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ECHO

NICE guidelines for head injury are cost effective



Please visit the *Quality and Safety in Health Care* website [www.qshc.com] for a link to the full text of this article.

A UK study has confirmed that National Institute of Health and Clinical Excellence (NICE) guidelines on managing head injury will save resources while maintaining patient safety. It should allay concerns about their cost effectiveness.

The two centre case study—in a teaching hospital with regional neurosciences centre and a district general hospital—compared rates of computed tomographic (CT) and *x* ray examinations of the head and admission in patients presenting to the emergency departments with head injury. Case notes for 1130 patients were analysed for four separate months—one month in the six months before the guidelines were implemented and one month after for each hospital.

Cost savings at the teaching hospital amounted to £3381/100 head injured patients, higher than predicted. A significant drop in *x* ray examination (37%–4%) and decrease in admissions (9%–4%) outweighed raised costs owing to a doubling of the rate of computed tomography. Savings at the other hospital were more modest—£290/100 patients—and less than predicted. There was a significant drop in *x* ray examination (19.0%–0.6%) and a fall in admissions (7%–5%), against a sixfold increase in CT examination. No adverse events occurred.

The NICE guidelines, issued in June 2003, advocate a major change to managing head injury. Standard skull *x* ray examination is replaced by CT examination, which is more informative and also saves patients radiation exposure. Until now the cost effectiveness of the guidelines had not been tested on practice based data.

▲ Hassan Z, *et al.* *Emergency Medicine Journal* 2005;**22**:845–849.