An audit of the recording of smoking status of the parents of asthmatic children

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ABSTRACT

Title: An audit of the recording of smoking status of the parents of asthmatic children.

Method: Medical audit during January 2000, to determine level of recording of smoking status.

Setting: Six partner, computerised, teaching general practice in South Bristol, where asthma care is shared by an asthma nurse and the doctors.

Results: 164 children out of the total practice population of 9250 met the criteria for inclusion in this audit. A smoking history was recorded in the medical records in 11 of the 29 children seen by the nurse and 37 of the 135 who saw a doctor.

Conclusions: The audit identified problems and raised awareness of the need to record parental smoking status. The 34% rate of recording of parental smoking status in the medical histories of asthmatic children was well below that expected. The asthma nurse was more efficient at recording smoking status, but she only saw 17.7% of the children. The audit revealed shortcomings in the recording systems used, which means that the rate of recording found here can only be used as an estimate.

4. A negative outcome was recorded if the converse was true.
5. The standard we set was 100% recording.

Notes:

- READ Codes are used to record morbidity on medical computing systems throughout the United Kingdom.
- In the United Kingdom, medical records are kept in a manual written format, either utilising A4 files or the Lloyd George - A5, envelopes, as well as a computerised system in the majority of general practices. Records are recorded in both manual and computerised format to varying degrees throughout the country.
- EMIS is one of the medical computing systems used in primary care in the United Kingdom.

BACKGROUND AND AIMS

In 1998 the WHO (World Health Organisation) identified the need to reduce parental smoking as a key action area in improving the health of children.¹ Smoking cessation in parents has been shown to reduce both the prevalence and severity of childhood asthma.²

General Practitioners are ideally placed to co-ordinate action to reduce parental smoking: they tend to have more frequent and long term contact with families; involving dialogue and encouraging patient responsibility; and there is usually more access to information about the social circumstances of the family.^{3,4} This audit was conducted in a six partner teaching practice in South Bristol during January 2000 to assess how effectively this information was recorded.

CRITERIA AND METHODOLOGY

The following criteria were used to define inclusion in the Audit:

1. Only children of school age (5 - 16 years inclusive) were audited, because the diagnosis of asthma in children younger than 5 years of age can be difficult and less reliable.
2. 'Asthma' was defined as having a READ* code diagnosis entry of asthma, or having been prescribed asthma medication in the past year.
3. A positive outcome was recorded if the parental smoking status was found in either the hand-written medical records (Lloyd George System*) or EMIS* records.

The medical records of each child identified by the EMIS search were examined to verify the diagnosis, and cases in which the diagnosis had been refuted (seven in this study) were excluded from the audit population studied. Children seen by the asthma nurse had their consultation recorded on a computer template. The records and asthma templates of the children were examined to see whether parental smoking status had been recorded. There were no missing records.

RESULTS

Two shortcomings in the recording of parental smoking status were immediately apparent (see figure 1):

The audit could not be conducted by examining only a single set of records, since the General Practitioners were not using the template and the Asthma Nurse did not always record her findings in the Lloyd George notes.

The computerised asthma template did not include a response for "non-smoking", so that it was not possible to tell whether parents were non-smokers or simply had not been asked.

There were no missing medical records. The medical histories of 109 of the 164 children with asthma (66.5%) identified in this audit contained no record of their parents' smoking status. It was notable that 62% of children seen by the asthma nurse had a record of parental smoking status, whereas only 27% of children reviewed by a doctor had this information recorded.

CONCLUSIONS

1. This audit reveals that rate of recording of parental smoking status in the medical histories of asthmatic children is only 33.5%. The standard

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Figure 3. Schematic diagram of the audit results

for this audit was 100%, so this represents a significant shortfall.

2. The asthma nurse was more efficient at recording smoking status, but she only saw 17.7% of the children.
3. The audit revealed shortcomings in the recording systems used, which means that the rate of recording found here can only be used as an estimate.
4. Audit studies provide primary evidence of current clinical practice, but these studies are time-consuming where General Practice consultation and Asthma Clinic records are recorded in different forms.
5. Existing Information Technologies would allow real-time auditing within General Practice, but this would require General Practitioners develop strategies for transferring hand-written consultation notes into electronic form, or for effective, appropriate electronic recording of consultation details during consultation.

RECOMMENDATIONS & DEVELOPMENTS

1. Following this audit, the template for asthma was

changed to allow the recording of non-smoking as well as parental and extended family smoking histories, and the practice has begun the process of becoming 'paperless'.

2. The practice has since received funding from the Regional Health Authority to allow staff training in smoking cessation techniques and to set up services within the practice for individual and group smoking cessation counselling.
3. There is ongoing discussion between the practice Information Technology Manager and the health practitioners to develop practice computer systems to target at-risk patients (including parents of asthmatic children).
4. The audit raised awareness of the need to record parental smoking status, and a repeat audit is planned for January 2001 to assess whether recording rates have improved. ■

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