

in the period. No one has requested more than nine scans. The waiting time for an appointment for scanning as an outpatient is one week, regardless of the source of the referral.

PATRICK M STRONG
Consultant radiologist

ROBERT J WALKER
General practitioner

Bolton Medical Institute,
Bolton BL1 4OS

1 Hampton JR, Barlow AR. Open access. *BMJ* 1995;310:611-2. (11 March.)

Service is valuable for evaluating murmurs too

EDITOR.—For the past 10 months we have been offering general practitioners in the Brighton area an open access echocardiography service similar to those in Edinburgh¹ and Nottingham.² Ours differs principally in that we encourage referral for the evaluation of murmurs as well as heart failure.

In total, 106 patients (43 male, 63 female), have been referred: 49 with heart failure with or without murmurs (mean age 72), 46 with murmurs alone (mean age 55), and 11 for other reasons. In those with murmurs alone no abnormality was found in 25 and we were able to reassure the patients and general practitioners and avoid unnecessary referral to a cardiologist. Not surprisingly, given the selection criteria for referral, we found a higher incidence of valve disease than that reported by Francis and colleagues.¹ Overall eight patients had appreciable aortic stenosis (which was severe in two cases, with a gradient >70 mmHg). Other findings were mitral stenosis (two cases, both mild); aortic (13), mitral (19), and tricuspid regurgitation (five); and mitral prolapse (two). Of the 49 patients with suspected heart failure, only 26 had heart failure confirmed by a low ejection fraction. Five of these were already taking angiotensin converting enzyme inhibitors, which were recommended in the remainder. The general practitioners subsequently reported that all but five were started on these drugs.

Unlike in Edinburgh and Nottingham, which have similar populations, the uptake of our service by general practitioners has not been great, even though we publicised it widely in a newsletter, by direct contact, and at meetings. Nevertheless, in a brief audit questionnaire 92% thought that the examination had been helpful in the management of both heart failure and murmurs, and only nine cases were subsequently referred on for assessment by a cardiologist.

It is difficult to know from this brief experience whether this service is cost effective and identifies patients with important disease who would otherwise slip through the net. Whatever the perceptions of those who work in hospitals, this service seems likely to be continued by fundholding practices.

PETER S C WONG
Research registrar

SAGAR DOSHI
Senior house officer

Department of Cardiology,
Royal Sussex County Hospital,
Brighton BN2 5BE

1 Francis CM, Caruana L, Kearney P, Love M, Sutherland GR, Starkey IR, et al. Open access echocardiography in management of heart failure in the community. *BMJ* 1995;310:634-6. (11 March.)

2 Hampton JR, Barlow AR. Open access. *BMJ* 1995;310:811-2. (11 March.)

Hospital patients need open access echocardiography

EDITOR.—We agree with C M Francis and colleagues that echocardiography is useful in patients with heart failure and that an open access service may be used successfully by general practitioners.¹ Heart failure is also common among patients admitted to hospital,² but we have noted a reluctance to use echocardiography in such patients.

To investigate this further we recently conducted a prospective audit of all patients acutely admitted to our district general hospital with heart failure to assess current strategies in the investigation and management of this condition. Over six months (March to August 1994) we identified 348 patients (178 female and 170 male; mean (SD) age 73.2 (11.2) years) who were admitted with heart failure.

Complete data were available for 260 of these patients (75%). Only 60 patients had echocardiography during the admission, a further 20 had had it within the six months before their admission, and nine were to have it arranged at a future date on an outpatient basis. Thus only 89 patients would have had echocardiography despite their acute admission with heart failure. Echocardiography showed poor left ventricular function (global) in 43 patients, left ventricular hypertrophy in six, mitral valve disease in six, and other disease in eight; no abnormalities were present in three patients, and in 14 cases the echocardiogram was uninformative. These results suggest that treatment would have been influenced in most cases, with, for example, the introduction of angiotensin converting enzyme inhibitors in patients with poor left ventricular function.

We suggest that despite the usefulness of open access echocardiography for general practitioners, many hospital inpatients who are admitted with heart failure should also be considered for echocardiography as useful information would be obtained. The availability of this service to hospital patients should not be neglected while echocardiography services in the community are developed.

JOHN ZARIFIS
Research fellow

D GARETH BEEVERS
Professor of medicine

GREGORY Y H LIP
Research fellow

University Department of Medicine,
City Hospital,
Birmingham B18 7QH

1 Francis CM, Caruana L, Kearney P, Love M, Sutherland GR, Starkey IR, et al. Open access echocardiography in management of heart failure in the community. *BMJ* 1995;310:634-6. (11 March.)

2 Parameshwar J, Poole-Wilson PA, Sutton GC. Heart failure in a district general hospital. *J R Coll Physicians Lond* 1992;26: 139-42.

Open access to specialist opinion is preferable

EDITOR.—C M Francis and colleagues' report on open access echocardiography¹ highlights the fears of many cardiologists about open access services.² The principal aim of the authors' service—the identification of patients with left ventricular dysfunction so that treatment with an angiotensin converting enzyme inhibitor could be started—occurred in only 50 (19%) of 259 patients, while valve disease was identified in 12. In a similar study of an open access exercise electrocardiography service McClements *et al* identified ischaemic heart disease in only 18% of the 192 patients tested.³ It is argued that a negative result of the test is reassuring, but many patients remain symptomatic despite reassurance.⁴ Furthermore, screening a low risk population will result in a much higher proportion of false negative results. It remains to be seen whether open access to investigations represents an effective use of expensive and scarce resources. Hampton and Barlow argue that specialists are most useful in giving an interpretation of the clinical problem with the aid of results of appropriately selected investigations.⁵ Another approach to general practitioners having improved access to cardiology services is to offer rapid open access to specialist clinical assessment and opinion.

We have over 18 months' experience of a same day open access cardiology clinical service for patients with chest pain or palpitation of less than 48 hours' duration. On three afternoons

a week this fast track outpatient service is incorporated into the routine cardiology clinic, and on two afternoons patients are seen by a trainee in cardiology. Patients are assessed clinically by electrocardiography, and further investigations are ordered as indicated. After investigations have been performed the patient is seen at a dedicated follow up clinic by a consultant cardiologist. Activity in the clinic took only four months to reach a steady state, and an average of 51 (range 43-63) patients per month have been referred over the past six months. Initially 97 of the first 100 patients referred had symptoms in the pre-specified categories, and this was the case for 87 of the last 100 patients referred.

Our experience does not suggest that general practitioners are indiscriminate in their referrals or that an unmanageable increase in workload has occurred. When the first 100 patients referred to the fast track service were compared with 100 patients referred to the routine clinic over the same period, a higher proportion of patients with chest pain were diagnosed as having ischaemic heart disease (42% (25/60) *v* 33% (14/43)) and a higher proportion of patients with palpitations were thought to have a clinically important arrhythmia (54% (20/37) *v* 39% (9/23)) in the open access clinic. Overall 78% of the 100 patients referred to the fast track clinic had their drug treatment changed at the first or second clinic visit, compared with 63% (54/86) in the routine clinic. Because the cardiologist acts as gatekeeper to investigations, 55 of 106 echocardiograms obtained in the fast track clinic showed a clinically important abnormality (18 showed appreciable valve disease, 26 left ventricular impairment, and 11 left ventricular hypertrophy); a further 21 showed an echocardiographic abnormality; and only 30 were reported as normal. Similarly, 46% (16/35) of the exercise electrocardiograms obtained in patients seen in the fast track clinic showed an abnormality.

Overall, the service seems to be popular with our local general practitioners. We believe that rapid access to clinical assessment by specialists constitutes a more effective service and overcomes some of the problems associated with direct access to clinical investigations.

LAURENCE O'TOOLE
Research registrar

ANDREW OATES
Senior registrar

KEVIN S CHANNER
Consultant cardiologist

Department of Cardiology,
Royal Hallamshire Hospital,
Sheffield S10 2JF

1 Francis CM, Caruana L, Kearney P, Love M, Sutherland GR, Starkey IR, et al. Open access echocardiography in management of heart failure in the community. *BMJ* 1995;310:634-6. (11 March.)

2 Working Group of British Cardiology Society. Cardiology in the district hospital. *Br Heart J* 1994;72:303-8.

3 McClements BM, Campbell NPS, Cochran D, Stockman S. Direct access exercise electrocardiography: a new service that improves the management of suspected ischaemic heart disease in the community. *Br Heart J* 1994;71:531-5.

4 Channer KS, James MA, Papouchado M, Russell Rees J. Failure of a negative exercise test to reassure patients with chest pain. *Q J Med* 1987;63:315-22.

5 Hampton JR, Barlow AR. Open access. *BMJ* 1995;310:611-2. (11 March.)

Study's conclusion is misleading and cannot be generalised

EDITOR.—C M Francis and colleagues' conclusion that echocardiography led to advice about a change in management in 70% of patients with established or suspected heart failure as diagnosed by their general practitioners is misleading.¹ Their 70% represented 82 of 119 patients receiving treatment at the time of referral, 53 of whom, they concluded, were taking unnecessary diuretics. But the actual figure should also include those in the group with suspected heart failure for whom the authors advised a change in management (14/99). Therefore