Barnsley Hospital – Nov 2020
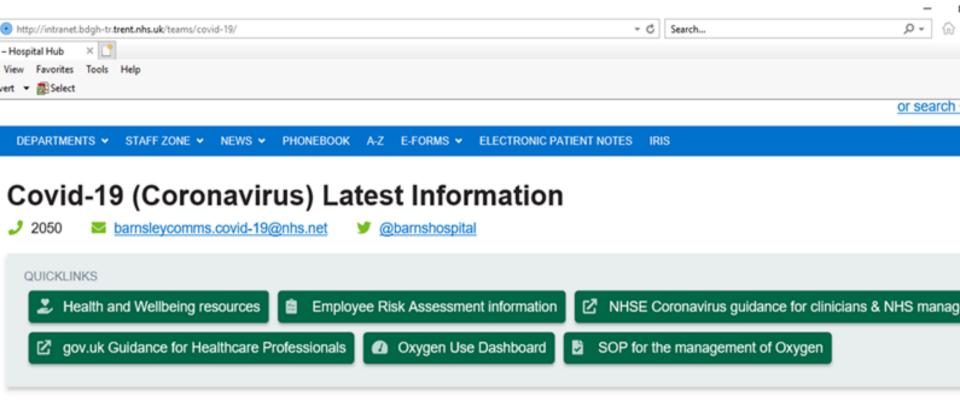
Please find attached SOP for the Management of Oxygen.

Below is a screenshot where this is available on our main Covid-19 intranet page

Barnsley Hospital – Nov 2020

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Oxygen Alarm Information

	High Limit SP	Low Limit SP	Alarm State
Pre Alarm	1150	1100	Inactive
Emergency Alarm	1300	1200	Inactive

Oxygen Total Supply

Lt's/Min

0   1700

713

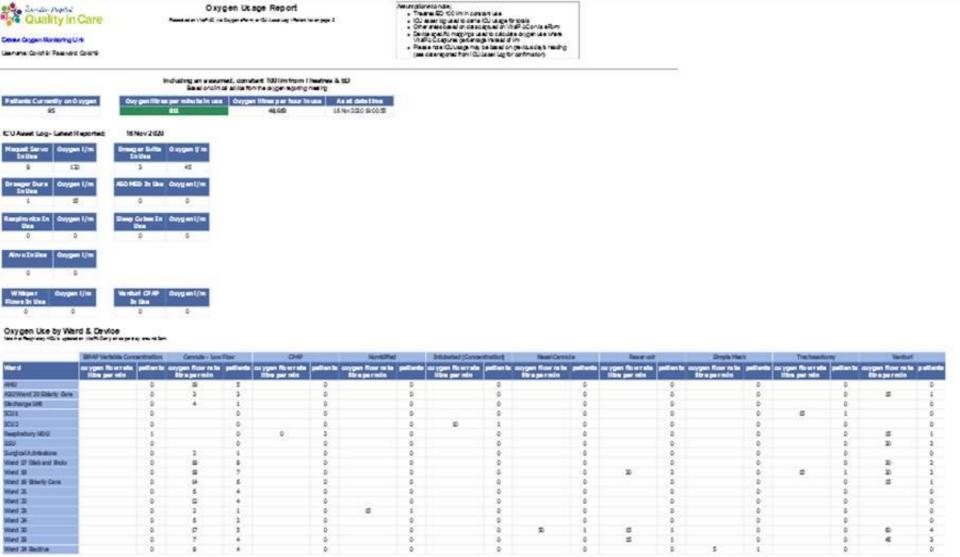|	Today Live	Yesterday 24 Hr	2 Days Ago 24 Hr
Maximum (Lt's/Min)	798	964	959
Minimum (Lt's/Min)	681	667	693

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We have our oxygen use dashboard which is live and available to all

At the top left it has a link to our BMS system to compare patient by patient data to the live flow from the VIE:

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1. Escalation Thresholds and Actions

a)	GREEN STATUS - <1000 L/min Reading - via Live Telemetry via Estates
i)	At this level standard BAU processes would take place and no alarms for intervention would be raised.

b)	AMBER STATUS - 1150 L/min Reading - via Live Telemetry via Estates
i)	Amber warning alarm's in <u>Switchboard</u> who inform <u>Silver Command</u> (In Hours) if Major Incident command arrangements already established or <u>Site Matron</u> (Out of Hours or non-Major Incident) and escalates to <u>Bronze</u> and <u>Silver On Call</u>.
ii)	A Trust-wide email advising <u>Consultant clinical review of all High Flow Nasal Oxygen/NIV</u> reviewed **ASAP** *(template outline below).*
iii)	Oxygen ward round to take place at the next ward round with senior nursing and consultant representation. Confirm the Oxygen has been prescribed and target Oxygen saturation has been documented for all patients. Identification of appropriate patients for use of Oxygen concentrator machines (<5 l/pm) (*If available)
iv)	Initiate daily oxygen meetings to include: Estates, Medical Director/DMD, Critical Care and Respiratory medics and nursing representatives
v)	Communications department initiate on-going general communication regarding oxygen usage to raise awareness *(template outline below).*

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2.   Escalation Thresholds and Actions

a)   RED STATUS - 1300 L/min Reading - via Live Telemetry via Estates

i)   Red warning alarm's in Switchboard to escalate to Site Matron who informs On Call Estates Manager and Associate Director of Estates (BFS) to review Oxygen supply on site. Site Matron to escalate status to Bronze and Silver & Gold On Call or Silver & Gold Command if Major Incident command arrangements already established. In hours silver

i)   Silver on call/Command to initiate **immediate** Oxygen Ward Round across all wards utilising Onsite/On Call Consultant and senior nursing representation (Out of Hours - Site Matron and Acute Response Team). Review of all High Flow Nasal Oxygen/NIV and consideration of other options with senior review undertaken by Intensivist (for Critical Care) and Respiratory/GIM Consultant (medical wards) REG on site – Consultant informed (when off site) MR. Confirm the Oxygen has been prescribed and target Oxygen saturation has been documented for all patients. Identification of appropriate patients for use of Oxygen concentrator machines (<5 l/pm).

ii)   GOLD considerations including:

    a)   Review oxygen levels and seek support from Estates in considering condition of plant, ice build-up and availability from both the Primary and Secondary Vapour Insulated Evaporators (VIE).

    b)   Potential ED divert

    c)   Potential to re-locate patients to other hospitals

ii)   Send a Trust-wide communication regarding the current critical Oxygen status.

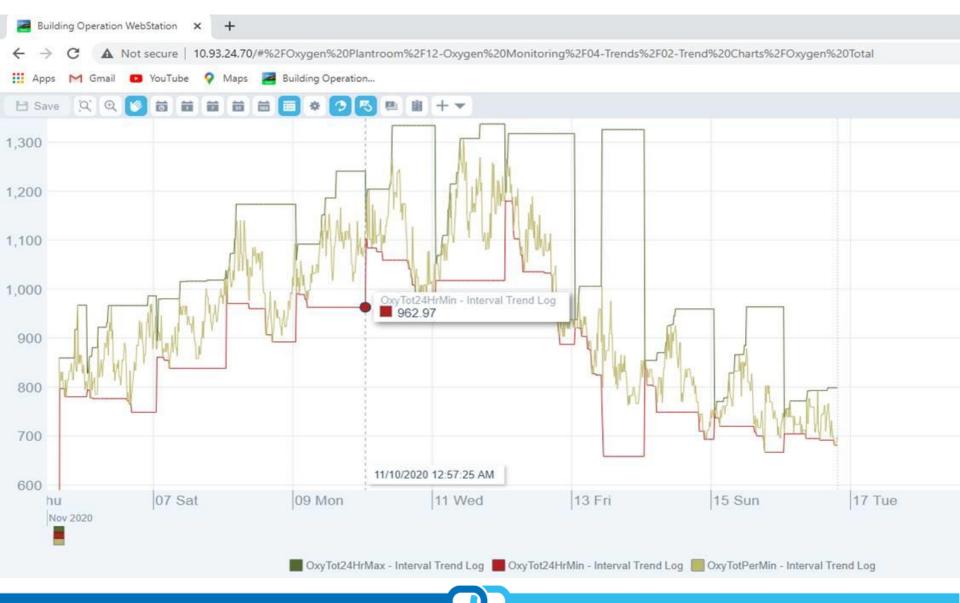iii)   Consider diversion for any new Critical Care patients to neighboring Trusts.

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Please note: At this level **any further high pressure oxygen such as Airvo/Whisper Flow/Trilogy CPAPs/HFNO** would risk reducing overall oxygen pressure and supply.

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Customer	State	Tank	Demand Type	LBShell		Inventory (MT)				Consumption (Nm3/hr)						Design Flowrate Product Vaporisers (Nm3/hr)	Ratio (Actual/design)			
				Converted Forecast Usage Rate (Nm3/hr)	Converted Override Usage Rate (Nm3/hr)	Ship to #	Actual	%	Time Stamp	Liquid Consumption Value	3 hr avg	8 hr avg	24 hr avg	72 hr avg			Current	8 hr avg	24 hr avg	72 hr avg
UNIVERSITY HOSPITAL OF NORTH MIDS	STOKE ON TRENT	G-50KL029 - F TANK-MLX		109.98	109.98	811256	41.19		872020-11-17T06:29:00	112.076	108.57	109.07	110.91	109.90	180		62.26	60.60	61.62	61.06

Customer		%	Time Stamp	Inventory (MT) History (72 hr)	Consumption (Nm3/hr) Last @ TimeStamp	History (7 days) (24 hr avg)	3 hr avg
HULL ROYAL INFIRMARY		79	06:57		112.076		95.73
ROYAL BOLTON HOSPITAL		98	07:05		112.076		77.05
SOUTHMEAD HOSPITAL PFI		65	06:31		42.028		56.04
NORTH MANCHESTER GENERAL HOSPITAL		86	06:25		56.038		56.04
ROYAL ALBERT EDWARD INFIRMARY		65	06:53		77.052		60.71
UNIVERSITY HOSPITAL OF NORTH		87	06:29		112.076		108.57

Royal Bolton Hospital – 19-11-2020