Western world, and several screening procedures have been discontinued following evidence based reviews.⁴

Health visitors increasingly prioritise their caseload. They prevent and treat postnatal depression, which may adversely affect child development; they promote immunisation, breastfeeding, good nutrition, and dental care; and they contribute to the prevention of sudden infant death and home accidents. Research in America has shown an impressive cost benefit ratio for health visiting, but data in Britain are sparse.⁵ Monitoring and intervention are essential for registered cases of child abuse, but are probably a less effective use of resources than primary prevention by family support. Health visiting offers the greatest potential among parents suffering severe deprivation and stress, who often lack the emotional and material resources to deal with issues such as stopping smoking or coping with depression. The challenge is to identify these mothers, secure their trust, and offer them a service that is not provided for everyone without them feeling stigmatised.

The first step in achieving this should be a better distribution of health visitors. Middle class areas do not need the same proportion of health visitors as areas of high deprivation.⁶ Targeting communities or neighbourhoods is more effective and less stigmatising than targeting individuals. Next, the visiting pattern should be reviewed. A trusting relationship between client and health visitor is more likely if contact is made before the baby is 10 days old, and antenatal contact is probably even more effective.⁷ Enabling a family to decide what help they require needs at least two visits, as specified in the basic child health surveillance programme, but contact beyond this should form part of a programme of care with defined objectives.

Two other developments might increase the effectiveness of health visiting. Firstly, an idea proposed 20 years ago—the combination of preventive health care and home based primary nursing care for children—should be tested.⁸ Secondly, health visitors could promote the health of their local community by increasing their public health role, identifying population needs as well as those of individuals. To strengthen networks for socially isolated families, health visitors should call on the full range of local community services: they do not have to solve all their clients' problems themselves. Campaigning and working with local agencies on environmental hazards, poor housing, and child care should pay dividends, though maintaining the link between individual and public health work is important. A new approach to community data collection that emphasises outcomes, rather than counting contacts, is urgently needed.

School nurses too are doing some soul searching. School entry medical examinations by doctors have been replaced by health interviews with school nurses, but there is little evidence on the value of this exercise, except perhaps where preschool medical care is poor.⁹ The school health service must collaborate more closely with primary care and focus on today's health problems—promoting physical and mental health, supporting children with physical or intellectual impairments, and reducing school failure due to missed learning disorders, bullying, or depression. Education about high risk behaviour and helping children to build self esteem and a successful school career should be joint responsibilities of education and health services.¹⁰

No healthcare activity can escape cost containment measures unless it produces robust evidence of effectiveness.¹¹ Much progress has been made recently in calculating the costs and benefits of screening programmes. Health promotion measures are harder to assess but, as evidence of what works accumulates, opportunities for successful intervention will increase. School nurses and health visitors must expect to compete with other professions for the important public health tasks of the next decade, but they have served the community well and deserve support for retraining and professional development.¹²

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Caring for patients with chronic leg ulcer

Early specialist assessment offers the best hope of sustained healing

Leg ulcers are common, disabling, resistant to treatment, and expensive to manage. There is debate, not just about how to treat them but where. Recently, the trend has been towards treating patients almost exclusively in the community, leaving it to trained community nurses armed with evidence

based protocols and pocket Doppler devices. The diversion of resources away from specialist care in hospitals, as well as being politically motivated, has been driven by clinical trials showing that community treatment can work: ulcer healing rates can improve as much as 70% over 3-6 months when care is provided

by trained nurses in dedicated clinics using improved bandaging systems.¹⁻⁴ These benefits are, however, short term. The longer term prospects for patients treated in this way are more uncertain. Health professionals and managers should not continue to divert resources from hospitals into the community before, firstly, taking account of the epidemiology of the condition and, secondly, considering the likely negative impact on important new advances in management.

The aetiology of chronic leg ulcers is multifactorial. Data on the natural course of the disease show that healing rates achieved by conservative methods in clinical trials or in newly established clinics are neither achievable in the whole ulcer population nor sustainable long term.⁵ Successes reported from clinical trials have been achieved in highly selected populations, by screening out patients with non-venous ulcers or those of "mixed" aetiology—those ulcers least likely to heal.^{2-4 6} Even in the best trials, a quarter to a half of all ulcers remained unhealed. Furthermore, most of the high quality bandages and dressings materials used in these trials, such as the Charing Cross four layer system,² cannot be prescribed by general practitioners in Britain. The results of clinical trials cannot, therefore, be confidently applied to most patients with leg ulcers.

Not only are leg ulcers difficult to heal with current non-surgical regimens but, more seriously, most recur. Callam et al, in a study of 600 patients, found that a third had never healed their first ulcer and two thirds had a series of ulcers. Consequently, half of the study population had had their ulcer disease for more than 10 years, some for virtually their entire adult lives.⁵ These findings have been confirmed in several subsequent studies.⁷⁻⁸ Faced with these data, the massive cost of leg ulcer care becomes understandable.⁹

Can recurrence be prevented? Conservative measures have only limited success. In a recent randomised trial comparing class 2 (18-24 mm Hg compression at the ankle) and class 3 (25-35 mm Hg compression at the ankle) graduated elastic compression hosiery, 300 patients were followed for 3-5 years after their venous leg ulcers had healed.¹⁰ The rates of ulcer recurrence were 19% and 32% respectively despite intensive preventive measures including professional fitting and regular renewal of hosiery, regular clinic visits, close supervision and counselling by leg ulcer nurses, and a hotline to the leg ulcer clinic—levels of support not available to the average patient. In non-compliant patients the recurrence rate was 69%.

How then should leg ulcers be managed? A new approach is urgently needed. The advent of duplex scanning has given us a non-invasive tool for imaging and measuring blood flow that, for the first time, makes it possible to tailor management precisely to the patient's pathology. This increases the likelihood of long lasting success. The results of surgical and non-surgical management are at last beginning to be correlated with particular patterns of venous dysfunction. The opportunities for improving outcomes for patients with venous disease, particularly leg ulcers, have never been better. At present, hospital referral tends to be the last resort, when care in the community has failed and the ulcer is embedded in chronic scar tissue. The best time for specialist input is at the outset,

giving patients the opportunity for a thorough diagnostic and prognostic evaluation in hospital including duplex scanning of the arterial and venous systems.¹¹ Such evaluation identifies patients who would benefit from early treatment of vascular disease, combined, if appropriate, with skin grafting. For example, a group in Leicester have recently described a venous ulcer assessment clinic where they performed duplex scanning on a consecutive series of 88 patients. They found that 14% had significant arterial disease, and 57% had incompetence limited to the superficial venous system, a category of patients in whom high success rates for simple venous surgery have been reported.^{12 13} Care can continue in the community after discharge as it does for patients judged unlikely to benefit from radiological or surgical intervention.

Chronic leg ulcer is perfectly suited to shared care. The hub and spoke model, in which a hospital specialist unit supports outreach services linked to it by specialist nurses, offers an ideal blend of specialist intervention and community based care. It assumes, of course, availability of a high quality duplex scanning service and vascular consultants trained in the care of leg ulcer, a notable deficiency in many vascular training programmes. There is hope however. Most district general hospitals have duplex scanners and there is increasing recognition of the need for vascular surgeons to assume more responsibility for managing venous disease in general and leg ulcer in particular. This approach has the potential for major cost savings, and clinical trials are needed to establish cost effectiveness. The most important outcome is not ulcer healing but sustained ulcer healing. A combined effort with early specialist assessment has the potential to achieve this.

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