

Proportions of men aged 40-64 years positive to Phadiatop\* and with specific IgE to three inhaled allergens, in three time periods,† and mean annual increase in prevalence. Values are percentages (95% confidence interval)

Year	Phadiatop	Grass	Tree	Cat
1975-6	30 (26 to 34)	16 (13 to 19)	5.7 (3.8 to 8.0)	4.1 (2.6 to 6.2)
1981-2	33 (29 to 37)	18 (14 to 21)	5.1 (3.3 to 7.3)	4.5 (2.9 to 6.6)
1996-8	42 (37 to 46)	27 (23 to 31)	12.6 (9.9 to 15.8)	10.1 (7.6 to 13.1)
Mean absolute annual increase in prevalence (%)‡	0.45 (0.17 to 0.73)	0.53 (0.30 to 0.77)	0.36 (0.19 to 0.53)	0.25 (0.13 to 0.38)

Test for trend ( $\chi^2$ ) was  $P < 0.001$  for Phadiatop and for each of the three allergens.

\*Preparation of 11 common, inhaled allergens used as a serological marker of atopy.

†In each time period there were 513 age matched men.

‡From logistic regression.

Our results do not support previous data suggesting an inverse association between two common enteric infections and adult atopy. The proportions of samples that were Phadiatop positive were similar in men with and without serological evidence of past hepatitis A infection (37% *v* 34%) and *Helicobacter pylori* infection (40% *v* 36%). Two other markers of childhood infection available from questionnaire data—number of siblings and whether a man went to boarding school—also showed no association with Phadiatop positivity.

## Comment

Our data show that atopy in middle aged men has increased during the last quarter of the 20th century and that the prevalence of atopy does not decline with increasing age; rather, more recent birth cohorts are more likely to have become atopic. Reports of

increases over time in specific IgE to inhaled allergens in adults from Nordic countries and Swiss and Japanese schoolchildren<sup>1-4</sup> involved younger subjects and shorter time periods than ours.

The reason for the increase in atopy is unknown. Our data suggest that it is unlikely to be an increased exposure to specific allergens (because sensitivity to both indoor and outdoor allergens increased). Our results also do not support the increase being due to declining childhood infections.

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Competing interests: None declared.

Ethical approval: Not needed.

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## Analysis of the distribution of time that patients spend in emergency departments

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The NHS Plan stated: "By 2004 no one should be waiting more than four hours in Accident and Emergency from arrival to admission, transfer or discharge."<sup>1</sup> This target was changed to allow for certain clinical exceptions, and since January 2005, 98% of patients must spend less than four hours there.<sup>2</sup> We analysed the distribution of time spent by patients in emergency departments in England.

## Participants, methods, and results

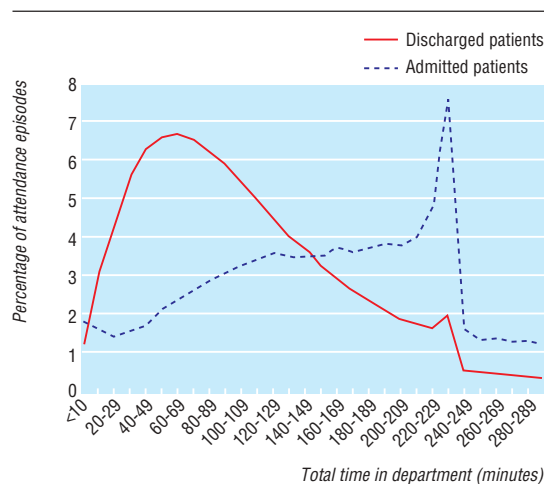
We invited major emergency departments (those providing 24 hour cover and most core services) in England to submit data for each new patient attending during April 2004. We determined the distribution of total time in each department for patients who were admitted to hospital and for those discharged from the department. To assess the generalisability of these findings, we used performance data from the Department of Health to compare trusts in which at least one

department had submitted data or in which no department had.<sup>3</sup>

We received data from 83 departments detailing 428 593 clinical episodes. Of these episodes, 72.8% (n=311 957) resulted in discharge and 22.0% (n=94 200) in admission. Of the remaining episodes, 1% (n=4452) were transferred, 0.2% (n=975) died, and 3.9% (n=16 504) did not wait to be seen. In 0.1% (n=505) of episodes the outcome was unknown. The figure shows the distribution of total time in the emergency department for episodes resulting in admission or discharge.

The median total time in the department for discharged patients was 96 minutes (98th centile=341 minutes); 91.0% (n=283 894) of these patients spent <220 minutes in the department, with a further 3.6% (n=11 161) spending 220-239 minutes. We calculated separately for each department the mean age of

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Distribution of total time in emergency department for episodes resulting in admission or discharge

patients spending 220-239 minutes there and of those spending <220 minutes there. A comparison using a paired *t* test showed that the mean age of the latter group (32.9 years) is significantly lower than that of the group who spent more time in the department (42.8 years) ( $t(df=82) = 19.8, P < 0.001$ ).

Patients admitted from the emergency department had a median total time in the department of 183 minutes (98th centile = 625 minutes). The distribution of total time in the department for patients admitted from the emergency department shows the most striking anomaly, with 64.0% ( $n=60\,315$ ) of patients spending <220 minutes in the department and a further 12.3% ( $n=11\,563$ ) spending 220-239 minutes. Admitted patients spending 220-239 minutes in the department were also significantly older than those spending <220 minutes there (mean age 56.5 *v* 48.9 years;  $t(df=82) = 8.28, P < 0.001$ ).

In 60 trusts at least one emergency department had submitted data for the study, and in 92 none had. The mean percentage of patients spending less than four hours in the emergency department in these two groups was 93.16% and 93.68% respectively. This difference was not significant ( $t(df=150) = 1.08, P = 0.28$ ).

## Comment

Although the departments studied performed well, older patients and those who were subsequently

## What is already known on this topic

Data published by the Department of Health show that the performance of emergency departments in England has improved when assessed by the proportion of patients treated within the current government target of four hours

## What this study adds

One in eight patients who are subsequently admitted are moved out of the emergency department in the final 20 minutes of the four hour target period

admitted were in the emergency department for longer than others, reflecting the findings of the recent National Audit Office report.<sup>4</sup> Our interpretation of these findings is limited by the lack of national data on the distribution of total time in emergency departments before the introduction of the four hour target. Response times for ambulance services in England have a similar distribution that peaks just before the target time.<sup>5</sup> Such performance targets should be monitored in such a way that any improvement can be shown to represent meaningful improvement in the patient's experience of the healthcare system.

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Competing interests: None declared.

Ethical approval: The study was approved by Eastern Medical Research Ethics Committee.

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