Doctors and managers working together on costs

Programme budgeting and marginal analysis has the potential to align the goals of both doctors and managers, argue Ruta and colleagues (p 1501), offering this economic approach to priority setting as one of the possible ways to tackle the

recent NHS reform that gave doctors more responsibility for use of resources. The strengths of this economic approach to priority setting include explicit presentation, evaluation, and the recording of contextual information, evidence, and subjective judgments. The approach fosters the need to balance clinical autonomy with financial responsibility, say the authors.

POEM*

Melatonin is effective for some sleep disorders

Question Is melatonin effective for insomnia and other sleep problems?

Synopsis The authors of this systematic review evaluated the role of melatonin in the treatment of different types of sleep problems in different types of patients. They performed a thorough search of the literature but limited the research to English language publications. Potential research was screened by two independent reviewers and the data were abstracted by one reviewer and then checked for accuracy by another. They included controlled clinical trials and reviewed all studies for quality using the established Jadad criteria. In normal sleepers, melatonin had a clinically insignificant effect on the time to sleep onset (sleep onset latency) or the amount of time actually spent asleep (sleep efficiency). Melatonin in doses of 1 mg to 3 mg caused an average 12.7 minutes' delay in onset of rapid eye movements (REM latency) compared with placebo. In patients with simple insomnia, melatonin helped adults to fall asleep an average 10.7 minutes faster (95% CI 3.7 to 17.6 min). Children had a better response, falling asleep an average 17 minutes faster. Melatonin was particularly effective in patients with delayed sleep phase syndrome, in which a person's circadian rhythm is misaligned without an external cause such as jet lag or shift work. In these patients, sleep onset was an average 38.8 minutes faster (27.3 to 50.3 min). Melatonin had no effect on sleep quality, wakefulness, total sleep time, or percentage of time spent in REM sleep. In patients with jet lag, melatonin did not decrease sleep onset latency or increase sleep efficiency, sleep quality, or the time spent in REM sleep, though it was effective in increasing the total sleep time. It had a similar effect as zolpidem in patients with jet lag in one study. Melatonin is not effective in patients with a secondary sleep disorder.

Bottom line Melatonin in doses from 0.1 mg to 10 mg is effective in helping adults and children who have difficulty falling asleep. It is particularly helpful in patients whose circadian rhythm is permanently off kilter (delayed sleep phase syndrome). It increases sleep length, but not sleep quality, in patients who perform shift work or who have jet lag.

Level of evidence 1a (see www.infoPOEMs.com/levels.html). Systematic reviews (with homogeneity) of randomised controlled trials.

Buscemi N, Vandermeer B, Hooton PR, et al. *Melatonin for treatment of sleep disorders*. Rockville, MD: Agency for Healthcare Research and Quality, 2004. (Evidence report/technology assessment No 108. AHRQ publication No 05-E002-1.)

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* Patient-Oriented Evidence that Matters. See editorial (*BMJ* 2002;325:983)

Editor's choice

Performance matters

It must be one of the worst nightmares of any clinician or parent—the failure to recognise or adequately treat a child with meningococcal infection. Death rates from meningococcal sepsis have not changed much over the past 20 to 30 years, despite growing appreciation of the benefits of aggressive management in intensive care. Perhaps this is because most children with meningococcal sepsis present to their local hospital and many die before they can be transferred to specialist intensive care units.

This is a disease where the quality of care really does mean the difference between life and death, as Nelly Ninis and colleagues show in their careful case control study (p 1475). The authors looked at the care given in the first 24 hours of admission to hospital, comparing children who died and children who survived, correcting for how sick the children were at presentation. Three factors were independently associated with an increased risk of death: not being looked after by a paediatrician, inadequate supervision of junior staff, and inadequate use of inotropes. A child with two of these factors was nearly 10 times more likely to die from the disease than one with none.

Expertise, or lack of it, is confirmed in this study as contributing to poor quality of care. Age and experience by themselves are no guarantee of performance, according to a recent systematic review. The review finds that older doctors and those in practice for more years performed less well than their younger, newer colleagues. It's another argument for revalidation, John Norcini (p 1458) says, along with patients' expectations and the individual and collective responsibilities of professionals to ensure they are able to provide high quality care.

No author in the series has argued against revalidation—it would be a hard case to make. But exactly how the system might work remains highly contentious. In the final article in our series on revalidation, Kieran Walsh and Lawrence Benson (p 1504) call for radical reform in place of the collection of reactive and short term solutions that make up the current system in the United Kingdom. We need “a strategic and fundamental reassessment of the place of professional regulation in modern health services.”

Finally Mike Pringle (p 1515) makes a passionate appeal for a system that is more than just another bureaucracy based around the GMC's fitness to practise procedures. This would combine the ability to find doctors who are underperforming, which, he says, appraisal and clinical governance between them have so far failed to do, with clear standards of professionalism against which doctors can be judged. After so much back tracking, loss of public confidence, and defensiveness, the chief medical officer's review of the medical revalidation is a real opportunity to get things right. We should seize it. Fiona Godlee *editor* (fgodlee@bmj.com)

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