Current Medical Topics

No. 1 The Army Medical Services Computer Development Steering Committee

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Computers, for reasons of stark economics — machines being cheaper than people—have an uncanny tendency just to happen. Major installations replace human workers of all kinds and our establishments drop accordingly. So we quickly find ourselves with no alternative to the machine. The computer has taken over, and the job, whatever it is, cannot be done any other way. Next year's estimates for expenditure on computers, for the Army Medical Services, amount to about £670,000 and this does not include the cost of things like word-processors and the computing elements integral to scientific and other equipment. The money is required for major patient administrative installations in Military Hospitals, for additions to existing systems, for computers for stock control in equipment depots and medical stores and for micros in General Practices, clinical research departments and in the consulting rooms and laboratories of individual enthusiasts who think they can justify the expense. Naturally, a budget of this size has a strong chemotactic effect on the purveyors of computer hardware and those offering consultancy services, software packages and so on.

This, as experience has painfully demonstrated, is the caveat emptor situation with a vengeance. For in many cases, even if we have defined our needs reasonably well, we are by no means properly equipped to be able to respond critically to the vendors' assurances that they understand what we need and that they can supply it. Even at this distinctly elementary level, we are short on expertise.

As we are swept along in the now irresistible current of computerisation, and systems, which can only be described as procrustean, are imposed, willy-nilly, on our daily lives and professional activities, cussing is not enough. The plain truth is that we are not going to get friendly systems until we are in a position to dictate, within the limits of feasibility (and we must know what these limits are) exactly what we want. Perhaps the largest challenge of all arises from the fact that computers, like biological organisms, have an inherent tendency to grow. It is a fact of life that one can't do very much about. The DEC PDP 11/40 at QEMH Woolwich, with its

program written in 'MUMPS' has been growing ever since it was brought 'on line'. From the Master Patient Index, little pseudopodia have appeared, from time to time, and have extended to the wards, the Out-Patient Department (where they have totally assimilated the appointment system), the administrative corridors of power and Reception. The computer looks after the waiting lists and generates medical statistics. It stores a diagnostic index and an index of operative procedures done, and anaesthetics given. Prospective buddings in the direction of the Pathology Laboratory, the X-Ray Department, the Department of Genito-Urinary Medicine (including the Central Syphilis Register) and even out toward the Dispensary, are beginning to worry us. Metastases have been found in the Cambridge Military Hospital, Aldershot and strongly suspected in DKMH Catterick.

This malignant neoplasia needs to be under expert control and this control can be exerted only by people who know both about medicine and about computers. I do not think it an exaggeration to suggest that every major unit blessed with a computer should have on its staff an RAMC Officer who has had formal training in automatic data processing (ADP) including, at professional level, Systems Analysis and Programming. But until such a counsel of perfection can be implemented, units badly need a source of advice and a depository of expertise on which to draw. Hence the recent institution of the Army Medical Services Computer Development Steering Committee.

The Committee consists of a Colonel L/RAMC as Chairman; a Secretary, an RAMC Major, whose main purpose in life seems to be to see the Army Medical Services totally computerised; a Lt Col from ASD 4 (ADP); a representative of the Commanding Officer of the RAMC Training Development Team; an ADP trained RAMC non-medical Captain with a considerable background of experience in Systems Analysis and Programming and a civilian representative of the Defence Administrative Computer Division (DACD 2). The Committee, which was appointed by DGAMS, reports, like its sister committees in the RN and RAF, to the Defence Medical

Services Computer Steering Committee and has links with several Government agencies concerned with computers, including the procurement authorities. Our terms of reference are wide but we are essentially concerned, in terms of general policy, with the guidance of future computer projects in the AMS. As well as monitoring advances in computer systems outside the Army so that we can best recommend, to DGAMS, systems and equipment to be developed and procured for use in the Army Medical Services, we provide a day-to-day advisory service by trained Systems Analysts who are able to visit units to discuss and consider potential projects. We offer channels to departments, both in MOD and in other Ministries from which specialised advice on procurement and other matters may be obtained. We are preparing a register of all existing computer installations, world-wide, in the AMS. We are looking at further ways in which computers can be used to achieve better efficiency and economy, relieve drudgery, extend scope and generally promote the interests of the Army Medical Services.

We will not, of course, get a penny of funding for such purposes unless we can demonstrate, to the satisfaction of some very hard-headed people, that what we propose is cost-effective or markedly advantageous—and that is another of our functions. Finally, we are, as you may have inferred, very interested in the question of training adequate numbers of RAMC personnel in computer studies and in the selection of project officers for new hospital systems. Restraints on manpower make this difficult to achieve, but we are unanimous that education in computers is fundamental to the success of the whole business.

Your contact is Major M W Grainger, RAMC (MOD, AMD 1d), 01-430-5555 ext 5828.

Editor's Note: Readers who wish to learn more about the medical applications of computers are recommended to read the excellent series in the *British Medical Journal* 1983; **286**: 1717 and onwards.

Honorary Consultants to the Army

Dr E D Morris, MB, FRCS, FRCOG, was appointed Honorary Consultant in Obstetrics and Gynaecology to the Army with effect from 28 May 1983, in succession to Mr T L Lewis.

Professor L Spitz, MB, FRCS (Ed), was appointed Honorary Consultant in Paediatric Surgery to the Army with effect from 6 June 1983, in succession to Mr H H Nixon.

Professor J Andrew Thornton, MD, FFARCS, DA, was appointed Honorary Consultant in Anaesthetics and Resuscitation to the Army in Hong Kong with effect from 2 August 1983, in succession to Dr Zolton H Lett.