Group these radical changes mean fighting on three fronts. The first will be a battle within Whitehall for the resources to do the job properly, in a way that really will mean improvements for Londoners in the next century and a strengthening of the city as an international centre for research and medical education. The second will be with the managements and workforces of individual institutions, most of whom recognise that changes are needed but cannot accept that these must affect them. The third is with streetwise and sceptical Londoners, all of whom identify with "their" hospital and have profound reservations about the proposed changes. With the publication of Tomlinson's report these battles have just begun.

VIRGINIA BEARDSHAW

Director,
London Initiative,
King's Fund, London W2 4HS

1 Dillner L. Tomlinson report recommends London closures and mergers. *BMJ* 1992;**305**:1045-6.
2 Tomlinson B. *Report of the inquiry into London's health service, medical education and research*. London: HMSO, 1992.

Mild cervical cytological abnormalities

Cytological surveillance replaces immediate colposcopy for mildly dyskaryotic smears

Should women with mild cervical cytological abnormalities be referred for immediate colposcopy and treatment if necessary or be kept under cytological surveillance? Only randomised controlled trials can provide the definitive answer, and these are under way. Until their results are known the evaluation of different protocols depends on studies that have been less than ideal. Backed by the relevant professional bodies, a workshop has recently drawn up guidelines based on the best available evidence.[1]

The workshop concluded that women with smears showing moderate or severe dyskaryosis should be referred for immediate colposcopy. Women with minor cytological abnormalities (such as borderline or mildly dyskaryotic smears) and cervices that look normal should have a repeat smear six months later and colposcopy if this smear shows any abnormality. These recommendations depart substantially from those made in 1987, which favoured immediate colposcopy for all women with abnormal smears (while accepting cytological surveillance for mild abnormalities in districts without colposcopic services).[2]

Surveillance, however, has its critics. They cite cross sectional studies showing that smears often underestimate the severity of cervical lesions—for example, almost one third of women with mild cytological abnormalities have grade III cervical intraepithelial neoplasia.[3-5] Such studies have generated demands for colposcopy for any degree of dyskaryosis in a single smear.

But these studies should be interpreted cautiously. Assessments of the accuracy of cytological testing have been based on comparisons with diagnoses obtained by tissue punch biopsy, which may be misleading.[6] This may be partly explained by considerable variations in the size of lesions and different grades of cervical intraepithelial neoplasia often coexisting in the same excision biopsy specimen.[7]

Studies have neglected the correlation between the size of the lesion and the degree of cytological abnormality: the low risk of progression to invasive disease in women with mild dyskaryosis and grade III cervical intraepithelial neoplasia is probably explained by the small size of the lesion.[8,9] What isn't yet known is whether women with mild cytological abnormalities develop invasive cancer without progressing through more severe degrees of cytological abnormality.[10]

Repeat cervical cytology will detect women with larger and more severe cervical intraepithelial neoplasia; minor lesions that progress should be detectable when they increase in size or severity.[11] Even better would be to identify those cases of cervical intraepithelial neoplasia that are likely to become invasive. A recent study that used the polymerase chain reaction holds out some hope for this: it identified two distinct levels of human papillomavirus type 16 DNA, which might discriminate between high and low grade lesions.[12]

Advocates of immediate referral justify their approach by arguing that colposcopy and biopsy result in prompt diagnosis, avoid possible default from cytological surveillance, and may reduce psychological morbidity—because any underlying lesions are treated rapidly and the cytological appearances returned to normal. Furthermore, any microinvasive or occult invasive lesion will be diagnosed at the earliest opportunity. The disadvantages are that this practice often results in unnecessary intervention (especially with the liberal use of large loop excision of the transformation zone), which has its own morbidity and wastes resources.

For most patients cytological surveillance is safe, and current scientific data do not justify a blanket policy of immediate colposcopy for mild cytological abnormalities. Reassuringly, a large retrospective study found that nearly half of all smears with mild dyskaryosis reverted to normal within two years, with no patient developing invasive cancer on longer term follow up.[13]

General practitioners depend on the laboratories that report their patients' smears for advice on future management, and this has varied by district and laboratory despite the existence of recommendations. Laboratories should now revise their advice according to the new guidelines, which, by raising the threshold for referral, will change the economics of screening. To implement the new guidelines fully will require local discussions among gynaecologists, pathologists, cytologists, and general practitioners.

By themselves the guidelines will not guarantee the safe management of patients with mild cytological abnormalities. That will depend on fully cooperative patients, high standards of cytological assessment and colposcopy, and failsafe systems of follow up.

MAHMOOD I SHAFI
Senior Registrar

DAVID M LUESLEY
Senior Lecturer

Department of Obstetrics and Gynaecology,
Dudley Road Hospital,
Birmingham B18 7QH

JOSEPH A JORDAN
Consultant

Department of Gynaecology,
Birmingham and Midland Hospital for Women,
Birmingham B11 4HL

1 Duncan ID. *NHS cervical screening programme: guidelines for clinical practice and programme management*. Oxford: National Co-ordinating Network, 1992.
2 Royal College of Obstetricians and Gynaecologists. *Report of the intercollegiate working party on cervical screening*. London: RCOG, 1987.
3 Bolger BS, Lewis BV. A prospective study of colposcopy in women with mild dyskaryosis or koilocytosis. *Br J Obstet Gynaecol* 1989;**95**:1117-9.
4 Soutter WP, Wisdom S, Brough AK, Monaghan JM. Should patients with mild atypia in a cervical smear be referred for colposcopy? *Br J Obstet Gynaecol* 1986;**93**:70-4.
5 Giles JA, Deery A, Crow J, Walker P. The accuracy of repeat cytology in women with mildly dyskaryotic smears. *Br J Obstet Gynaecol* 1989;**96**:1067-70.
6 Buxton EJ, Luesley DM, Shafi MI, Rollason TP. Colposcopically directed punch biopsy: a potentially misleading investigation. *Br J Obstet Gynaecol* 1991;**98**:1273-6.
7 Jenkins D, Tay SK, McCance DJ, Campion MJ, Clarkson PK, Singer A. Histological and immunocytochemical study of cervical intraepithelial neoplasia (CIN) with associated HPV 6 and HPV 16 infections. *J Clin Pathol* 1986;**39**:1177-80.
8 Shafi MI, Finn CB, Leusley DM, Jordan JA, Dunn J. Lesion size and histology of atypical cervical transformation zone. *Br J Obstet Gynaecol* 1991;**98**:490-2.
9 Jarmulowicz MR, Jenkins D, Barton SE, Goodall AL, Hollingworth A, Singer A. Cytological status and lesion size: a further dimension in cervical intraepithelial neoplasia. *Br J Obstet Gynaecol* 1989;**96**:1061-6.
10 Woodman CBJ, Jordan JA. Colposcopy services in the West Midlands region. *BMJ* 1989;**299**: 899-901.
11 Giles JA, Hudson E, Crow J, Williams D, Walker P. Colposcopic assessment of the accuracy of cervical cytology screening. *BMJ* 1988;**296**:1099-102.
12 Cuzick J, Terry G, Ho L, Hollingworth T, Anderson M. Human papillomavirus type 16 DNA in cervical smears as predictor of high-grade cervical cancer. *Lancet* 1992;**339**:959-60.
13 Robertson JH, Woodend BE, Crozier EH, Hutchinson J. Risk of cervical cancer associated with mild dyskaryosis. *BMJ* 1988;**297**:18-21.

If Clinton wins

Little chance of major reforms of health care

If the smart money is right the world will awake on Wednesday to find a Democrat preparing to move into the American White House for the first time in 12 years. And if voters decide that Mr Bill Clinton should live in Washington one of his greatest tasks will be the reformation of the American medical system—a task he has promised to take on within his first 100 days in office.

Mr Clinton has broadly sketched what he plans to do with American medicine but has said nothing on how he plans to do it. His aims are fairly clear. Firstly, he would create a National Health Board, comprising "consumers, providers and representatives from business, labor and government,"[1] though he has not said how they would be chosen. The board would set a global medical budget for the nation, set basic benefits that every insurance plan would have to offer, and oversee research into the effectiveness of various diagnostic tests and treatments. He would also set up a "pay or play" system: employers would either provide insurance for workers or else pay about 7% extra in payroll taxes to support public insurance plans. Like Mr Bush, he would create incentives to shift Americans into managed care groups (which operate rather like small versions of the NHS), promote preventive and primary care medicine, demand reform of malpractice, and streamline billing and patient records through electronic technology.[1,2]

How Mr Clinton would pay for his plan to insure 37 million more Americans he has not actually said. He has implied that legal and administrative reforms would eventually save at least a quarter of the $808 billion spent this year on health care and that this would be more than enough to cover the 16% of Americans now uninsured. Numerous economists have criticised Mr Clinton for not being more specific about costs, but few have declared outright that his plan is unworkable.[3,4]

Difficult as it is, the economic means will prove easier to deal with than the political means. A mile down the street from the White House stands the Capitol, Congress's home. Congress, through nine presidents, has failed to pass a comprehensive medical reform plan. It passed Medicare (for elderly people) and Medicaid (for poor people) in the 1960s, after arm twisting by Senate leader turned president Lyndon Johnson. But it ignored national health plans proposed by presidents Truman, Nixon, and Ford.

Right now Congress has at least 36 health care plans of its own. And even though Congress is—and no doubt will be next year—controlled by the very same Democratic party that nominated Mr Clinton, there is no evidence that he will be able to push through his initiatives. Like Mr Clinton, Jimmy Carter, the last Democratic governor to assume the presidency, was a stranger to Washington and a moderate in a liberal party, and he was virtually ignored by the liberal Democratic leadership. Congress is not a parliament, so the leader of the United States cannot exert party discipline other than through personal friendships.

Even if Congress was inclined to go along with Mr Clinton's reforms more—and richer—obstacles exist. Since 1979 the number of medical lobbying organisations that circle Washington has grown from 117 to 741.[5] The richest among them, the American Medical Association, doles out about $4m each election year to congressional candidates, an average of about $8500 per seat.[6] Total contributions from health industry lobbyists are expected to exceed $22m this election.[7] The cost of running for re-election is now so high that congress men and women must each gather about $2000 a day in contributions just to keep their seats. The implications for wealthy lobbying groups that oppose Mr Clinton's plans, such as the American Medical Association, the American Hospital Association, and the 1700 insurance companies, are obvious to each of the 435 members of the house and 100 senators.

Of course, not all of the 600 000 doctors in the United States are against the Clinton proposal. In September the 77 000 member American College of Physicians put forward a comprehensive reform plan very similar to Mr Clinton's,[8] joining the 74 000 member American Academy of Family Physicians. The strengths of their lobbying attempts remain to be seen.

Congress and lobbyists will be barriers for Mr Clinton, but his greatest obstacle may be the American people. Mr Clinton says that his plan will pay for itself within four years, but its immediate costs will be great. In some form the money will come from the people, either through lower wages (as employers contribute more into health insurance to cover all their workers), government borrowing (which means increasing the $4 trillion federal deficit), or some kind of tax (proposals have included a federal value added tax,[9] higher payroll taxes, higher alcohol and cigarette taxes, and higher insurance premiums for the rich[8]). As George Bush has learnt all too well in this campaign, any increase in taxes will surely incur the wrath of voters.

So how will Mr Clinton win his comprehensive plan to "control rising health care costs, covering every American with at least a basic health benefits package, and maintain consumer choice in coverage and care"?[1] Most likely, he cannot. More likely, small reforms will be made to encourage primary care and discourage malpractice lawsuits. Meanwhile, more states will continue to grow impatient and will join Hawaii, Oregon, Minnesota, Vermont, Massachusetts, and others in experimenting with medical reforms. The federal government, which now controls 41% of medical