

# CLINICAL UPDATE

5<sup>th</sup> January 2021

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## Oximetry in the community

With continued challenges of COVID-19 across our region and an improved understanding of COVID-19 as a disease process, the healthcare system is looking to respond with new ways of working so that those with COVID-19 can **safely** be managed in the community.

**Silent Hypoxia** has been identified as a characteristic of COVID-19 affecting some patients. When a patient becomes hypoxic, there would normally be other signs and or symptoms that co-present such as breathlessness, however with silent hypoxia these other features may not present. Silent hypoxia is **life threatening**.

Patients who have tested positive for COVID-19 with mild to moderate symptoms are being safely managed in the community within 'virtual wards' with regular GP, OOH GP and healthcare professional involvement in their care whilst remaining at home. To ensure that this is done safely, some patients are being provided a **pulse oximeter** so that oxygen saturations can be monitored at home.

**Any** patient who has been provided a pulse oximeter for home monitoring as part of a virtual ward is being informed of their '**normal**' pulse oximetry levels and in turn **informed when an ambulance should be called**. These conditions are:

- **SpO<sub>2</sub> ≤ 92%** on air for a patient who **usually** has oxygen saturations **above 94%**
- **SpO<sub>2</sub> ≤ 4% less than 'normal'** for a patient who **usually** ranges between **88-92%** on air

Our Ambulance Operations Centres (AOC) have updated their guidance though the call handling process to identify any such patient that could be presenting with silent hypoxia with processes in place to ensure senior clinical oversight of any calls waiting in the dispatch stack are appropriately prioritised or where it is deemed that a call is suitable for ECAT, that processes exist whereby the ECAT stack is appropriately priorities.

It is **important that clinicians consider silent hypoxia** when undertaking a patient assessment. Where possible (i.e. if using a Corpuls multi-modality monitor) ensure that when obtaining oxygen saturations you **look at the pleth wave** and specifically its amplitude (height) and therefore the likelihood of accuracy in the oximetry reading. Be professionally curious and look for subtle signs commonly associated with hypoxia.

Where a patient presents with low oxygen saturations, as reflected above **the patient is to be transported to hospital**. In the event that clinically it is felt silent hypoxia may not be present despite low oxygen saturation (i.e. low amplitude pleth wave in a patient with peripheral vascular disease, and a good central capillary refill) then safe non-conveyance practices **must** be followed in line with Trust policy **including a referral** and clinical discussion with the virtual ward duty clinician.