

Exploring the Relationship between General Practice Characteristics and Attendance at Walk-in Centres, Minor Injuries Units and Emergency Departments in England

P Tammes, RW Morris, E Brangan, K Checkland, H England, A Huntley, D Lasserson, F Mackichan, C Salisbury, L Wye, S Purdy

The problem:

Many ED attendees are self-referred, and this number is increasing (Fig. 1)

Many could be managed in primary care

Aims

To investigate impact of general practice and population characteristics on ED attendances in a longitudinal design

To investigate the impact of changes within general practices

To test previous findings of cross-sectional studies in a nation-wide context over several years.

Approach

Population

General Practices in England in 2009/10 to 2012/13 (4 financial years)

Data sources

NHS-Comparators, GP-patient-survey, Office of National Statistics, Public Health England

Outcomes

Self-referred discharged ED attendance rate per 1,000 practice population, standardized by age and gender,

Combined self-referred discharged ED, self-referred Walk-in Centre (WiC) and self-referred Minor Injuries Unit (MIU) attendance rate.

Potential predictor variables

- Opinion on waiting times in waiting room of practices
- Satisfaction with opening hours
- Having a preferred GP
- Able to see/speak to preferred GP always/often
- MIU and WiC attendance rates

Controlled for: male life-expectancy, proportion of elderly patients, ethnicity, unemployment rates, urban/rural location of practice

Inclusion criteria

For each year, included practices were:-

- Operative over whole year
- >500 patients
- Response rate to GP Patient Survey >20%, and >100 completed survey forms.
- Self-referred discharged ED rate > 10 per 1,000 patients (since lower rates implausible).

RESULTS

Self-referred discharged ED attendance

Between practices:

Less dissatisfaction with waiting time, having a preferred GP => lower ED attendance rate

Within practices:

Increase in MIU attendance rate over time => decrease in ED attendance rate

Combined ED, WiC & MIU attendances

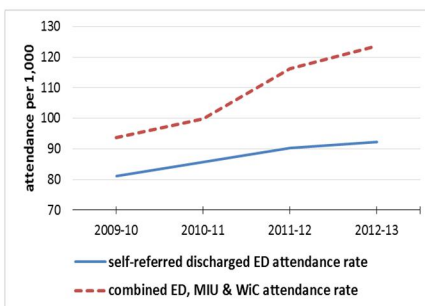
Between practices:

Less dissatisfaction with waiting time => lower combined ED, WiC & MIU attendance rate

Within practice variance:

Increased satisfaction with opening hours => decreased combined ED, WiC & MIU attendance rate

Fig. 1: Trend in ED attendance rate and the combined ED, MIU & WiC attendance rate.



Statistical methods

Estimated associations *between practices* (Fig. 2) and *within practices* (Fig. 3) over time: Multilevel design

Fig. 2: Time average (between practice association)

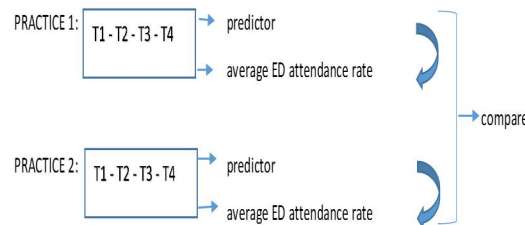
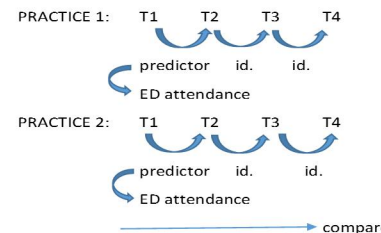


Fig. 3: Time specific (within practice association)



Conclusions

- Improvements in general practice access and continuity of primary care could reduce ED attendance.

Support for the introduction of 'named GP' scheme in 2014.

- Increase in the use of MIUs might decrease ED attendance rate.
Establishing a MIU near a hospital with an ED might reduce pressure on ED.
- Certain practice demographic profiles showed higher ED attendance.
Additional support measures might be needed for such practices.

School for Primary Care Research

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