

Improving blood transfusion in England

The public often perceive transmission of disease to be the most important transfusion risk. Fortunately, good transfusion practice has reduced this risk considerably. The reality is that the most serious risks are related to potentially avoidable human errors. Between 1996 and 2005, 105 deaths and 296 major complications occurred in the UK in patients who received a blood transfusion. This report of the 2005 National Comparative Audit of Transfusion Practice found that hospital transfusion committees had been well established by 2003. However, hospital transfusion teams lagged behind—86% reported having established teams by 2005 although only 52% reported having all essential elements of the team in place. Opportunities for improvement were identified. For example, 6% of patients received a blood transfusion with no identification wristband in place; while in 9% of those that did, the details were incomplete. Observation of vital signs during transfusions had also improved by 2005; however, 13% of patients receiving a transfusion had had no observations recorded. Progress has been made in England in establishing an effective infrastructure for the support of safe transfusion practice but there still remain areas of poor practice and improvements have not been seen across all hospitals. *See pages 235 and 238*

A new quality measure for drug treatment in general medical settings

This preliminary report offers a new method for evaluating the quality of drug treatment in general medical inpatients. It measures the proportion of opportunities in which a proven intervention would be ideally implemented, while it takes into account valid situations where there is reason not to use that treatment. Seventeen instances of treatment were evaluated for patients with atrial fibrillation, ischaemic stroke, coronary artery disease, heart failure or osteoporosis. In this assessment, the "ideal intervention index" was 0.74 and the justified non-use index was 0.49. This suggests that the studied treatments were implemented in around



three-quarters of situations where their use was considered ideal, while in about half of cases there were clear instances where the treatment should not be used. This measure may be useful in other patient contexts and medical conditions. *See page 268*

Impact of NICE guidance on rates of haemorrhage after tonsillectomy

In 2003, the National Institute for Health and Clinical Excellence (NICE) issued guidance on tonsillectomy that recommended surgeons use as little diathermy as possible, especially when used for both dissection and haemostasis. An analysis of the National Prospective Tonsillectomy Audit had found that the rate of post-operative haemorrhage was three times higher when diathermy was used throughout a tonsillectomy compared with the traditional approach of "cold" dissection. The British Association of Otorhinolaryngologists—Head and Neck Surgeons supported the guidance, although it was potentially controversial because diathermy was a widely used technique. This study assessed the impact of the guidance on surgical practice and outcomes. After publication of the guidance, the rate of postoperative haemorrhage fell from 6.5% to 5.7%. This change coincided with a decrease in the use of diathermy, suggesting that the NICE

guidance may have influenced improved outcomes in surgical tonsillectomy. This outcome suggests a positive role was played in this setting by the ongoing national audit, together with strong support from the surgical specialist association. *See page 263*

Application of statistical process control charts to improve stroke care

Statistical process control (SPC) charts are familiar tools in improvement work but are still not widely or routinely used by clinicians. Clinicians and staff involved with the Scottish Stroke Care Audit at three hospitals in Lothian, Scotland, used SPC charts retrospectively to demonstrate the beneficial impact of changes in care. Examples included demonstration of the effect of new, faster brain scanners on the time to administration of aspirin to ischaemic stroke patients and the increase and eventual stabilisation of statin prescription following the publication of the Medical Research Council Heart Protection Study. Some changes in stroke services were not followed by the anticipated improvements in processes of care. SPC charts were used to promote reflection and discussion about how stroke services might be improved and offer opportunities for motivating clinicians and staff to track system improvement. *See page 300*