Disclaimer: We kindly ask to acknowledge that due to the diverse and heterogeneous nature of the questions and the dynamic pandemic situation some of the information might be incomplete or only correct for the time being. Thus, please consider the date and date of the last update with the below information. All available information was provided by a country representative from the PHIRI network during or in connection to the respective meeting.

Date: 12.04.2021 Last update: 22.04.2021

Table 1: Management of Long COVID

Country	Data/studies on long COVID-19	Guidelines/recommendations	Additional information
Austria	At this moment there doesn't seem to be coordination on a national level for the management of long COVID patients. Some hospitals have started initiatives: • A clinic in Vienna has established a specialized out-patient department for post COVID patients: program of 2 days a week for 6 weeks with psychotherapy, physical examinations, physica	Guidelines/advice from medical associations is not yet available.	A patient organization of long COVID patients has been established: https://www.longcovidaustria.at/
	Data collection/studies: • Medical University of Vienna, department of cardiology: Post-COVID Outpatient Care and Biomarkers for Persisting Symptoms of Post-COVID-19 disease - A prospective registry and biobank (patients who still experience symptoms 4 weeks after infection) https://www.meduniwien.ac.at/web/forschung/forschung-zu-covid-19/		
Belgium	Ongoing studies/projects on long COVID: • the HELICON project will assess long-term biomedical and social effects of COVID patients – results will only be available in a year • the HELICON website tries to keep track of published information on long COVID: https://www.brain-helicon.be/evidence/long-covid • within Sciensano, there is the "covimpact" project • KCE ongoing study on long COVID: https://kce.fgov.be/en/study-2020-04-hsr-long-covid		
Czech Republic	CZ is not aware of specific studies on long COVID. However, data from hospitals and insurance companies are available.	CZ does not have special definitions on long COVID.	Information on WHO long COVID to be found at Additional information
Estonia	There have been discussions about conducting long COVID surveys, but nothing certain is yet planned for the near future.		
Ireland	A working group on long COVID has been established in Ireland, under the governance of the Health Service Executive. At the moment, there is no national data available on long COVID in Ireland, although there are some reports from individual centres. Additionally, there are no published studies on long COVID from Ireland as of yet, but there was a report of an unpublished Irish study on healthcare workers who reported incomplete recovery or residual symptoms up to 12 weeks after being infected with COVID.	Specific guidance on and a national approach to long COVID are currently under development, and there is a support group for people who have been infected with COVID that has 1800 members that are working with the HSE. In terms of treatment, people who had COVID are followed up with by their	





Italy	In October 2020, the HSE's National Health Library and Knowledge Service published an evidence synthesis on long COVID, available at the following link: <a 2768351"="" fullarticle="" href="https://hselibrary.ie/what-is-the-latest-evidence-about-the-existence-of-long-covid-or-post-covid-and-its-persistence-for-covid-19-survivors-what-evidence-is-currently-available-on-the-management-of-patients-who-have-post/ There is no large study or national study ongoing. The National Institute of Health-ISS is preparing a report on long COVID management. It has just started and is in preparation. Additionally, some Italian regions, i.e. Tuscany, Umbria, and Emilia Romagna are preparing and setting up specific paths for the long-term COVID management. A case study on 143 patients can be found at the following link: https://jamanetwork.com/journals/jama/fullarticle/2768351 [Carfi A, Bernabei R, Landi FGemelli Against COVID-19 Post-Acute Care Study Group. Persistent symptoms in patients after acute covid-19. JAMA 2020;9. doi: 10.1001/jama.2020.12603. pmid: 32644129]	doctors, either their GP or if they were hospitalized, then their hospital team. The Italian GIMBE Foundation (nonprofit foundation) has published the translation of the NICE Guidelines on the 'Management of Long-term COVID', available at the following link: https://www.evidence.it/articolodettaglio/209/it/568/linee-guida-per-gestire-la-long-term-covid19/articolo [Evidence.it; Febbraio 2021; Vol. 13, Issue1, e1000216]	
Malta	MT is not following long COVID- patients.	MT is following pre-existing COVID-19 guidelines and recommendations.	
Netherlands	RIVM will start research on long COVID at the end of April 2021. At least 1000 people who were tested positive for COVID-19 will be followed for a year and asked to fill in questionnaires about medical complaints and quality of life. This will be compared to a group of people who did not test positive for COVID-19. Commissioned by the Ministry of Health, Welfare and Sport, the organization C-support works for COVID-19 patients who experience long-term complaints of a corona infection. C-support started their work on 1 October 2020. C-support informs, advises and supports them in all areas in which this complex and still unknown disease affects health, (psycho) social aspects and work & income. For more information, visit www.c-support.nu (only in Dutch) The study "Clinical features of COVID-19 in children, long term effects" (COPP2, https://www.covidkids.nl/copp2/) examines the long-term effects of COVID-19 in children. In adults who have undergone COVID-19, residual complaints such as fatigue, dyspnea and moderate exercise tolerance are often still present. Whether these kinds of late effects also occur in children is still unknown.	General Practitioners: Dossier (in Dutch): https://corona.nhg.org/ Federation of Medical Specialists: (in Dutch): https://www.demedischspecialist.nl/onderwerp/details/richtlijnen-handreikingen-leidraden On this page you can find an overview of guidelines, guidance, perspectives and other documents for medical specialists to use in the fight against the COVID-19 pandemic. These documents are divided into the categories: infection prevention, for admission / ER, treatment / admission to the department, admission ICU, aftercare, guidelines of the RIVM and the Ministry of Health, Welfare and Science, information pages of scientific associations, non-COVID care and other. For patients, information about COVID-19 can be found on https://www.thuisarts.nl/corona. All incoming questions, documents and the published scientific studies on COVID-19 are divided into different topics and different expertise teams have been set up for the further assessment. Read more about the expertise teams at the following link: https://www.demedischspecialist.nl/expertiseteams-covid-19	https://www.rivm.nl/en/nove l-coronavirus-covid- 19/long-covid Additional information on guidelines/recommendation s can be found in the attachments at the end of this document: Additional information and links from The Netherlands on guidelines and recommendations:
Norway	There has been recently published a rapid review on long lasting effects of COVID / long COVID. This rapid review is a first look at possible long-term effects of COVID-19 (>28 days), including long COVID. We (expert team at our Institute) performed a		





Poland	Please have a look on the following link where you can find more information. https://www.fhi.no/en/publ/2021/Long-Term-Effects-of-COVID-19/ Medical Research Agency, among many other studies focused on SARS CoV-2/COVID-19, supports, financially and scientifically (according to our regulatory status) a prospective, observational, cohort trial called "The assessment of prevalence, clinical course and treatment of cardiological, neurological and pulmonological complications of COVID-10 – a pilot study" conducted by one of Polish Universities – Medical University of Silesia, Katowice (Sponsor). Summary of this study is as follows: "SARS-Cov-2 infection and its clinical manifestation known as COVID-19 beside the respiratory and lung involvement may include the cardiovascular system, the nervous system and the liver. In the acute phase of the disease, all of these conditions may be life-threatened. As a result, after the acute phase of COVID-19, early complications may be observed, including heart, lungs, brain, muscles and liver. A few papers to date have been reported of myocarditis, ventricular arrhythmias, post-inflammatory changes in the lung and liver, as well as ischemic changes in the brain, diseases of skeletal muscle, which may have adverse prognostic effects. Due to the extent of the pandemic, the severity of the complications and the expected high complications' prevalence in the early post-recovery period, a study was designed to determine the extent of the problem of early complications after COVID-19. Complex cardiological, pulmonary, neurological and hepatological diagnostics are planned, including laboratory, imaging and functional tests. The results obtained, in addition to determining the scale of the problem, will allow the selection of studies that optimally identify patients with early complications. The purpose of this procedure is to enable rapid treatment of diseases that are complications of SARS-COV-2 infection. A	For physicians in Poland guidelines and recommendations elaborated by National Consultants and national collaborations/ associations/ societies of physicians with specific specializations are of greatest importance. National Consultants and collaborations may release common statements, often based on European guidelines (or from USA, infrequently). Regarding COVID-19 and its long-term complications, The Polish Association of Epidemiologists and Infectiologists released guidelines "Approach to a child with pediatric inflammatory multisystem syndrome with COVID-19. Recommendations by the Polish Pediatric Society Expert Group, Update February 2021", available at the following link: http://www.pteilchz.org.pl/wpcontent/uploads/2021/04/Post%C4%99powanie-z-dzieckiem-z-PIMS-Przeql%C4%85dPediatryczny-2021.pdf . Guidelines on adults are not available on the website of the mentioned association, yet. Guidelines on specific complications, e.g. cardiological, neurological, pulmonological etc., if available, are posted on websites of specific associations. Among international guidelines, those from World Health Organization are followed.	
	(PC19) – an expert opinion" (enclosed, in Polish only). Also full-text publication in English, presenting methods and results of the study, is planned to be available in public domain soon.		
	Trial Registration: https://clinicaltrials.gov/ct2/show/results/NCT04453748		
	There are no studies related to long COVID available at the moment.		
	SI is not aware of any studies regarding long COVID.		
	The Spanish Society of General Practitioners (SEMG) launched an online, voluntary,	Patients are treated within the usual care pathways,	
	anonymous survey to explore the different symptoms that are experiencing former	Patients are treated within the usual care pathways, both in primary and hospital care, as part of the	





COVID-19 patients in order to define this clinical condition in a comprehensive way. basket of benefits covered by the NHS. Hospitals Data regarding age, sex, diagnosis and symptoms persisting over time was collected and primary care centers assisting COVID-19 patients are providing them with guidance on from 13 July to 14 October. 2,120 patients answered the survey, out of them 1,834 met long COVID criteria, respiratory and physical rehabilitation to face the 1,448 were female (79 %), mean age was 43.3 years and mean symptom consequences of COVID-19. persistence was 185.8 days. There were 201 distinct symptoms, being the most Nevertheless, the Spanish Society of General Practitioners (SEMG) together with the patients frequent: asthenia (95.9 %), headache (86.5 %), low mood (86.2 %), myalgia (82.8 association LONG COVID ACTS have been working %), dyspnea (79.3 %), diarrhoea (70.8 %), and palpitations (69.9 %). Further details (in Spanish) are available at the following link: on Clinic Guidelines to treat long-COVID patients to http://mgyf.org/descripcion-de-los-201-sintomas-de-la-afectacion-multiorganicaget better clinical assistance. Currently, the first draft producida-en-los-pacientes-afectados-por-la-covid-19-persistente/ has been presented to 27 scientific societies and patients associations to collect their input about their specialties. The final aim is getting a coordinated protocol to treat these patients in the National Health System in order to get better outcomes: https://www.semg.es/index.php/noticias/item/633noticia-20210127 The Centre of Alerts and Health Emergencies at the Ministry of Health, as part of their continuous update of evidence on COVID19, included a specific entry in its 2021 January report, available at the following https://www.mscbs.gob.es/profesionales/saludPublic a/ccayes/alertasActual/nCov/documentos/ITCoronav irus.pdf United The MRC in the UK has funded a number of studies with details to be found at the Kingdom following link: https://www.ukri.org/news/18-5-million-to-tackle-long-covid-in-thecommunity/ Funded studies: 1. "REACT long COVID (REACT-LC)"-study: sample study of 120.000 people in the community - 30,000 tested positive and 90,000 tested negative will be invited to take part and followed up 2. "TLC study": Therapies for long COVID in non-hospitalised individuals: from symptoms, patient-reported outcomes and immunology to targeted therapies. Study on interventions that might improve long COVID-19 3. Characterisation, determinants, mechanisms and consequences of the long-term effects of COVID-19: providing the evidence base for health care services: a national core study at UCL (University College London) with data drawn from a combination of national anonymised primary care electronic health records and longitudinal studies of people of all ages across the country.

with Iona COVID

4. "The CLoCk Study" on about 6000 non-hospitalised children and young people

Figure 1: Masks outdoors mandatory - YES/NO

agreement No 101018317



Table 2: Masks outdoors

Country	Yes / No	Additional information/settings	Link
Albania	Yes	It's mandatory to wear face masks in all places outside. Exceptions: Only in cafes and restaurants when you sit you can take off your mask.	https://www.shendetesia.gov.al/wp- content/uploads/2020/10/1163- 1UDHEZUES-MBI-PERDORIMIN- E-DEYRUESHEM-TE-MASKAV- NE-AMBJENTET-SHTEPIAKE- 1.pdf
Austria	Yes	In Austria wearing masks outdoors is mandatory: • When the minimum distance of 2 meters cannot be maintained (e.g. queuing, at crowded public spaces, at demonstrations) • There are regional measures for wearing masks outdoor in special selected areas (e.g. in special, high-frequented locations in Vienna, since 1st of April) • In Austria the face mask must be a FFP2 mask. An exception to wearing a FFP2 mask applies to: • Children and adolescents under 14 years of age • Pregnant women • People who cannot be expected to wear an FFP2 mask for health reasons (in this case, a medical certificate is required).	Regional regulations: https://corona-ampel.gv.at/aktuelle-massnahmen/regionale-zusaetzliche-massnahmen/wien/
Belgium	Yes	Masks are mandatory in all situations where it is impossible to ensure compliance with the rules of social distancing. In the Brussels capital region wearing a mask is mandatory everywhere.	
Croatia	No	Wearing masks outdoors is not mandatory on a national level. Wearing masks outdoors is mandatory in some counties at places where circulation of people is high (squares, open markets etc.).	
Czech Republic	Yes	In CZ it is mandatory to wear respiratory masks everywhere, outdoors and indoors. Children have to wear a surgical mask if FFP2 is not available, it is not obligatory to wear FFP2 in case the person is doing physical exercise and is able to keep the distancing of minimum 2 meters.	
Estonia	No	In Estonia it is mandatory to wear respiratory masks indoors and in public transport.	
Finland	No		
Ireland	No		
Italy	Yes	Wearing masks outdoors is mandatory with no special setting regulations.	
Malta	Yes	Yes, it is mandatory, only temporal removal is accepted for certain, specific circumstances.	
Netherlands	No	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Norway	No	For the moment it is not mandatory to wear masks outdoors (if you keep minimum two meters distance). For the moment there are municipalities who decide whether it is mandatory wearing masks. It is mandatory in Oslo if taking public transport or taxi, in the shops where customers can buy goods, food serving sites and in houses of faith (churches, mosques, etc. More info in Norwegian: https://www.oslo.kommune.no/koronavirus/rad-og-regler-i-oslo/munnbind/#gref	More information on guidelines for Norway: https://www.helsenorge.no/en/coronavirus/face-masks/
Poland	Yes	Wearing masks outdoors is mandatory with no special setting regulations.	
Portugal	Yes	Since the 28th October 2020, the use of a mask in public spaces is mandatory in Portugal. This measure is valid at least until June 13th. Security forces and the municipal police are responsible for the inspection of this measure. Those who do not comply with the use of mask are sanctioned with a fine between 100 and 500 euros.	
Slovakia	Yes	It is mandatory to wear face protection in exterior. Exterior is meant urban setting. Exceptions: abandoned places, or permanent 5 meter radius empty space, child aged under 7, documented diagnosis of asthma, autism, severe hearing loss, severe mental disorder, bride and bridegroom at the wedding ceremony; SPECIAL NOTE: smoking is not an exception to remove face mask, i.e. although smoking was not prohibited, it is not possible to smoke in exterior.	https://www.uvzsr.sk/docs/uvod/roz cestnik vyhlaska respiratory a ru ska 22-3-2021.pdf





Slovenia	No	Wearing masks outdoors was obligatory until last Friday (all settings except for sporting activities). Wearing masks outdoors is not mandatory at the moment.	
Spain	Yes	Yes, wearing face masks is mandatory in Spain. Currently, there is some controversy because since March 30th 2021 (Law 2/2021 https://www.boe.es/eli/es/l/2021/03/29/2), it is mandatory for everyone over six years old to use face masks indoors and outdoors, irrespective of physical distance. The norm, though, has some exceptions. For example, people with respiratory disorders or conditions that could worsen because of their use (e.g. mental health disorders) are exempted. In addition, activities incompatible with their use (e.g. individual sport practice) are also excluded. Until now, it was mandatory if a minimum distance of 1.5 meters could not be assured. Nevertheless, on April 7, the interterritorial council agreed on other activities incompatible with wearing face mask: e.g. swimming or sunbathing alone.	
United Kingdom	No	Masks are not mandatory outside.	

Additional information

WHO - Long COVID

There is a group discussing long COVID at the WHO, information is available at the following link:

https://www.who.int/docs/default-source/coronaviruse/agenda_expanding-our-understanding-of-post-covid-19-condition-agenda-final.pdf





Attachments

A. Additional information and links from The Netherlands on guidelines and recommendations:

Infection prevention

- Guideline Test policy and deployment of care workers in the hospital (version 20 December 2020)
 Expertise team Infection Prevention
- Guideline Personal protection in the (poli)clinical setting due to SARS-CoV-2 (version 21 March 2021)
 Expertise team Infection Prevention
- Guideline No longer contagious after COVID-19 infection (version 22 March 2021)
 Expertise team Infection Prevention
- Overview Medical procedures that generate an infectious aerosol (IAGP) with SARS-CoV-2 (version 12 June 2020)
 Expertise team Infection Prevention
- Guideline Perioperative care infection prevention at the time of COVID-19 pandemic
 Expertise team Infection Prevention
- Guideline Laparoscopy and COVID-19
 - Gynecologists NVOG, Surgeons NVvH, Anesthesiologists NVA, Urologists NVU, Clinical Physicists NVKF
- Bronchoscopy in times of SARS-COV-2 pandemic Pulmonologists NVALT
- Guideline Infection Prevention measures for the hospital care of COVID-19 (suspicious) patients (version 20 November 2020)
 - Expertise team Infection Prevention
- Guideline infection prevention in ENT care
 - ENT doctors NVKNO
- Protocol endoscopy during COVID-19 epidemic Gastroenterologists MDL
- Guideline GGZ and Corona (version 4 May 2020)
 Psychiatrists NVvP

For admission/ER

- Guidance on home treatment versus referral to the hospital in elderly patients with (suspicion of) COVID-19 (version 6.0, 8 February 2021)
 - NVKG, Verenso, NIV, KNMG, NHG, V&VN, KBO-PCOB, Federation of Medical Specialists
- <u>Guideline for admission of patients with (suspected) COVID-19 infection in hospital</u>
 NIV, NVKG, NVALT, NVIC, KNMG, NVT, NVSHA, Federation of Medical Specialists
- <u>Guideline diagnostics in patients with an admission indication and suspicion COVID-19 infection</u> (version 29 October 2020)
 - Expertise team Diagnostics
- Module Pre-operative screening for SARS-CoV-2 infection in asymptomatic patients scheduled for surgery under general anesthesia
 - Working Group Preoperative Screening SARS-CoV-2, Expertise Team Diagnostics
- Guideline Pre-operative diagnostics to COVID-19 in asymptomatic children (version 1, 28 May)
 - NVvH, NVU, NVvR, NVK, NVMM, NVA and NVKNO
- Protocol CT-thorax COVID-19
 - Clinical physicists NVKF
- Guide Target and standard report CT-Thorax Sample Case Studies
 - Radiologists NVvR
- Guidance for the process and uniform recording of proactive care planning NHG, V&VN VS, NVAVG, Verenso, Patient Federation Netherlands

Treatment/admission to the ward

- <u>Study results and study quality drug treatment COVID-19</u> (version 16
 March 2021) This document summarizes the results and quality of studies on drug treatment in COVID-19. The
 literature is regularly reviewed by the Knowledge Institute of the Federation of Medical Specialists and, if necessary,
 the overview is supplemented.
- <u>Guidance Criteria for transferring COVID-19 patients to another hospital</u> *NVALT, NVIC, NIV and NVKG*
- Guideline Drug treatment options for patients with COVID-19
 Foundation Working Group Antibiotic Policy SWAB





Advice treatment ILD in patients with and without COVID-19

Pulmonologists NVALT

Guideline Corticosteroids in the treatment of COVID-19 (version 11 December 2020)

NVIC, NVALT and NIV

Guideline COVID-19 coagulopathy

Internists NIV

Guideline non-invasive respiratory support in acute respiratory failure due to COVID-19

NIV, NVZA, NVA, NVALT, NVIC, NVKF

 Guideline Abdominal position in patients with COVID-19 and non-invasive ventilation or 'high flow nasal oxygen' administration

NVALT, NVIC, NIV and NVA

Modules Cardiovascular complications COVID-19 (version 29 March 2021)

NVVC, NVIC, NVT, NVALT, NIV, NVKC, NVN, NHG, Harteraad

• Recommendations for hospital physiotherapy in COVID-19 patients

Rehabilitation doctors VRA, KNGF

Factsheet physiotherapy in COVID-19 patients during hospitalization

Rehabilitation doctors VRA, KNGF

• Guideline (hydroxy)chloroquine (in study) in elderly people with COVID-19

Clinical geriatricians NVKG, internists NIV

Delier in patients with COVID-19

Clinical geriatricians NVKG

Blueprint corona and immunosuppression biologicals

Dermatologists NVDV

• Protocol instruction inhalation therapy in children with (suspected) COVID-19 infection

Pediatricians NVK

• Coronavirus and children and adolescents with a chronic disease

Pediatricians NVK

Policy neonate in pregnant with suspicion COVID-19

Pediatricians NVK

NVK position COVID-19 and children

Pediatricians NVK

Recording IC

Playbook pandemic part 1

NVIC, NVKG, NIV, KNMG, Federation of Medical Specialists

 Triage playbook based on non-medical considerations for ICU admission at the time of phase 3 in the COVID-19 pandemic

KNMG and Federation of Medical Specialists

Current overview of care capacity

Intensivisten NVIC

Guidelines overview at the IC

Intensivisten NVIC

Guideline Alternatives for ICU ventilators

Clinical Physics NVKF, pulmonologists NVALT, anesthesiologists NVA and intensivists NVIC

Aftercare

- Guidance on Aftercare for ICU patients with COVID-19
- Guidance on Aftercare for patients with COVID-19
- COVID-19 page palliaweb

Non-COVID care

- Framework for maintaining regular clinical non-COVID care in relation to pandemic pressure
- Guidance for choices when scaling up and down regular outpatient non-COVID care
- Guide safe non-COVID care in hospitals

Expertise team Infection Prevention

Scaling up non-COVID operations

Surgeons NVvH, Anesthesiologists NVA

Guideline Considerations psychiatric treatment during COVID-19 pandemic

Psychiatrists NVvP

Guideline Resuming regular care for vulnerable elderly

Clinical geriatricians NVKG, internists NIV





 <u>Guidance Glucocorticoid injections for local treatment of pain and sterile inflammation during the COVID-19</u> pandemic

NOV, NVA, NVVR, NVR

- <u>Guideline Corticosteroids for treatment of asthma/COPD during the COVID-19 pandemic</u> *Pulmonologists NVALT*
- Documents oncological care in times of COVID-19 (private)

Guidelines RIVM & VWS

- RIVM: information for professionals about COVID-19
- RIVM: up-to-date information about the COVID-19
- RIVM: preliminary treatment options COVID-19
- RIVM: overview page Guidelines » Playbooks
- RIVM: LCI guideline, step-by-step plans and roadmaps
- RIVM: questions and answers new coronavirus
- Ministry of Health, Welfare and Welfare: information on the obligation to report doctors and laboratories
- Ministry of Health, Welfare and Welfare: general page about coronavirus
- National Patient Distribution Coordination Centre: website with latest news and daily updates

Information pages scientific associations

Various scientific associations have created a special, public COVID-19 theme page. On these pages they collect relevant information for their members:

- <u>Dutch Society for Surgery (NVvH)</u>
- Dutch Internist Association (NIV)
- Dutch Association for Paediatrics (NVK)

View all information pages

Other

- Position Temperature measurement in the context of screening at the gate for COVID-19 in the hospital Clinical physicists NVKF, internists NIV
- Position Vaccination against COVID-19 around pregnancy and childbirth Gynaecologists NVOG
- Guidance on registering COVID-19 in SPD

Federation of Medical Specialists/CMIO/DHD

- Position COVID-19 and pregnancy, childbirth and childbirth (version 1 April 2021)
 Gynaecologists NVOG
- COVID-19 news overview KNMG
- National Medicines Coordination Centre
- Q&A when applying for necropsy

Pathologists NVVP

