

# COVID-19 Oxygen Saturation Service



**Southampton Primary Care Ltd.**

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27 September 2020

# Southampton Primary Care



## SPCL is:

- A Limited Company formed by local GPs in 2014
- The GP practices are owners and shareholders

## SPCL was created to:

- Increase the capacity of practices and develop/tender for new services
- Make efficiency savings by economies of scale
- Strengthen and improve clinical governance and be able to demonstrate the quality and safety of our services
- Develop training and education capacity by central coordination
- Improve local service integration across practices and other providers  
(align with Southampton Better Care)

Inspected and rated

Outstanding ☆





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# Notable Achievements

- Shared IT and Telephony – EMIS/TPP
- Direct Booking
- Access to full medical records
- Flexible workforce
- City-wide support working across organisational boundaries
- Primary Care resilience “Pressure Valve” (Bloods / Solent)
- Gap Analysis and service redesign – Innovation and proof of concept, procurement
- Back House Functions (HR and Legal support)
- Training College (HEE Accreditation, LMC, Sirius, Fourteen Fish)
- Systems and Processes...

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Outstanding 



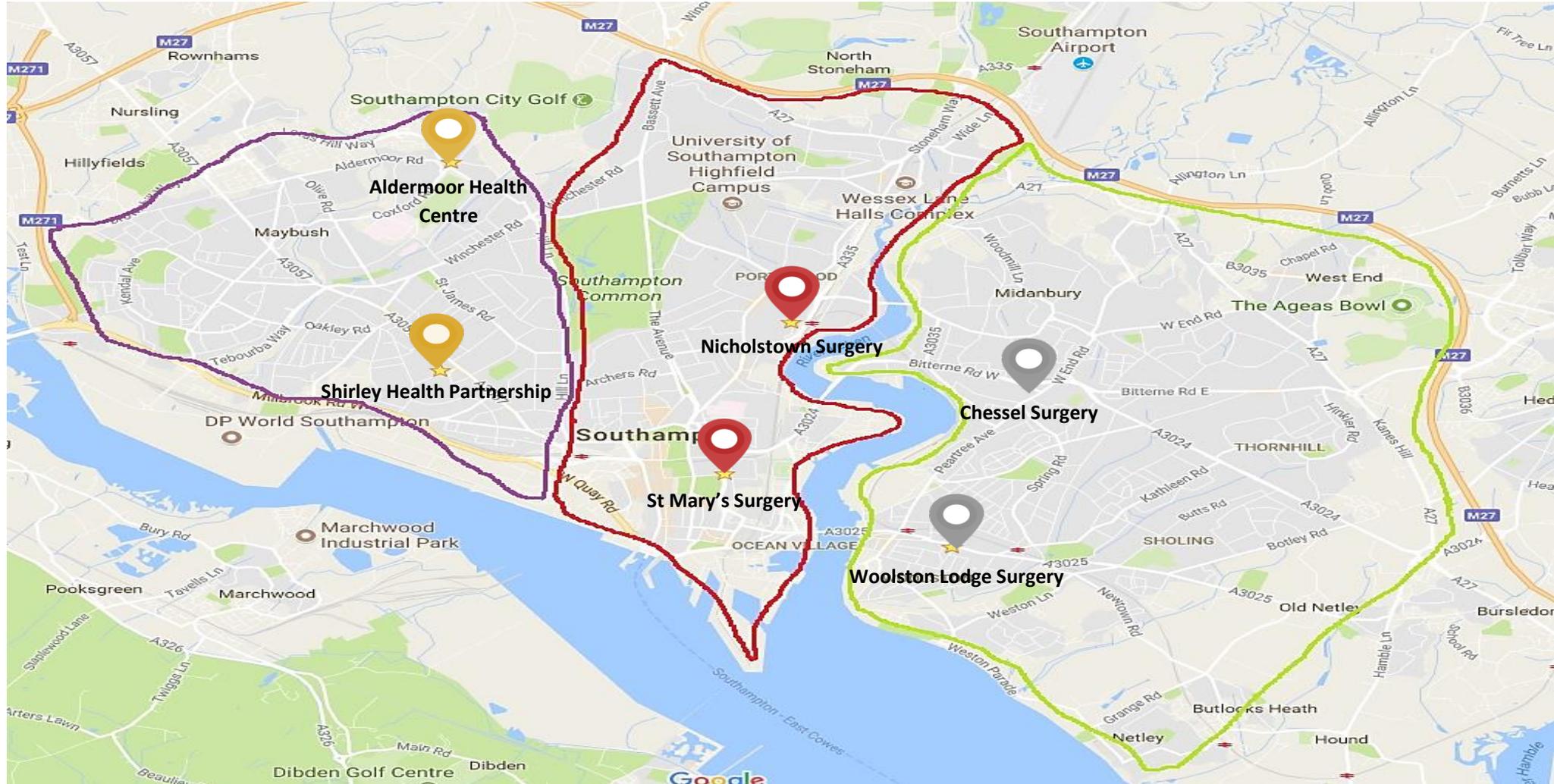


# Southampton Primary Care



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Number of patients covered: 285,000 | Number of practices participating: 26 | CCGs covered: 1



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## Current services

- Cold site 0800 - 2200 GP/Prescribing ANP and HCA appointments 7 days a week
- First contact physio 2.5FTE a week Telephone / video and F2F appointments
- LARC clinics
- EHCH (Enhanced Health and Care Homes) service- Annual reviews, post discharge, fall and ambulance call out/A+E attendance, acute visits and long-term conditions reviews 0800-1700 5 days a week
- EHCH Clinical Advice and Guidance Line 0800-2200 7 days a week
- EHCH Band 4 bloods LTC monitoring 0800-1600 5 days a week
- EHCH Flu planning and vaccines
- IVAB's service in conjunction with Solent
- Social Prescribers
- Telemedicine 24/7 cover for all nursing homes and carer homes collaboration with UHS and North Hampshire Hospital
- Domiciliary bloods for Solent/ SMS
- Asylum seeker medical assessments

# SPCL COVID-19 services



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## Clinical Triage

- 111 and practices
- 0800-2200 7 days a week

## AVS (Hot)

- 9:00 -17:30
- 5 days a week

## Hot site

- 8:00-22:00
- 7 days/week
- GP and Prescribing ANP
- COVID testing provision

## Oxygen saturation monitoring

- Clinical Assess 8:00-22:00
- 7 days a week

## TEP planning

## COVID end of life monitoring & VOD

- Visits 8:00-22:00
- 7 days a week

## Safe and Certain

- COVID testing pilot in Southampton

## Primary care support

- Discharge to assess hotel

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# SPCL COVID-19 services – wave 2



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## Hot site

- 8:00-22:00
- 7 days/week
- GP and Prescribing ANP
- COVID testing provision

## AVS (Hot)

- 9:00 -17:30
- 5 days a week

## Primary care support

- Discharge to assess hotel

## Oxygen saturation monitoring

- Helpline 8:00-22:00
- 7 days a week

## Clinical Triage

- 111 and practices
- 0800-2200 7 days a week

## COVID end of life monitoring & VOD

- Visits 8:00-22:00
- 7 days a week

## Safe and Certain

- COVID testing pilot in Southampton

## TEP planning

## Home oxygen provision

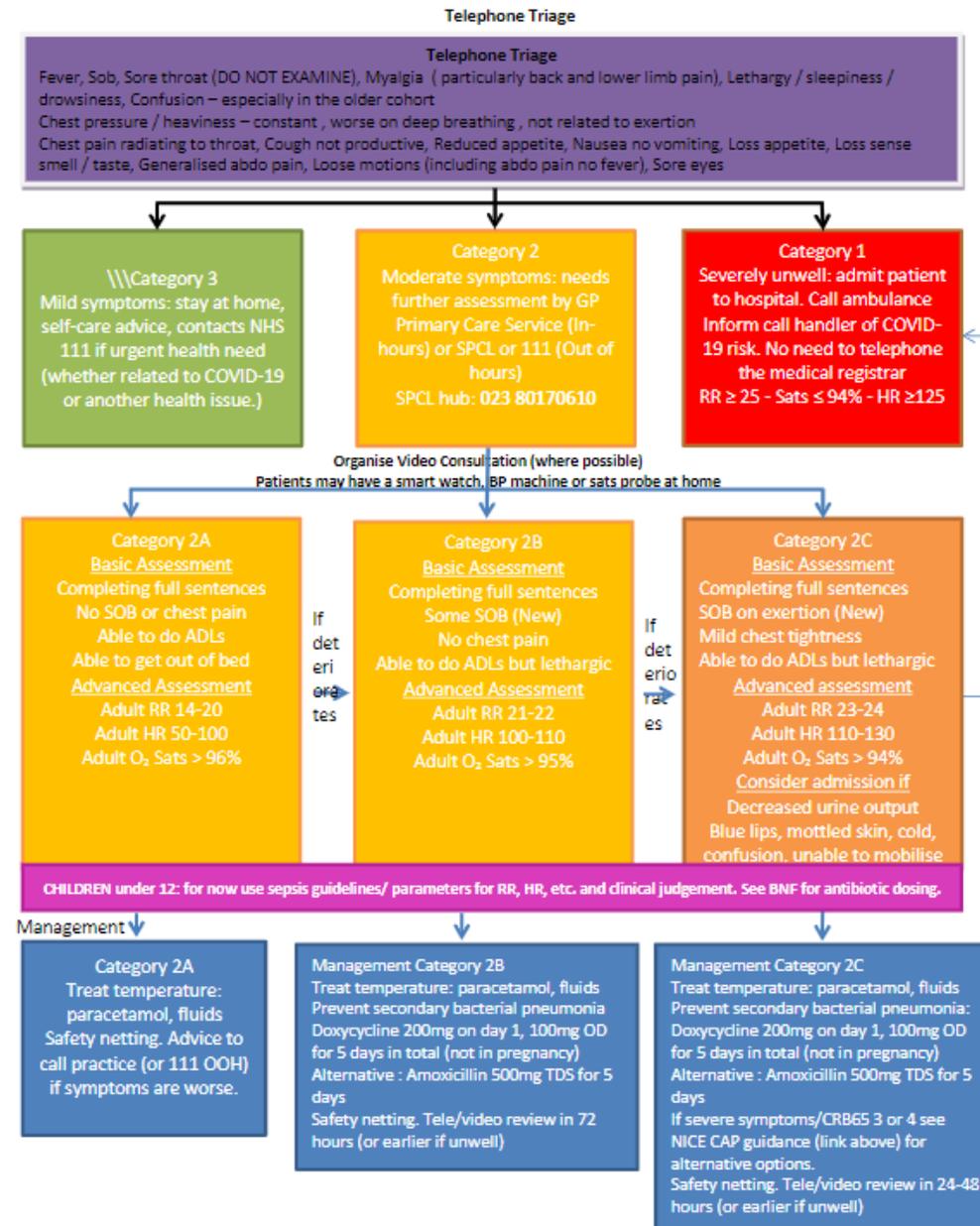
- In preparation for wave 2
- Step-up and step-down COVID

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This pathway was created for GPs during uncertain times, using clinical judgment and are currently not evidence based. HR, RR and O2 saturations taken from sepsis and NEWS<sup>®</sup> score- these may or not be sensitive for COVID-19



# Oxygen saturation service: process



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Patient has COVID symptoms

- calls 111 or
- OGP referral to SPCL or
- EHCH team refers to SPCL triage clinician

Patient assessed by SPCL clinician

- Identified as a candidate for home monitoring or
- F2F visit or
- Advice with safety netting

Admin team registers patient and allocates sats probe asset number via APP

Patient given sats probe and information pack

Patient is monitored:

- Receives daily follow-up call from SPCL clinician
- Open access to SPCL clinicians 8:00-22:00 7 days/week

SPCL clinician assesses safe to cease monitoring

Or patient admitted to hospital

Or EOL pathway

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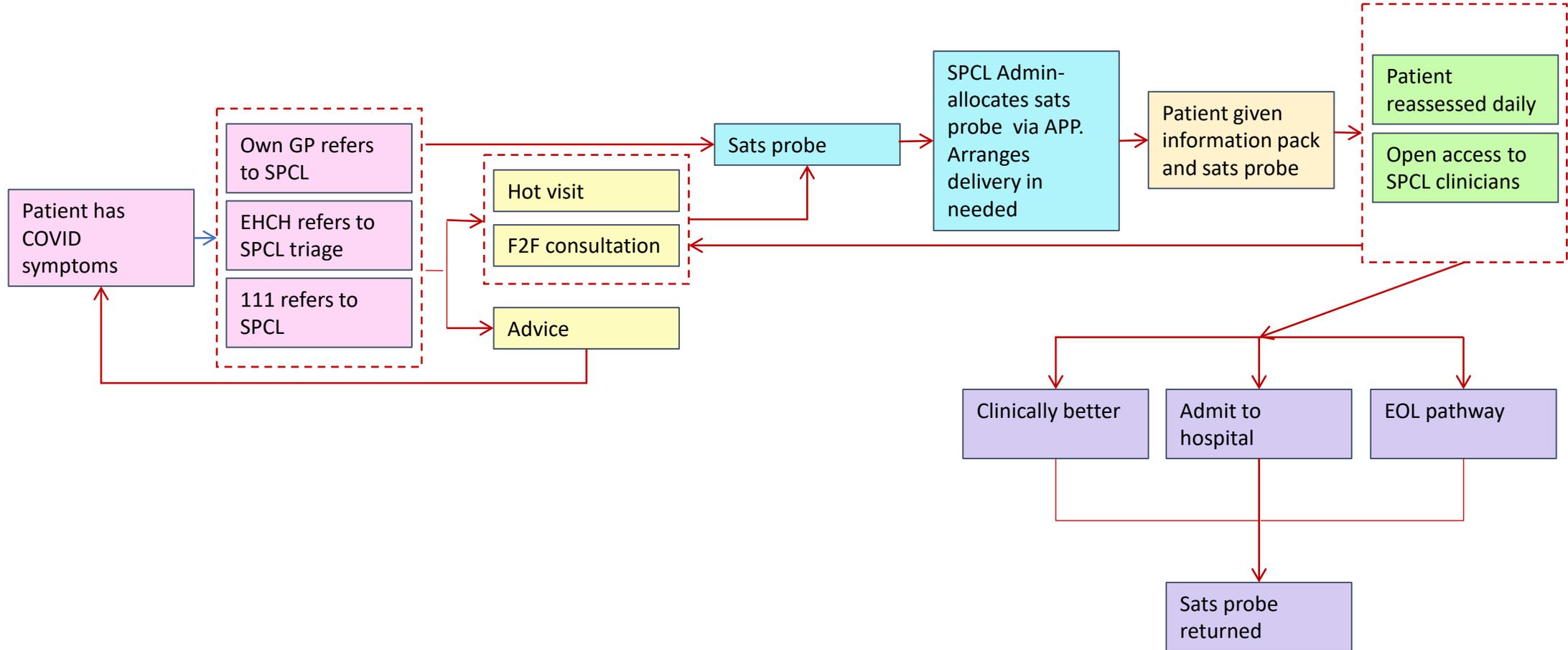
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# Oxygen saturation service: patient journey



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# Safety Considerations

Is the patient suitable for home monitoring?

- Is it safe to leave them at home?
- Understanding?
- Communication difficulties?
- Able to call if concerned?

# Operational considerations



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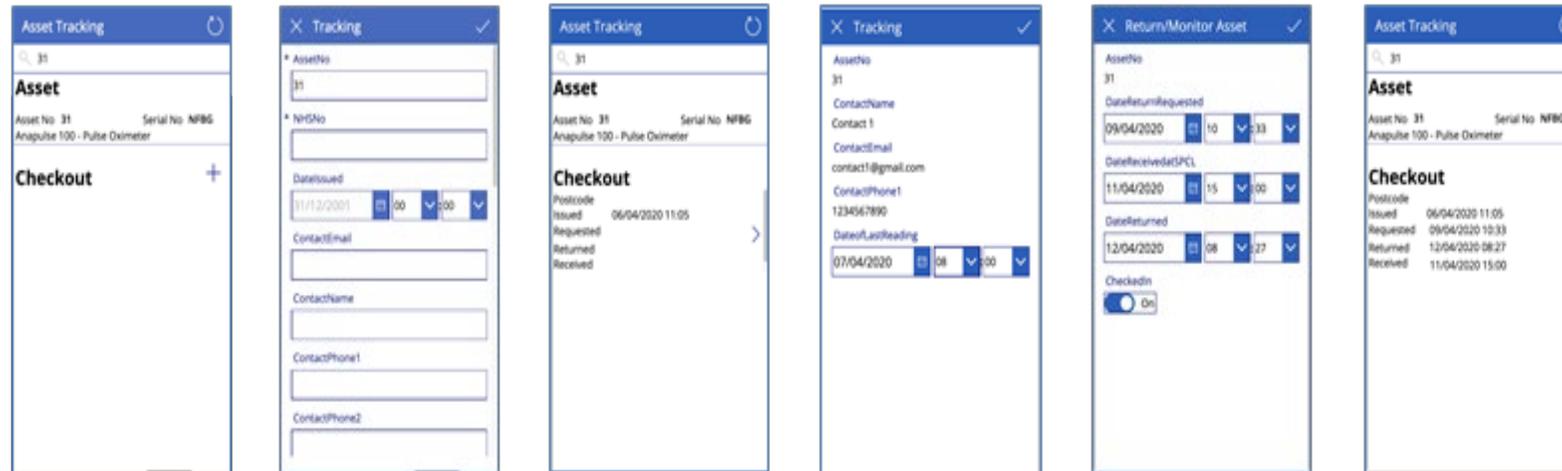


# Asset tracking App



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- Designed in house
- 500 sats probes all asset ID
- Logs asset to patient
- Daily patient contact log
- Checks out asset on return to SPCL



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Courier drops information pack and sats probe to patient so isolation is maintained

Courier leaves probe on doorstep and returns to car before calling patient and notifying them of delivery

On collection the patient is asked to leave the sats probe in the plastic bag provided on the doorstep

Courier in Full PPE- Probe is transported in sealed plastic box to HOT clinical area

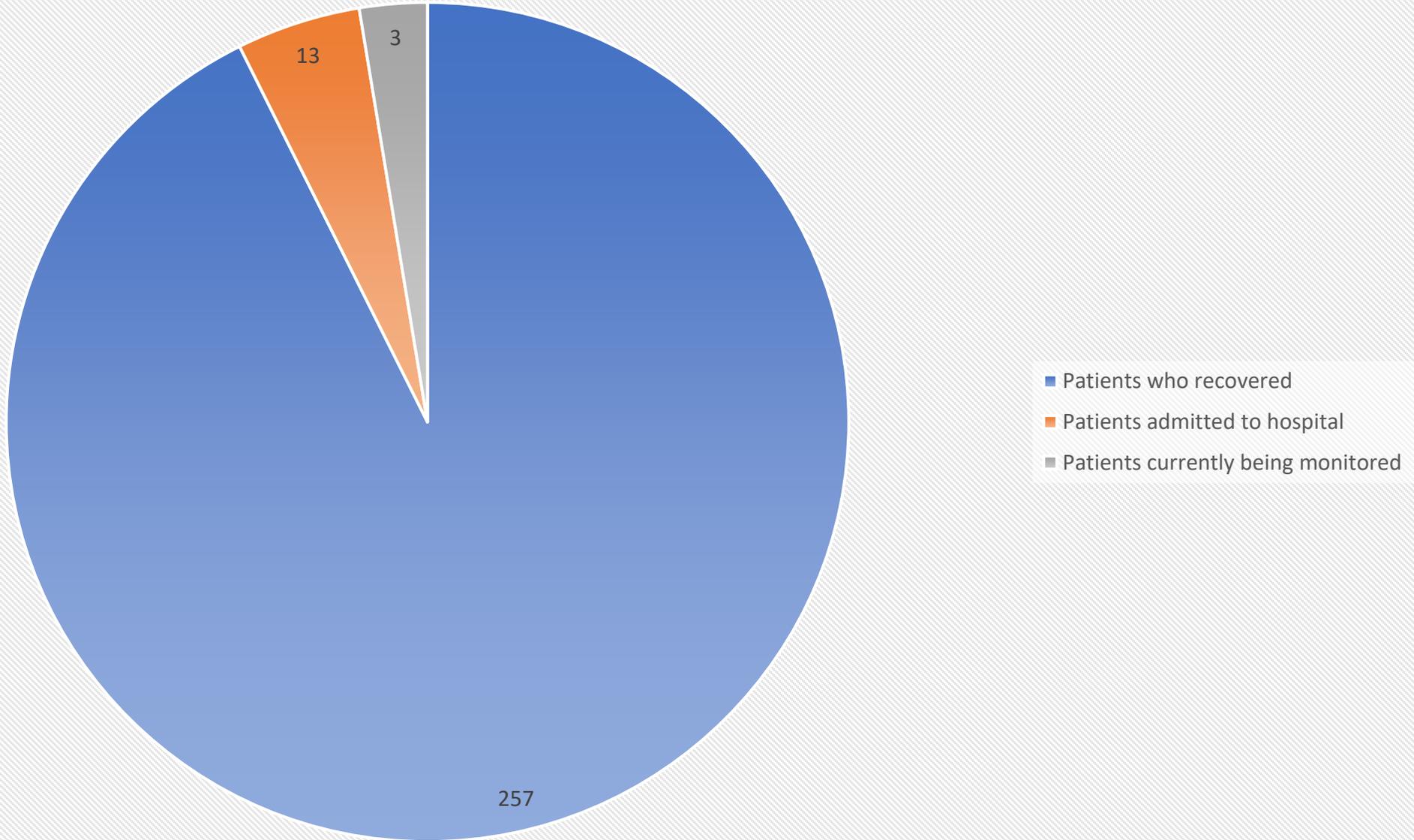
The probe is kept in HOT designated clinical area for 72 hours before opening and is decontaminated according to current IPC guidance (PHE 2020)

## Infection control considerations

# Table 1-Number of patients monitored at home 6<sup>th</sup> April-17<sup>th</sup> Sept 2020



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# Secondary care admission outcomes



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- One patient did not survive despite ITU admission. That person was on monitoring for 11 days with oxygen saturations of 96-97% but on day 11 had a change in behaviour and oxygen saturation levels had dropped to 84% and they were admitted via 999 ambulance.
- Four patients were admitted to secondary care following their first phone call by the SPCL team to get their readings and reassess them clinically after they had all reported mild (2A) to moderate (2B) symptoms (Southampton CCG 2020) on their original triage call.
- One patient declined assessment at HOT site initially following triage call for worsening cough for 3 weeks. Known autoimmune disease. Sats probe sent out, tachy 133 bpm but sats 98% persuaded to come into HOT site for review. Chest quiet all lobes- admitted for 2 days then discharged.
- One initially declined assessment for cough, SOB and generally unwell. Type 1 diabetic. Tachy 115bpm, sats 98%- declined to come in for review. Following morning SPCL clinicians call Tachy 120bpm, sats 97% agreed to HOT site appointment. Reduced air entry, sats 95%, tachy 120bpm admission arranged.
- Six patients were monitored at home for between 9-15 days before having to be admitted to secondary care for suspected postnatal PE and ongoing SOB / COVID symptoms.
- Three of the patients were picked back up by the SPCL team post discharge and monitored until better.

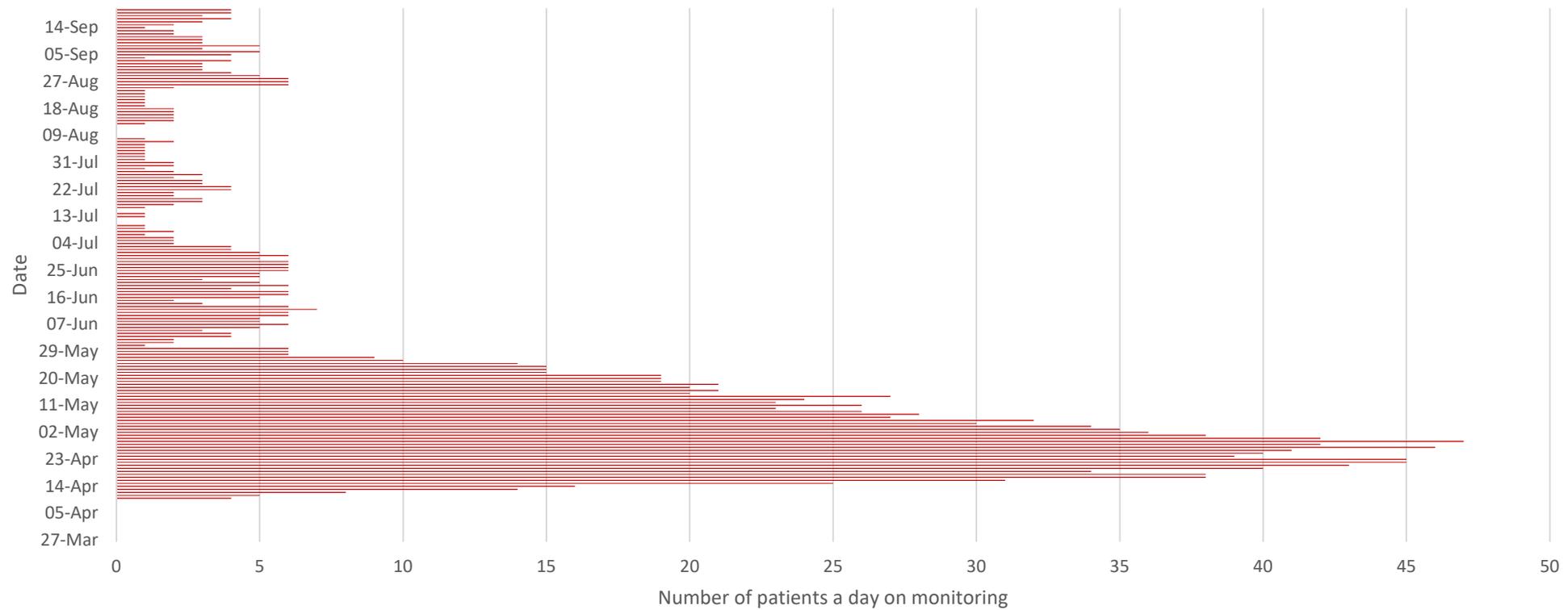
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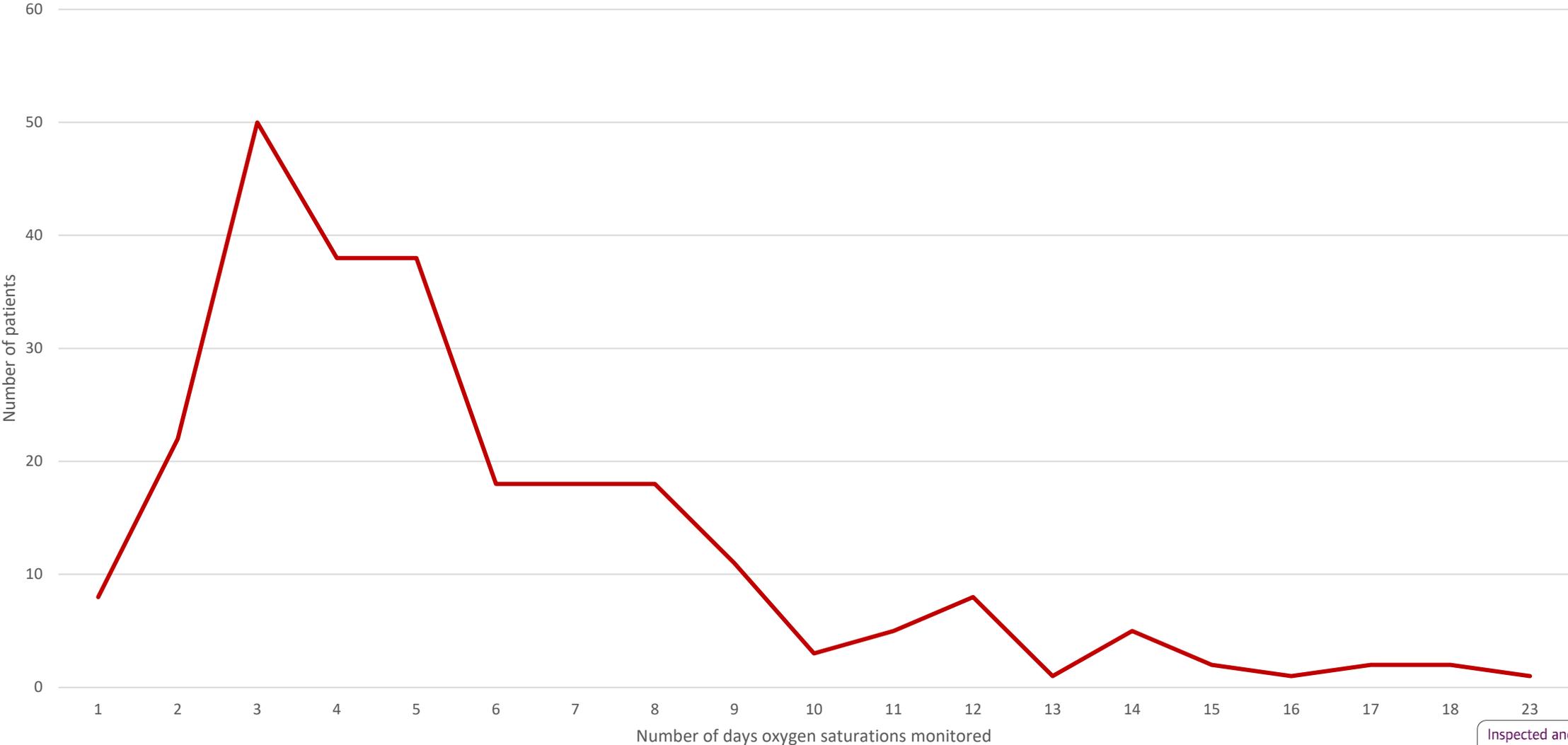
# Data: number of patients monitored each day



# Data: length of time monitored

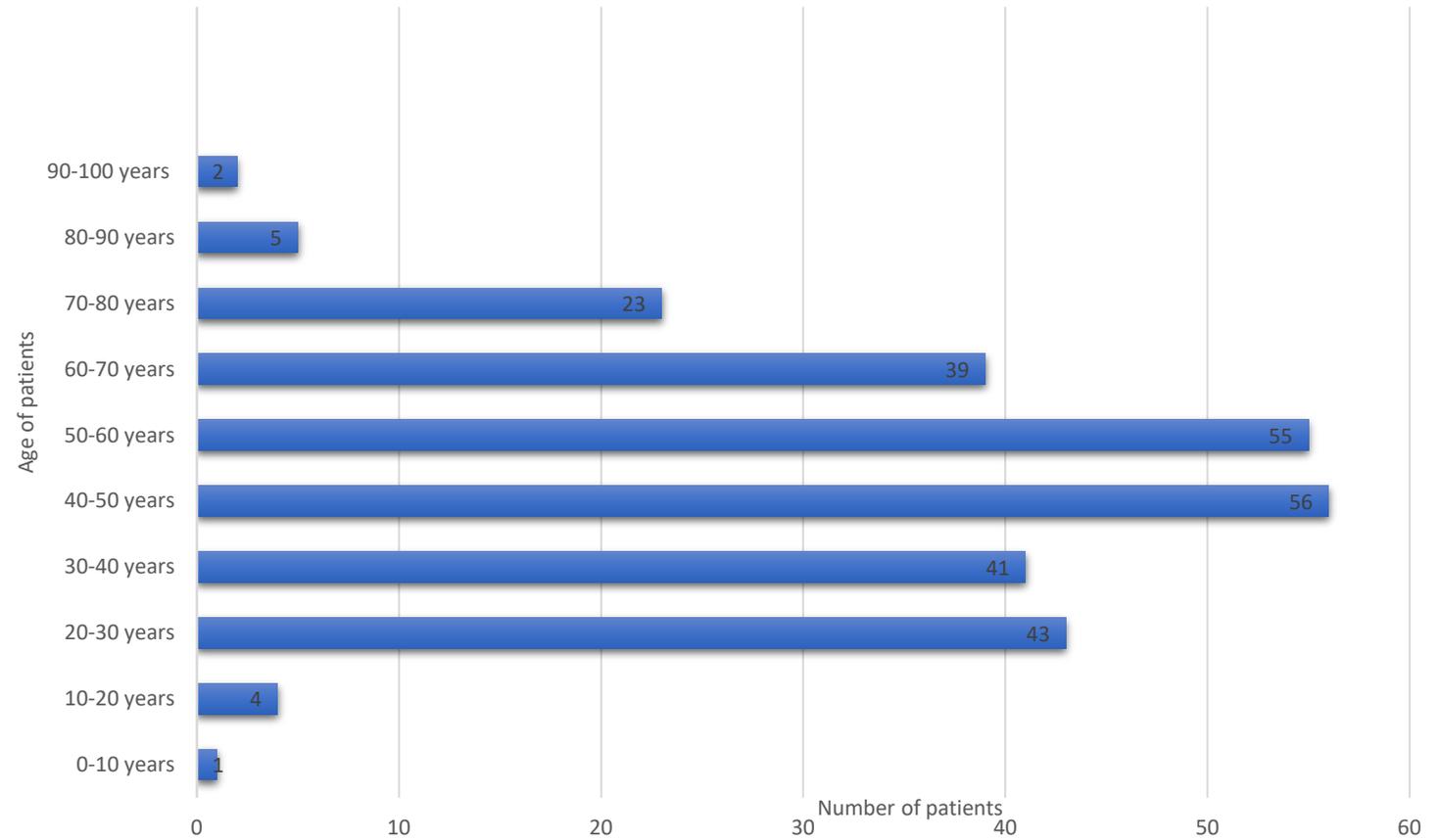


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CareQuality  
Commission

# Age range of patients being monitored



# Patient feedback

“I felt so relieved to be monitored at home and I found the Sats readings very reassuring when my breathing felt so bad”

“I didn’t want to go into hospital and felt so grateful to be contacted daily by the team”

“I work as a nurse and didn’t want to have to go to hospital-thank you so much”

“the service has been amazing it would have been really traumatic trying to manage our Son in hospital’

“I am very anxious and knowing I could keep an eye on my levels and speak to a GP was fantastic”

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# System-wide benefits



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- ✓ Southampton City Wide
- ✓ Whole patient journey
- ✓ Clinicians experienced in COVID
- ✓ Silent hypoxia picked up quickly
- ✓ Admission reductions to secondary care (270 patients and only 13 admissions)
- ✓ Patients reassured and happy not to have to go into hospital

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# References



Public Health England (2020) COVID-19:Guidance for the remobilisation of services within health and care settings. Infection prevention and control recommendations

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/910885/COVID-19\\_Infection\\_prevention\\_and\\_control\\_guidance\\_FINAL\\_PDF\\_20082020.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/910885/COVID-19_Infection_prevention_and_control_guidance_FINAL_PDF_20082020.pdf)

Accessed 24.09.2020

Cohen. P. A. Hall. L. E. John. J. N Rapoport. A. B (2020) The early natural history od SARS-CoV-2 infection: Clincal observations from an urban, ambulatory COVID-19 clinic. Mayo Clinc Proceeding. Vol 95 (6) pg 1091-1093.

Embeds (2020) Covid-19 Respiratory Flow Chart- RespED (RED) Flow Chart.<https://www.embeds.co.uk/2020/03/27/covid-19-respiratory-flow-chart/>

T. Choon Huat Koh. G. Car. J (2020) Covid-19: a remote assessment in primary care. BMJ. Vol 368. doi: <https://doi.org/10.1136/bmj.m1182>

Khawan. E. Hassan. H. Pozuelo. L (2020) Treating acute anxiety in patients with Covid-19. Vol 87 (7)

NHS (2020) Clincal guide for the management of emergency department patients during the coronavirus pandemic: Version 1. [https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/Specialty-guide\\_ED-and-coronavirus\\_V1\\_17-March.pdf](https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/Specialty-guide_ED-and-coronavirus_V1_17-March.pdf)

Ottestad. W. Seim. M. Otto Maehlen. J (2020) Covid-19 with silent hypoxia. Tidsshr Nor Legeforen.

Richardson S, Hirsch JS, Narasimhan M, et al. Presenting Characteristics, Comorbidities, and Outcomes Among 5700 Patients Hospitalized With COVID-19 in the New York City Area. *JAMA*. 2020;323(20):2052–2059. doi:10.1001/jama.2020.6775

Southampton City CCG (2020) Covid-19 telephone triage guidance; Version 4. Adapted from <https://www.pcrs-uk.org/sites/pcrs-uk.org/files/resourses/COVID-19/Barnet-Primary-Care-Pathway-during-Covid-19%20v1.0.pdf>.

WHO (2020) Home care for patients with COVID-19 presenting with mild symptoms and management of their contacts: Interim guidance. WHO.

Wu. Z. McGoogan. J. M (2020) Characteristics of and important lessons from the coronavirus disease 2019 (COVID-19) outbreak in China: summary of a report of 72314 cases from the Chinese centre for disease control and prevention. *JAMA*. Vol 323 (13).

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