The Oxfordshire Emergency Department Frequent Attender Programme

The problem

The population of patients who frequently attend the emergency departments (ED) of the John Radcliffe Hospital and Horton General Hospital in Oxfordshire amounts to approximately 1100 individuals[*]. Between them they account for more than 8000 visits/year. More importantly, frequent attender (FA) use of resources are often disproportionate compared to any other patients and they represent a remarkably heterogeneous, potentially vulnerable, and extraordinarily challenging group[2-6]. In order to deliver efficient care it is important to acknowledge that frequency of ED use can be an indicator of the difficulty in meeting their unique needs. Unfortunately, the time required to identify and manage the drivers of each attendance is a resource not readily available to shop floor clinicians.

Addressing the difficulties inherent to the FA population requires a deeper understanding of the higher incidence of certain patient 'personas'[2]. Psychiatric morbidity, substance abuse, social isolation, and possible drug-seeking behaviour are all aspects of a richer characterisation prevalent in this group[2,7-10]. In the past, Oxford University Hospitals (OUH) kept paper records on our complex patients (who were often FAs) with the aim of providing valuable information not readily available at the time of attendance. These records varied in quality and clinicians were often not even aware of their existence. As a result, plans were not regularly reviewed and therefore failed in the opportunity of giving clinicians the information required to tailor care appropriately.

Notably, mental health emergencies and underlying psychiatric conditions constitute a particularly large part of the challenge. The necessary level of insight to manage these patients can only be achieved by working closely with an effective mental health service.

The solution

The Emergency Department Psychiatric Service started operating in October 2013, providing assessments to all patients presenting to OUH Emergency Departments with mental health problems. At the time we acknowledged the limitations of the historic paper records kept in ED. Emergency Medicine and EDPS clinicians realised that through improved collaboration we would be able to better manage our shared FA population. It resulted in a more structured approach built around monthly FA meetings. Initially, our aim was mainly to devise personalised care plans for the use of emergency and mental health clinicians on the shop floor. However, we saw the potential of creating a successful programme with a much deeper purpose.

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[*] Based on the widely-used and statistically proven definition of ≥5 attendances pa[1]

Our meetings evolved into a more comprehensive group working closely together to not only create appropriate plans but in fact case manage especially challenging patients.

Results

1. Creation of a collaborative network

Over the last few years our team actively worked on expanding our collaborative network. Our core group now includes ED and EDPS clinicians and managers, as well as representatives of the in-patient psychiatric department (PM), Oxford Community Psychological Medicine Service (OCPMS), the ambulance service, and hospital safeguarding representatives. Involvement of pre-hospital pathways and elective care, as well as identifying the most appropriate service by utilising a broad level of expertise and experience is key. Liaising with GP's and specialist care teams regularly improves the overall care and outcomes we are able to offer our patients.
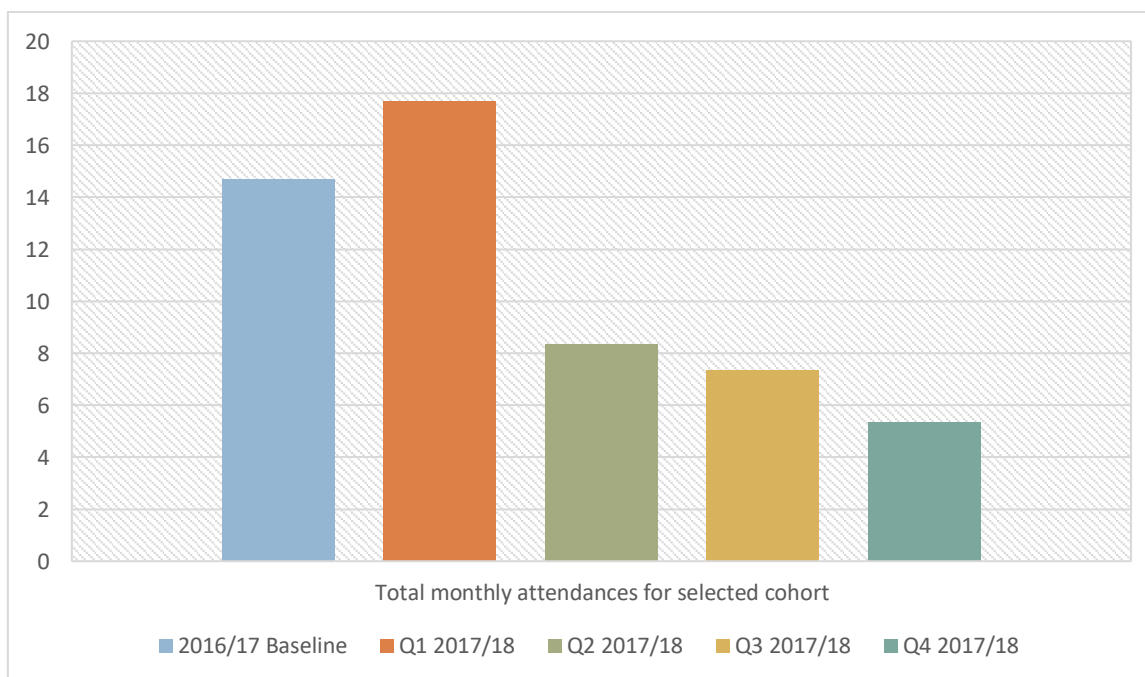
In many cases we have been able to build relationships with individual clinicians who act as immediate contacts, particularly when patients are not known to a specific consultant. It has enabled us to signpost appropriate patients more efficiently than would be possible though the traditional route of writing to the GP to action a referral (although this is still done when required by commissioning pathways). In addition, we would often invite GPs to contribute to plans. All finalised plans are shared with GPs.

A key principle of our frequent attender programme (FAP) is the maintenance of a transparent relationship with patients. Unless a relevant reason is identified, all plans are shared with individuals. Indeed, we have found that the effectiveness of plans are much greater when patients are aware of discussions behind the scenes, as well as what to expect when presenting to ED. If possible we involve patients in the case management and care planning process, mainly through MDT meetings. However, due to the challenge of coordinating the schedules of many professionals, we often ask GPs, specialists (in the elective clinic setting) or care coordinators to discuss relevant issues with patients (see addendum 1).

2. Reduction in attendances

- CQUIN 4 achievements

CQUIN 4 for 2017/19, the so-called mental health CQUIN, is designed around the principle that FAs have unmet psychosocial needs[11]. The stated aim is to improve the quality of care provided to people who visit the ED >10 times/year. The CQUIN uses reduction in attendances as one of its principle measures of success, with the target for year one a 20% reduction for a selected cohort of patients presenting with both mental health and/or other emergencies. Reports submitted to the Oxfordshire CCG provide verified data which indicate that we have outperformed the CQUIN target by a large margin. As illustrated below, after an initial natural increase in quarter 1 (during which plans were still being introduced), monthly ED attendances dropped consistently (using a 2016/17 baseline), with a 64% reduction in quarter 4. In addition to the inherent cost savings, the financial value of CQUIN 4 in year 1 amounts to £380,777.

Total monthly attendances for selected cohort

■ 2016/17 Baseline ■ Q1 2017/18 ■ Q2 2017/18 ■ Q3 2017/18 ■ Q4 2017/18

- Reduction in non-psychiatric attendances

A distinctive challenge when measuring the impact of an intervention on a population of FAs is the remarkable heterogeneity within this group. And while primary psychiatric emergencies are common, mental health morbidities and co-morbidities regularly act as an underlying driver of attendances. Consequently, patients may present with a range of non-psychiatric complaints. In fact, a study in Cambridge showed that 45% of their FA population had medically unexplained symptoms (MUS)[2]. Even though clinicians often find these patients the most challenging, very little evidence exists on how FA interventions affect their use of emergency departments.

A separate analysis of the Oxfordshire FAP identified patients in whom the majority of presentations were due to somatic complaints, typically related to MUS or anxiety about long-term conditions. To evaluate the impact on new cases only, rather than cases that required review, individuals were included if they were first case managed and/or had plans written in the 12 months between 1st June 2016 and 31st May 2017. Of note, data in this analysis consisted of a larger sample with slightly different inclusion criteria (e.g. applying the more widely used cut-off of ≥5 attendances/year) than the CQUIN cohort.

In the 6 months after the intervention period, attendances dropped in 78% of patients. ED use increased in 16.7% and did not change in one patient. The total number of attendances fell by a statistically significant 36%, which proves that the collaborative approach of the Oxfordshire FA programme has impact beyond patients who present with primary mental health complaints.

3. Best-interest outcomes for complex patients

While the impetus for frequent attender projects is often focussed on reducing the use of ED services, experience has shown that complex cases may be unresponsive to almost any level of case management or care planning. Indeed, the patient with the highest attendance rate in Oxford has been resistant to all interventions offered over the last ten years, and still regularly presents to our EDs. However, ongoing efforts have shown that a best-interest outcome for such complex cases is possible.

The positive results we achieved for this patient can be replicated in other complex individuals. It includes better management of risk while in ED, appropriate use of the Mental Capacity Act, a reduction in police involvement (where appropriate) and therefore less potential of an escalation in behaviour, senior decision-making with regards to radiological requests, limiting the use of Entonox, and a more consistent provision of care throughout our region and beyond (including other EDs).

Lessons learnt

1. Accurate data on attendance rates is essential. It should not be limited to a list of FAs but involves awareness of which patients are currently escalating. Equally, these patients have a variety of factors driving their use of healthcare services, both in the ED as well as in the community. The key to our success is the close working relationship between EDPS and ED, which includes the sharing of information available to each respective department. Frequent attender meetings are essential to facilitate this process, as well as providing a forum for discussions.

2. Meetings should be held regularly (in our case monthly), as attendances and drivers change rapidly.

3. Meetings need to be structured and have a clear aim. Our meetings aim to:

    a. Identify and discuss patients who frequently attend or pose specific risks (to themselves or others).

    b. Review care to ensure that mental health issues are identified (and coded) as necessary.

    c. Devise plans to ensure appropriate, consistent treatment and to minimise harm.

4. Personalised care plans should:

    a. Have a standard format (see addendum 2).

    b. Be easily accessible to shop-floor clinicians. A 'Flag' appears on our Electronic Patient Records and clicking on this link allows clinicians to view relevant information.

    c. Plans need to be able to 'last', e.g. avoid being too specific about contact details for others involved in care, as these may change.

    d. Avoid negative language.

    e. Never deny a service.

    f. Often focus on empowering patients to use their resources to resolve issues.

    g. Have a review date and a mechanism to trigger review at least annually.

5. Plans which contain advice that does not follow NICE guidance are all approved in ED clinical governance meetings.

6. In the current economic climate very few EDs have access to the resources required to create a completely bespoke FA service (e.g. regular clinics with mental health professionals or physicians). Instead, by thinking 'outside of the box' our collaboration has managed to tap into existing services.

7. A reduction of attendances can be achieved by tailoring care to patient needs. However, this should not be the only goal of a frequent attender programme. An individualised approach will achieve best-interest outcomes while allowing for a more appropriate use of resources (e.g. staff time and the avoidance of over-investigating and over-medicalising). It may also lead to cost-reduction, even if attendances are not significantly affected.

8. Involving patients is not only best-practice, but could also lead to a higher success rate.

Challenges have included:

1. FA meetings (and all the preparatory and ancillary work) take up a large amount of senior clinician time.

2. It has been difficult to have appropriate administrative time/support allocated.

3. Involving patients in developing plans can be particularly challenging. Nevertheless, we remain committed to an inclusive approach. All patients, unless there is a clear documented reason not to, are sent a copy of their plan. On occasion patients have contacted the team to re-draft plans.

Conclusion

From its inception to current day, the Oxfordshire ED Frequent Attender Programme has become an increasingly important aspect in the overall care provision of patients attending our EDs. It has grown in prominence in our hospitals and is highly regarded among healthcare professionals. In recognition, clinicians now regularly approach our team to help manage complex cases (including ED doctors, various OUH hospital specialities, a neighbouring ED, and GPs).

The ability of this programme to inform and assist other clinical services to achieve a better understanding of their patients' needs has resulted in an ever-broadening exploration of its potential. Currently, we are working with our endocrine and acute general medicine departments to develop pathways to identify and support diabetic FAs, thereby reducing the high mortality and morbidity risk of this vulnerable group. It has also played a part in building a relationship with Mind, the mental health charity, with whom we have undertaken a ground-breaking trial project that is exemplary of the national drive towards working closer with the third sector.

Our successes have been shown by the results reported in CQUIN 4, with the benefits to the department and the Trust far exceeding the CQUIN value. Indeed, if it was possible to replicate CQUIN achievements in our total group of FAs (which can of course not be guaranteed as it is affected by confounders), it would amount to cost savings in excess of £758,000/year in attendances alone (according to NHS reference cost per ED attendance[12], i.e. not factoring in investigations, treatment, admissions, etc). Our biggest limiting factor is clinician time. Nevertheless, the outcomes we have achieved for our patients and for the wider healthcare community are based on a more patient-centred, sustainable and long-term vision which came before the CQUIN and will last long after its completion.

There is no doubt that the NHS as national healthcare provider is under immense pressure, and only by working together can the vast challenges be met. The ED Frequent Attender programme in Oxfordshire has proven to be both a rewarding and productive model of collaboration.
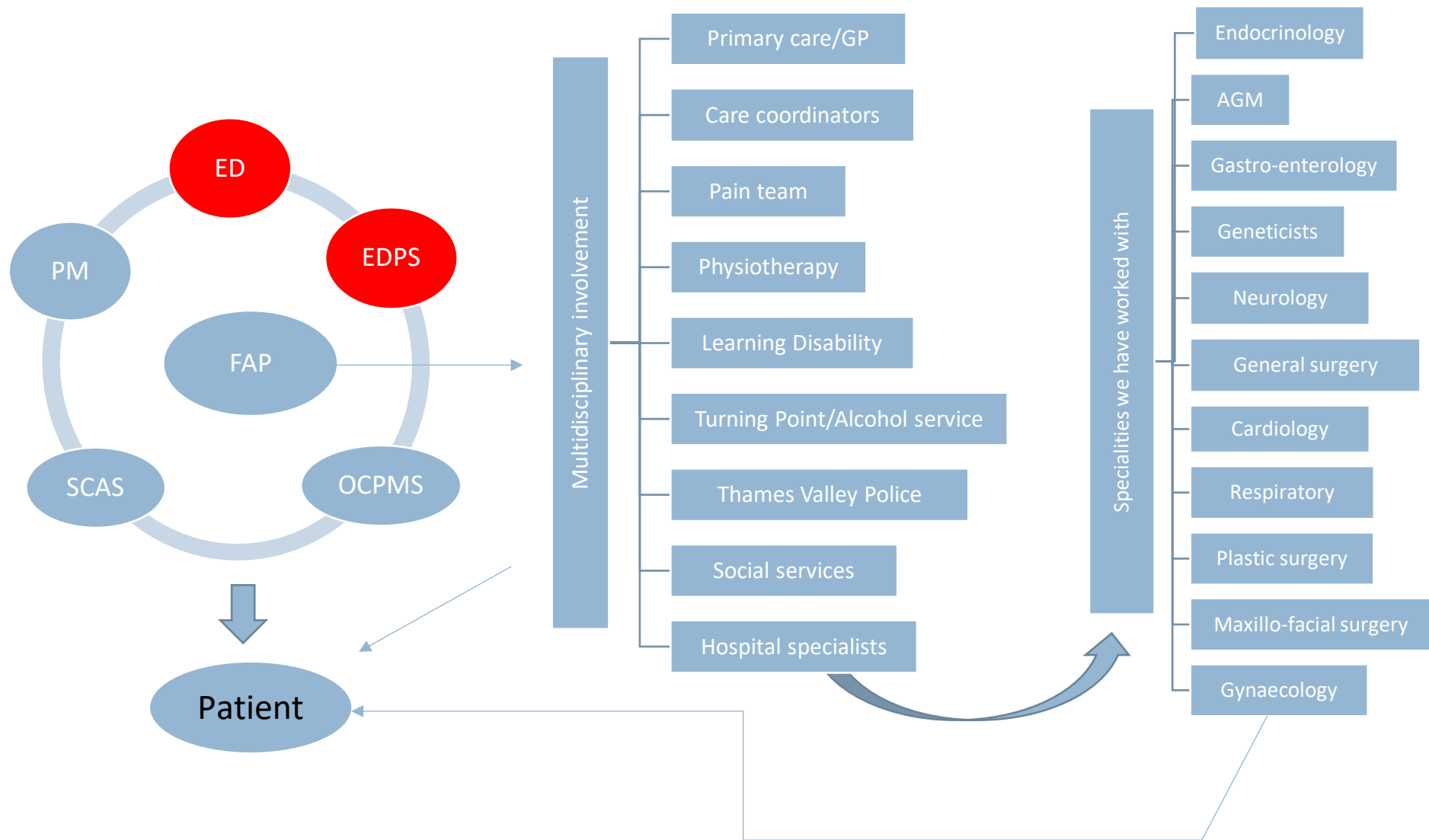
PCP: EMERGENCY DEPARTMENT

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Name	
Dob	
NHS number	
Other names	
Reason for alert	
Psychiatric diagnosis	
Physical health	
Background	
Plan	
Risks	
Other professionals/ Agencies involved	
Has the Management Plan been shared with the patient? If not, why?	
Alert raised by	
Review date	

REFERENCES:

1. Locker TE, Baston S, Mason SM, Nicholl J. Defining frequent use of an urban emergency department. *Emergency Medicine Journal.* 2007;24: 398-401.

2. Jacob R, Wong ML, Hayhurst C, Watson P, Morrison C. Designing services for frequent attenders to the emergency department: a characterisation of this population to inform service design. *Journal of the Royal College of Physicians.* 2016; 16 (4): 325-329.

3. Ruger JP, Richter CJ, Spitznagel EL, Lewis LM. Analysis of Costs, Length of Stay, and Utilization of Emergency Department Services by Frequent Users: Implications for Health Policy. *Academic Emergency Medicine.* 2004; 11(12):1311-7.

4. Moe J, Kirkland S, Ospina MB, Campbell S, Long R, Davidson A, et al. Mortality, admission rates and outpatient use among frequent users of emergency departments: a systematic review. *Emergency Medicine Journal.* 2016; 33:230-236.

5. Mason SM. Frequent attendance at the emergency department is a symptom but not a disease. *Emergency Medicine Journal.* 2014; 31:524-525.

6. Lacalle E, Rabin E. Frequent Users of Emergency Departments: The Myths, the Data, and the Policy Implications. *Annals of Emergency Medicine*. 2010; 56(1): 42-8.

7. Moore L, Deehan A, Seed P, Jones R. Characteristics of frequent attenders in an emergency department: analysis of 1-year attendance data. *Emergency Medicine Journal.* 2009;26:263–267.

8. Genell Andrén K, Rosenqvist U. Heavy users of an emergency department--a two year follow-up study. *Social Science and Medicine.* 1987;25(7):825-31.

9. Althaus F, Paroz S, Hugli O, Ghalei W, Daeppen J, et al. Effectiveness of interventions targeting frequent users of emergency departments: a systematic review. *Annals of Emergency Medicine.* 2011; 58(1): 41-52.

10. Soril LJJ, Leggett LE, Lorenzetti DL, Noseworthy TW, Clement FM. Reducing Frequent Visits to the Emergency Department: A Systematic Review of Interventions. Gupta V, ed. *PLoS ONE*. 2015;10(4):e0123660. Available from http:// doi:10.1371/journal.pone.0123660. [Accessed 20 August 2017].

11. NHS England. *CQUIN Indicator Specification Information on CQUIN 2017/18 - 2018/19: Improving services for people with mental health needs who present to A&E*. Available from: https://www.england.nhs.uk/wp.../2017/.../cquin-indicator-specification-14-07-17.doc [Accessed 5 August 2017].

12. NHS Improvement. *Reference costs 2016/17: highlights, analysis and introduction to the data.* Available from: file:///C:/Users/Deon/Downloads/1_-_Reference_costs_publication_VSnAQ5x.pdf. [Accessed 16 April 2017].