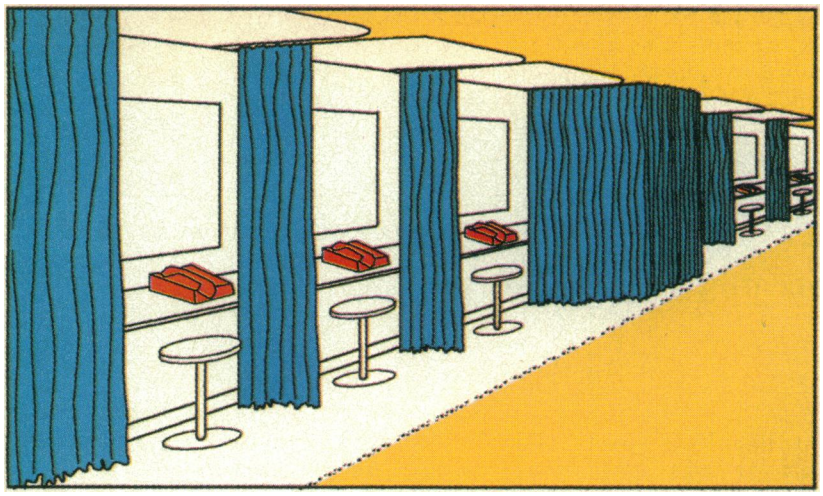

CAROL CARTER

Futuristic, but possible: the Mediphone

longer appear. A little packet fell into the box below the screen, together with a card inviting him to go to the optician's counter to have a more detailed visual check and to select a pair of spectacle frames. He felt ill, however, and went home to bed.

Three days later, back at home in north Yorkshire, the telephone rang in the evening.

"You haven't been back to a Mediphone booth," said the voice from Devon. "Are you feeling better?"

David felt guilty. "Much better," he said. "I haven't finished the course of tablets yet, and thought I would leave it until I had since they are obviously working."

"OK," said the voice at the end of the line. It knew from his family history and from his exam results both in school and university (as recorded by the Central Educational Bureau) that he was intelligent. However, from previous responses to requests to attend the Mediphone booth it knew that he was rather unreliable in this respect. "Do go back though," it said. "The pills you are on now are only antibiotics designed to get rid of the infection. Once that is dealt with you will need some others to dissolve the gall stones. You could also do with losing some weight." It did not mention that the electrocardiogram showed very early signs of ischaemic damage to the heart which would be worth following up, particularly in view of a strong family history of coronary artery disease evident from the genetic record. Luckily there had been no traces of nicotine on David's breath.

The computer updated the neural network in the National Databank to pass on all the knowlege it had about David and what treatment it had recommended for him, together with the fact that the abdominal pain had resolved within three days. Further follow up details could be sent in when David next came to the Mediphone. Keeping the central network up to date was important in order to determine which forms of treatment worked best for particular groups of patients.

"OK," said David, knowing that he might decide not to go back, but also that he would have to tell the Mediphone of his decision if he did not want to be pestered by one phone call after another. He also knew that his employer might ask him to produce a clean Mediphone "bill of health" if he took many more days off work and that, although the computer would not tell his employer the diagnosis, it would not tell a lie and say that he was doing all he could to keep healthy if he ignored its suggestions.

Finally, there was the matter of the optician card and the need to get a pair of spectacles. If he was unlucky enough to miss a traffic sign and the courts found out that he had ignored a recommendation from the Mediphone they would certainly increase his fine. He would have to balance the prospect of another visit to Mediphone with the risk to his pocket.

Everything this article describes is almost possible with technology available now. IBM has been developing speech recognition for several years, and Apricot incorporates a microphone into the front of its current range of computers for this reason. "Breathalysing" is perhaps most commonly used to assess alcohol excretion but many other metabolic products are excreted in the breath, and biochemical analysis generally has been carried out on smaller and smaller samples as time goes by. The various computer networked systems mentioned are all in place now, and child health systems in the regions incorporate birth registration. Speech synthesisers (as opposed to speech recognisers) are available on even the cheapest of home computers.

Whether computer aided diagnosis based on question and answer techniques will be trusted sufficiently for computers to be able to prescribe on the basis of them is more debatable. Similarly, ethical considerations and confidentiality would need to be taken into account before health computers would be allowed to link all members of the family and their medical histories together, let alone interrogate airline booking systems or credit systems. In principle they might be allowed to access these systems without any data flowing in the other direction.

Allowing computers to choose which treatment to prescribe on the basis of experience accumulated in a neural network might be similarly controversial, but it would have the advantage that the outcome of treatment in every patient living in normal circumstances would be taken into account, rather than only those enrolled in the very special circumstances of a randomised controlled trial.

Consultatio epistulae—the way forward?

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Our centre receives referrals from a wide catchment area and it can be difficult for patients to get to the clinic. They often have to make long, arduous journeys for a relatively short consultation. In this context we describe a case of consultatio epistulae; we believe this is the first such case documented.

Case report

A 30 year old man with a 12 year history of intractable complex partial and secondary generalised seizures first attended the epilepsy clinic at the National Hospital for Neurology in 1989. At the beginning of January 1993 we received a letter and questionnaire from him (box) along with a stamped, addressed envelope.

Comment

We believe that with the "rationalisation" of the health service, in which hospital services are offered at centres chosen on the basis of economics rather than proximity to the patient, an epidemic of consultatio epistulae may occur. Whether this condition is detrimental to patient care is a matter of debate; it would certainly increase patient turnover in a busy clinic. Computerisation of this mode of consultation may make it possible to dispense with the services of a

doctor, making consultations faster and more cost effective (the main aim of clinics in the future NHS?).

The prognosis of this and similar conditions (for example, consultatio telephonis) is still uncertain and may warrant further multicentre prospective studies. Some doctors may feel that this condition is to be avoided, but often "the pen is mightier than the sword"—and a lot easier to carry.

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29. 12. 92

For the attention of: DR SANDER

Dear Dr Sander,

I have an appointment to see you on 20th January 1993 at 11:15 am. I hope this letter can replace that visit and save considerable time and difficulties it poses. Living in the countryside it takes ca. 4 hours of travelling to visit each time.

I wish to report that since 2nd June I have had no abnormalities, loss of consciousness, aura, or any other symptom related to neurological disorders.

I enclose a questionnaire and SAE to save time, and will follow the comments on it.

May I take this opportunity to wish you a peaceful and happy new year.

Yours sincerely,

1. I still require you to keep your appointment
   - ☐ YES
   - ☐ NO

2. Keep taking Tegretol Retard at prescribed times and amounts
   - ☐ YES
   - ☐ NO

3. I require further information from you by letter
   - ☐ YES
   - ☐ NO

4. I wish you a happy new year as well
   - ☐ YES
   - ☐ NO

During his presidency of the Medical Society of London, Alan Woodruff engraved its building, This, the oldest medical society in Great Britain, was founded by Lettom in 1773