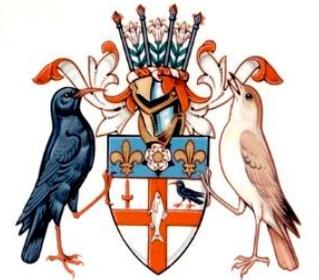


Guy's &  
St Thomas'  
Charity  
&...

**KING'S**  
*College*  
**LONDON**  
**University of London**



Guy's and St Thomas' **NHS**  
NHS Foundation Trust



*Guy's & St Thomas' Hospital Health Seminar 2022*  
**COVID-19 Update**

# **The Changing Face of COVID-19: The Long COVID Story**

Nicholas Hart

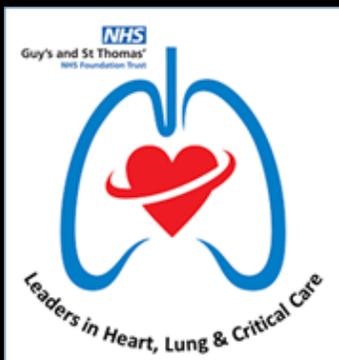
Professor of Respiratory & Critical Care Medicine

Deputy Medical Director Heart, Lung and Critical Care Clinical Group  
St Thomas' Hospital

Guys & St Thomas' NHS Foundation Trust  
London UK

**E-mail**  
[nicholas.hart@gstt.nhs.uk](mailto:nicholas.hart@gstt.nhs.uk)

**Twitter**  
[@NickHartGSTT](https://twitter.com/NickHartGSTT)



***'COVID-19 is this generation's polio. Patients will have mild, moderate and severe illness. Large numbers of patients will have physical, cognitive and psychological disability that will require long-term management. We must plan ahead'***

**Nicholas Hart**

**March 21st 2020**



**Guy's and St Thomas'**  
NHS Foundation Trust

**A multi-disciplinary clinical-academic approach  
to deliver the best holistic care to our patients  
from front door to back door and beyond**



Guy's and St Thomas'  
NHS Foundation Trust

# The changing face of COVID-19: Long COVID

# LONG COVID: BUILDING A MIND & BODY CLINICAL ACADEMIC SERVICE

**NHS**  
King's College Hospital  
NHS Foundation Trust

**NHS**  
South London  
and Maudsley  
NHS Foundation Trust

**KING'S**  
*College*  
**LONDON**  
**University of London**

**NHS**  
Guy's and St Thomas'  
NHS Foundation Trust

**Guy's &  
St Thomas'  
Charity  
&...**



## CYCLE OF EXCELLENCE

Clinical Excellence asks the research question

Research excellence answers the research question

Educational excellence delivers the answer into clinical practice

# LONG COVID CLINICAL RESPONSE: DEVELOPING A MIND & BODY CLINICAL ACADEMIC SERVICE



Tim Nicholson



Georgios Kaltsakas



Amy Dewar



Caroline Jolley



Julie Moore



Jennifer Turnbull



Jacky Jones



Trudie Chalder



Irem Patel



Laura Duly



Matt Friend



Jeong Su Lee



Nick Hart



Lynette  
Linkson



Philippa Yeeles



Alicja Bellamy

# BUILDING A MIND & BODY CLINICAL ACADEMIC SERVICE: Scope of the SEL Long COVID Problem

COVID-19 rapid guideline:  
managing the long-term  
effects of COVID-19

**NICE** National Institute for  
Health and Care Excellence

**RC  
GP** Royal College of  
General Practitioners

**Healthcare  
Improvement  
Scotland** | **SIGN**

## COVID CATEGORIES

- **ACUTE COVID**
- **POST ACUTE COVID (Up to 12 weeks)**
- **SEQUELAE OF ACUTE COVID (>12 weeks)\***
- **LONG COVID (>12 weeks)**

\*respiratory, cardiac, renal, neurological and endocrine

- **COVID symptom app**
- **4,182 incident cases**
- **2.3% reporting symptoms at  $\geq 12$  weeks**
- **Characterised by Long COVID symptoms**
- **> 5 symptoms during first week of illness was 3.5 Xs more likely to report Long COVID symptoms**

# BUILDING A MIND & BODY CLINICAL ACADEMIC SERVICE: Scope of the SEL Long COVID Problem

COVID-19 rapid guideline:  
managing the long-term  
effects of COVID-19

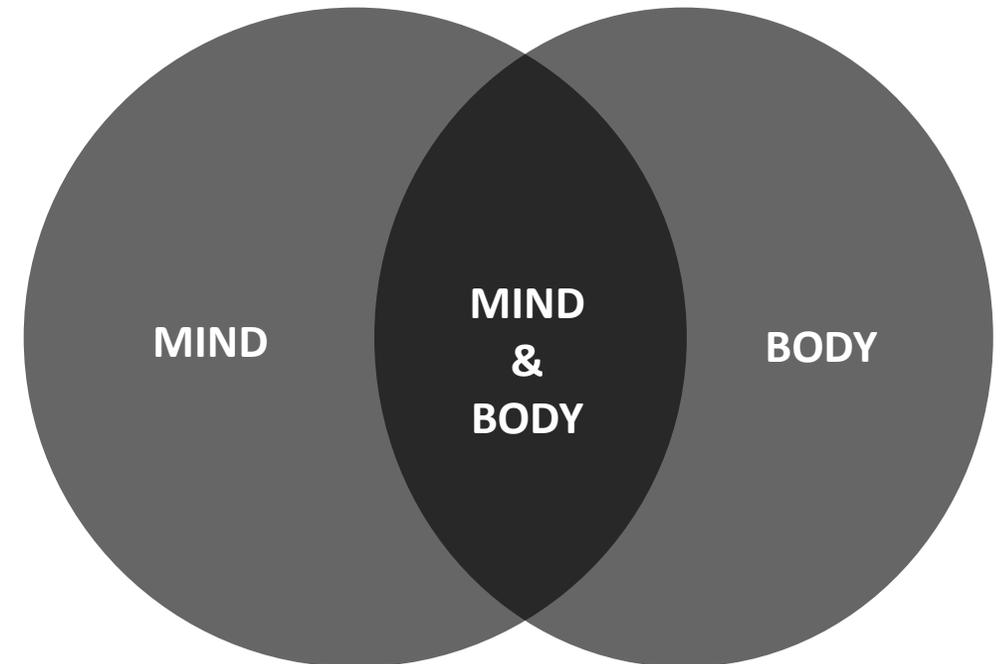
**NICE** National Institute for  
Health and Care Excellence

**RC  
GP** Royal College of  
General Practitioners

**Healthcare  
Improvement  
Scotland** | **SIGN**

## Most commonly reported symptoms

- Fatigue
- Breathlessness
- Muscle ache
- Muscle weakness
- Joint pain
- Lethargy
- Impaired sleep quality
- Short-term memory loss
- Slower thinking



**Psychophysiological Medicine**

# BUILDING A MIND & BODY CLINICAL ACADEMIC SERVICE: Scope of the SEL Long COVID Problem

COVID-19 rapid guideline:  
managing the long-term  
effects of COVID-19

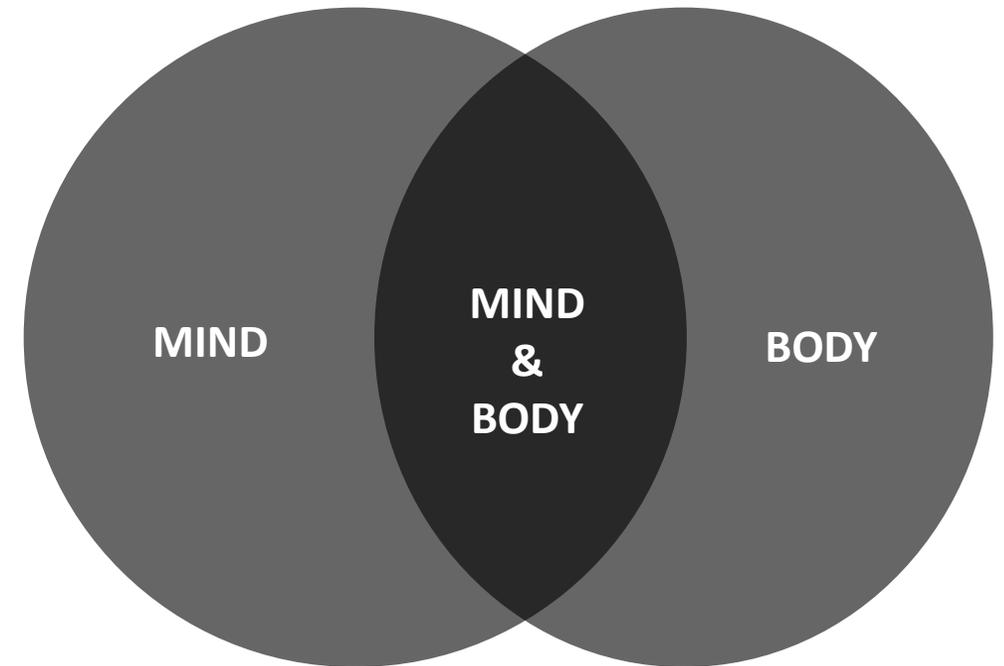
**NICE** National Institute for  
Health and Care Excellence

**RC  
GP** Royal College of  
General Practitioners

**Healthcare  
Improvement  
Scotland** | **SIGN**

## Most commonly reported symptoms

- Fatigue
- Breathlessness
- Muscle ache
- Muscle weakness
- Joint pain
- Lethargy
- Impaired sleep quality
- Short-term memory loss
- Slower thinking



**Psychophysiological Medicine**

# **BUILDING A MIND & BODY CLINICAL ACADEMIC SERVICE: Scope of the SEL Long COVID Problem**

## **Coronavirus and the social impacts of 'long COVID' on people's lives in Great Britain**

Opinions and Lifestyle Survey

- Long COVID reported in 3.6% of adults
- Women more likely to experience Long COVID than men
- More likely to experience Long COVID between 30 and 49 years
- More likely to experience Long COVID if live in deprived area
- Anxiety, life satisfaction and happiness affected in two thirds reporting Long COVID
- Anxiety and depression affected one third reporting Long COVID
- Work affected in half reporting Long COVID
- Household finances in one fifth reporting Long COVID

# BUILDING A MIND & BODY CLINICAL ACADEMIC SERVICE: Scope of the SEL Long COVID Problem

<https://coronavirus.data.gov.uk/>



Bexley  
Bromley  
Greenwich  
Lambeth  
Southwark  
Lewisham

Total COVID-19 Cases: 628,034

Total Deaths: 4089 (0.65%)

Total Hospitalisations: 26,116

**Long COVID 2.8% of All Community COVID-19 Infections  
= Predicted 16,739**

# BUILDING A MIND & BODY CLINICAL ACADEMIC SERVICE: Scope of the SEL Long COVID Problem

<https://coronavirus.data.gov.uk/>



Bexley  
Bromley  
Greenwich  
Lambeth  
Southwark  
Lewisham

Total COVID-19 Cases: 628,034

Total Deaths: 4089 (0.65%)

Total Hospitalisations: 26,116

SEL Predicted Long COVID  
= 16,739

## GSTT LONG COVID CLINIC Therapy Led-Medically Supported

Physiotherapy  
Occupational Therapy  
Psychology  
Respiratory Consultants  
Rehabilitation Consultant

Domain	Measure
Function	Work & Social Adjustment Scale
Fatigue	FACIT/NRS
Breathlessness	MRC-DS/NRS/BPAT
Brain Fog	PDQ
Mental Health	PH2/GAD2
Health Economics	EQ5D-3L

# **BUILDING A MIND & BODY CLINICAL ACADEMIC SERVICE: GSTT THERAPY LED-MEDICALLY SUPPORTED LONG COVID CLINIC**

- 63% female
- 46 years
- 87% non-hospitalised COVID illness
- 11% hospitalised COVID illness
- 2% critical care COVID illness

# **BUILDING A MIND & BODY CLINICAL ACADEMIC SERVICE: GSTT THERAPY LED-MEDICALLY SUPPORTED LONG COVID CLINIC**

## **REASON FOR REFERRAL**

- 76% fatigue
- 74% breathlessness
- 53% functional limitation
- 18% brain fog/return to work
- 10% combination breathlessness, fatigue, functional limitation, brain fog/return to work

## **CLINICAL PROBLEM IDENTIFIED**

- 82% fatigue
- 75% breathlessness
- 55% brain fog/return to work
- 52% functional limitation
- 15% psychological
- 11% palpitations
- <5% headache, cough, sleep disturbance, loss of taste/smell, hair loss, rash

# **BUILDING A MIND & BODY CLINICAL ACADEMIC SERVICE: GSTT THERAPY LED-MEDICALLY SUPPORTED LONG COVID CLINIC**

## **IN CLINIC TESTING**

<b>n</b>	<b>Test</b>
<b>93%</b>	<b>SpO2 and heart rate (STS)</b>
<b>69%</b>	<b>Blood profile</b>
<b>17%</b>	<b>Chest X-Ray</b>
<b>30%</b>	<b>Lung function test and home oximetry</b>
<b>9%</b>	<b>ECG</b>
<b>2%</b>	<b>Echocardiogram</b>

# **BUILDING A MIND & BODY CLINICAL ACADEMIC SERVICE: GSTT THERAPY LED-MEDICALLY SUPPORTED LONG COVID CLINIC**

## **IN CLINIC ADVICE**

<b>n</b>	<b>ADVICE</b>
<b>99%</b>	<b>COVID recovery advice</b>
<b>95%</b>	<b>Fatigue advice</b>
<b>95%</b>	<b>Exercise advice</b>
<b>89%</b>	<b>Psychology advice</b>
<b>77%</b>	<b>Vocational rehabilitation advice</b>

# **BUILDING A MIND & BODY CLINICAL ACADEMIC SERVICE: GSTT THERAPY LED-MEDICALLY SUPPORTED LONG COVID CLINIC**

## **ONWARD REFERRAL**

- 40% IAPT (Improving Access to Psychological Therapies)
- 35% pulmonary rehabilitation
- 35% persistent symptom service
- 28% respiratory clinic
- 21% vocational rehabilitation
- 15% ENO
- 13% MSK referral
- 5% cardiology referral
- 5% neurology referral

# **BUILDING A MIND & BODY CLINICAL ACADEMIC SERVICE: GSTT THERAPY LED-MEDICALLY SUPPORTED LONG COVID CLINIC**

## **ONWARD REFERRAL**

- 40% IAPT
- 35% pulmonary rehabilitation
- 35% persistent symptom service
- 28% respiratory clinic
- 21% vocational rehabilitation
- 15% ENO
- 13% MSK referral
- 5% cardiology referral
- 5% neurology referral

## **POST CLINIC OUTCOMES**

**Did you find the clinic useful? Yes 99 %**

**Do you feel we addressed your issues? Yes 99%**

**Anything we could have done better? No 97%**

## **OUTCOMES AT 3 MONTHS**

**EQ5D-3L: 66% improvement**

**WSAS: 55% improvement**

**Symptoms: 48% improvement**

**BUILDING A MIND & BODY CLINICAL ACADEMIC SERVICE:  
LEARNING IN REAL TIME**

**DO NOT BECOME COVID BLIND**

**AVOID DUALISTIC CARE & OVER-MEDICALISATION**

**PROMOTE EXPECTED RECOVERY PATHWAY**



Guy's and St Thomas'  
NHS Foundation Trust

# The changing face of COVID-19: where next?

# The changing face of COVID-19: where next?

**RESEARCH IS THE EXIT STRATEGY FROM THE PANDEMIC**