

maintaining a national network of perhaps half a dozen large milk banks.

In 1949 Findlay Ford, a Glasgow paediatrician, wrote, "When breast milk can be obtained from the milk bank it is expensive in money and when the bank is part of a hospital activity it is expensive in nurses' time. It is therefore essential to find out if this is really so advantageous as to justify the financial outlay and the use of valuable nursing hours in collecting and processing it."¹⁷ More than 40 years on we still don't have the final answer.

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Improving the care of elderly people

Time to recognise the importance of those at the bedside

The American management guru W E Deming, regarded as being largely responsible for the industrial revival of postwar Japan, maintains that most people want to do a good job. Bad work usually results from bad management rather than bad or incompetent workers.¹ If this is true then poor quality long term care—whoever provides it—is largely a managerial problem, which punitive regulations are unlikely to solve.

Day to day long term care is usually provided by the least qualified and most poorly paid staff. Although often working with great dedication, they are "moppers up"; the system does not empower them to improve the quality of their work. A recent joint report from the research unit of the Royal College of Physicians and the British Geriatrics Society provides guidelines and an audit package—the CARE (continuous assessment, review, and evaluation) scheme—for use in evaluating the quality of care both in an institution as a whole and for elderly people within it. *High Quality Long Term Care for Elderly People* aims to engage all staff in audit, which will educate and empower them to achieve the highest standards of care.²

Overall quality of care is difficult to measure directly, and eight aspects of care are used as proxies: preservation of the patient's autonomy; promotion of urinary continence; promotion of faecal continence; optimisation of drug use; management of falls and accidents; prevention of pressure sores; optimising the environment, equipment, and aids; and the medical role in long term care.

The quality of people's work is intimately linked to their sense of personal worth, which in turn is enhanced by their ability to influence the way in which they work. The new report and CARE package are important developments, which will be refined further (Deming's rule of constant improvement). To give a clear signal to providers that quality matters to them health authorities and social service departments of local authorities could require the CARE scheme to be used as a contractual obligation in establishments from which they purchase services for elderly people. The report complements guidelines set out in other reports, most notably *Home Life*, the bestseller from the Centre for Policy on Ageing.³

Before coming to industrial management Deming was a

statistician. He recognised the importance of workers at the "coal face" regularly collecting data for overall planning and modification of working practices locally with the aim of achieving greater quality and efficiency. The second joint report from the Royal College of Physicians' research unit and the British Geriatrics Society, *Standardised Assessment Scales for Elderly People*, recommends a series of scales for routine use. Intended mainly for use for elderly people in hospital, they combine measures of disability in everyday function (the Barthel scale⁵); communication, hearing, and vision (questions from the Lambeth disability screening questionnaire⁷); and cognition (abbreviated mental tests⁸); together with assessments of mood (geriatric depression scale⁹); morale (anglicised version of the Philadelphia Geriatric Center morale scale¹⁰); and social status (a checklist compiled by the Royal College of Physicians and the British Geriatrics Society). These scales were regarded as the best available for measuring particular aspects of quality of life. They are recommended for use in clinical audit, in the care of individual patients, in defining requirements for support services in the community, and in screening of people over 75 by general practitioners. The report also suggests that they can be used as measures of outcome and as ways of making the assessment of casemix "an effective and credible exercise."

A problem exists, however, in that many of the scales have been used mainly in research rather than clinical settings, and the report admits that "the feasibility, interpretability and usefulness of these scales when removed from the research environment to the every day clinical situation has yet to be established." There is an inherent danger of regarding them as "tablets of stone" despite the report's reservations.

Deming would approve both reports' attempts to give workers caring for elderly people the responsibility and tools to work well. Other issues related to the quality of care, however, also need addressing: Arie has pointed out the difficulties in monitoring both possible financial exploitation and the "moral climate" (whether people are happy).¹¹

To be effective these reports must be only a part of a process of continuous improvement, which should be driven by those working directly with elderly people. Given the many differ-

ent care settings for elderly people how do we ensure that innovations occurring in these settings are more generally taken up? For new practices originating in private establishments it will be particularly difficult. We must have a system that recognises, assesses, and communicates these new practices for the benefit of all elderly people. The route for their dissemination should be through purchasing authorities ensuring that they have the means to recognise innovation and to incorporate it into contracts with all their providers.

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Diagnosing congenital dislocation of the hip

A large trial of ultrasonography might help

Congenital dislocation of the hip has been defined as "a congenital deformation of the hip joint in which the head of the femur is (or may be) partially or completely displaced from the acetabulum. The term embraces secondary hip dysplasia whether or not hip instability or dislocation persists."¹ The conventional clinical tests for the condition detect either dislocation of the hip or displacement on provocation (Ortolani and Barlow tests respectively). Despite initial confidence in these tests neonatal screening has not reduced the number of cases of congenital dislocation diagnosed late; the numbers may have even increased.² The validity of the clinical test therefore remains in doubt.

Diagnosis, screening, and treatment of the condition depend on the basic premises that adequately trained staff can detect all abnormal hips at birth by clinical examination. This depends on two further assumptions: that all abnormal hips are clinically abnormal when tested and that abnormalities persist. Clinically detectable instability of the hip may, however, resolve in the first 24 hours after birth, which makes the timing of the clinical test critical. It has been suggested that enthusiastic or repeated clinical examination may actually provoke hip instability or harm.³ (In this week's journal Paterson *et al* highlight its dangers in the extreme case of infants with osteogenesis imperfecta (p 464).⁴) Additionally, it has been estimated that most cases of unstable hips that are detected by clinical examination are false positive findings and the number of false negative findings is probably similar to that of true positive findings.⁵

Ultrasonographic studies have supported Barlow's original observation⁶ that 60% of unstable hips are clinically normal by 1 week of age.⁷ Early expert treatment of displaced hips by abduction splintage undoubtedly leads to better results than those obtained with often necessarily repeated surgery in cases that are diagnosed late. The therapeutic dilemma, however, is whether to splint all unstable hips immediately or to delay splintage, given that in many cases instability resolves spontaneously. Immediate splintage results in overtreatment and possible complications such as avascular necrosis of the femoral head. Delaying splintage risks a falsely reassuring delayed negative finding on clinical testing; a delayed negative finding is not synonymous with a normal hip.⁷

The importance of an accurate initial diagnosis of congenital displacement of the hip is therefore crucial for instituting the right early treatment and reducing the number of cases

presenting late, in which surgical intervention is required. Economically there are also important implications.⁸

Numerous techniques are available for improving the diagnostic accuracy of the clinical test. Neonatal radiography of the hip is not necessarily accurate because of possible misinterpretation by even experienced radiologists (mainly because of the difficulties of positioning the neonate). Magnetic resonance imaging is useful in established dislocation but is impractical for neonates and costly. Although results of vibration arthrometry during clinical examination correlate closely with the opinion of an experienced clinical examiner,⁹ the specificity of the techniques remains in question. The sound transmission test, in which sound is transmitted across the hip joint,¹⁰ reportedly has a sensitivity of 100% and a specificity of 23% with a certain level of decibel difference between hips; bilateral dislocation of the hip may, however, cause difficulty in interpretation.

Ultrasonography is a reliable method of examining the infant hip, providing accurate images non-invasively. Its specificity and sensitivity for detecting abnormalities are seldom quoted but seem to vary if inferred from treatment rates in different series. Certainly, early ultrasonography detects a high prevalence of abnormality of the hips, and consequently treatment rates may be unnecessarily high. In its favour, however, no false negative results have been reported in large series. A delayed ultrasonographic examination at the age of 2-4 weeks allows transient instability of the hip to resolve without compromising the results of treatment. Repeated ultrasonographic examination also allows the observation over time of hips for which the diagnosis is in doubt without necessarily condemning them to splintage. The role of ultrasonography in screening has yet to be defined. In selective screening it did not reduce the incidence of late cases of congenital dislocation of the hip.¹¹

Decisions about whether to screen every neonate ultrasonographically will have to await the outcome of a suitable long term trial—for which there is an undoubted need. Until then congenital dislocation of the hip will continue to cause difficulty and its management will remain imprecise.

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