

effect on a handful of patients, even a solitary case. This points to the challenge not only of bringing about change in clinical behaviour but of devising appropriate reinforcements to ensure that the new behaviour is maintained.

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- 1 Smith R. The scientific basis of health services. *BMJ* 1995;311:961-2.
- 2 Davidoff F, Haynes B, Sackett D, Smith R. Evidence based medicine. *BMJ* 1995;310:1085-6.
- 3 Lancet. Evidence-based medicine, in its place. *Lancet* 1995;346:785.
- 4 Haines A, Jones R. Implementing findings of research. *BMJ* 1994;308:1488-92.
- 5 Davis DA, Thomson MA, Oxman AD, Haynes RB. Evidence for the effectiveness of CME. *JAMA* 1992;268:1111-7.
- 6 Grimshaw JM, Russell IT. Effect of clinical guidelines on medical practice: a systematic review of rigorous evaluations. *Lancet* 1993;342:1317-22.
- 7 Taylor RJ, Bond CM. Change in the established prescribing habits of general practitioners: an analysis of initial prescriptions in general practice. *Br J Gen Pract* 1991;41:244-8.

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A method of creating a death register for general practice

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Registers of deaths, kept by general practices, are important for audit and research, to improve the care of dying patients, for planning services for terminally ill patients, and to improve the care of recently bereaved patients.^{1,2} A critical analysis of deaths in whole populations can also identify changes that are needed in the work and organisation of primary care teams.³ Although many general practitioners are interested in receiving a confidential list of deaths for their practice, only a few general practitioners maintain a death register.²

To create a death register general practitioners need accurate, up to date information about their patients' deaths. However, general practitioners complete only 30% of death certificates themselves, and, although registration of death is a statutory obligation, they have considerable difficulty obtaining prompt and accurate information about their other patients who die.^{1,2} The cause of death of patients who die in hospital is not always available,⁴ and coroners do not routinely provide reports to general practitioners unless they are requested. Some coroners' offices charge to supply the reports. An audit in our practice showed that our method of maintaining the death register was inadequate. I describe a simple system that was introduced following this audit for maintaining an accurate death register.

Methods and results

My five doctor training practice in inner city Leicester has 9800 patients. The first audit was carried out on patients who had died between 1 April 1992 and 31 March 1993. Of the 131 deaths that occurred in the 12 months the cause of death was known for only 95 (73%) patients. Twelve (9%) patients were known to have been referred to the coroner. A system was therefore set up to ensure that the cause of death was recorded on the practice computer for each patient before the notes were returned to the family health services authority. The secretary automatically requested information from hospitals if the patients had died in hospital but the surgery had not been told the cause of death and sent a letter to the coroner's office requesting the post-mortem findings every time a patient was referred to the coroner. The second audit was carried out by looking at all the deaths that had occurred from 1 April 1993 to 31 March 1994.

Of the 126 deaths the cause was known for 125 (99%). The remaining patient had died abroad and the cause of death could not be established. Nineteen (15%) of the patients had been referred to the coroner. Table 1 shows that the numbers of deaths from respiratory and neoplastic causes changed very little between the audits. The deaths missed at the first audit were

Table 1—Results of audits of death register. Values are numbers (percentages) unless specified otherwise

	First audit	Second audit
Number of deaths	131	126
Crude death rate (per 1000 population)	13.6	13.1
Sex distribution:		
Men	54 (41)	49 (39)
Women	77 (59)	77 (61)
Average age in years (range)	75.7 (5-99)	77.6 (40-99)
Cause of death recorded	95 (73)	125 (99)
Referred to coroner	12 (9)	19 (15)
Died in hospital	Not known	47 (37)
Died in own home or residential or nursing home	Not known	78 (62)
Causes of death:		
Coronary artery diseases	28 (21)	47 (37)
Respiratory diseases	28 (21)	24 (19)
Neoplastic disorders	26 (20)	26 (21)
Cerebrovascular disorders	7 (5)	20 (16)
Others	10 (8)	8 (6)
Not known	32 (24)	1 (0.8)

probably due to cerebrovascular and cardiovascular events—which are usually the causes for sudden unexpected events that lead to hospital or coroner intervention.

Comment

In general practice the only records of death are the counterfoils in the books of Medical Certificates of Cause of Death which general practitioners complete themselves. A system that can maintain a death register has been described,¹ but this relies on information being supplied by district health authorities and family health services authorities. Our system is simple and could easily be adopted by any general practice. It relies on preventing notes being returned to the family health services authority without the cause of death being recorded on the practice computer, but maintaining a death register would be much easier if hospitals and coroners routinely forwarded postmortem reports to general practitioners.

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- 1 Berlin A, Bhopal R, Spencer J, Van Zwanenburg T. Creating a death register for general practice. *Br J Gen Pract* 1993;43:70-2.
- 2 Black DA, Jachuck SJ. Death certification in general practice: reviews of records. *BMJ* 1984;288:1127-9.
- 3 Hart JT, Humphreys C. Be your own coroner: an audit of 500 consecutive deaths in a general practice. *BMJ* 1987;294:871-4.
- 4 Neville R. Notifying GPs about deaths in hospital: an audit. *J R Coll Gen Pract* 1987;37:496-7.

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