the use of deputising services will increase and the role of the general practitioner in all aspects of acute medicine will rapidly disappear.

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### Poses storage and cost problems

EDITOR,—Two papers highlight the slowness with which general practitioners have taken up the use of thrombolytic drugs in acute myocardial infarction.[1,2] Neither paper discusses storage, cost, and the need for a defibrillator as factors in this.

The storage requirements for thrombolytic drugs other than streptokinase are probably beyond the feasibility of most general practices. Anistreplase, for example, must be kept at 2-8°C and not frozen. It is rendered ineffective by exposure to normal temperatures for more than two to three hours. When a general practitioner receives a call to a patient with chest pain there will be delay while he or she drives to the surgery, takes the drug from the refrigerator, puts freezer blocks into the travelling container supplied, and drives to the patient. If the drug is not used the doctor must return it to the refrigerator before making any more visits. If the drug has to be discarded because of failure of refrigeration or because its shelf life has expired the cost to the general practitioner will be around £490.

It is recommended that general practitioners who give thrombolytic drugs should have a defibrillator available. Appropriate models cost £4000-£6000 each, and general practitioners receive no reimbursement for their purchase.

For these reasons I cannot see thrombolysis continuing in general practice until the pharmaceutical companies produce thrombolytic drugs other than aspirin that are safe to use and are stable in a wide range of ambient temperatures. The health service will also need to consider direct investment in defibrillators for general practitioners.

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1 Round A, Marshall AJ. Survey of general practitioners' prehospital management of suspected acute myocardial infarction. *BMJ* 1994;309:375-6. (6 August.)
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## Prescribing exercise in general practice

### Encourage active community life

EDITOR,—Steve Iliffe and colleagues advocate caution in prescribing exercise from primary care but argue that "exercise is good for us, especially as we get older."[1] They cite the benefits of physical activity in a practice population, which include lower rates of cardiovascular disease, reduced depression and anxiety, and improved functional ability in elderly people as well as a lower risk of osteoporosis and fractured hips. Campbell *et al* evaluated a controlled trial of a community health promotion exercise programme that used a questionnaire and a motivated general practitioner and showed that general practitioners can influence exercise habits.[2] Ten years later, with exercise promotion continuing in the general practice, the annual report of the director of public health showed a significant reduction in the all cause standardised mortality ratio in the campaign village compared with the control village.[3]

I agree that referral to leisure centres alone is not enough. My rural community of Brockenhurst does not have a leisure centre. We promote "active living" and refer patients to appropriate community activities, including activities for young and old people, held in the village hall, church hall, schools, and hotels. We are evaluating the project with the Wessex Institute of Public Health Medicine, the Southampton Health Commission, and New Forest District Council. The "Brockenhurst healthy village project" has a community coordinator, who receives referrals from any member of the primary care team or from individual people and then determines the appropriate community facility, activity, or club for the person to attend.[4] We hope to show a reduction in medication, a reduction in referrals to hospital for cardiovascular disease and fractures, and an improved quality of life.

One fifth of our population aged over 65 plays indoor bowls during the winter and outdoor bowls during the summer. Our frail elderly group meets twice a week in the village hall, and the "knitter knatter" group meets weekly in a rest home; transport is provided by the local lions organisation. Many children attend the local church hall for musical movement classes. The local hotel has an excellent leisure facility and employs a physiotherapist. All the hotel leisure club's staff have obtained an approved qualification in exercise and fitness. They provide supervised exercise programmes for rehabilitation of people with coronary heart disease and for people with asthma or neurological conditions, and they organise aquarobic sessions in the swimming pool.

An active community is a healthy community. Active living encompasses more than just exercise and is more acceptable for patients referred from general practice.

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1 Iliffe S, See Tai S, Gould M, Thorogood M, Hillsdon M. Prescribing exercise in general practice. *BMJ* 1994;309:494-5. (20 August.)
2 Campbell MJ, Browne D, Waters W. Can general practitioners influence exercise habits? Controlled trial. *BMJ* 1985;290:1044-6.
3 *Director of public health annual report 1992.* Southampton: Southampton and South West Hampshire District Health Authority, 1992:17.
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### Randomised controlled trials exist

EDITOR,—I agree with Steve Iliffe and colleagues that health professionals have a responsibility to ensure that any exercise programmes prescribed have been proved to be effective and that effectiveness should be studied in randomised controlled trials.[1] I am surprised, however, that the authors' extensive search of the literature failed to detect any of the three randomised controlled trials that colleagues and I have undertaken in Scotland in the past three years.[2-4] All of these trials were conducted in elderly people, the last two being in residents of local authority old people's homes in Dundee.

Contrary to Iliffe and colleagues' pessimistic comments about motivation and adherence to exercise programmes, our studies were characterised by high completion rates (93%, 84%, 85%), high attendance rates (83%, 91%, 72%), and—a crucial factor not mentioned in the editorial—an excellent safety record. Our experience has convinced us of the motivational power of group exercise, the acceptability and effectiveness of the exercise programme we have developed, the desire of many old people to participate in exercise programmes, and the paucity of practical advice on how to begin.

In an attempt to provide opportunities for old people to enjoy safe and effective exercise we have undertaken several initiatives. Leaflets containing simple advice about exercise have been produced for patients, and educational sessions for old people and interested health professionals have been held. In addition, with the help of the University of Dundee and assisted by private investors, a network of exercise classes is being established throughout Britain. The classes are modelled on the Dundee University over 60s exercise class, which was established 17 years ago and is attended by 1500 elderly people each week.[2]

Several obstacles deter older people from taking regular exercise. Dominant among these are health professionals who consistently devote much of their energy to determining why particular patients should not exercise and too little to determining why they should. Evidence exists of the effectiveness of at least one exercise intervention, and doctors who ignore it do so at the expense of their patients. For the sake of our patients we must acknowledge the health benefits of regular exercise and start routinely giving advice about exercise.

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### Evaluation of scheme exists in Stockport

EDITOR,—In the penultimate sentence of their editorial on prescribing exercise in general practice Steve Iliffe and colleagues conclude: "While we await the results of careful evaluation, primary health care teams should look closely before they leap into prescribing exercise."[1]

We bring to your attention a detailed evaluation of such a scheme in Stockport, which was up and running in October 1992. The evaluation, by an external research officer, looked at the progress of the 251 people who passed through the scheme in its pilot year. Methods used included the general health questionnaire[2]; self administered questionnaires; fitness assessments (for example, weight and pulse rate); focus groups with attenders and non-attenders; and interviews with participating general practitioners.

Although Iliffe and colleagues recognised some of the difficulties, they suggest that randomised controlled trials are needed to evaluate exercise on prescription schemes. Smith reported that "only 15% of medical interventions are supported by solid scientific evidence," with many treatments never having been assessed at all.[3]

The medical profession with its use of the traditional randomised controlled trial has all too often failed to provide conclusive evidence, with small numbers and imprecise matching causing problems. The controlled trial is an inappropriate method for evaluating complex health promotion initiatives. We should instead be encouraging more appropriate, innovative methods of evaluation which can provide valid scientific evidence. The Stockport evaluation takes a combination of qualitative and quantitative methods to provide carefully and soundly researched evidence.

This rigorous evaluation highlighted demonstrable improvements in participants' physical health as well as considerable improvement in their mental health. Compliance compares favourably