a demonstrator project under strand 1 of the integrated clinical workstation (ICWS) programme. Loughborough: Centre for Coding and Classification, 1993.

- 3 Williams JG, Morgan JM, Greenway SC, Cheung WY. Improving outpatient services: the value of information. In: Ozbolt JG, ed. *Proceedings of the American Informatics Association's 18th annual symposium on computer applications in medical care, Washington, Nov 1994*. Philadelphia: Hanley and Belfus, 1994:978.

Data collection should be integrated with patient care

EDITOR,—The editorial on making routine data adequate to support clinical audit mentions the high quality of data from the St Mary's maternity information system,¹ citing two recent papers on its validity.^{2,3} The editorial's authors, however, have missed the point about why this particular system has proved so successful. The basis of the system is that midwives enter the data themselves and then in turn use the system for practical purposes directly associated with patients' care—for example, it generates summaries and discharge letters. The system is thus integrally associated with patients' care and is not a separate task.

This experience strongly suggests that abandoning the normal practice of relegating the input of data to clerical staff results in better quality of data. This is both because the motivation of health care professionals is higher and, crucially, because of the reinforcing feedback loop involving the use of the information for patients' care.

The Department of Health has introduced an information management and technology strategy for the NHS in England, which has many positive features.⁴ Its potential Achilles' heel, however, is precisely this question of the quality of the data. Although it includes a data quality initiative, this is concerned mainly with administrative data (the postcode and codes for the provider, health authority, and general practitioner), the only clinical element being the code for the diagnosis.⁵ We suggest that a great deal could be learnt from the strengths and weaknesses of existing systems, especially successful ones like St Mary's maternity information system, and could then be used in the development of the future information technology for health care.

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- 1 McKee M, Dixon J, Chenet L. Making routine data adequate to support clinical audit. *BMJ* 1994;309:1246-7. (12 November.)
- 2 Cleary R, Beard RW, Coles J, Devlin HB, Hopkins A, Roberts S, et al. The quality of routinely collected maternity data. *Br J Obstet Gynaecol* (in press).
- 3 Cleary R, Beard RW, Coles J, Devlin B, Hopkins A, Schumacher D, et al. Comparative hospital databases: value for management and quality. *Quality in Health Care* 1994;3:3-10.
- 4 Information Management Group of the NHS Management Executive. *IM&T strategy overview*. London: HMSO, 1992.
- 5 Information Management Group of the NHS Management Executive. *Setting standards for data quality*. London: HMSO, 1993.

Myths in medicine

EDITOR,—Richard Horton wishes to lay the Jenner myth to rest for the final time.¹ It was a common belief among farmers in the west country that previous infection with cowpox prevented smallpox. Acting on this, Benjamin Jesty, a farmer in Dorset, infected his wife and two sons with cowpox from a cow.² Twenty years later, on 14 May 1796, Jenner inoculated James Phipps with material from a sore on the hand of Sarah Nelmes, who had been infected with cowpox when milking Blossom.

Jenner thus showed that "true" cowpox could be transmitted from person to person. This was important, since an infected cow was not always available. Jenner then inoculated James Phipps with smallpox two months later and showed that inoculation with cowpox did prevent smallpox. Jenner repeated the experiments. He published his findings in a pamphlet entitled "An inquiry into the causes and effects of the variolae vaccinae . . . known by the name of the cow pox" in 1798. He spent much time answering questions and meeting criticism. He published further pamphlets. He once described himself as "the vaccine clerk of the world."

It is for this that Jenner received and deserves recognition. The bicentenary of Jenner's experimental proof of the effectiveness of vaccination will be celebrated next year.

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- 1 Horton R. Myths in medicine. *BMJ* 1995;310:62. (7 January.)
- 2 Perry CB. *Edward Jenner*. Bristol: University Press, 1983:21.

*Interestingly, the *BMJ* published the following letter and editorial footnote in October 1895 (*BMJ* 1895;ii:871).

SIR,—During my rambles in Dorsetshire a few weeks ago I noticed an inscription on a tombstone in the little village churchyard of Worth Matravers as follows: "Sacred to the memory of Benj. Jesty Downstay, who departed this life April 16th, 1816. Born at Yetminster in this county. A honest and upright man. He was the first person (known) that introduced cowpox with inoculation, who from great strength of mind made experiment from the cow on his wife and two sons in the year 1774."

I have since ascertained that there is no doubt as to the correctness of this statement, and the above was a farmer in that neighbourhood, and there remains no doubt that he performed vaccination, at least on his own family, several years before Jenner made the discovery.—I am, etc,

Bristol, Sept. 25th

G. C. PAULI, M.R.C.S.

The then editor added the footnote:

There is no reason to doubt the correctness of the statement made upon the tombstone. It was long a matter of traditional belief amongst the dairy farmers in England and in Holstein that cow-pox was protective against small-pox. The deliberate introduction of cow-pox may therefore well have been adopted by several independent minds. All great discoveries have been anticipated in a similar manner, but it detracts nothing from the greatness of him who first systematises or renders them available for the purposes of every day life.

Sudden infant death syndrome in Maoris

EDITOR,—Charles Essex's news item on the sudden infant death syndrome in New Zealand quotes the opinion of Dr Ed Mitchell, who coordinated the New Zealand cot death study from 1987 to 1990 and has continued to monitor baby care practices in New Zealand.¹ Essex points out the disproportionate rate of the syndrome among Maori babies. It must be appreciated, however, that a designated Maori can have any proportion of Maori blood. The New Zealand study called a baby Maori if either parent considered himself or herself to be Maori. But the Maori part was seldom full Maori. For some, it was as little as a quarter or less. Thus the relative rates of the sudden infant death syndrome for Maoris and non-Maoris vary according to the criteria that are used.

The article is accompanied by a photograph of a Maori woman in a flax skirt who is holding a baby and standing in front of the traditional meeting

Maoris today live like other New Zealanders

house. This gives the impression that this is the manner in which Maoris live in New Zealand. Nothing could be further from the actuality. The situation depicted in the photograph is one used for tourist publicity. Maoris today live like other New Zealanders. Their education is equal, and most of them live in similar houses, enter the same professions and occupations, and are just as familiar with late 20th century technology (figure).

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- 1 Essex C. Cot deaths. New Zealand: campaign falters over bed sharing. *BMJ* 1995;310:8-9. (7 January.)

We apologise for the unintended offence caused in New Zealand by our use of an old picture, and we are grateful to the New Zealand Cot Death Association for supplying us with modern pictures that we can use in the future.—ED, *BMJ*

n of 1 trials in osteoarthritis

Study was conceptually and statistically biased

EDITOR,—Lyn March and colleagues' study comparing a non-steroidal anti-inflammatory drug with paracetamol in osteoarthritis displays conceptual and statistical bias towards paracetamol.¹ The conceptual bias—that non-steroidal anti-inflammatory drugs are illogical when there is little inflammation—would not arise if these drugs were called potent pain killers. After all, paracetamol has antipyretic activity but is used in the absence of fever. Statistical bias arose by the authors' designation of paracetamol as the drug of choice if differences from diclofenac did not reach significance. It was impossible, however, for diclofenac to be significantly better on a global rating: when all preferences were for diclofenac the P value was only 0.06. In fact, 12 patients showed more preferences for diclofenac (compared with one with more preferences for paracetamol); nine patients had more pain and eight more stiffness when taking paracetamol (compared with one and two, respectively, when taking diclofenac); and 12 needed more escape analgesia when taking paracetamol (compared with one when taking diclofenac (median 7.5 tablets v 1, P=0.13)). Eight patients reported more side effects while taking paracetamol compared with five while taking diclofenac; median number six v three, P=0.17). These results suggest that paracetamol was relatively ineffective and poorly tolerated.

Other studies in osteoarthritis also show that paracetamol is less effective than non-steroidal