5 **Teasdale GM**, Murray G, Anderson E, *et al*. Risks of acute traumatic intracranial haematoma in children and adults: implications for management of head injuries. *BMJ* 1990;**300**:363–7.

6 **Mendelow AD**, Teasdale G, Jennett B, *et al*. Risks of intracranial haematoma in head injured adults. *BMJ* 1983;**287**:1173–6.

7 **The Royal College of Radiologists**. *Making the best use of a department of clinical radiology. Guidelines for doctors*. 5th edn. London: RCR, 2003:96–9.

NICE guidelines

NICE head injury guidelines

T J Coats

Emergency physicians in the UK will be scanning more patients with head injury and should have easier access to CT

The current discussion about the NICE head injury guidelines illustrates both the strengths and the weaknesses of the system of national guidelines for the NHS. We are still on the learning curve of how we should use this national advice in emergency medicine practice. When there is good evidence that tells that a treatment works or that a treatment does not work a guideline is easy to write. However, when there is weak evidence, as the research has not been done, writing a guideline becomes more difficult.[1] Simply leaving a gap in the guideline would not be useful, however the ''best evidence available'' becomes a consensus opinion among experts. Different groups of experts may come to different opinions and an individual emergency physician may, because of personal clinical experiences or particular local circumstances, disagree with the consensus. Guideline developers recognise that there is no way of telling who is right and who is wrong (until further research is conducted) and so label consensus opinions with the lowest level of evidence (grade D).

Each step in a guideline should therefore be regarded rather differently. Much more weight should be given to the parts of a guideline supported by higher grade evidence, as we are more certain that this is the right thing to do for the average patient. The parts supported by grade D evidence are much more open to question and modification to fit an individual patient. We should not think that once a guideline has been developed it should be slavishly followed in all circumstances. Unfortunately when guidelines are discussed, flow diagrams constructed, or departmental guidelines written, the underpinning evidence becomes removed and all steps look as if they have the same weight.

Clinical experience also comes into play here. I would expect an emergency department SHO to closely follow a guideline. However, I would also expect an experienced emergency physician to know which parts of a guideline are based on weaker evidence and to exercise more clinical skill in these areas, so that management is tailored to the individual patient. Our audit systems also need to become more sophisticated in the way that they use guidelines to define ''right'' and ''wrong'' treatment, although I doubt that the politicians (and lawyers) will be weaned from their belief that medicine is full of certainties. Simply ticking the box that says ''followed the NICE head injury guideline'' does not take into account the subtleties of individual patient management and will not provide meaningful audit or a good assessment of performance.

It is debatable how the availability of resources should influence the development of a guideline. The inability of a hospital to provide a computed tomography (CT) service that can cope with the NICE head injury guidelines seems to be a strong argument for improving the service rather than changing the guideline. The burden on radiologists does not need to be great as there is no reason why emergency physicians should not interpret a CT head scan, which can be less difficult than interpreting a chest radiograph.

In the UK the greatest effect of the new guidelines may be an improved access to CT for all head injured patients. It is rather ironic that the Canadian CT head rules were used in North America to decrease the number of CT scans performed on minor head injuries, whereas in the UK they will have the opposite effect. Estimates of the numbers of additional CT scans in the ''average ED'' seem to vary from 48 a year[2] to 725 a year.[3] Experience from the introduction of a guideline similar to NICE is particularly important,[4] and indicates that the upper figure is wrong. The Cambridge experience also questions whether admissions will be reduced—it will interesting to see if the admission rate falls as more experience is accumulated and we become confident with the new approach.

In the absence of comprehensive evidence guidelines are always going to be imperfect. The group that developed the NICE guidance consulted widely among practising emergency clinicians and has been transparent about the details of the evidence on which the guidance is based (full details are on the NICE web site but not in the printed format). There are a number of areas for future research—some of which is already underway. This has been acknowledged in the short interval before the guidelines are due for a review (June of next year). There seems to be a consensus that some lowering of the threshold for CT is desirable,[5] but uncertainty about management of some subgroups. The details can be debated, but the underlying messages of the NICE head injury guidelines—that emergency physicians in the UK will be scanning more patients with head injury and will have easier access to CT—should be endorsed.

Emerg Med J 2004;**21**:402.
doi: 10.1136/emj.2004.016485

Correspondence to: Professor T J Coats, Leicester Royal Infirmary, Infirmary Square, Leicester LE1 5WW, UK; t.coats@virgin.net

Funding: none.

Conflicts of interest: none declared.

REFERENCES

1 **Dunning J**, Lecky F. The NICE guidelines in the real world: a practical perspective. *Emerg Med J* 2004;**21**:404–7.

2 **Shravat BP**, Hynes KA. The impact of NICE guidelines for the management of head injury on the workload of the radiology department. *Emerg Med J* 2004;**21**:521–2.

3 **Leaman AM**. The NICE guidelines for the management of head injury: the view from a district hospital. *Emerg Med J* 2004;**21**:400.

4 **Sultan HY**, Boyle A, Pereira M, *et al*. Application of the Canadian CT head rules in managing minor head injuries in a UK emergency department: implications for the implementation of the NICE guidelines. *Emerg Med J* 2004;**21**:420–5.

5 **Swann IJ**, Kelliher T, Kerr J. Are we ready for NICE head injury guidelines in Scotland? *Emerg Med J* 2004;**21**:401–2.