I-MOVE-COVID-19 Network

Multidisciplinary European network for research, prevention and control of the COVID-19 pandemic

COVID-19 European primary care surveillance:
Surveillance bulletin January – April 2021

Author(s)	**Nivel and Epiconcept**
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1. Table of contents

Version history

Version	Date finalised	Created/modified by	Comments
v1	06/07/2021	Nivel	Draft version circulated among partners
v1.1	16/07/2021	Nivel	Final version

Abbreviations

ARI	Acute respiratory infection
COVID-19	Coronavirus disease 2019
EEA	European Economic Area
ECDC	European Centre for Disease Prevention and Control
EU	European Union
GP	General Practitioner
ILI	Influenza-like illness
I-MOVE	Influenza – Monitoring Vaccine Effectiveness in Europe
RCGP RSC	Royal College of General Practitioners Research and Surveillance Centre
SARS-CoV-2	Severe acute respiratory syndrome – coronavirus 2
VE	Vaccine effectiveness

1. Summary

1.1. Background

This surveillance report summarises the information from the nine I-MOVE-COVID-19 primary care surveillance networks to monitor the COVID-19 pandemic in seven European countries. The I-MOVE-COVID-19 surveillance in primary care aims to reinforce and complement the COVID-19 epidemiological data in the EU/EEA and the UK, compiled and reported by ECDC. Throughout this surveillance report, persons who tested positive for SARS-CoV-2 virus in primary care are referred to as "COVID-19 cases".

This third surveillance report encompasses January until April 2021. The first surveillance bulletin, released in September 2020, encompassed March – July 2020, the second surveillance bulletin, released in March 2021, covered March 2020 – January 2021.

Data for the I-MOVE-COVID-19 surveillance in primary care is collected following a generic protocol that was adapted by sites to their specific context. To account for study site differences, for instance due to differences in health care systems or coding of data, data was pooled using random effects logistic regression. Seven out of nine sites provided information on sequencing of viruses found in SARS-CoV-2 positive patients.

1.2. Key findings

- All participating study sites provided data for COVID-19 surveillance in primary care.
- A total of 10,456 COVID-19 cases were reported by nine participating networks in the period January 2021 – April 2021. Due to their sampling method, the Spanish region of Navarra reported the majority of cases.
- The majority of cases were reported in the age band 25 to 49 years. For females more than 41%, for males 35% of cases fell within this age band.
- The most frequently reported symptoms were cough (70%) and fever (51%). The least often reported symptom was vomiting (4%).
- Within age groups percentages of reported symptoms varied, with generally a lower share of cases who experienced a particular symptom in the youngest age group. For instance, whereas cough was reported for 60% of cases in the age band 0 – 24 years, in the age group 65 – 79 years for more than three thirds of cases (78%) cough was reported.
- The median time between onset of symptoms and date of testing was 2 days (IQR 1-4). The median time between onset and testing decreased over time.
- Any chronic condition was reported for 43% of the cases of 25 years and older, with the majority of cases in the oldest age groups reporting any condition: 68% among cases of 65 – 79 years and 72% among cases of 80 years and older. The most often reported chronic condition was heart disease among the age group of 80 years and older (51%), followed by diabetes among age group 80 years and older (25%).
- Chronic conditions were more often reported for males compared with females: for any chronic condition 44% for males versus 42% for females. Heart disease was reported for almost 20% of the males versus 14% of the females, diabetes for almost 13% of males and 9% of the females.

- The majority of COVID-19 cases of 15 years and older never smoked, 12% formerly smoked and almost 15% of the cases currently smoked.
- Seasonal influenza vaccination 2020-2021 was reported for 26% of COVID-19 cases aged 25 years and older. Among the age groups (65 years and older) with an indication for vaccination, the vaccination rate was higher. For females of 65 to 79 years 54%, versus 57% for males. For females of 80 years and older 78% versus 67% for males.
- Vaccination for SARS-CoV-2 was limited among the younger age-groups, with lower percentages of cases vaccinated among males in the age band 25 – 79 years (1.5 – 6%), than females (4 – 7.5%). In the age-band of 80 years and older, one fifth of cases (21%) received at least one vaccination of any vaccine product. This vaccine coverage is overall at time of swab, when the patient was not necessarily part of the target group for vaccination in their country.
- A selection of specimens from COVID-19 positive patients from seven sites were used for virus isolation and sequencing of viruses (n=489). The dominant lineage was B.1.1.7 (66%), followed by B.1.177 (20%).

2. Enhanced COVID-19 surveillance

2.1. Description of participating networks

Table 1 briefly describes participating networks and their contribution of data to this report. Note that the time period for which data were submitted does not necessarily reflect the total duration of the data collection, nor the epidemic in that country. In many countries, dedicated COVID-19 testing hubs were established in 2020, impacting on the data collection for virological surveillance carried out by sentinel GPs prior to the COVID-19 pandemic. In some countries, new sentinel GP data collection systems were established.

Table 1. Description of participating I-MOVE primary care COVID-19 surveillance networks, January 2021 to April 2021

Network (country)	Coverage or number of participating GP practices
RCGP RSC (England)	134 practices*
Réseau Sentinelles (France)	~ 350 practices
Irish GP influenza sentinel surveillance system (Ireland)	60
Navarra (Spain)	53
Nivel Primary Care Database - Sentinel Practices (Netherlands)	~ 40 practices
Rede Médicos-Sentinela (Portugal)	8 COVID-19 testing centers
NHS community pathways, primarily comprising COVID-19 community assessment centres and triage hubs (Scotland)	~ 14 NHS Boards across Scotland
Spanish Sentinel Surveillance System of Acute Respiratory Infections (Spain)	53 GPs and 27 paediatricians in two regions
Sentinelövervakning /Sentinel Surveillance Network (Sweden)	~ 90 practices

* From January 2021 onwards only the sentinel virological surveillance information for England was included.

England (EN) – Data is collected from the sentinel GP practices participating in the RCGP RSC network. For surveillance purposes, data were selected from patients with symptoms consulting their GP with a diagnosis of "COVID-19", "COVID-19 illness" or "Main symptom" (i.e. presenting with fever, cough, loss of sense of smell, or loss of sense of taste) and tested for positive for SARS-CoV-2. We excluded records of subsequent positive SARS-CoV-2 tests.

France (FR) – Data is collected from ARI patients consulting in primary care with GPs participating in the Sentinelles network. A sample of these ARI patients is tested for SARS-CoV-2, influenza and other respiratory viruses. The data collection has been adapted since week 21, 2020, with more information on symptoms and comorbidity, but no longer information on influenza vaccination or influenza virus co-infection. Symptoms are reported as free text have not yet been included in the analyses.

Ireland (IE) – At the beginning of the COVID-19 pandemic, virological surveillance with the Irish sentinel GP network was disrupted, when face to face GP consultations were stopped. All patients with COVID-19 like symptoms are advised to phone their GP. Virological surveillance with the sentinel GP network was re-established in November 2020, including all COVID-19 phone consultations to the sentinel GP network. Surveillance of COVID-19 with the Irish sentinel GP network was integrated into the national COVID-19 referral pathway, with all patents with COVID-19 symptoms referred to COVID-19 community testing centres for swabbing. Sentinel GP specimens are identified and routed directly to the National Virus Reference Laboratory for SARS-CoV-2 testing. Data reported includes all patients meeting the Irish COVID-19 case definition and consulting (via phone) a sentinel GP in Ireland. Sentinel GP patients without COVID-19 symptoms were excluded.

Navarra (NA) – The data is collected from ARI patients in primary care from all the Navarra population. Since week 20 in 2020, all outpatients with COVID-19 symptoms have been tested.

Netherlands (NL) – The routine influenza surveillance system in sentinel primary care practices was continued, with additional testing for SARS-CoV-2 of all samples in addition to influenza and other respiratory viruses. From 1 June 2020, every citizen with any respiratory symptom can request a diagnostic (PCR) test at dedicated testing centres. Therefore the number of ILI/ARI patients in primary care eligible for swabbing has decreased considerably and may not be representative for all persons suspected of COVID-19.

Portugal (PT) – A new sentinel surveillance system was set up, based on a selection of ARI cases among patients visiting primary care centres with respiratory symptoms. Cases were selected using a systematic sampling method (five cases/week per centre). Laboratory data for SARS-CoV-2 and influenza were available for all cases. Information on underlying chronic diseases and medication may become available through data linkage at a later stage.

Scotland (SC) - The routine GP Sentinel Swabbing Scheme for influenza was stepped down as consultations stopped at practice level. Instead, dedicated NHS COVID-19 triage hubs and community assessment centres were set up across Scotland. From June 2020, patients who are unwell in the community with symptoms compatible with COVID-19 are referred for NHS clinical assessment, either in person or over the telephone. These patients are offered a diagnostic COVID-

19 test and asked to provide information about themselves to Public Health Scotland (self-reported by the patient or supplied by the clinical assessment centre) for COVID-19 surveillance purposes. Those patients for whom a test result and enhanced surveillance data are available are included in the community surveillance dataset.

Spain (ES) – The well-consolidated Spanish Influenza Sentinel Surveillance System in primary care was disrupted with the emergence of COVID-19 pandemic, just when the influenza season 2019-20 was almost finishing in Spain. Because of surveillance work since June 2020, a new Spanish Sentinel Surveillance System of Acute Respiratory Infections in Primary Care has been implemented in Spain. For the purpose of this report, data from two Spanish regions are included, although other regions are already working and will became participant in a near future. Data from of all ARI cases consulting sentinel primary care are collected with information on sex, age, symptoms and presumption of ILI. Respiratory swabs are systematically taken form the first two-five ARI patients per week. From those swabbed patients, information on chronic diseases, virological and influenza and COVID-19 vaccination is collected. Improving completeness of variables is ongoing.

Sweden (SE) – Data and samples for both enhanced and aggregated surveillance are collected on all patients with influenza-like illness (ILI) and acute respiratory infection (ARI) who consult a sentinel physician. The existing influenza sentinel surveillance system was expanded in week 10 of 2020 to include COVID-19. While the influenza sentinel surveillance phased out in week 16 of 2020, the COVID-19 sentinel surveillance remained active throughout 2020. During the first wave in 2020, sentinel practices had exclusive access to COVID-19 testing for health workers and those with moderate or severe illness. This led to increased numbers attending for consultation with a three-fold increase in sentinel samples taken. Generalised access to testing from June 2020 led to major declines in participating practices. Efforts are now ongoing to encourage GPs to participate given access to both influenza and COVID-19 testing and financial reimbursement for the first five swabs taken per week.

Table 2. Main characteristics of I-MOVE primary care COVID-19 surveillance systems, January 2021 to April 2021

Network (country)	Case definition*	Testing strategy
RCGP RSC (England)	ILI or ARI	Sentinel testing
Réseau Sentinelles (France)	ARI	All patients
Irish GP influenza sentinel surveillance system (Ireland)	ARI or ILI**	All patients meeting the COVID-19 case definition are tested for SARS-CoV-2. All patients meeting the influenza case definition are tested for SARS-CoV-2 and influenza.
Navarra (Spain)	ARI	All outpatients with COVID-19 symptoms
Nivel Primary Care Database - Sentinel Practices (Netherlands)	ILI or ARI	Systematic sample
Rede Médicos-Sentinela (Portugal)	ARI	All patients, but a systematic sample is provided for the I-MOVE-COVID-19 project
NHS COVID-19 community assessment centres and triage hubs (Scotland)	ILI or ARI or altered sense of smell/taste	All patients are tested, but only those for whom enhanced surveillance data are also available are included in the community surveillance programme.
Spanish Sentinel Surveillance System of Acute Respiratory Infections (Spain)	ARI	Systematic sample
Sentinelövervakning /Sentinel Surveillance Network (Sweden)	ILI or ARI	Systematic sample

* ILI = influenza-like illness; ARI = acute respiratory illness

** Irish case definitions: www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/casedefinitions/covid-19interimcasedefinitionforireland/ (COVID-19) and www.hpsc.ie/a-z/respiratory/influenza/casedefinitions/ (influenza)

Table 3. Site-specific surveillance websites of participating I-MOVE primary care COVID-19 networks, January 2021 tot April 2021

Network (country)	URL
RCGP RSC (England)	www.rcgp.org.uk/rsc
Réseau Sentinelles (France)	https://www.sentiweb.fr/france/en/?page=bulletin
Irish GP influenza sentinel surveillance system (Ireland)	www.hpsc.ie
Navarra (Spain)	
Nivel Primary Care Database - Sentinel Practices (Netherlands)	www.nivel.nl/nl/nivel-zorgregistraties-eerste-lijn/actuele-weekcijfers-aandoeningen-waaronder-griep-surveillance
Rede Médicos-Sentinela (Portugal)	www.insa.min-saude.pt/category/informacao-e-cultura-cientifica/publicacoes/atividade-gripal/
NHS COVID-19 community assessment centres and triage hubs (Scotland)	www.hps.scot.nhs.uk/web-resources-container/enhanced-surveillance-of-covid-19-in-scotland-community-surveillance-protocol/
Spanish Sentinel Surveillance System of Acute Respiratory Infections (Spain)	vgripe.isciii.es/inicio.do www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/EnfermedadesTransmisibles/Paginas/Gripe.aspx
Sentinelövervakning /Sentinel Surveillance Network (Sweden)	https://www.folkhalsomyndigheten.se/folkhalsorapportering-statistik/statistik-a-o/sjukdomsstatistik/covid-19-veckorapporter/senaste-covidrapporten/

NOTE:

All figures in this report are based on data reported by I-MOVE-COVID-19 primary care networks from January 2021 to April 2021.

The results reported are approved by all partners.

Data have been weighted for differences between study sites, due to sample size and data collection methods, using random effects logistic models with study site as random effect. Total percentages may therefore not add up to 100%.

In this report, all COVID-19 cases are laboratory confirmed for SARS-CoV-2.

2.2.   Data on COVID-19 cases

Figure 1 depicts the number of COVID-19 cases, selected for testing in the primary care surveillance networks and with a positive test result for SARS-CoV-2. Please note that the y-axis is different between networks.

Figure 1. Number of COVID-19 cases reported by I-MOVE-COVID-19 primary care networks by week*, January 2021 to April 2021

Scotland

Spain

Sweden
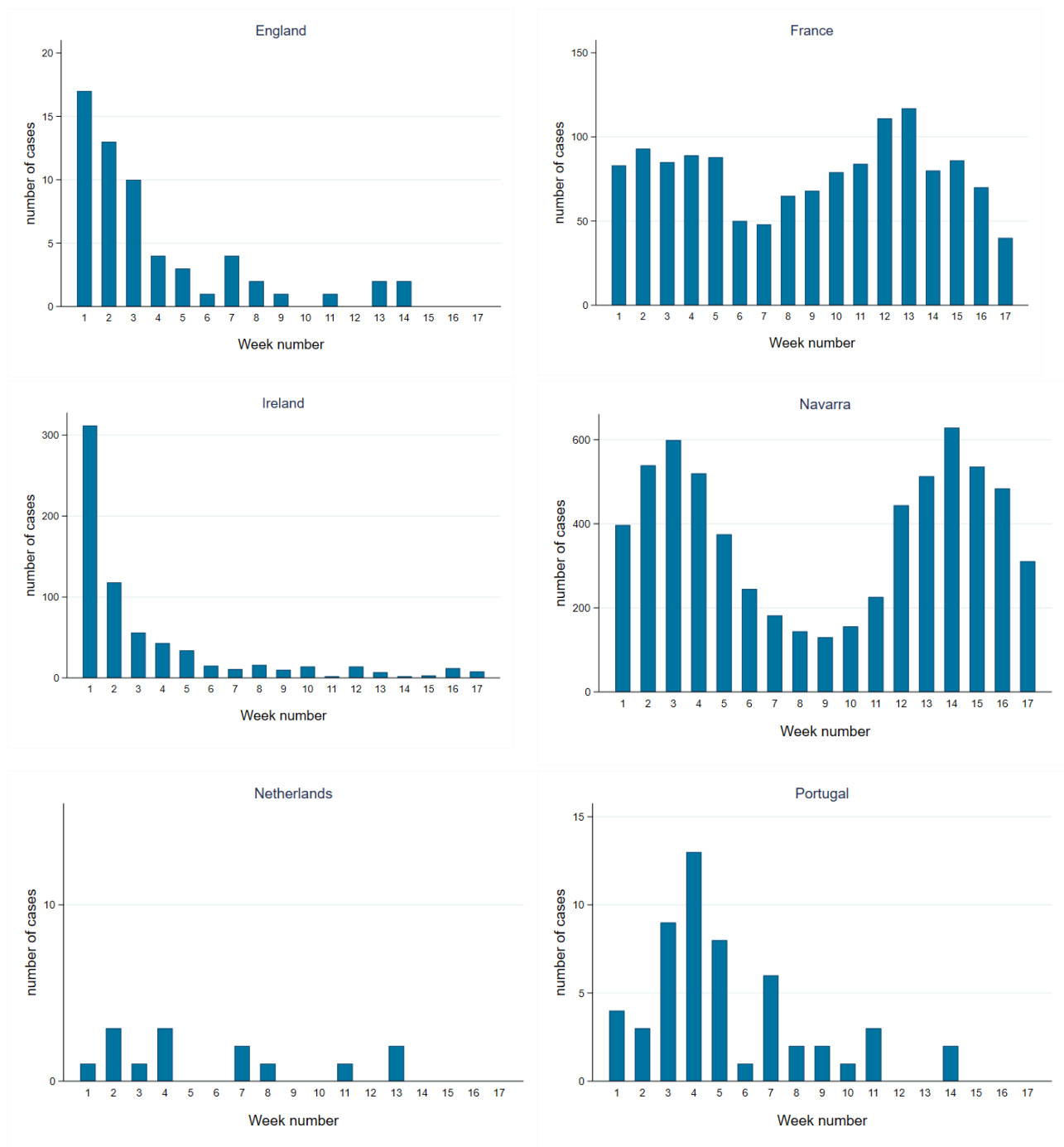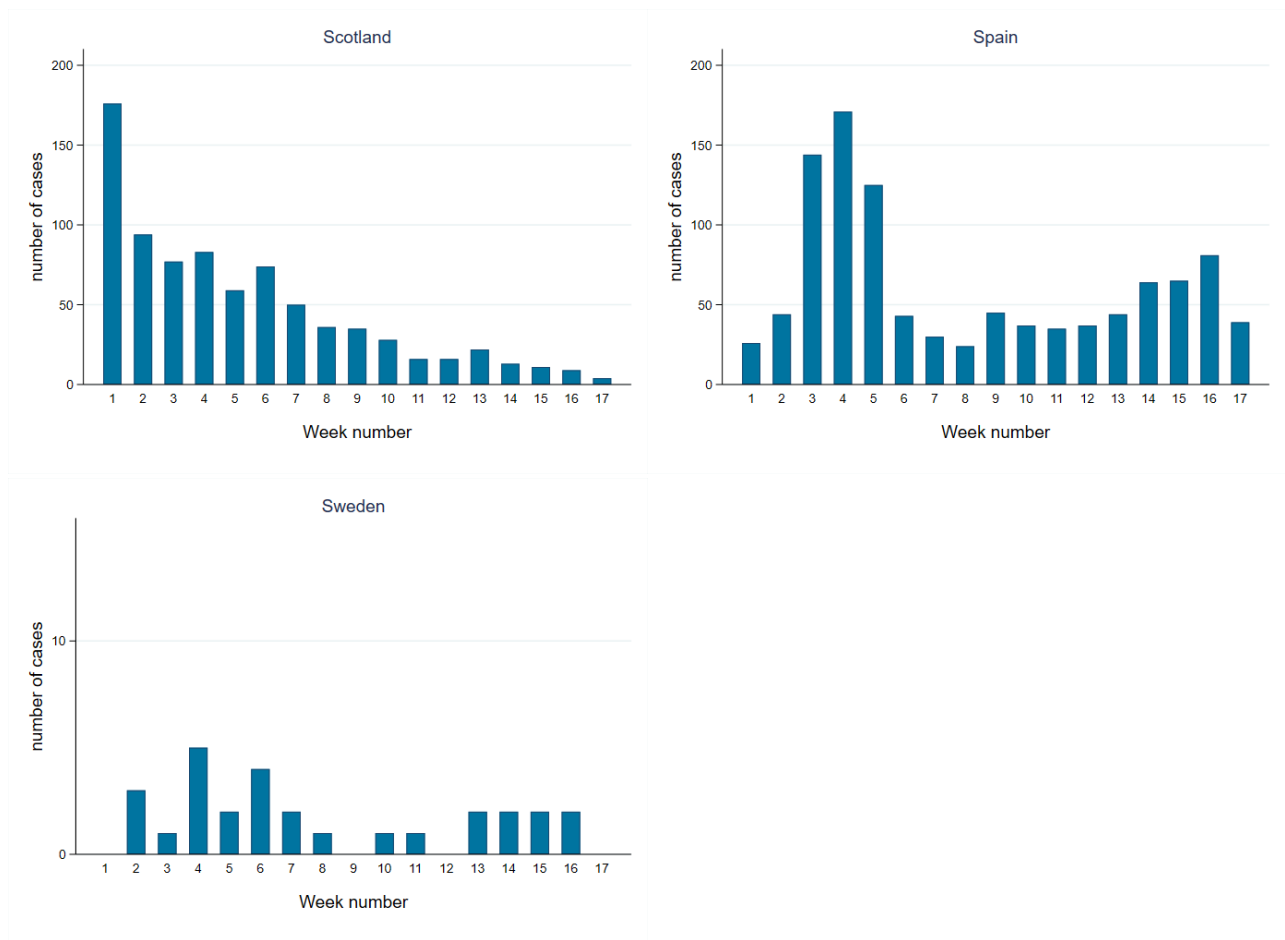
* Week number refers to the week in which the swab specimen was taken. Week numbers range from week 1 to week 17 in 2021.

2.3.   Demographic characteristics of COVID-19 cases

The age profile of COVID-19 cases presenting to primary care may be younger as they are generally milder cases compared to hospitalised patients. Older, more severe cases may not be fully represented in this dataset. In Portugal, for example, being 65 years or older is one of the criteria to be referred to a hospital emergency department. In several countries, among others Ireland and the Netherlands, the primary care surveillance systems exclude residents of long term care facilities. Moreover, an effect may be expected from higher vaccination rates among the older age-groups, since vaccination was generally prioritised for older age-groups.

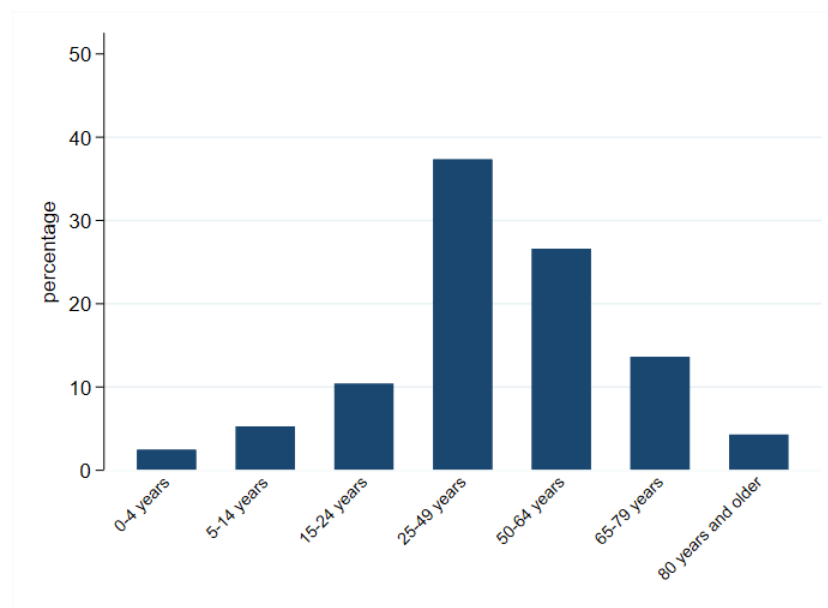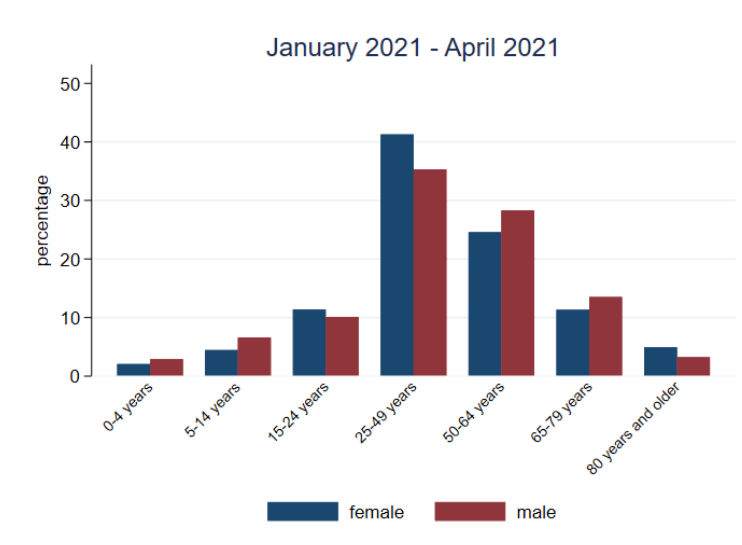**Figure 2.** Percentage of COVID-19 cases by age group (pooled data, N=10,455)

Figure 3. Percentage of COVID-19 cases, distribution of age groups by sex (pooled data. N=10,455)

2.4. Symptoms of COVID-19 cases

Results on symptoms are based on data reported by different countries for each symptom, and are reported only if collected in at least two countries. The reporting of symptoms may be related to the definition of patients eligible for I-MOVE-COVID-19 surveillance by protocol. Therefore, asymptomatic cases are not expected.
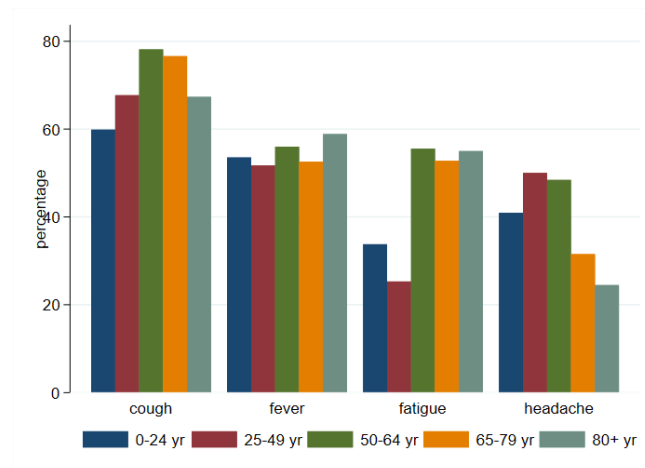
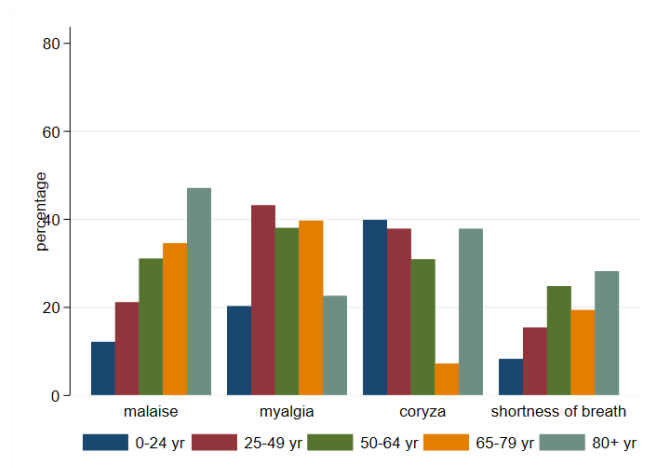**Figure 4.** Symptoms reported by COVID-19 cases (pooled data, N*)
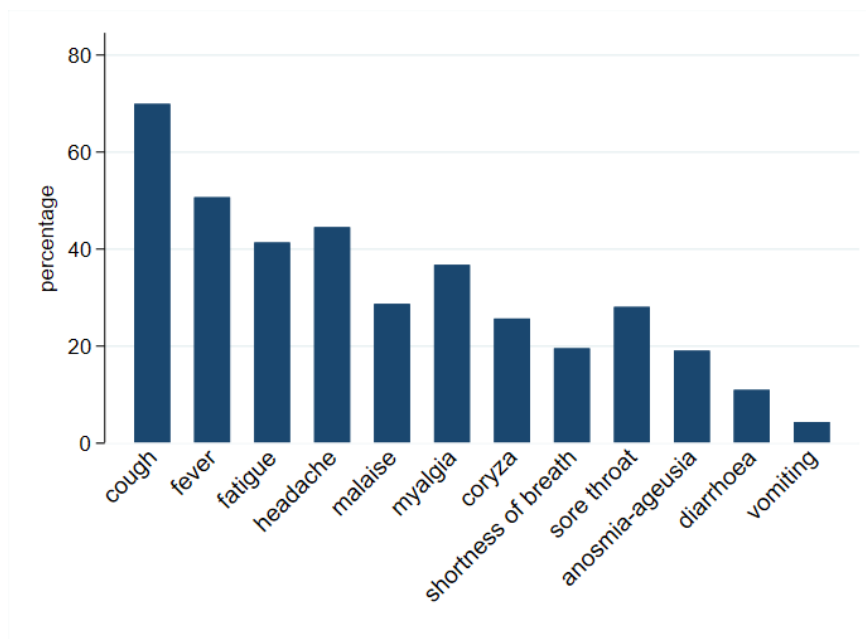
* Pooled data differs according to symptom (N in pooled data, countries): cough: 3,176 (ES, FR, NL, PT, SC), fever: n=3,174 (ES, FR, NL, PT, SC), fatigue: 3,211 (FR, PT, SC), headache: 3,193 (ES, FR, NL, PT, SC), malaise: n=2,441 (ES, FR, NL, PT), myalgia: 2,441 (ES, FR, NL, PT), coryza: 3,172 (FR, NL, PT), shortness of breath: 3,155 (ES, FR, NL, PT, SC), sore throat: 3,188 (ES, FR, NL, PT, SC), anosmia-ageusia: 3,176 (ES, FR, NL, PT, SC, SE),diarrhoea: 2,112 (ES, FR, NL, PT, SC), vomiting: 3,169 (ES, FR, PT, SC).

Figure 5. Symptoms reported by COVID-19 cases by age-group (pooled data*)
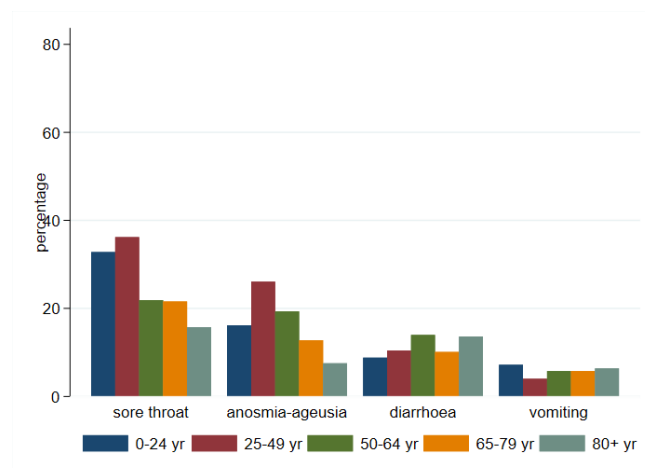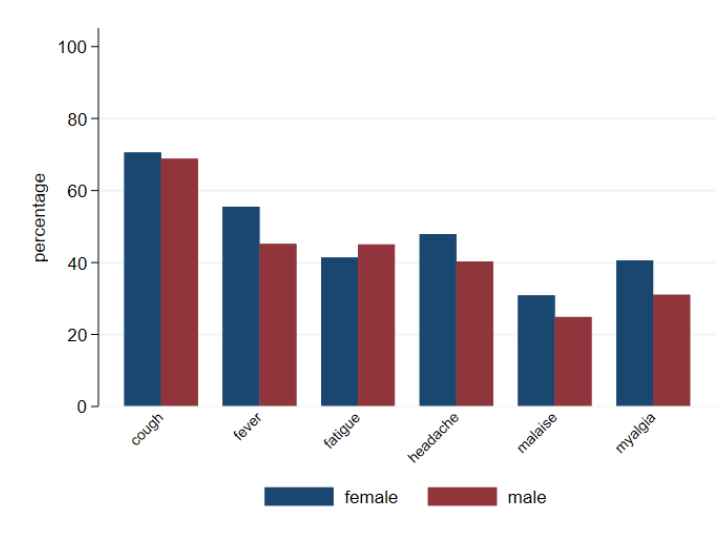
A

B

C

* Pooled data differs according to symptom (N in pooled data, countries): cough: 3,176 (ES, FR, NL, PT, SC), fever: n=3,174 (ES, FR, NL, PT, SC), fatigue: 3,211 (FR, PT, SC), headache: 3,193 (ES, FR, NL, PT, SC), malaise: n=2,441 (ES, FR, NL, PT), myalgia: 2,441 (ES, FR, NL, PT), shortness of breath: 3,155 (ES, FR, NL, PT, SC), sore throat: 3,188 (ES, FR, NL, PT, SC), anosmia-ageusia: 3,176 (ES, FR, NL, PT, SC, SE),diarrhoea: 2,112 (ES, FR, NL, PT, SC), vomiting: 3,169 (ES, FR, PT, SC). Coryza was not included since logistic random effects models did not converge due to too small number of cases in age-groups by country.

Figure 6. Symptoms reported by COVID-19 cases, by sex (pooled data*)
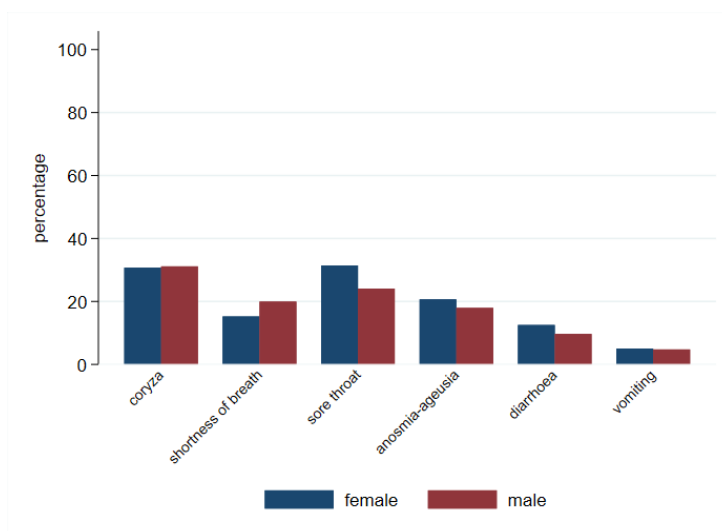
A.

B.

* Pooled data differs according to symptom (N in pooled data, countries): cough: 3,176 (ES, FR, NL, PT, SC), fever: n=3,174 (ES, FR, NL, PT, SC), fatigue: 3,211 (FR, PT, SC), headache: 3,193 (ES, FR, NL, PT, SC), malaise: n=2,441 (ES, FR, NL, PT), myalgia: 2,441 (ES, FR, NL, PT), coryza: 3,172 (FR, NL, PT), shortness of breath: 3,155 (ES, FR, NL, PT, SC), sore throat: 3,188 (ES, FR, NL, PT, SC), anosmia-ageusia: 3,176 (ES, FR, NL, PT, SC, SE),diarrhoea: 2,112 (ES, FR, NL, PT, SC), vomiting: 3,169 (ES, FR, PT, SC).

2.5.   Time between onset of symptoms and testing

The median time between onset of symptoms and date of testing was 2 days (IQR 0-4). The median time between onset and testing was constant over January to April, but the IQR decreased with one day.

Table 4. Number of days between onset of symptoms and swab specimen was taken (pooled data N= 3,420)

	Number of cases	Median	25th Percentile	75th Percentile
All COVID-19 cases	3,420	2	1	4
By month (2021)				
January	1,336	2	1	4
February	735	2	1	4
March	710	2	1	3
April	639	2	1	3
By age group				
0 – 4 yrs	99	1	1	3
5 – 14 yrs	226	1	1	2
15 – 24 yrs	329	2	1	4
25 – 49 yrs	1,288	2	1	3
50 – 64 yrs	903	2	1	5
65 – 79 yrs	426	2	1	5
80+ yrs	148	2	1	4
By sex				
Female	1,859	2	1	4
Male	1,543	2	1	4

2.6.   Co-infections of COVID-19 cases

No co-infections with influenza virus were reported by France, Ireland, the Netherlands, Portugal, Spain, and Sweden. Data on co-infections with respiratory syncytial virus (RSV), rhinovirus, and enterovirus were provided by the Netherlands only. Enterovirus was observed in one person in the age band 0 – 4 years, in week 4, whereas co-infections with RSV and rhinovirus were not detected.

2.7.   Referral to hospital of COVID-19 cases

Data regarding referral to hospital was provided by France and Spain. 155 patients were referred (7.3%), of whom 14.2% in the age band 25 to 49 years, one third in the age band 50 – 64 years (34.8%), another third in the age-group 65 – 79 years (32.3%), and 18% in the age-group of 80 years and older.

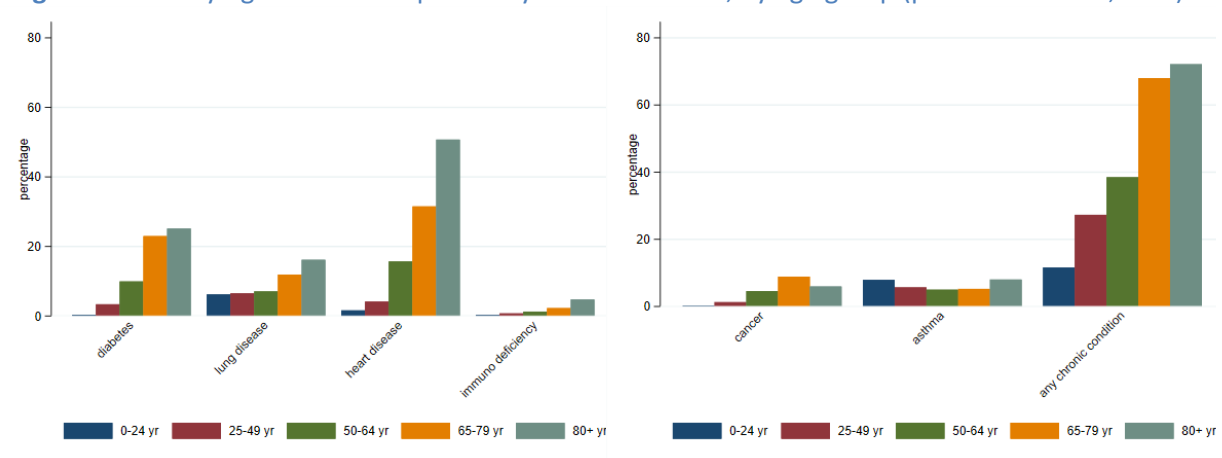## 2.8.   Underlying (chronic) conditions of COVID-19 cases

Results on underlying chronic conditions are based on data reported by all countries, except Ireland. For Ireland the variable 'presence of any chronic condition' was available. Exceptions are cancer and asthma, that were collected only in England, France, Navarra, and Portugal.

Figure 7. Underlying conditions reported by COVID-19 cases of 25 years and older (pooled data N=7,654*)
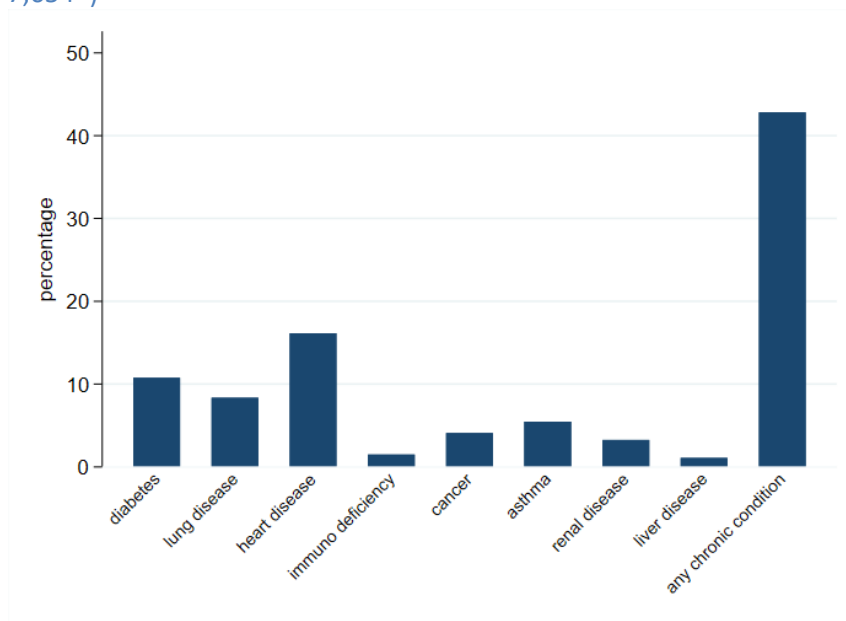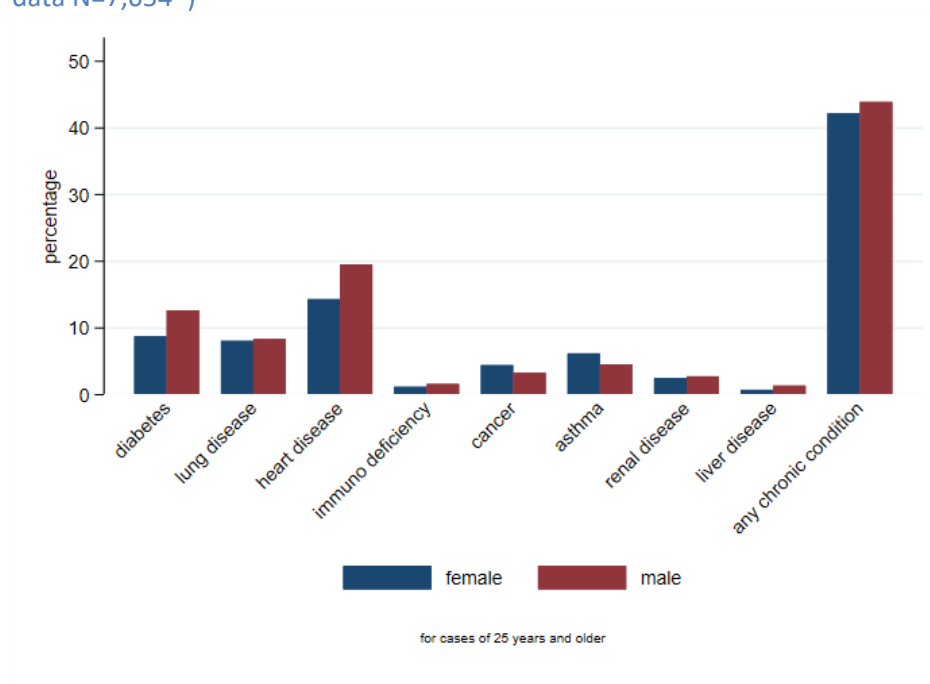

* Based on the variable 'presence of any chronic condition' for any of the chronic conditions as collected by the country.

Figure 8. Underlying conditions reported by COVID-19 cases, by age group (pooled data N=7,654*)

* Based on the variable 'presence of any chronic condition' for any of the chronic conditions as collected by the country.

* Based on the variable 'presence of any chronic condition' for any of the chronic conditions as collected by the country.

2.9.   Obesity among COVID-19 cases

Information on obesity was collected in England, France, Navarra, the Netherlands, Scotland, and Spain. Obese was defined as a Body Mass Index (BMI) of 30 or higher (FR, NL, and SP) and as BMI of 40 or higher (EN, and NA). Obesity was reported for 318 COVID-19 cases (3.5%), most of whom were female (59.8%).

2.10. Smoking status of COVID-19 cases

The results on smoking status are presented for cases aged 15 years or older. A former smoker ceased smoking more than one year ago. Smoking status was collected by Navarra, the Netherlands, Scotland, and Spain.

Figure 10. Smoking status of COVID-19 cases aged 15 years or older (pooled data, N=3,033)
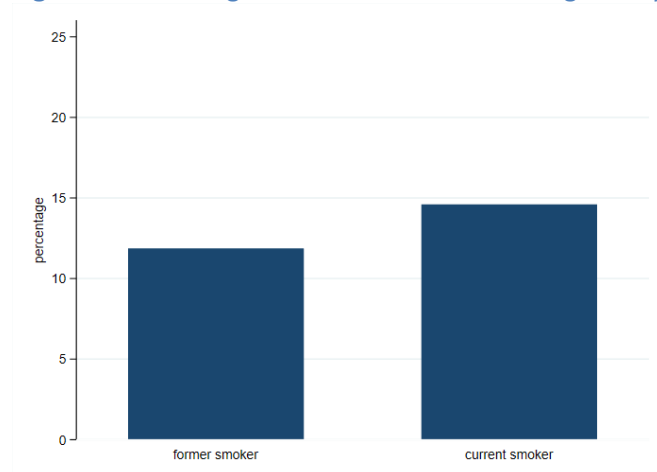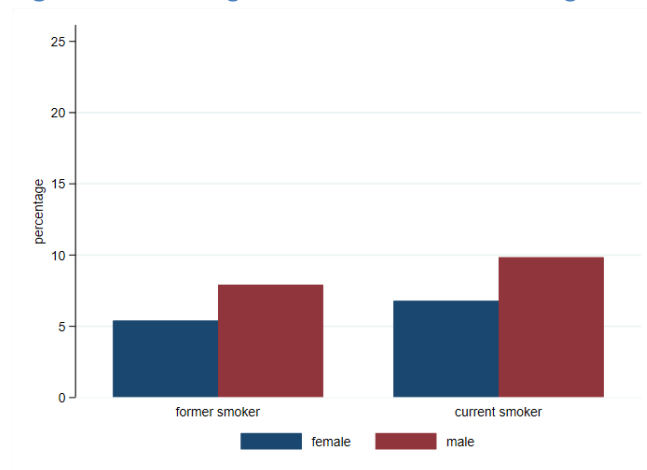

Figure 11. Smoking status of COVID-19 cases aged 15 years or older, by sex (pooled data, N=3,033)

2.11. Pregnancy status of COVID-19 cases

Results on pregnancy are restricted to female COVID-19 patients aged between 15 and 45 years. Data regarding pregnancy were provided by France, Ireland, the Netherlands, Scotland, Spain, and Sweden. 30 COVID-19 cases were found to be pregnant (1.6%).

2.12. Seasonal influenza vaccination status of COVID-19 cases

The result of seasonal influenza vaccination status are based on the data collected by all countries. Seasonal influenza vaccination status refers to being vaccinated in 2020. Results are presented for cases aged 25 years or older, because immunisation programmes for younger age groups differ between countries.

Figure 12. Received seasonal influenza vaccination, COVID-19 cases aged 25 years or older by age and sex (pooled data, N=7,931)
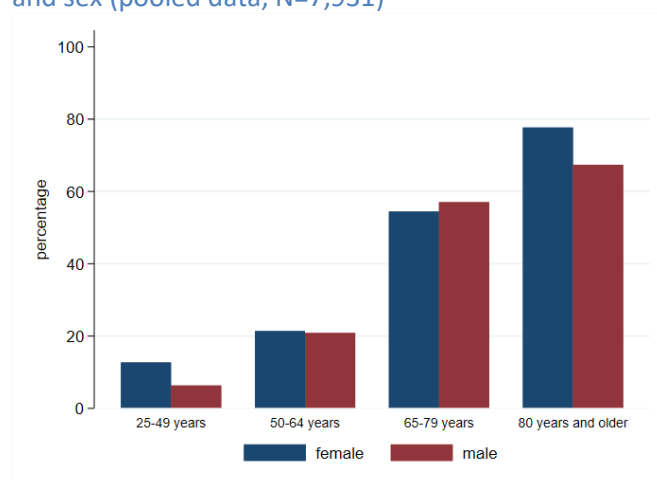

2.13. SARS-CoV-2 vaccination status of COVID-19 cases

The results of SARS-CoV-2 vaccination status are based on the data collected by all countries. The onset of vaccination programmes, eligible age-groups, and vaccine products used (i.e. AstraZeneca, Janssen, Moderna, and Pfizer) used differed between countries. Vaccination status refers to cases who received at least one dose of any vaccine, for age-groups of 25 years and older. Of all cases, 4.5% received at least one vaccination.

In figure 13, crude pooled results are presented, since the numbers were too small to apply random effects logistic regression models to account for study site differences.

Please note that vaccine coverage is overall at time of swab, when the patient was not necessarily part of the target group for vaccination in their country.

Figure 13. Received at least one vaccination for SARS-CoV-2, COVID-19 cases aged 25 years or older by age and sex (pooled data, N=10,071)
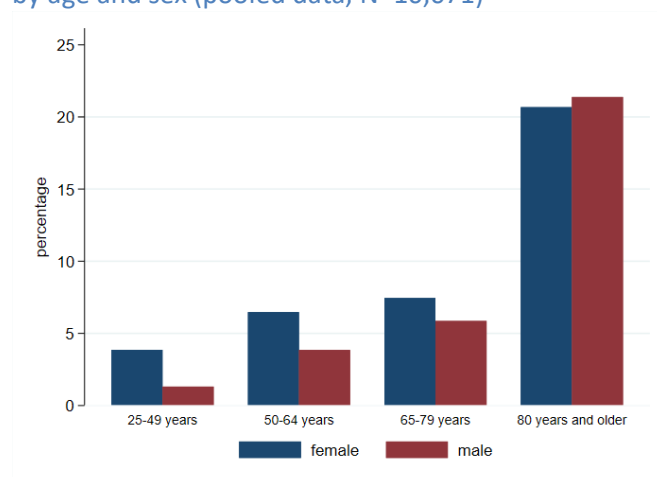
2.14. Health care workers among COVID-19 cases

Data regarding whether a COVID-19 case was a healthcare worker was provided by Ireland, Navarra, and Scotland. In Ireland, Navarra and Scotland 214 COVID-19 cases were indicated as healthcare worker (2.9%).

2.15. Recent travel of COVID-19 cases

Data on recent travel was collected by the Netherlands and Sweden. Two cases were observed who recently travelled abroad.

2.16. Sequence and isolate viruses of respiratory samples from COVID-19 positive cases

A selection of specimens from COVID-19 positive patients in England, Ireland, Navarra the Netherlands, Portugal, and Sweden were used for virus isolation and sequencing of viruses. The sequencing results are shared in GISAID. Dedicated bioinformatics pipelines will be used for analysis of viral sequencing data. These data will be provided to WP4 for epidemiological and modelling studies. In the period January to April 2021, the Alpha variant, according to the WHO labelling of SARS-CoV-2 variants of interest and concern, was dominant among the sequenced specimens.

Table 5. Characterised viruses of COVID-19 cases, by country and month

	Total	Lineages					
		B.1.1.7	B.1.177 [a]	B.1.160	P.1	B.1.777.82	Other lineages [b]
	N	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Total SARS-CoV-2 sequenced	**489**	321 (65.6)	97 (19.8)	10 (2.0)	8 (1.6)	6 (1.2)	47 (9.6)
Month (2021)							
January	**168**	57 (33.9)	73 (43.5)	7 (4.2)	0 (0)	1 (0.6)	30 (17.9)
February	**100**	61 (61.0)	19 (19.0)	2 (2.0)	0 (0)	5 (5.0)	13 (13.0)
March	**100**	93 (93.0)	5 (5.0)	1 (1.0)	0 (0)	0 (0)	1 (1.0)
April	**121**	110 (90.9)	0 (0)	0 (0)	8 (6.6)	0 (0)	3 (2.5)
Country							
England	**28**	25 (89.3)	2 (7.1)	0 (0)	0 (0)	0 (0)	1 (3.6)
Ireland	**122**	94 (77.1)	12 (9.8)	0 (0)	0 (0)	0 (0)	16 (13.1)
Navarra	**268**	177 (66.0)	67 (25.0)	2 (0.7)	8 (3.0)	0 (0)	14 (5.2)
Netherlands	**5**	1 (20)	4 (80)	0 (0)	0 (0)	0 (0)	0 (0)
Portugal	**28**	5 (17.6)	8 (28.6)	4 (14.3)	0 (0)	0 (0)	11 (39.3)
Spain	**19**	15 (78.9)	3 (15.8)	0 (0)	0 (0)	0 (0)	1 (5.3)
Sweden	**19**	4 (21.1)	1 (5.3)	4 (21.1)	0 (0)	6 (31.6)	4 (21.1)

[a] Not including sub-lineages

[b] Other lineages include B.1.258, B.1, B.1.177.32, B.1.221, P.2, B.1.177.56, B.1.177.67, B.1.408, B.1.597, A.2, B.1.1, B.1.1.117, B.1.1.198, B.1.1.318, B.1.1.420, B.1.177.21, B.1.177.46, B.1.177.52, B.1.177.6, B.1.177.68, B.1.177.72, B.1.177.77, B.1.177.85, B.1.351, B.1.36, B.1.367, B.1.480, B.1.526, C.4, R.1, Y.1

2.17. Epidemiological curve pooled COVID-19 positive cases from March 2020 to April 2021

For a comprehensive overview of COVID-19 cases reported in primary care surveillance, the pooled data for all study sites from March 2020 in week 8 to April 2021 until week 17 are depicted in figure 14.
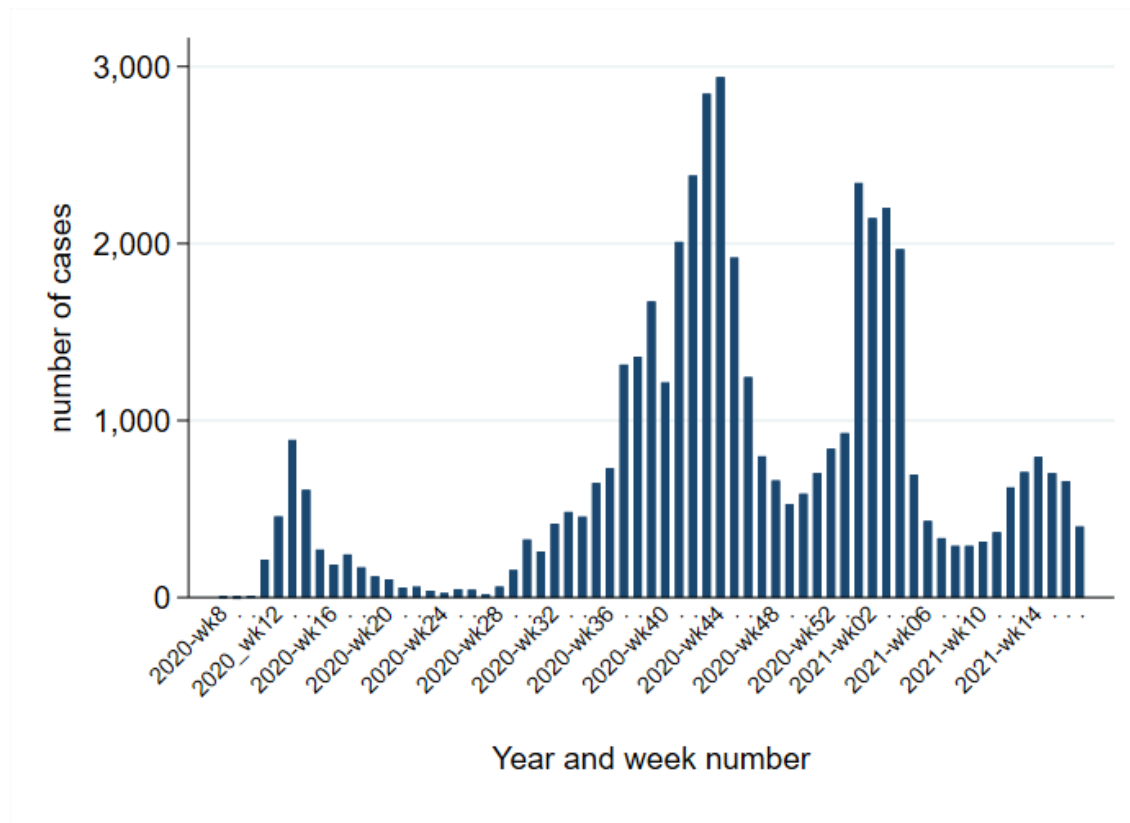

Figure 14. Number of COVID-19 cases from start of surveillance in March (week 8) 2020 to April (week 17) 2021

3. Background

The end of 2019 saw the emergence of a novel severe acute respiratory syndrome – coronavirus 2 (SARS-CoV-2), which can causes coronavirus disease 2019 (COVID-19). The I-MOVE-COVID-19 consortium aims to obtain epidemiological and clinical information on patients with COVID-19 as well as virological information on SARS-CoV-2, through different work packages (WP):

a) provision of a flexible surveillance platform, adaptable to the epidemiological situation, through WP2 (primary care surveillance) and WP3 (hospital surveillance)
b) research studies, through WP4, and
c) evaluation of public health interventions (e.g. vaccination, antivirals) in WP2–4

in order to contribute to the knowledge base, guide patient management, and inform the public health response. This is being achieved through adaptation and expansion of the existing I-MOVE network to include COVID-19. The network includes primary care networks, hospitals, and national laboratory reference centres in 10 countries across the WHO European Region.[1]

The WP2 primary care surveillance for COVID-19 is coordinated by Nivel (Netherlands institute for health services research). The I-MOVE-COVID-19 primary care network comprises nine sentinel surveillance networks in six European Union (EU) Member States (MS)[2] and in England and Scotland. The laboratory component of the network includes regional and national reference centres from the participating countries. While each of the surveillance sites analyses their data separately, pooling the data for overall analysis will provide a sample size big enough to answer study questions with reasonable precision.

> The I-MOVE-COVID-19 consortium, coordinated by Epiconcept, was created following the European Commission's Call for Proposals H2020 "Advancing Knowledge for the Clinical and Public Health Response to the Emerging Coronavirus Epidemic". It brings together many partners already involved in the I-MOVE (Influenza - Monitoring Vaccine Effectiveness in Europe) network.
> I-MOVE, first established in 2007, was the first network to monitor influenza vaccine effectiveness (VE) within and across the seasons in the European Union (EU) and the European Economic Area (EEA). The network has two components, one for primary care practices, recruiting patients with influenza-like illness (ILI) and the other for hospitals, recruiting patients with severe acute respiratory illness (SARI). In February 2020, I-MOVE partners came together as the I-MOVE-COVID-19 consortium, and were successful in a bid for the H2020 call on "Advancing knowledge for the clinical and public health response to the novel coronavirus epidemic".

In this third surveillance report of COVID-19 in primary care, results are presented from participating primary care COVID-19 surveillance networks from January to April 2021. The results add to the ECDC surveillance data collection through TESSy (NCOVAGGR) and reporting (https://www.ecdc.europa.eu/en/covid-19/surveillance/weekly-surveillance-report) by providing more detailed information of COVID-19 cases in primary care.

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[1] Albania, France, Lithuania, Portugal, Romania, Spain, and the UK (England and Scotland).
[2] France, Ireland, The Netherlands, Portugal, Spain (two sites: the Spanish national system and the Navarra regional system) and Sweden.

More details on the data collection for I-MOVE-COVID-19 primary care surveillance can be found in the Generic Protocol.[3] Briefly, the I-MOVE network is nested in sentinel practices carrying out surveillance for influenza and now COVID-19. Data is being collected from community-dwelling individuals who consult a participating physician with symptoms of suspected COVID-19. From all or from a systematic sample of suspected COVID-19 cases, primary care practitioners collect respiratory specimens as well as information on patient characteristics, and if possible, also on symptoms and potential risk factors and preventive factors for COVID-19. We refer to lab-confirmed SARS-CoV-2 COVID-19 patients as 'COVID-19 cases'. Participating primary care networks have implemented the generic protocol in their surveillance setting.

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[3] https://www.imoveflu.org/wp-content/uploads/2020/06/D2.3-I-MOVE-COVID-19-Phased-surveillance-protocol.pdf