

## Rationing in practice: the case of in vitro fertilisation

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**One of the few examples of explicit rationing in the National Health Service is provided by in vitro fertilisation. Of six purchasing authorities examined three have decided against buying in vitro fertilisation while three have decided in favour. The decisions reflect local factors such as the absence or presence of local providers and the views of the public and health professionals. But in vitro fertilisation also illustrates some of the wider issues involved in all decisions about purchasing: questions about what should be provided by the National Health Service, about what procedures should be compared when weighing up value for money, and whether equity demands national decisions about what to provide.**

Explicit decisions by purchasers to stop offering specific forms of treatment, on the Oregon model,<sup>1</sup> are still very much the exception in the National Health Service. For the most part rationing takes the traditional, less visible, form of limiting the resources that are available for particular services and leaving it to doctors to determine priorities between different procedures and patients. There are, however, exceptions. One such is in vitro fertilisation. Analysis of 114 purchasing plans for 1992-3 found six authorities which explicitly stated that they would not be buying any in vitro fertilisation or gamete intrafallopian transfer treatment for their populations.<sup>2</sup> At the same time, other purchasers were continuing to buy in vitro fertilisation and, some were even planning to put extra money into the service.

The case of in vitro fertilisation therefore provides an intriguing, and rare, opportunity to explore the way in which such explicit rationing decisions are reached. In vitro fertilisation produces results, although there is some debate about its success rate and about the circumstances in which its use is appropriate.<sup>3</sup> In contrast to procedures like tattoo removal (struck off the National Health Service menu by seven purchasing authorities), it cannot be seen as a response to a self inflicted injury or as a tribute to vanity. Furthermore, the use of in vitro fertilisation is widespread in Europe: in France its use is reimbursed by the social security system, and in Belgium, Denmark, and Norway the state will bear most or all of the cost.<sup>4</sup>

Why, then, do purchasers disagree about the desirability of buying this procedure? What evidence and arguments were used in coming to these decisions? What local circumstances or pressures influenced the decision to buy or not to buy? And can any general insights into the dilemmas and problems of rationing be derived from this specific case?

To answer these questions, we compare three purchasing authorities which decided not to buy in vitro fertilisation with three others which took the opposite decision. In each case our account is based on the documents produced by the authorities and informed by the views of relevant health authority

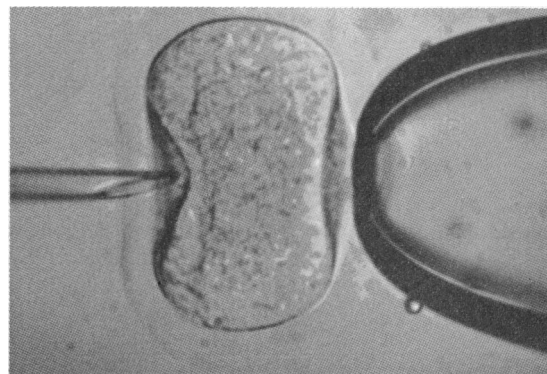
officials, who were either interviewed or contacted by letter. These are in no sense a sample. Apart from anything else, we do not know how many purchasers have quietly decided not to offer in vitro fertilisation without making their views explicit. All six authorities are gainers, if to differing degrees, under the weighted capitation formula. The differences between them cannot therefore be explained by variations in resource constraints.

### Non-purchasers of in vitro fertilisation

#### HEALTH AUTHORITY A

This first health authority provides a subfertility service but not in vitro fertilisation or gamete intrafallopian transfer. The scope of the infertility service was one of the issues discussed at the authority's "choices for health day," which brought together a range of interested professionals to rank a list of bids for development money. They decided that in vitro fertilisation would not be offered because of its cost: the health authority, it was argued, should not spend so much money on people who were not "ill." The view was not unanimous: the women were generally more sympathetic to the case for in vitro fertilisation than the men. They argued that the mental distress of being infertile should be taken into account and that the people of the district should have the choice available to them.

The health authority decided that while people on the waiting list for in vitro fertilisation in 1992-3 should still be seen the treatment would thereafter be provided only as an extra contractual referral. In practice, however the authority has been turning down such extracontractual referrals. Several factors have influenced the authority in this stance, quite apart from the views of the "choices for health day" meeting. The general practitioners are happy with current service provision and are not exerting any pressure to extend it. Neighbouring health authorities do not provide in vitro fertilisation either. There is also a general feeling that, since the district is relatively affluent, people can afford to be treated privately.



IVF: technical advances don't make the decision whether to pay any easier

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As part of its assisted conception services the second health authority provides donor insemination and intrauterine insemination but no in vitro fertilisation or gamete intrafallopian transfer. It has deliberately decided against purchasing in vitro fertilisation because of cost. The nearest provider unit charges about £2000 per cycle. In contrast, donor insemination costs £70 per cycle. Instead of buying in vitro fertilisation, the authority has therefore decided to strengthen its donor insemination services. Requests for in vitro fertilisation under the extra contractual referral procedure are turned down.

The authority's reasoning is that equity demands that any service provided should give everyone requiring treatment a fair chance of getting it. To buy only a few cycles of in vitro fertilisation is therefore unfair. Also, the authority does not consider that in vitro fertilisation represents good value for money. Although the success rate of in vitro fertilisation is actually better than for donor insemination in terms of babies produced, the cost per birth is higher. Moreover, for every cycle of in vitro fertilisation, which has a one in four chance of success, a new hip can be bought.

So far, the authority's decision about in vitro fertilisation has brought no backlash from the local community. There does not appear to be either a community or a professional lobby pressing for the purchase of in vitro fertilisation. If there were a groundswell of opinion the authority would reconsider its position.

## AUTHORITY C

Authority C differs from the previous two in that it did not decide explicitly against providing in vitro fertilisation but simply gave it a low priority. It was originally included in the list of purchasing developments for 1992-3, but it was not high enough on the list of priorities to justify additional funds. In vitro fertilisation is thus excluded from the authority's contracts, although it can be made available through extra contractual referrals. In effect in vitro fertilisation has become a casualty of the competitive battle for resources.

Not surprisingly, given this decision making process, there has been no extensive discussion or assessment of in vitro fertilisation in this district. The authority has largely drawn on the results of national research and appears to have been strongly influenced by the director of public health's view that the clinical effectiveness of in vitro fertilisation treatment is generally low.

**Purchasers of in vitro fertilisation**

## AUTHORITY D

Authority D decided to buy in vitro fertilisation as part of a whole range of fertility services. It calculated that it would cost £280 000 per year to provide subfertility treatment for all the residents who might present, but it could afford to put only £150 000 into the service. So it decided to fund 20 in vitro fertilisation cycles, agreeing with the providers on the criteria to be used in choosing the beneficiaries. It also agreed with the provider on the number of embryos to be used in order to limit the number of multiple births and the pressure on maternity services.

Local circumstances clearly influenced this decision. A local provider of in vitro fertilisation is already in place, and the unit is highly regarded and has strong support among clinicians. The consultant in charge of the infertility service is also an effective lobbyist.

Members of the authority played an active role in the decision, examining the evidence about the extent of infertility problems in the community and the medical

evidence about the effectiveness of in vitro fertilisation. Four considerations appear to have determined their views.

Firstly, they concluded that infertility can cause psychological harm as well as marital difficulties. Secondly, they attached much importance to the role of the family. Thirdly, they saw themselves as having a moral obligation to put more money into their subfertility package for in vitro fertilisation since, at the other end of the scale, they purchase abortions, sterilisations, and contraception services. To spend additional money preventing babies being born without also doing likewise to help the infertile was felt to be ethically unjustifiable. Fourthly, they believed that it would breach the National Health Service's principle of equality of access to deny in vitro fertilisation treatment of local women when it is available in other districts.

## AUTHORITY E

Authority E came into being only in April 1993, as the result of the amalgamation of three districts, and decided to purchase about 62 cycles of in vitro fertilisation in 1993-4. There are 24 in vitro fertilisation centres within acceptable travelling distance, whose costs range from £498 to £2546, excluding drugs, so the authority is inviting tenders from these providers. Each centre has been asked to supply information on outcomes, numbers of treatment cycles, and patient selection to help the authority in choosing the most cost effective options.

This authority's decision reflects its view that subfertility is a health care problem with very definite physiological, psychological, and social implications. It also differs from the decisions made by other authorities in that it was based on an elaborate needs assessment exercise carried out by the public health department.

The report that emerged from this exercise integrated epidemiological evidence, the results of a survey of consultants in obstetrics and gynaecology, and information from local in vitro fertilisation centres. It estimated, on the basis of a survey of the evidence by the *Effective Health Care Bulletin*,<sup>3</sup> that about 333 women a year would need in vitro fertilisation or gamete intrafallopian transfer but recommended that only in vitro fertilisation should be bought. The report argued that gamete intrafallopian transfer did not have in vitro fertilisation's advantage of detecting poor fertilisation and bypassing tubal damage.

The authority subsequently carried out a survey of consultants to establish local need and decided to buy 62 cycles of in vitro fertilisation. This still left the question of how those limited resources should be allocated—for example, what rationing principles should be used. Here the decision has been to use two criteria: age and family size. Women over 40 will be excluded because the success of in vitro fertilisation decreases with age, and only couples who have no children or only one child will be considered. The final selection will be made by the consultant in charge, and there will be a maximum of two cycles per patient. In addition, purchasers and providers are to produce shared protocols for general practitioners, consultants, and the specialist centres to improve the investigation and treatment of subfertility.

## AUTHORITY F

The last authority decided to fund in vitro fertilisation and gamete intrafallopian transfer for the first time ever in 1993-4, although it has not yet fixed the budgetary allocation. Previously it had refused to provide funding because of doubts about effectiveness in the early pioneering years, concern about possible side effects, and the belief that the treatments, as new

technologies, should be developed and tested more centrally.

The decision to change policy reflects the influence of two factors. Firstly, local pressure groups have been vociferous in pressing the authority to fund in vitro fertilisation and gamete intrafallopian transfer. Secondly, a policy review carried out by the authority's public health departments dispelled some of the earlier doubts about effectiveness.

The policy review estimated that about 270 couples a year would require subfertility services, of whom some 50 might benefit from in vitro fertilisation. It also recognised, however, that the high Asian population in the area may make the demand on the service greater. As in authority E, demand is therefore likely to exceed supply, thus raising, once again, the question of selection. No formal criteria for in vitro fertilisation treatment have yet been laid down. But current discussions suggest that criteria for selection are likely to include primary versus secondary infertility, and prognosis. In addition, a local protocol for managing subfertility has been developed with general practitioners and obstetricians in the hope that this will save money by reducing unnecessary and repeated investigations.

### The dynamics of rationing

Our six cameo case studies do not purport to illustrate the whole range of decision making among purchasers. But they do identify some of the main issues. Firstly, they suggest the importance of local champions for any given service or procedure. In vitro fertilisation is more likely to be purchased in those authorities where there is a local provider and, thus, a local constituency of support. Pressure from general practitioners and the community is another factor that influences purchasing authorities. Such influence may work both positively and negatively: if there is no pressure authorities may conclude that there is no demand.

Secondly, the case studies also indicate the importance of public health departments, both as the interpreters of the evidence about effectiveness and value for money and as assessors of need.

Thirdly, however, the case studies show some differences of opinion about what should count as a need when it comes to allocating resources—for example, where the frontiers of the National Health Service's responsibilities should be drawn. This issue is also raised by decisions not to buy various cosmetic procedures. Thus authority A was not prepared to spend money on individuals who were not perceived to be really "ill." In contrast, the purchasers of in vitro fertilisation believed that there was a health need which had to be addressed. They were convinced by the arguments of the Royal College of Obstetricians and Gynaecologists<sup>5</sup> and others<sup>6</sup> that the inability to have children can cause psychological distress and damage—that the "pain of childlessness is every bit as great as that of osteoarthritis of the hip."<sup>7</sup>

### EFFECTIVENESS

Fourthly, those authorities which accept that infertility does represent a legitimate claim on National Health Service resources then had to ask whether in vitro fertilisation was the best way of meeting that need. In considering this question the authorities had to address questions of effectiveness. A recent *Effective Health Care Bulletin* on the management of subfertility concluded that techniques such as in vitro fertilisation are quite effective, although this is often offset by poor organisation of the service.<sup>3</sup> Success rates have increased over the past few years,<sup>8</sup> and one study concluded that in couples where the woman was under

40 and the man had normal sperm a pregnancy rate of 30% per cycle had been achieved by 1991.<sup>9</sup>

Fifthly, however, showing that a treatment is effective—in the sense of producing results—does not necessarily demonstrate that it should be purchased. Inevitably such decisions merge with questions of value for money, and this involves comparison with other claims on resources. Questions also arise about whether such comparisons should be made solely in terms of the relative cost-effectiveness of different treatments within the same field (in vitro fertilisation or donor insemination?) or whether they should be made between treatments in different fields (in vitro fertilisation or hips?). Whichever sort of comparison is done it seems to demand a rough and ready assessment of the relative health gains produced by different interventions. The case studies suggest that authorities do not make such systematic comparisons—no doubt because the required information is not available. Quality adjusted life years-style analyses were conspicuous by their absence.

Sixthly, the case studies illustrate two quite different types of rationing decisions. On the one hand, there are decisions about how much to allocate to a particular type of activity. On the other hand, having decided to support a particular type of activity an authority then has to decide who to treat when supply falls short of demand. Even authorities which are buying in vitro fertilisation have to make the second type of decision. Interestingly, too, the case studies suggest that—in the case of in vitro fertilisation at least—authorities are beginning to become involved in devising criteria and protocols for allocating treatment to individual patients. This trend can be expected to become more general.

### EQUITY

Lastly, the case studies raise some fundamental questions for the National Health Service. Does the principle of equity of access require that everyone should have an equal chance of treatment irrespective of where he or she lives? Both authority B and authority D assumed that it did, though they drew diametrically opposed conclusions. And if equity does demand an equal chance of treatment (at least once a treatment has passed the experimental stage) does this mean, in turn, that rationing decisions should be made nationally, since it cannot be left to individual purchasers to determine what services should or should not be available? Again, in determining priorities, how legitimate is it for health authorities to take into account the availability of services in the private sector? Does not the fact that an estimated 90% of births achieved through in vitro fertilisation in the United Kingdom (though not all in United Kingdom nationals) are the result of private treatment<sup>10</sup> offend against the principle of equity? And if so, are we not once again left with the uncomfortable conclusion that equity demands that a service should be provided either universally—at least in the sense of giving everyone the same statistical chance of access—or not at all?

These questions, to which the answers are far from self evident, are prompted by the case of in vitro fertilisation. They demonstrate, however, that the issues raised by in vitro fertilisation range far beyond this particular treatment and need to be addressed in the context of the National Health Service as a whole.

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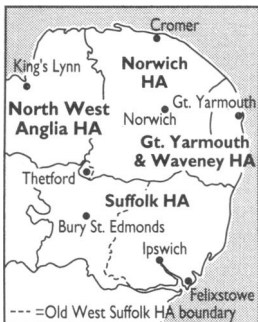
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## The New NHS: The Second Year

### West Suffolk: a new landscape

Jane Smith



*This is the final article in our re-examination of the NHS reforms at the end of their second year*

Geography favours stability in west Suffolk. One main acute district general hospital, a strong tradition of community services, and an established body of well founded group practices serve this rural population. Distance limits the possibilities for rapacious competition.

Nevertheless, the NHS reforms have touched West Suffolk in ways that would have been surprising two years ago.<sup>1</sup> West Suffolk Health Authority no longer exists, having merged with East Suffolk to form Suffolk Health Authority this April. At the same time West Suffolk Hospital in Bury St Edmunds became a trust, as did Mid Anglia Community Health, formerly the community and mental health services unit.

These changes in turn have opened up new horizons of change. Two years ago one of the surgeons at West Suffolk told me he felt as though he were on a helter skelter. For many people that impression has intensified, as each new turn of the spiral opens up new vistas of change.

#### Suffolk Health Authority

The merger with East Suffolk has been in the offing for some time,<sup>2</sup> having been sought by both authorities. Dr Roger West has moved from being director of public health of the old authority to the new and now has a department with six consultants in public health medicine. The merger, he feels, gives him much more time to spend on genuine public health work. Grant Elliott, who also moved from West Suffolk to be the finance director of the unified authority, hopes the move will save £250 000-300 000 a year in overheads. Though coterminosity is now much better, it is still not complete because part of Suffolk (and part of the area covered by Suffolk Family Health Services Authority) still lies in Great Yarmouth and Waveney Health District. This is widely seen as an anomaly—as is the fact that the family health services authority and the district health authority cannot merge.

#### Patterns of purchasing

One reason why Grant Elliott would like to merge with the FHSA is to get a handle on fundholders' spending. East Suffolk had fundholders from the outset; this year for the first time west Suffolk has four, though, significantly, they are all on the district borders, where they have genuine choice of providers. In one or two places within the area of the old West Suffolk Health Authority non-fundholding practices are forming consortiums to talk to the health authority and provider units about what they want. Roger West sees this as a positive development because if the authority agrees something with the practices "then it

will happen because they deliver the referrals." He sees such self selected groupings of practices as the basis of locality purchasing.

There is speculation about whether the numbers of fundholders will grow. Elliott fears that if they do they will start to form consortiums, to share resources and overheads, and "then you end up with two parallel purchasing authorities in a district." On the other hand, Chris Stevens, chief executive of Mid Anglia Community Health, regrets that there are not more: he sees fundholders as a boost to innovatory services.

Partly because of the merger there has been little immediate change in the pattern of purchasing. Indeed, west Suffolk was guaranteed stability in funding this year. The people of west Suffolk have traditionally feared the ability of Ipswich in the east to suck in resources, so for the first year the new authority promised that the revenue allocation that West Suffolk Health Authority would have had will be spent exclusively in west Suffolk.

Similarly, one of the fears at West Suffolk Hospital in Bury St Edmunds is of becoming marginalised within a bigger health authority. At the authority that fear is not seen as realistic. Roger West thinks that the problems of access in a rural area mean that there must be an acute district general hospital in the west of the county. "But we do have to be careful to ensure we do not prejudice the viability of West Suffolk Hospital. The lesson we learnt from Newmarket [see below] is that a hospital with less than a full range of specialties will lack a critical mass and start to decline." The change he does foresee is that people in west Suffolk might start to look to Ipswich rather than Cambridge for services they cannot get in Bury St Edmunds.

The health authority is looking for long term relationships with its providers, sharing its business plans with them and starting to explore longer term contracts. Ian Baines, chief executive of Suffolk Health Authority, agrees that there will always be a need for a major acute provider in both east and west Suffolk, but, he points out, the authority will if necessary flex its muscles to get a better service.

Baines thinks that contracting will become less about money and more about quality, and that quality will increasingly be defined by what patients and general practitioners want. He wants, for example, to unscramble the reasons why GPs refer patients to one consultant but not another in the same specialty. "We can then present that information to the providers" and expect them to do something about it. Bob Jones, the chief executive of West Suffolk Hospital, admits that such pressure from purchasers gives hospital managers the leverage to tackle clinical issues (which may be longstanding) with consultants.