

What is already known on this topic

Prescription errors often occur because the prescriber does not have immediate access to relevant information relating to the drug or the patient

Computerised systems containing rules to prevent incorrect or inappropriate prescribing increase the appropriateness of drug treatment and reduce errors

Such systems have not been widely implemented because of difficulty providing decision support at patients' bedside

What this study adds

A rules based system for prescribing and recording the administration of drugs that can be accessed from the patient's bedside through wireless terminals was introduced

Over 11 months the system stopped 58 unsafe prescriptions and gave over 700 high level warnings

The system was considered an improvement by most doctors and nurses

have been eliminated, and patients' prescriptions are always available. Prescriptions are checked against patient data as well as information on drug interactions and maximum recommended doses, which increases the likelihood that prescribing will be safe. The prescriptions abandoned as a result of warning messages constitute an important contribution to safety and patient care. We have also found that the system facilitates the introduction of treatment protocols into clinical care and makes audit of drug prescribing easy (data not shown).

Because the system has been designed to support clinical decision making rather than to control it, it has been well received by doctors, nurses, and pharmacists. It was seen as improving the effectiveness and safety of patient care. Most of the prescription warnings generated by the system are low level interaction warnings, which are usually overridden. However, the purpose of these warnings is to give information on potential interactions, which would otherwise have to be sought in a drug formulary. The warnings of drug interactions and contraindications reinforce users' knowledge of drugs.

We have not yet examined the effect of the introduction of the system on patient outcomes, but this is an important area for future study. Although the system is generic in concept and potentially applicable to any specialty, it is currently only in use in the renal unit, and its effectiveness in other settings remains to be examined.

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Contributors: PGN designed the questionnaire, analysed all the data, and drafted the paper. DA, NTR, and MP initiated the introduction of the system and participated in the interpret-

ation of the data and writing the paper. PGN will act as guarantor.

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Competing interests: Since its development the system has been acquired by McKesson HBOC. Wolfson Computer Laboratory has a contract with McKesson HBOC to develop the system further and both the laboratory and the renal unit receive royalties from sales of the system. NTR and MP have been reimbursed by McKesson HBOC for attending several conferences.

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Corrections and clarifications

Reviews

In Simon Chapman's review of the book *Curbing the Epidemic: Governments and the Economics of Tobacco Control* (15 January, p 192) we unfortunately misspelt the name of one of the book's editors—Prabhat Jha.

Not time to put cot death to bed

We inadvertently forgot to incorporate a couple of late changes to this article by Sylvia Limerick (11 September, pp 698-700). In the second paragraph on p 699, disease categories were from ICD-9 (not ICD-10), and in the second paragraph on p 700, the reference is 7 (not 2).

Recent advances in intensive care

In this article by Stephen Stott (5 February, pp 358-61) the figure showing the technique of percutaneous tracheostomy (p 360) was adapted from a diagram provided by Cook Critical Care.