Statistics in the reformed health service

Report on a one day conference organised by the Royal Statistical Society held at the Institute of Mechanical Engineers on April 21 1993.

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It would be fair to say that I left this conference feeling rather depressed. I hasten to add that this was no reflection on the speakers. In each case the presentations were in general entertaining, clear and spiced up with a certain degree of cynicism, flippancy and critical comment. Alaric Cundy (Head of Business Systems, UCL Hospitals, London) provided an excellent overview of the NHS 'reforms' and their implications for health information.

This was elegantly illustrated with a case history of a patient presenting with stomach pains. After an initial GP consultation, the patient is referred for several outpatient visits, an in-patient episode and finally follow-up visits. The complexity of information transfer from GPs to trusts or directly managed units, to purchasers or fund-holders was all too clear and that was before considering the additional problems of extra-contractual referrals. In addition, purchasers require information on quality measures and need to assess whether their populations's health needs are being met. Whilst conceding that much work was currently happening in these last two areas, little if anything had reached the level of practical applications.

Providers' information needs were simpler. Their number one priority was getting paid, hence identifying the purchaser and appropriate tariff for the procedure. Issues such as including capital charges, in relation to buildings and equipment were still currently a 'theoretical' rather than real consideration in billing purchasers. Finally the roles of Regional Health Authority were seen to encompass monitoring the contracting process and evaluating the effectiveness of contracts in meeting the health needs of their population. This is a rather grandiose aim, which I somehow cannot see will be achieved in anything but the very distant future.

Laura Guest (Resource Project Manager at Whittington Hospital) discussed the resource management initiative (RMI), which aims to enhance efficient use of health resources. The initial work, piloted in 1986 in six hospitals, was financed to the tune of £1 million ring-fenced for 3 years. However, in the opinion of this speaker, to fully implement a RMI would take more in the range of 10 years. Further, the sum of money allocated to acute services stands in marked contrast to the mere £15,000 allocated to develop RMIs for community care. The RMI is dependent on good data for pricing procedures, a direct result of the internal market.

Computerised information systems now exist to link nursing information systems, pharmacy, radiology, theatre and case-mix information systems. The development of accurate costings was still very much in its infancy. There was now a shift from simple block contract costings to cost per volume and finally outcome specific costings. The field of surgery was simpler than that of medicine. In the former, 20 per cent of patient groups constituted around 85 per cent of the work as compared to the latter were the figure was more like 50 per cent. Little progress had yet been made, however, in truly integrating information systems across acute, community and primary health care sectors. Such data-linkage would enable the 'true' cost of illness episodes to be evaluated, but of course would be of interest to purchasers rather than providers.

Sue Eve (Clinical Coding Adviser, Medicode Ltd.) provided a tale of coding 'past, present and future'. With the advent of the RMI and the need to obtain more accurate clinical information, coders had arisen from their dungeons and now often had better accommodation, status and training. However, in her opinion, the overall level of clinical coding accuracy still remained around the 50 per cent level, despite a few centres of excellence were this figure was probably far higher. Neither OPCS or Regions routinely carry out any validation studies, except consistency checks for example that the sex of patient discharged after a hysterectomy was not male. Money had often been spent on information systems before national standards were set up and even now lack of standardization remained a problem. Furthermore the need to bill purchasers has often meant that diagnostic accuracy has often been sacrificed in favour of prompt coding. Block contracts also do not encourage detailed accurate clinical coding.

Her vision of the future brave new world of coding was more optimistic. Around £2.7 million pounds has been spent on developing the Reed classification system. An attempt to classify diseases, procedures and interventions such as physiotherapy, chiropody etc. in a more meaningful 'medical' way. This classification system appears to have more credibility with clinicians, and hence their support, than the current ICD-9 classification. Read codes can also be converted to ICD codes although the mapping process is not without problems and errors. Other developments include the use of clinical workstations so that doctors and nurses directly code data. The information needs of clinicians and managers are not the same, however. If

future coding is to be done by clinicians it is possible that specific medical information may be accurately coded whilst other information may still remain poor. She felt there was still a long way to go before there was a uniform 'culture' change in how both clinicians and managers viewed the importance of clinical coding.

George Clark (Systems Manager, Mersey Regional Health Authority) discussed data transfer in relation to contracts. He initially described the Department of Health October 1990 directive on the contract minimum data set (CMDS). This specified that all hospitals, through HES, should obtain standardised information on patient's name, address, general practitioner, purchaser, provider, contract number and several other variables including ethnic origin. Possible uses of the CMDS were as follows: (a) invoice validation (b) contract monitoring and planning (c) health needs assessment (d) provide hospital episodes statistics for the health service indicators.

Obviously different aims require different degrees of information. Recent attention from the data protection officer has been raised on the collection of ethnic information. Such information would not be required simply to bill a purchaser, yet may be vital in terms of monitoring the provision of health care services for ethnic minorities. Despite the production of guidelines for the CMDS, no information was provided on how information should be returned, on paper or magnetic tape, and no file layout or key identifier is provided. This means there is no way to go back to the files and amend corrections.

Since the NHS changes, the networks involved in data transfer has also become more complicated. This led to the 'Mersey project', the establishment of a single central clearing house for sending data from providers to purchasers that cuts across regions and special health authorities. Hence providers can send their information to the clearing house and it will then pass on the information to relevant purchasers. As 10 per cent of patients will cross regional boundaries for medical treatment, such a system simplifies and rationalises the amount of data transfer. This system is not mandatory, however, and is not used by all regions.

The future holds more opportunities for faster and more efficient data transfer. Work in the area of Electronic Data Interchange (EDI) is still in its infancy, but may enable rapid transfer of information from different regional information systems on both procedures and waiting lists. Current pilot studies between two regions however have not been without problems. No mention was made about the ever growing private sector and whether current guidelines concerning data transfer also covered private hospitals. Whilst the government has now produced a national information technology strategy with respect to the health service, it has no clear time-scale for

implementation and no additional budget has been allocated.

The final speaker, Malcolm Teague (Regional Information Services Manager, South Western RHA) discussed general practice funding, but I was unable to stay for this presentation.

On reflection, my disappointment almost certainly stems from the snail's-pace progress that has been made in this area over the last few years despite a large degree of work and effort. It appears to be a depressing fact that whilst millions of pounds have been spent on developing information systems, coders do not have their own medical dictionaries and use ICD manuals held by string and elastic bands. So it goes.

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