ment allowed induction and the use of syntocinon for normal obstetric indications; acceptable progress was up to 18 hours for the first stage, 2 hours before pushing, and 1.5 hours of pushing in the second stage. The results were similar whether labour was induced, augmented, or prolonged, and in women with different levels of attendants' experience.

A meta-analysis that has pooled these results with those from the two other randomised controlled trials shows that the benefit to the baby is similar (relative risk of death or morbidity 0.31, 0.19 to 0.52)⁴ because the estimates of effect are compatible in all three trials. In the term breech trial study serious morbidity (or death) in the mother was not increased significantly (relative risk 1.24, 0.79 to 1.95). However, the risk to the mother becomes significant in this meta-analysis: relative risk of maternal morbidity 1.29, 1.03 to 1.61.

There is therefore a definite cost in immediate maternal morbidity with planned caesarean section. No study has considered longer term outcome. Future morbidity has not been assessed beyond the index pregnancy and is particularly a concern in pregnancies with a scarred uterus. Longer term effects on the babies are also unknown, but this analysis is planned. In some settings the risk of caesarean section may still outweigh the risk of vaginal birth, and almost 97% of babies will not be seriously compromised as a result of planning a vaginal breech. The resource implications of performing more caesarean sections in some societies may also be significant and prohibitive. Also, the number needed to treat to show benefit is higher where perinatal mortality is high.¹

As caesarean sections are recognised to have an increased mortality and morbidity compared with vaginal delivery,⁵ clinicians must not be tempted to extrapolate these findings about term breech deliveries to other breech deliveries, such as twin pregnancies and premature deliveries (the commonest cause of breech presentation). The need to provide expertise in breech delivery will not disappear: the term breech trial showed that nearly 6% of women with breech presentation still have a vaginal breech delivery because they present too late, even with a policy of

planned caesarean section. Moreover, some women will still choose a vaginal breech delivery even when evidence of harm is conclusive. Indeed, some women with HIV and even with fetal distress, where the benefits are even greater, refuse caesarean section. Reassuringly the level of experience in the obstetrician does not seem to be a factor in determining outcome, and this should not be used as an excuse to perform caesarean sections for other indications.

There is good evidence that external cephalic version for breech at term will reduce non-cephalic births by nearly 60%. However this technique is far from universally offered. Even in the term breech study, with enthusiastic participating units, nearly 80% of participants had not had an attempt at external cephalic version. There is now a pressing justification for implementing this simple, apparently safe alternative to planned caesarean section in all obstetric units and to offer it universally while continuing assessment of its safety and use, including in labour. A planned caesarean, though beneficial to the term breech fetus, increases maternal morbidity and should not be the first or only obstetric intervention.

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How best to organise acute hospital services?

Think completely differently

he Royal College of Physicians and the NHS Confederation have announced a working group to rethink the delivery of acute emergency services in hospitals. It is, says their press release, "one of the biggest problems faced by the NHS." And, says George Alberti, college president: "We need completely new thinking to solve the problem—not just refinements of the present system."

The current arrangement of acute hospital services in Britain becomes ever less efficient and more dangerous. Yet the political cost of reorganisation is rising. The government lost a safe parliamentary seat in Wyre Forest because of its plans to close Kidderminster Hospital. A current minister, Yvette Cooper, faces potentially the same problem in her constituency. So

the time has clearly come to think differently, and a recent meeting in Cambridge of the Eastern Region of the NHS on acute services heard a radical proposal to reverse current thinking. Instead of the current fashion for ever larger acute hospitals with local hospitals taking patients discharged from the large hospital, patients with emergencies might go first to the local hospital—but to one very different from now. With these proposals Kidderminster Hospital might have stayed open.

Many forces are driving change.² The medical establishment has until now thought that hospitals serving populations of 500 000 are necessary to ensure high quality care.³ The evidence for this belief is moderate for some surgical services but unclear for medical services.⁴ 5 Smaller hospitals find it increasingly hard to provide 24

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¹ Hannah ME, Hannah WJ, Hewson SA, Hodnett ED, Saigal S, Willan AR, for the Term Breech Trial Collaborative Group. Planned caesarean section versus planned vaginal birth for breech presentation at term: a randomised multicentre trial. *Lancet* 2000;356:1375-83.

² Collea JV, Chein C, Quilligan EJ. The randomised management of term frank breech presentation: a study of 208 cases. Am J Obstet Gynec 1990;137:235-44.

³ Gimovsky ML, Wallace RL, Schifrin BS, Paul RH. Randomised management of the nonfrank breech presentation at term: a preliminary report. Am J Obstet Gynec 1983;146:34-40.

⁴ Hofmeyr GJ, Hannah ME. Planned Caesarean section for term breech delivery (review). Cochrane Database Syst Rev 2001;1:CD000166.

⁵ Hall MH, Bewley S. Maternal mortality and mode of delivery. Lancet

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hour cover because junior doctors can no longer work all hours, and consultants are unwilling to work rotas that destroy their family life. Increasing specialisation has reduced the number of physicians who are good at managing medical emergencies, yet emergency medical cases are increasing. All this is happening against a background of rising expectations from patients, growing anxiety about medical errors, increasing litigation, and a commitment to clinical governance.

Variations in geography and existing patterns of service mean that there is no single solution for reconfiguring acute services,2 but the favoured model has been a large central hospital with associated local hospitals to which patients are discharged. But this model may make services worse rather than better, argues Andy Black, once chief executive of the Central Middlesex Hospital and now a consultant in the organisation of acute services (see his paper and others at www.ersf.net/presentation_materials.htm).

Acute services can be thought of as a simple system that comprises a medical emergency that usually occurs in the patient's home, a journey to the hospital, assessment, admission, a treatment process, and then discharge. A large central hospital inevitably means longer journeys. This has immediate therapeutic implications: with many conditions minutes matter. Long journeys mean more ambulances-and two fully crewed ambulances, said Black, cost the same as the direct costs of a medical ward. Increased distance also creates problems for visiting families and weakens the links with primary care and social services, which are crucial for discharging the patient. Further problems then arise with assessment and admission. The large numbers of patients create logiams, with some patients spending hours on trolleys.

The worst problems come with discharge. The difficulty of discharging patients increases with their distance from home, so big hospitals tend to fill up with medical patients. Ironically this often means that patients who need elective operations-those who might benefit from larger hospitals-cannot be admitted because the beds are filled.

The local hospitals usually do not share care or staff with the large hospital and so become places with weak medical and nursing staff who are uncomfortable managing those who are seriously ill. They thus become nursing homes rather than hospitals, so that many patients cannot be safely discharged to them.

These problems have led Black to propose reversing the model: patients would be admitted first to the local hospital, which would in effect be an assessment arm of the big hospital. The medical and nursing staff would be part of the team working in the central hospital, and staff would rotate between the hospitals. Most crucially the local unit would have local imaging and laboratory support and high quality electronic links with the central hospital that would allow specialists there to know almost as much about the patients as if they were examining them directly. This technology exists but is mostly not available in the NHS. Some patients would need to be transferred to the central hospital, but it might well be the minority.

The first advantage of such a system would be that patients with emergencies would reach hospital within 10 rather than 30 minutes. Links with primary care would be better. Those who didn't need admission could be quickly discharged home, which seems to be logistically impossible to achieve in one day with current arrangements. Some patients need never go to the central hospital. Those who did would not need to be assessed again, and transfer could be faster because fewer transfers would be needed overall.

Black said that when he first described these ideas to the Royal College of Physicians he was put in the "buffoon slot." Now he gets to speak earlier in the day, and a vote at the Cambridge meeting showed that most of the audience thought his model better than the current one. The working party set up by the Royal College of Physicians and the NHS Confederation will surely consider this model, and Yvette Cooper might be most interested of all: it might save her seat.

Richard Smith editor, BMJ

Competing interest: RS chaired the meeting in Cambridge but was not paid.

Preventing cardiovascular disease in primary care

Targets are fine in principle, but unrealistic

The United Kingdom's national service framework for cardiovascular disease¹ is one year old. It describes an ambitious list of standards, milestones, and performance indicators against which the NHS will be held to account. It requires primary care to identify and institute preventive strategies not only for people with established ischaemic heart disease but also for those with a 30% 10 year cardiovascular risk. In this issue Hippisley-Cox and Pringle report a study of 18 computerised general practices to estimate the

workload involved in meeting these expectations (p 269).2 Is it matched by the benefits gained?

Clearly, the increased workload for primary care is huge. In the absence of additional resources, how should this extra work be prioritised alongside everything else required of primary care? Apparently there will be more doctors and nurses,1 but given a global shortage where will they come from in the time frame of this framework? Without extra staffing the opportunity costs will be high, so which existing activities should stop?

Primary care p 269

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