Oxygen use on medical wards at St George's: results of a nurse-led review

Completed as part of the B5 MedCard development programme | May 2024

BACKGROUND

Oxygen is a frequently used drug on in-patient wards and should be prescribed. The British Thoracic Society (BTS) recommend oxygen is prescribed using target oxygen (O2) target ranges of between 94% and 98% for medically unwell adult patients and 88% to 92% in patients at risk of hypercapnic respiratory failure [1].

Evidence highlights the suboptimal adherence to these guidelines in the UK [2,3].

RESULTS

Data were received from 8/10 wards (80%) totalling 52 patients. The number across the 8 wards ranged from 2 to 10 patients.

Criteria 1: number of patients receiving oxygen with valid prescription

Across ward areas 21/52 (40.4%) of patients had a valid prescription.

Criteria 2: percentage of drug rounds where prescribed oxygen was signed for

Across ward areas for 21 patients where oxygen was prescribed there were 188 drug round encounters (range by patient was 1 - 8). Of these 6 prescriptions had been signed by nursing staff as being administered (figure 2).

AIM

This audit examined the use of oxygen on 10 wards in the MedCard Division at St George's Hospital in April 2024. The main focus was on safe prescribing and monitoring of oxygen use. The audit standards were derived from the 2017 BTS guidelines [1]

METHOD

- Data collection across all ward / areas
- Minimum of 10 patients per ward / area
- Convenience sample of patients on oxygen
- Standardised data collection sheet

Key audit criteria for patients on oxygen [BTS 2017]

Oxygen should be prescribed and a signature should be entered on the drug chart on each drug round

Oxygen should be prescribed to achieve a target saturation of 94-98% for most acutely ill patients or 88-92% in patients at risk of hypercapnic respiratory failure

Oxygen saturations should be recorded on the patients monitoring chart

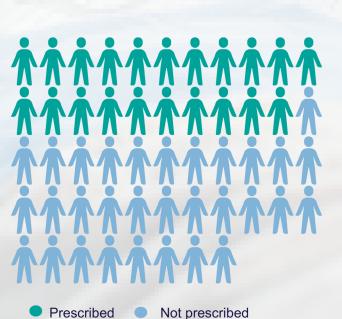


Figure 1: Number of patients with oxygen prescribed (21/52)

Criteria 3: percentage of observation rounds with oximetry recorded

Oxygen saturations were reliably documented during observation rounds (95.5%)



Figure 2: 5 prescriptions signed for

KEY MESSAGES

- 59.6% of patients receiving supplemental oxygen had no valid prescription
- There is a need for greater awareness of the requirement to prescribe oxygen for in-patients
- Nurses need to gain confidence to ask for oxygen to be prescribed on ward rounds

REFERENCES

- 1 O'Driscoll BR, Howard LS, Earis J, Mak V; British Thoracic Society Emergency Oxygen Guideline Group; BTS Emergency Oxygen Guideline Development Group. BTS guideline for oxygen use in adults in healthcare and emergency settings. Thorax. 2017 Jun;72(Suppl 1):ii1-ii90.
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- 3 Dickson C. Oxygen Delivery on Medical Wards. BMJ Qual Improv Rep. 2015 Apr 2;4(1):u206934.w2785. doi: 10.1136/bmjquality.u206934.w2785.

