fracture. Awareness is growing about the morbidity associated with osteoporosis: a further third of patients require continuing institutionalised care and many of the remaining third suffer a significant loss in their independence and ability to perform daily tasks.² How much suffering occurs as a consequence of loss of vertebral height, with persisting mechanical back pain and other postural consequences, remains unknown.

The economic cost is also difficult to establish, but osteoporosis is undoubtedly an expensive business. In New Zealand (population 3 million) the combined total cost for caring for women in the two years after a hip fracture in 1994 was NZ\$66 637 355 (£22 000 000).³ The estimated world wide annual cost of hip fracture alone will reach US\$131.5bn (£82 000m) in the year 2050.4

Despite increasing media attention, it is disappointing that only 34 of 82 of the patients with recent fracture surveyed by Pal were aware of the condition of osteoporosis and that this knowledge came from doctors in only 29%. Effective treatments are available; these not only increase bone mineral density but also significantly reduce fracture rate. These treatments have been shown to be effective in all age groups. Bone mineral density increases of around 6% a year, as measured by dual energy x ray absorptiometry (DEXA) scanning, are achieved with agents such as oestrogen, vitamin D analogues, and bisphosphonates. All these have been shown to reduce the fracture rate by around 50%. There is also an increasing appreciation of the prevalence of vitamin D deficiency in elderly people, particularly those in institutional care. Measurement of serum 25-hydroxyvitamin D concentrations should be routine in elderly people, with vitamin D replacement therapy offered as necessary.

A major difficulty in managing patients with recent fracture and in identifying underlying osteoporosis is the availability of bone density measurement. Dual energy x ray absorptiometry has become the international standard tool, but it is not widely available, particularly to patients who cannot afford the test outside a publicly funded system. This is akin to trying to manage patients at risk of myocardial infarction or stroke without access to serum cholesterol concentrations or blood pressure measurements. Dual energy x ray absorptiometry can identify patients at high risk and allow prioritisation for treatment, thereby increasing the cost benefit ratio. In patients with a fracture a baseline measurement is required not so much to establish the diagnosis of osteoporosis as to document a baseline level with which to monitor treatment efficacy. The non-response rate to treatment seems to be about 15%, making progress monitoring essential. Without access to dual energy x ray absorptiometry management of osteoporosis must be speculative.

Alan Doube Consultant rheumatologist
Waikato Hospital, Private Bag 3200, Hamilton, New Zealand

London's health: a role for the new mayor

The mayor could have more influence on London's health than its hospitals

ondon is not a healthy city. Overall mortality is falling more slowly than in the rest of England, and infant mortality compares unfavourably with that of other European capitals. The city is blighted by pollution, and there are particular problems with HIV infection, substance misuse, teenage pregnancy, tuberculosis, and severe mental illness. The seven million people who live in London are aware of the problems: a poll revealed that they regard their city as an unhealthy place, and they think it is going to get worse.

Last May Londoners voted in favour of establishing a Greater London Authority (GLA), made up of an elected mayor and an elected assembly. The legislation is on its way through parliament, elections will be held in May next year, and the mayor and assembly will start work on 3 July 2000. The new authority will be responsible for "promoting economic and social development in London and improving the environment." The mayor will have sweeping executive powers and with the exception of the president of France will have the largest direct democratic mandate of any politician in Europe.

The new authority will have a tremendous opportunity to make an impact on the capital's health. Although it will not be involved in managing or providing health services, it will produce policies on matters that are inextricably linked with health—such as transport, jobs, and housing. There is, however, concern that health considerations will be neglected. A report just published by the King's Fund notes that although the government was originally explicit about the mayor's "duty" to improve the health of Londoners, the present bill refers only to the "desirability" of promoting health. The report calls for health "to be an integral and essential component of all the GLA's policies."

London's most conspicuous need is to tackle poverty and inequalities. Thirteen of the 20 most deprived boroughs in England are in London, and across its 33 boroughs there is a good correlation between deprivation score and standardised mortality ratios. The city is divided by extremes of wealth and poverty and the income gap is growing: from 1979 to 1997 the earnings of the highest paid 10% of people increased from 2.8 to 4.5 times that of the lowest paid 10%. The

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⁴ Johnell O. The socioeconomic burden of fractures: today and in the 21st century. Am J Med 1997;103 (2A):20-65.

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health divide has followed suit: between 1981 and 1991 the standardised mortality ratio decreased in the most affluent areas and increased in the most deprived.

London has a large and expanding ethnic population, on whom unemployment falls disproportionately, and the accompanying poverty is associated with poor health. Similar problems have been faced elsewhere: Glasgow has responded by targeting education and training initiatives at its most deprived communities as part of a package of economic regeneration. Air quality is another pressing issue for London. Most of the pollution comes from motor vehicles, but car use in London is increasing despite mounting evidence of the dangers to health. By contrast, the mayor of Rome describes his priorities as "traffic, traffic, and traffic" and has taken action to restrict cars, improve public transport, monitor air quality, and convert motor vehicles to make them environmentally friendly.

These are just two examples of the value of integrating health and social policy. The Healthy Cities project coordinated by World Health Organisation's European office has established an international network of cities dedicated to improving health—from Liverpool in the United Kingdom to Amadora in Portugal and Kuressaare in Estonia. Their approach has been to develop partnerships and joint local strategies between all the municipal offices and other organisations that contribute to health to meet challenges such as poverty, inequalities, unemployment, and homelessness and also to encourage public participation in planning and taking action.

The democratic accountability of the GLA may promote meaningful community involvement in decisions that affect people's health. The authority will hold annual "state of London" debates and a twice yearly "people's question time." Ultimately, if the public shows enough interest in health related issues this will put them near the top of the mayor's agenda. Hopefully this will mean that the mayor works constructively with the NHS to improve health, rather than simply criticising health services; health professionals in the capital are unlikely to welcome further external scrutiny.

The GLA will need to ensure that it has access to public health advice, either from the new NHS London regional health authority or, as the King's Fund report suggests, from its own public health team. The BMA is also considering lobbying for a chief medical officer for London. But however the public health advice is provided, the capital needs a strong civic leader who is prepared to make an explicit commitment to improving health by incorporating health considerations into all of his or her policies. The mayor must not underestimate the importance of social determinants on health 15: the mayor and the assembly have the potential to be a greater influence on London's health than any of its 34 major hospitals.

Richard Harling Editorial registrar, BMJ, and registrar in public health medicine, East London and the City Health Authority

Short course antiretroviral regimens to reduce maternal transmission of HIV

May be effective but shouldn't be allowed to strangle research that might help Africans

In the Bangkok perinatal HIV study oral zidovudine given during late pregnancy and labour to non-breast feeding women reduced the rate of mother to child transmission of HIV by 51% (95% confidence interval 15 to 71%). The investigators concluded that this intervention may help prevent HIV infection in children in developing countries, and the policy director for the treatment action group said, "If we can get this incredible health benefit for 80 bucks a pop, then we can really make a difference around the world." Are these conclusions and expectations justified?

After the landmark ACTG076 trial, which showed that a complex and expensive antiretroviral regimen reduced mother to child transmission by 67%,³ the Thai results are clearly an important step forward. The short Thai regimen is cheaper and less complex, and hence likely to be attractive to countries unable to afford the 076 regimen. Paradoxically, the reaction to the results of this trial may pose a threat to the health of Africa's poorest women and their children. Within days of the release of the Thai data investigators studying other regimens closed recruitment to the placebo

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