



British Thoracic Society
Emergency Oxygen Audit 2011
(national audit period 15 August – 1 November 2011)

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THE BRITISH THORACIC SOCIETY (BTS) Guideline for Emergency Oxygen Use in Adult Patients (1), the first national guideline on this topic, aimed at simplifying oxygen delivery and enhancing the management of 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.

The fourth audit of emergency oxygen use in UK hospitals took place in August – October 2011.

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. The 2010 audit obtained data from 90 trusts, involving 22,017 from 1026 wards. The 2011 audit collected data from 156 trusts, involving 41,009 patients in 1919 wards.

In 2008, 32% of patients who were using oxygen had some sort of written order for oxygen use. In 2011, this figure had risen to 48% of patients.

Table 1: A summary of the main elements of the audits over the past 4 years

Year	2008	2009	2010	2011
Percent On oxygen	17.5%	18.4%	15.5%	13.7%
Target Range	10%	40%	41%	43%
No Written Order	68%	31%	44%	52%
Percent of all hospital patients on oxygen with no written order	11.9%	5.7%	6.8%	7.1%

Table 2: A summary of the results of the annual implementation audit

Year	2009 Feb n=72	2009 Nov n=61	2010 n=51	2011 N=127
Oxygen Policy Implemented	6%	21%	37%	89%
Printed Oxygen Prescription	9%	28%	51%	72%
O2 on Monitoring Chart	7%	34%	33%	58%
Nurse Training Implemented	7%	13%	18%	31%
Doctor training implemented	4%	10%	11%	31%

The national audits from 2008 to 2011 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 2011 and there is some evidence that clinical staff may not always respond appropriately to patients with high or low oxygen saturation levels.

The 2012 National Emergency Oxygen Audit takes in August - October 2012 and further details are available on the BTS audit system at: <https://audits.brit-thoracic.org.uk/>