



NRAP Good Practice Repository – COPD

Barnet Hospital

Royal Free London NHS Foundation Trust

**KPI2:**

**Oxygen prescribed to a targeted saturation.**

*Barnet Hospital achieved:*

**99.5% - 2022-23\***

\*% of patients submitted to the audit.

We have improved our prescribing of oxygen to a targeted saturation to 100%. Despite efforts to raise awareness of this among the wide number of respiratory and non-respiratory clinicians admitting patients acutely, we had struggled to do this for a long time prior to the change described below.

## Our processes to achieve good practice in KPI2:

Our Trust went paper-free in 2019 using Cerner for electronic patient records and prescribing. Although oxygen prescribing was integrated in this, rates of prescribing remained low.

**Working with our Electronic Prescribing and Medicines Administration (EPMA) team, we worked to implement a prescribing alert for oxygen which went live in April 2021.**

Whenever an inpatient has been administered oxygen in the previous six hours (as recorded on their observations), and a prescriber opens their record to request another medication, an alert pops up to prompt oxygen prescribing alongside. This links directly to add the oxygen to their medication requests with a single click, thus making it quick and easy to prescribe. The oxygen prescription ensures that the saturation target and delivery mode are specified, which therefore prompts the prescriber to record this decision if it has not already been documented.

Along with some other improvements to the oxygen prescription itself to ensure that the available delivery modes and saturation targets were optimised, this was the single change that improved our prescribing rates.

Patients who are admitted with COPD are reviewed during their admission by a Specialist Respiratory Team\* (mostly nurses but also includes respiratory physiotherapy) and their care is optimised to include all aspects of the COPD discharge bundle, including smoking cessation. The team discuss audit results and where results are lower than expected, the service review practice to ensure improvement seen.

### Description of the alert parameters:

The Royal Free London NHS Foundation Trust and West Hertfordshire Hospitals NHS Trust oxygen localisation group wanted a way of reducing oxygen being administered without an oxygen prescription. It was suggested that an alert can be introduced with the following specification:

Who receives the alert?	Clinical practitioner roles
When does the proposed alert fire?	If any pharmacy type (medicine) order is placed, and the system detects the patient is receiving oxygen (nurse is recording a flow rate or delivery device in iView) without a prescription.
Alert text:	OXYGEN NEEDS PRESCRIBING  You have placed orders for a patient who has been administered oxygen in the last four hours but isn't currently prescribed, please review urgently.

### COPD Good Practice Repository – case study

National Respiratory Audit Programme

[copd@rcp.ac.uk](mailto:copd@rcp.ac.uk) | 020 3075 1526 | [www.rcp.ac.uk/nrap](http://www.rcp.ac.uk/nrap)

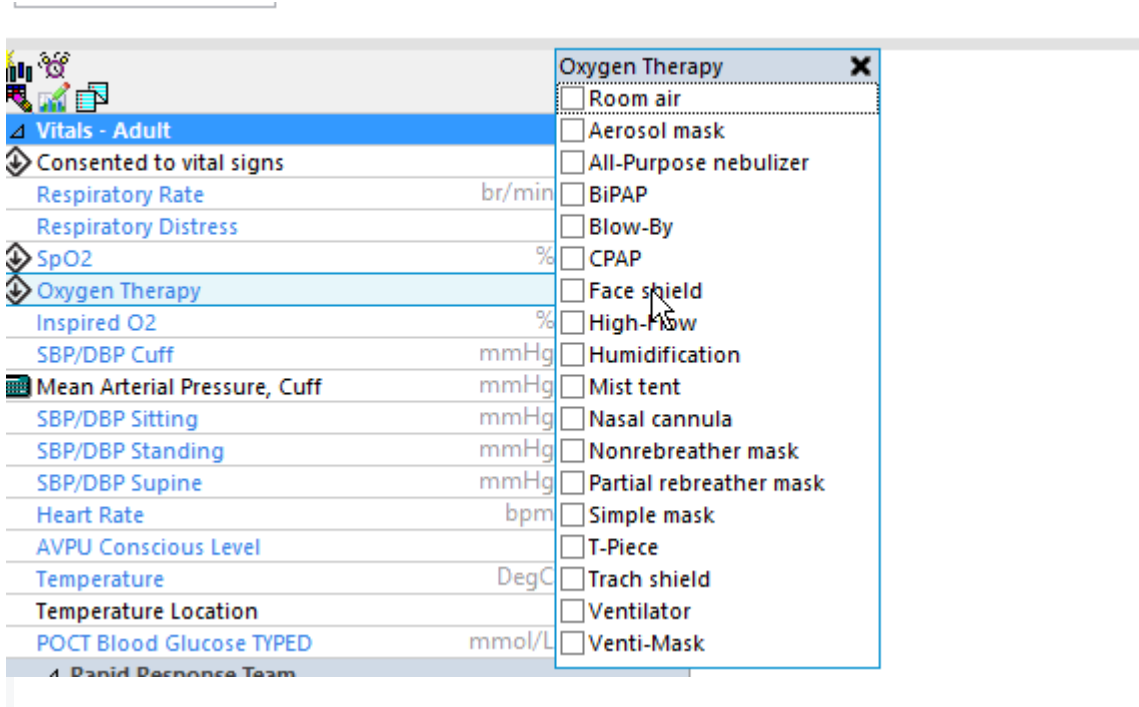
This ticket was resolved by Zak (ex EPMA pharmacist) on the 19/04/2021 – which should be when the alert went live.

Alert fires if:

- A clinical practitioner access role clicks sign when adding any medication order.

AND

- A nurse has recorded anything but “Room air” when recording oxygen therapy as part of their vital signs rounds in the past 6 hours.



Vitals - Adult		Oxygen Therapy
<input type="checkbox"/>	Consented to vital signs	<input type="checkbox"/> Room air
	Respiratory Rate br/min	<input type="checkbox"/> Aerosol mask
	Respiratory Distress	<input type="checkbox"/> All-Purpose nebulizer
<input type="checkbox"/>	SpO2 %	<input type="checkbox"/> BiPAP
<input type="checkbox"/>	Oxygen Therapy	<input type="checkbox"/> Blow-By
	Inspired O2 %	<input type="checkbox"/> CPAP
	SBP/DBP Cuff mmHg	<input type="checkbox"/> Face shield
<input type="checkbox"/>	Mean Arterial Pressure, Cuff mmHg	<input type="checkbox"/> High-Flow
	SBP/DBP Sitting mmHg	<input type="checkbox"/> Humidification
	SBP/DBP Standing mmHg	<input type="checkbox"/> Mist tent
	SBP/DBP Supine mmHg	<input type="checkbox"/> Nasal cannula
	Heart Rate bpm	<input type="checkbox"/> Nonrebreather mask
	AVPU Conscious Level	<input type="checkbox"/> Partial rebreather mask
	Temperature DegC	<input type="checkbox"/> Simple mask
	Temperature Location	<input type="checkbox"/> T-Piece
	POCT Blood Glucose TYPED mmol/L	<input type="checkbox"/> Trach shield
	4 Rapid Response Team	<input type="checkbox"/> Ventilator
		<input type="checkbox"/> Venti-Mask

AND

- no oxygen order already exists, and they are not adding an oxygen order at that time.

AND

- The alert hasn't already fired to that same user in the past 6 hours.

AND

- The patient isn't in an ICU location.



Alert fires as below.

- Default ticks oxygen order to be added.

Discern: (1 of 1)

**OXYGEN ALERT**

ZZZTEST, GEMMAEPMA has received oxygen within the previous 6 hours without an oxygen prescription on the drug chart.

Please use the order below to prescribe oxygen if appropriate.

**Add orders for:**

oxygen

OK