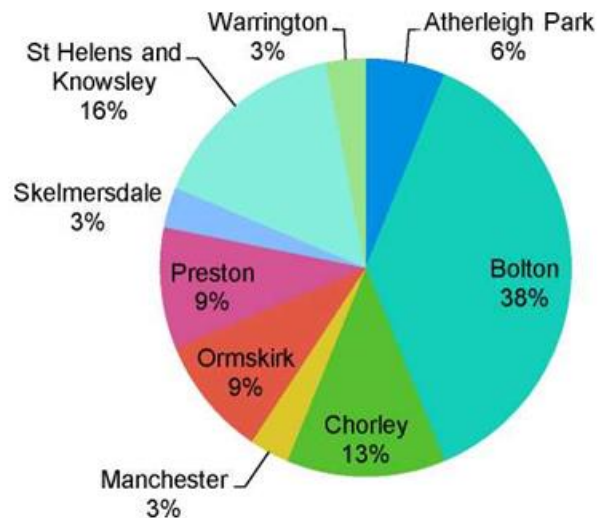


Figure 2

29 out of 32 patients were discharged from the A&E departments at the alternative trusts. Three patients were admitted. One patient was admitted at a psychiatric hospital and 2 patients were admitted at Royal Bolton Hospital (Figure 3).

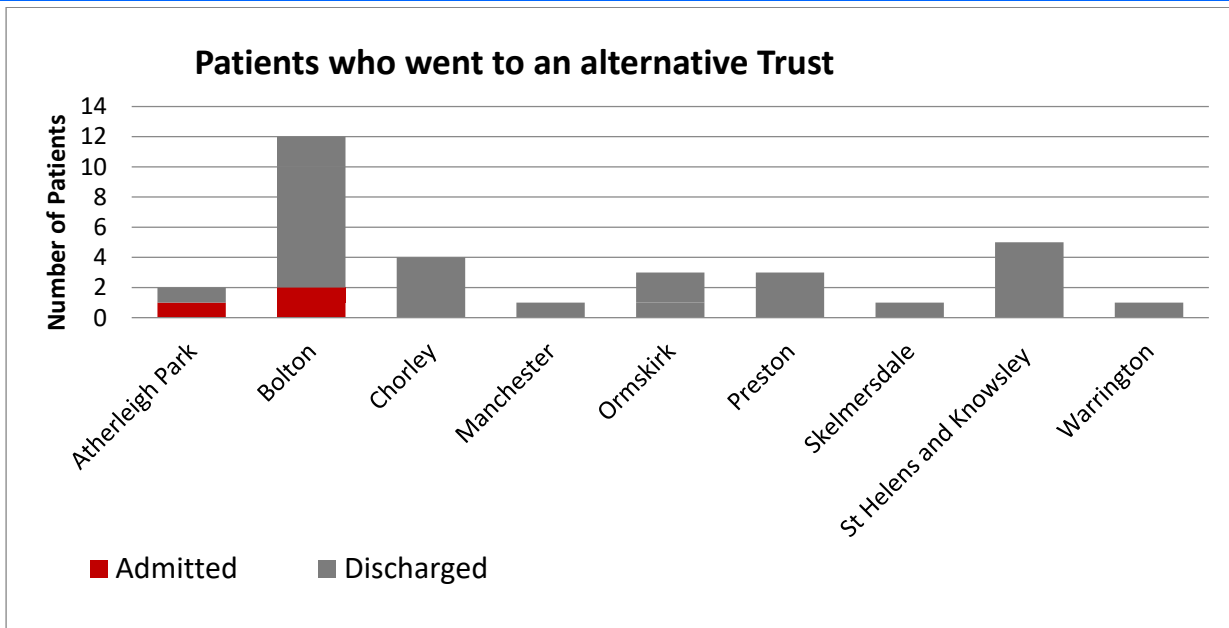


Figure 3

Of the 53 patients we were able to contact, no one died. All the patients that failed to reply were called thrice. Almost all our patients were pleased that the hospital was contacting them in order to ask about their condition and offering apologies for the inconvenience and disruption caused during the major incident. All these patients were also offered recall if required. The purpose of collecting these details was to ensure patient safety and to check if any complaints were made. PALS were given the names of the 93 patients. There were no complaints made through PALS by any of patients till 28th February 2020.

Discussion

In United Kingdom, people attend Emergency departments with non-emergency conditions. This causes congested departments and long waiting times affecting those patients who are waiting for Emergency treatments. We believe that most patients who attend the Emergency departments require some advice only. Similar effects were observed during sporting events [10-14], and more importantly during the current COVID-19 outbreak drastically reducing attendances. Furthermore, it is our contention that an urgent care center can see up to 48% of patients which would otherwise have been seen by Emergency Department in a safe and effective manner [16]. For such a service to have an impact on reducing Accident and Emergency services it is important for patient education and awareness of such a service to take place. Continued evaluation of the effect on Accident and Emergency of these new centers will be needed to plan future allocation of resources for the provision of Emergency Care. The primary aim of any effort must be to ensure patient safety. Urgent care centers evaluate and treat a broader scope of illness than primary care surgeries. They function similarly to Emergency departments. The typical waiting time to be seen at an urgent care center is less than 30 minutes, compared with hours at an emergency

department. Urgent care centers are run by physicians, nurse practitioners, and nurses trained in primary or Emergency Care and most can perform basic laboratory tests, obtain radiographs, provide care for fractures and offer intravenous fluids and antibiotics. They do not manage acute life-threatening emergencies and could never take the place of Emergency Departments, but they do offer the ability to absorb patients from A&E who have non-urgent complaints. Many patients do not know what an urgent care center is or what services it has to offer. If patients are not able to see their GP, they are either referred to the Emergency department by their GP or believe that the Emergency department is their only option for care. The 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 workers demonstrated that urgent care centers can decrease non-urgent Emergency department use without a concomitant increase in hospitalization [16]. Introducing urgent care centers and potentially reducing the non-urgent patients will help reduce not only financial loss but also help patient outcomes in emergency departments [17].

Conclusion

Urgent care centers have the capability to manage patients who have non-life-threatening emergencies. They offer a potential to absorb approximately up to 50% of ED patients. Considering the results of our study where 40% of our patients did not require hospital intervention, we recommend urgent care centers be established close to Emergency departments reducing the congestion and exhaustion of Emergency health care.

Ethical Considerations

No ethical review was required.

Funding

No funding required.

Conflict of Interest

The authors declare that there is no conflict of interest.

References

- Graham J, Aitken ME, Shirm S. Correlation of measures of patient acuity with measures of crowding in a pediatric emergency department. *Pediatr Emerg Care*. 2011; 27: 706-709
- Cunningham PJ, What accounts for differences in the use of hospital emergency departments across U.S. communities? *Health Aff*. 2006; 25: 324-336
- Institute of Medicine, IOM report: the future of emergency care in the united states health system. *Acad Emerg Med*. 2006; 13: 1081-1085
- 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 Emerg Nurs*. 2005; 31: 429-435
- Remuzzi A, Remuzzi G. COVID-19 and Italy: what next? [published online ahead of print, 2020 Mar 13]. *Lancet*. 2020;395(10231):1225–1228. doi:10.1016/S0140-6736(20)30627-9
- Vial F, Dezavelle S, Baka NE, Herbain D, Bannay A, Omorou Y, Bouaziz H. Does a major football event affect obstetric emergency attendances? A prospective observational study during Euro 2016. *Am J Emerg Med*. 2018 Sep;36(9):1696-1697.
- HE, Colón-González FJ, Fouillet A, Elliot AJ, Caserio-Schonemann C, Hughes TC, Gallagher N, Morbey RA, Smith GE, Thomas DR, Lake IR. The influence of a major sporting event upon emergency department attendances; A retrospective cross-national European study. *PLoS One*. 2018 Jun 13;13(6):e0198665. doi:10.1371/journal.pone.0198665. eCollection 2018. PubMed PMID: 29898000; PubMed Central PMCID: PMC5999282.
- Bonasso P, Lucke-Wold BP, Riffon M, Long D, Wilson A, Knight J. The Effect of Sporting Events on Medical Transport Time at a Level 1 Trauma Center: a Retrospective Cohort Study. *W V Med J*. 2017 May-Jun;113(3):44-51. PubMed PMID:29056781; PubMed Central PMCID: PMC5645076.
- McGreevy A, Millar L, Murphy B, Davison GW, Brown R, O'Donnell ME. The effect of sporting events on emergency department attendance rates in a district general hospital in Northern Ireland. *Int J Clin Pract*. 2010 Oct;64(11):1563-1569. doi:10.1111/j.1742-1241.2010.02390.x. PubMed PMID: 20846204.
- Reich NT, Moscati R, Jehle D, et al. The impact of a major televised sporting event on emergency department census. *J Emerg Med* 1994;12(1):15–7.
- Murphy SM, Myers E, Kingston R, et al. Ireland in the World Cup: trauma orthopaedic workloads. *Ir Med J* 2003;96(4):119–20.
- Moody WE, Hendry RG, Muscatello D. Were attendances to accident and emergency departments in England and Australia influenced by the Rugby World Cup Final 2003? *Eur J Emerg Med* 2007;14(2):68–71.
- Galvin GM, Jelinek GA. The impact of the America's Cup on Fremantle Hospital. *Arch Emerg Med* 1989;6(4):262–5.
- Cheng D, Yakobi-shvili R, Fernandez J. Major sport championship influence on ED sex census. *Am J Emerg Med* 2005;23(3):408–9.
- Cooke MW, Allan TF, Wilson S. A major sporting event does not necessarily mean an increased workload for accident and emergency departments. Euro96 Group of Accident and Emergency Departments. *Br J Sports Med* 1999;33(5):333–5
- 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
- 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.e1