can be set properly within the context of other relevant studies.[23] Improvements in the infrastructure needed to support trials[24] should mean that clinicians and patients faced with uncertainties about the relative merits of treatment options will more often be able to participate in the research needed to resolve these uncertainties.

The greatest potential for improving research may lie in greater public involvement. Partly because of perverse incentives to pursue particular research projects[25 26] researchers often seem to design trials to address questions that are of no interest to patients. Greater public involvement could help to reduce this mismatch and ensure that trials are designed to address questions that patients see as relevant. More generally, it will be important to assess whether the public understands and endorses the efforts being made to control biases in assessing the effects of health care.[27 28] So far, the research community has made very little effort to involve the public in discussions about this. All in all, there is plenty of scope for building on the undoubted progress made during the past century.

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Clinical trials in primary care

Targeted payments for trials might help improve recruitment and quality

"Why is it every time that I mention the word 'reform' GPs reach nervously for their wallets?" These cynical words from Kenneth Clarke, former secretary of state for health, contain a grain of truth. Most British general practices are small businesses, understandably influenced by financial incentives and disincentives—or "the imagination, enterprise and investment assumptions of corner shopkeeping."[1] What effect does this have on research in primary care? And would explicit financial incentives improve the amount and quality of primary care research?

Demand for high quality research in primary care is growing, particularly multicentre randomised controlled trials. But such studies are difficult to conduct, disruptive to routine practice, and may fail to recruit enough general practitioners or patients.[2] The Mant report advocates expanding recruitment of multidisciplinary researchers and redistributing funds to support the required infrastructure.[3] Such a long term strategy to build capability is essential but will not be sufficient on its own to improve rates of practice recruitment to clinical trials.

Several factors are known to influence general practitioners' participation in research. One is the level of personal interest in the research topic.[4] Concern has grown recently that "enquiry led research is becoming endangered with the growth in the commissioning of research" and that general practitioners and their own research questions may be marginalised.[5] Ownership is important, but external commissioning will remain necessary to address issues of wider concern to health services or the public health.

Several non-monetary interventions appear to promote participation in research, including personal approaches by researchers or peers and the subsequent identification of different stakeholders' concerns and information needs.[4 6] Minimising time commit-

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ments to trials by simplifying protocols, using research assistants for data collection, and reducing the number of planning meetings may also help. Nevertheless, patient recruitment can be disappointing within participating practices,[2] and many eligible patients still fail to be recruited during consultations. Those who are recruited tend to have more severe symptoms and different consulting patterns from the majority,[7] thereby undermining the generalisability of findings.

Would financial incentives work any better? Financial incentives do appear to work in general; indeed, they have encouraged general practitioners to conduct health promotion activities in which they have little faith.[8] In research, one randomised comparison indicated that survey response rates were incrementally related to levels of payment.[9] However, in a recent British study, use of an alcohol screening programme in general practice was related more to the level of training and support provided than to the offer of a financial incentive (although this was only a £50 gift voucher) (EFS Kaner, unpublished data). On the other hand, pharmaceutical companies offer general practitioners often quite substantial sums for each patient recruited into a trial, and it seems unlikely they would use such payments if they failed to work.

What are the drawbacks of financial incentives? The use of money to promote more intensive case finding, including identification from computer records or the opportunistic detection of eligible patients during consultations for unrelated reasons, could skew the representativeness of cases drawn from the study population. For example, dyspeptic patients identified from prescribing records may have more chronic illness or different consulting behaviour from incident cases or those requiring more occasional prescriptions. Pragmatic trials, where patient entry tends to depend on general practitioners' opinions about eligibility, might be more vulnerable to misrepresentation than explanatory trials, where entry criteria are more tightly defined. Alternatively, payments may actually improve the generalisability of results if a higher proportion of less research active practices participated in trials than at present. Practices funded by regional or national initiatives to support or lead research activities overrepresent atypical general practitioners (such as those with research degrees) serving atypical populations (such as rural populations).[10]

Personal ethical values may deter some doctors from participating in research where payment is based on fees per patient recruited. Safeguards are required to avoid doctors pressurising patients to take part in trials and to deter fraudulent case finding and entry.[11] Fairness to other practice staff is also an issue. Although general practitioners have overall responsibility for practice management, it seems less than fair if other staff central to research, such as practice nurses, sometimes receive no reward for their efforts. Furthermore, it is essential that the opportunity costs of participating in research do not compromise other patients' quality of care.

Given the importance of money in everyday general practice, the use of financial incentives is seldom openly discussed—as if some shame were attached to it. Money is already being paid for research in general practice, and the NHS and other non-commercial commissioners of research find it hard to compete with rates offered by the pharmaceutical industry. The danger is that ad hoc funding in some studies may jeopardise others, and commissioners of research should openly consider the role of financial support. We still need more information about whether and when financial incentives work, including reports of trials that fail due to inadequate recruitment. It will also be important to monitor the impact of incentive payments on rates and quality of recruitment. Trialists writing up their findings should explicitly report methods of recruitment and any financial incentives used. This would establish a more professional context for research in primary care and distance it from the culture of the corner shopkeeper.

Targeted financial incentives may represent an effective approach where other means of involving general practitioners in research fail. This is especially true while the organisational and funding infrastructure for research is still being built in primary care. Clinical trials represent large investments in time and resources for commissioners, researchers, clinicians, and patients. Payments to practitioners may be a small investment for a major return—the relatively quick recruitment of trial participants. Payments may also compensate general practitioners for the lack of external recognition they receive for participating in other people's trials.

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Competing interest: RF and JP are both conducting a trial which involves payments to general practitioners for recruiting patients.

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