

to hospital were relatively short and use of the equipment was low; had each health centre seen 12 patients a week and the patients lived an average of 40 km from the hospital, teledermatology would have been as cheap. Other factors, such as cheaper equipment, would also improve the relative economics for telemedicine. Nevertheless it is clear that, although real time teledermatology is both clinically effective and economic in the appropriate circumstances, it is not likely to be useful in large cities, except possibly for secondary-to-tertiary consulting or for educational use. Its place in the overall management of dermatology patients from primary care, and indeed the place of pre-recorded teledermatology ("store-and-forward") remains to be established in future trials.

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INFOPOINTS

Online appointment booking to rapid access chest pain clinic

The English National Service Framework for Coronary Heart Disease recommends rapid access chest pain clinics for the prompt management of angina.¹ Moreover, consultations in general practitioners' surgeries should be "structured and guided by the active use of a paper or electronic practice protocol/guideline which includes the indications and arrangements for accessing ... specialist advice [and] exercise testing."

We have implemented a service that provides early, protocol driven access to exercise testing and consultation with a cardiologist. The generic methodology used could be translated without difficulty to other specialties. The service had the following design goals:

- To use web browsers via the NHSNet
- To use the hospital's web server
- To obtain a patient's history
- To use this to determine the need for referral
- To allow flexible booking of appointments with immediate confirmation
- To integrate with local hospital databases
- To allow online entering of exercise test results
- To calculate a patient's risk of coronary heart disease from the general practitioner's data and the exercise test results
- To provide a report with the patient's management plan
- To incur no additional costs for the general practitioners

Since the launch of the service at the Royal Alexandra Hospital in December 1999, 15 general practitioners have referred 100 patients. The median

time for clinic attendance has been three days (range 2-14 days), with 88% of patients seen within a week.

This service represents one of the first web based implementations of a complete protocol-driven booking, analysis, and reporting system. Comments from general practitioners have been positive and appreciative of the rapid response. They have suggested that integrating the system into their computer system would increase its usefulness. This should be achieved in the near future as part of the NHSiS—Scottish Care Information initiative.

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1 Department of Health. *National service framework for coronary heart disease*. London: DoH, 2000. (www.doh.gov.uk/nsf/coronary.htm#chdnst)