

2009 BTS Emergency Oxygen Audit

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The *British Thoracic Society (BTS) Guideline for Emergency Oxygen Use in Adult Patients*, the first national guideline on this topic, aimed at simplifying oxygen delivery and better protecting acutely ill patients, was published in October 2008.

The Guideline was prepared by a multidisciplinary working group and published with the endorsement of 22 professional institutions, across emergency medicine, intensive care, physiotherapy, primary care, anaesthetics and the ambulance service.

The Guideline's key recommendations include:

- Oxygen therapy should be adjusted to achieve target saturations rather than giving a fixed dose to all patients with the same disease.
- Oxygen will require a prescription in all situations except for the immediate management of critical illness.

In autumn 2008, prior to publication of the Guideline, BTS carried out a baseline audit of oxygen use in UK hospitals. A second national audit took place in autumn 2009, using the new BTS on-line audit system.

The 2008 baseline audit provided data from 99 Trusts, involving 14,830 patients in 712 wards. The 2009 audit gave data from 51 trusts, involving 7,381 patients in 312 wards.

In 2008, 32% of patients who were using oxygen had some sort of written order for oxygen use. In 2009, this figure had risen to 69% of patients. The percentage of patients with prescriptions for oxygen which included a target range had also increased in 2009 compared with 2008 as illustrated in the figure below.

93% of scheduled observation rounds (with oximetry checks) were documented clearly. Of the patients with a target range specified, 82% were within the target range at the time of audit with 12% above the target range and 6% below it. There was poor documentation of what action was taken when patients were above or below the target range.

Conclusion

National audits in 2008 and 2009 have shown that oxygen prescribing has improved since the publication of the BTS Emergency oxygen Guideline in October 2008 but many patients were still being given oxygen with no prescription in late 2009 and there is some evidence that clinical staff may not always respond appropriately to patients with high or low oxygen saturation levels. Participants in the 2009 audit can generate a report to compare their own results with that of the national dataset through the report function on the BTS audit system.

The 2010 National Emergency Oxygen Audit will take place in October/ November 2010 and further details are available on the BTS audit system at:

<https://audits.brit-thoracic.org.uk>

