

Table S1. Characteristics of included studies

Author & Year	Location	Study Design	Title	Population	Definition(s) of Long COVID used	Outcome Measures & Findings/ Recommendations
Kingstone, T., et al, 2020 (12)	UK	Qualitative interviews	<i>Finding the 'right' GP: a qualitative study of the experiences of people with long-COVID</i>	People with self-reported experiences of persistent symptoms following COVID-19 infection (n=24)	'Post-acute COVID-19', 'Long COVID'	<p>Patients emphasise key role of the GP in supporting patients at every stage.</p> <p>Patients emphasise the importance of GPs believing their symptoms and demonstrating empathy and understanding.</p> <p>Patients alluded to the uncertainty and helplessness that GPs had admitted to.</p> <p>Participants described difficulty seeking and accessing care.</p> <p>Patients felt that a face-to-face assessment would help.</p>
Broughan J et al., 2021 (33)	Ireland	Pilot study	General practice attendances among patients attending a post-COVID-19 clinic: a pilot study	Adult patients attending a hospital-based post-COVID-19 follow-up clinic	No definition specified	24% and 39% of patients hospitalised with COVID-19 attended general practice within 7- and 30-days following hospital discharge, respectively.
Castro-Avila AC, et al. (35)	UK	Mixed-methods (surveys and interviews)	Support and follow-up needs of patients discharged from intensive care after severe COVID-19: a mixed-methods study of the views of UK general practitioners and intensive care staff during the pandemic's first wave	GPs and clinicians leading care for patients discharged from ICU. (Survey n = 170) (Interviews n = 23)	No definition specified	<p>Over 60% of GPs were unaware of the follow-up services generally provided by their local hospitals.</p> <p>GPs were concerned about the complex psychological needs of patients recovering from severe COVID and that greater emphasis is placed on the physical needs.</p> <p>Need for improved follow-up services and communication between specialists and GPs.</p> <p>GPs welcomed specific and targeted information that would help them to guide patient's care after an intensive care and hospital stay and stressed that guidance needs be balanced and channelled through a respected national body.</p> <p>One GP summarised the information needs as "<i>what to look for, when to refer back into hospital and types of patients that need specific follow-up</i>"</p>

Greenhalgh T, et al. 2020 (17)	USA	Editorial	Long COVID: A primer for family physicians	n/a	'Long COVID'	<p>Key role of the family practitioner is to distinguish patients with life-threatening or serious post-COVID complications from those with less concerning symptoms.</p> <p>Evaluation for alternative diagnoses is vital.</p> <p>Recommended management for most patients in the outpatient setting, whose symptoms tend to be nonspecific and dominated by fatigue, consists of emotional support, ongoing monitoring, symptomatic treatment, and attention to comorbidities.</p> <p>Face- to face assessment often recommended in some cases</p> <p>Mental health and well-being may be greatly improved by re-establishing social connections, community and peer support, and attention to structural determinant.</p>
Atherton H, et al., (30)	UK	Editorial	Long COVID and the importance of the doctor–patient relationship	n/a	'Long COVID'	<p>People with persistent COVID-19 symptoms were rarely offered a face-to-face appointment with a GP, often spoke to numerous different GPs, and were distressed to find that GPs were as baffled as they were.</p> <p>Emphasises the need for the patient to be believed, that their symptoms are taken seriously and not dismissed as due to 'anxiety', and the importance of finding the 'right' GP.</p> <p>Management of people with long COVID is the responsibility of general practice.</p> <p>GPs may only know as much as their patients can share with them.</p> <p>The questions remain for GPs: 'how am I going to differentiate long COVID from other complex symptoms?', and 'what resources are available for me to refer patients with long COVID to?'</p> <p>There is a need to translate the NICE guidance into services for people with persistent symptoms.</p>

Taylor, A.K., et al., 2021 (28)	UK	Qualitative interviews	'Reluctant pioneer': A qualitative study of doctors' experiences as patients with long COVID	Doctors with self-reported experiences of long COVID (n=13)	'Long COVID'	<p>Participants expressed fear that certain symptoms would be perceived negatively by their GP and described selectively disclosing symptoms to avoid symptoms being dismissed or attributed to a potentially stigmatizing condition.</p> <p>Those participants who had received support emphasized the value of being listened to and believed by a particular GP.</p> <p>Participants described how they were forced to self-advocate because their own GPs were unsure how to investigate and manage their symptoms</p>
Parkin, A., et al, 2021 (31)	UK	Case Study	A Multidisciplinary NHS COVID-19 Service to Manage Post-COVID-19 Syndrome in the Community	n/a	'Ongoing symptomatic COVID-19' & 'Post COVID-19 syndrome'	<p>Most referrals (96%) come from GP surgeries. Community matron and GP's, ensure that differential diagnosis have been considered.</p> <p>The tier system delegates responsibilities at each level, giving HCPs working in GP surgeries and hospitals clarity around which interventions to offer, and when referral is necessary.</p> <p>Strong links are also necessary with GP surgeries to establish and maintain the referral pathway. Having a lead GP representative has assisted with communication.</p> <p>On-going communications work with GP links can help establish equitable pathways of referral and access.</p> <p>Primary care teams worldwide need such an integrated multidisciplinary comprehensive model of care to deal with the growing number of cases of post-COVID-19 syndrome effectively</p>
Greenhalgh, T., et al., 2020 (9)	UK	Practice pointer	Management of post-acute covid-19 in primary care	n/a	'Post-acute COVID-19' & 'chronic COVID-19'	<p>Outlines blood tests and investigations that should be offered in general practice, with management guidelines for common symptoms.</p> <p>Patients should be managed pragmatically and symptomatically with an emphasis on holistic support while avoiding over-investigation.</p> <p>One key role that the primary care practitioner can play is that of witness, "honouring the story" of the patient.</p>

						Describes the importance of accessible, relationship-based care for patients with complex needs. Support should be personalised with input from the multi-professional team GPs.
NICE, SIGN, RCGP, 2020 (24)	UK	Guideline document	Review of NICE rapid guidelines	n/a	'Ongoing symptomatic COVID-19' & 'Post COVID-19 syndrome'	Provides definitions for acute COVID-19, ongoing symptomatic COVID-19, and post-COVID-19 syndrome. Provides guidelines for managing long COVID. <ul style="list-style-type: none"> <li>- Patient education</li> <li>- Self-management support</li> <li>- Accessible information</li> <li>- Follow-up community care</li> <li>- Investigation and referral guidelines</li> <li>- MDT rehabilitation</li> </ul> People need good information after acute COVID-19, so they know what to expect and when to ask for more medical advice. Information may be provided by GPs or community services
Lund, L.C., et al, 2021 (32)	Denmark	Cohort study	Post-acute effects of SARS-CoV-2 infection in individuals not requiring hospital admission: a Danish population-based cohort study.	All individuals with a positive or negative RT-PCR test for SARS-CoV-2 in Denmark between Feb 27 and May 31, 2020 (n = 498,151)	No definition specified, 'Long COVID'	Observed that SARS-CoV-2-positive individuals overall visit their general practitioner more often after the infection than SARS-CoV-2-negative individuals, which could indicate that persisting symptoms of SARS-CoV-2 infection are managed in general practice
Demeco, A., et al, 2020 (34)		Literature review	Rehabilitation of patients post-Covid-19 infection: a literature review.	n/a	No definition specified	Rehabilitation will have to be focused on screening programs. It is essential to establish adequate screening opportunities. This can be done by a general practitioner alone or by a multi-professional team consisting of a physiatrist, a physiotherapist, a psychologist, an ICU physician, and others.

<p>Royal Australian College of General Practitioners, 2020 (26)</p>	<p>Australia</p>	<p>Guideline document</p>	<p>Caring for adult patients with post COVID-19 conditions</p>	<p>n/a</p>	<p>'Post-acute COVID-19' &amp; 'chronic COVID-19'</p>	<p>For patients who had severe COVID-19 illness requiring hospitalisation, GPs should consider an early telehealth appointment.</p> <p>Patients should have a formal assessment of physical and emotional functioning at 6–8 weeks post discharge, and referral to appropriate services where indicated.</p> <p>Collaborate with the patient to develop an individualised management plan to support their recovery. This may also present an opportunity for development of multidisciplinary models of care guided by the general practice team, utilising chronic disease management plans, team care plans and case conference items.</p> <p>Describes common symptoms associated with post COVID-19 syndrome.</p> <p>Includes advice specific for older adults and people with disability</p>
<p>National Health Service (NHS), 2020 (16)</p>	<p>UK</p>	<p>Guideline document</p>	<p>Aftercare needs of inpatients recovering from COVID-19.</p>	<p>n/a</p>	<p>'Ongoing symptomatic COVID-19' &amp; 'Post COVID-19 syndrome'</p>	<p>Describes healthcare needs of patients following discharge, including physical, cognitive, and psychological needs.</p> <p>Discusses the most common physical post COVID symptoms (includes cardiology, respiratory, urology, neuromuscular, general wellbeing, and endocrinology, and includes guidelines for management.</p> <p>Discusses common neuro-psychological and psychological symptoms, as well as mental health conditions that are common post COVID-19.</p> <p>GPs should liaise with local cardiology services for advice and support. Many patients will require cardiac assessment pre-discharge plus plan – with echocardiography (usually), optimisation of medications and cardiology follow-up.</p> <p>Next steps and actions that are needed to enhance the care of patients with post COVID-19 symptoms are discussed</p>

O' Brien H, et al., 2020 (14)	Ireland	Case study	An integrated multidisciplinary model of COVID-19 recovery care	Patients who need enhanced follow-up following COVID-19 pneumonia (n = 174)	No definition specified	<p>Demonstrates the implementation of an integrated multidisciplinary approach to patients with COVID-19, identifying those with increased physical and mental healthcare needs</p> <p>Highlights the necessity for the necessity for an integrated and comprehensive follow-up service, encompassing all members of the multidisciplinary model.</p> <p>A large proportion of patients will be discharged to the community for integrated care with their GP and community mental health services.</p> <p>If no further specialist follow-up is necessary, patients will be discharged to their GP with community follow-up as required.</p>
Provincial health service authority (27)	Canada	Guideline document	Mental Health in "Long-COVID" – A Resource for GPs	n/a	'Long COVID'	<p>Patients should still be supported by GPs in managing these symptoms to facilitate recovery. For patients that had COVID19, assess &amp; manage new or recurrent psychiatric disorders per normal guidelines.</p> <p>For "long-COVID" patients with signs or symptoms of poor mental health, GPs should screen for mood disorders, anxiety disorders, substance use disorders, PTSD and ideation of homicide, self-harm, or suicide.</p> <p>List web resources and apps to help.</p>
National Health Service (NHS), 2021 (15)	UK	Guideline document	National guidance for post-COVID syndrome assessment clinics	n/a	'Ongoing symptomatic COVID-19' & 'Post COVID-19 syndrome'	<p>Post-covid clinic should be available, following general practice or other clinician, referral, to all affected patients. Clinics should offer physical, cognitive, psychological, and psychiatric assessments with the aim of providing consistent services for people with post-COVID syndrome ('Long COVID').</p> <p>An initial assessment should be carried out by the GP, using a holistic, person-centred approach.</p> <p>General practice plays a key part in the Long COVID clinical pathway. The initial role of the general practice clinician is to exclude acute or life-threatening complications and other unrelated diagnoses, using appropriate assessment, investigations, or referral.</p>

						<p>People who develop new symptoms after the 12-week follow up, or whose symptoms persist after the 12-week follow up should be reviewed by their GP.</p> <p>The GP should receive communication from the assessment service on the patients care.</p> <p>Referral pathway for long COVID is described.</p>
World Health Organisation, 2021 (22)	International	Policy brief	In the wake of the pandemic: Preparing for Long COVID - Policy Brief 39	n/a	'Long COVID'	<p>Highlights the need for multidisciplinary, multispecialty approaches to assessment and management.</p> <p>According to a survey of GPs in the United Kingdom in 2020, 67% were looking after patients with COVID-19 symptoms lasting longer than 12 weeks but only 23% had access to a Long COVID clinic that they could refer into.</p> <p>In Czechia, the intention is for patients to be cared for by their GPs, with follow-ups by respiratory doctor until symptoms and any residual organ damage have resolved (Biba, 2021).</p> <p>In Italy, GPs also coordinate services that include domiciliary care, supported by remote telemonitoring and a new community nurse role.</p> <p>In Czechia, the intention is for patients to be cared for by their GPs, with follow-ups by respiratory doctor until symptoms and any residual organ damage have resolved.</p> <p>In countries where this has not yet happened, it will be important to develop contextually appropriate guidelines for health professionals caring for those affected, especially in primary care.</p>
Royal College of General Practitioners, 2020 (25)	UK	Guideline document	Royal College of General Practitioners. Management of the long-term effects of COVID-19: The RCGP response and top	n/a	'Ongoing symptomatic COVID-19' & 'Post COVID-19 syndrome'	<p>Defines long-COVID conditions for the purpose of the guideline.</p> <p>Re-emphasises guidelines from NICE and SIGN.</p> <p>Describes the possible investigation, treatment, and referral pathway proposed by RCGP.</p> <p>81% of respondents in a survey of RCGP members in September 2020 asked for more clinical guidance to help look after these patients</p>

			tips for caring for our patients			<p>73% of respondents believed that listening and empathy were beneficial for their patients suffering with ongoing symptoms of COVID-19</p> <p>Only 7% of RCGP survey respondents felt they had good diagnostic testing access within the community for long COVID patients.</p> <p>In September 2020, only 23% of RCGP survey respondents had access to a “post covid” clinic, and shockingly a fifth had access restricted for those patients without a positive SARS-CoV2 test,</p>
Ladds E, et al., 2020 (11)	UK	Qualitative interviews & focus groups	Persistent symptoms after Covid-19: qualitative study of 114 “long Covid” patients and draft quality.	‘Long COVID’ patients from support groups, social media, etc... (n = 114)	‘Post-acute COVID-19’ & ‘chronic COVID-19’, ‘Long COVID’	<p>Remote consultations generated additional queues and obstacles to getting seen by a GP.</p> <p>Some though not all general practitioners were reported to be unaware of rehabilitation services locally.</p> <p>GPs and other primary care clinicians appear to need better knowledge, better guidance, and more time and resources to deliver the generalist care and support which many patients with long Covid need, though this would have resource implications.</p>