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Primary care for patients with respiratory tract infection before and early on in the COVID-19 pandemic: an observational study in 16 European countries

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ABSTRACT

Objective To describe primary health care (consultation characteristics and management) for patients contacting their general practitioner (GP) with a respiratory tract infection (RTI) early on in the COVID-19 pandemic in contrasting European countries, with comparison to prepandemic findings.

Setting Primary care in 16 countries (79 practices), when no routine SARS-CoV-2 testing was generally available.

Design and participants Before (n=4376) and early in the pandemic (n=3301), patients with RTI symptoms were registered in this prospective audit study.

Outcome measures Consultation characteristics (type of contact and use of PPE) and management characteristics (clinical assessments, diagnostic testing, prescribing, advice and referral) were registered. Differences in these characteristics between countries and between pandemic and prepandemic care are described.

Results Care for patients with RTIs rapidly switched to telephone/video consultations (10% in Armenia, 91% in Denmark), and when consultations were face-to-face, GPs used PPE during 97% (95% CI 96% to 98%) of contacts. Laboratory testing for SARS-CoV-2 in primary care patients with RTIs was rapidly implemented in Denmark (59%) and Germany (31%), while overall testing for C reactive protein decreased. The proportion of patients prescribed antibiotics varied considerably between countries (3% in Belgium, 48% in UK) and was lower during the pandemic compared with the months before, except for Greece, Poland and UK. GPs provided frequent and varied COVID-related advice and more frequently scheduled a follow-up contact (50%, 95% CI 48% to 52%). GPs reported a slightly higher degree of confidence in the likely effectiveness of their management in face-to-face (73% (very) confident, 95% CI 71% to 76%) than in virtual consultations (69%, 95% CI 67% to 71%).

Conclusions Despite between-country variation in consultation characteristics, access to SARS-CoV-2 laboratory testing and medication prescribing, GPs reported a high degree of confidence in managing their

Strength and limitations of this study

► The operational infrastructure of this point prevalence audit survey in 16 European countries enabled data collection on patient consultations for respiratory tract infections early on in the first wave of the COVID-19 pandemic.
► This prospective audit enabled an exploratory between-country comparison in care delivery early on in the COVID-19 pandemic, as well as direct comparison to prepandemic care.
► The prospective registration reduced risk of 'information bias'.
► A limited number of practices per country participated in the registration audit.
► Data from qualitative studies could further contextualise our findings.

patients with RTIs in the emerging pandemic. Insight in the highly variable pandemic responses, as measured in this multicountry audit, can aid in fine-tuning national action and in coordinating a pan-European response during future pandemic threats.

INTRODUCTION

The COVID-19 pandemic has brought dramatic changes in the delivery of primary healthcare, especially for patients with respiratory tract infections.[1–4] There was an urgent imperative to minimise risk of transmission of viral infections by reducing face-to-face consultations and to identify, monitor and treat those patients developing an adverse illness course.[2 3 5] However, the management of patients with respiratory tract infections (RTIs), and especially those suspected of having COVID-19, was impeded by the lack of

evidence regarding diagnosis and treatment of COVID-19.[6 7] Furthermore, poor availability of personal protective equipment (PPE) and laboratory testing capacity for SARS-CoV-2,[2] and differences in governmental policies for containing the pandemic hampered a consistent and uniform management of suspected COVID-19 in primary care across Europe. Therefore, care provision and workflows had to be responsive to many rapidly changing circumstances.

Research during the initial phase of the pandemic was largely secondary care focused, whereas most patients were managed in the community. Primary care has an essential role in any emergency response, as being the first point of call for patients and the first line of defence for the healthcare system.[1 3] Therefore, containing the spread of pandemic pathogens, while also providing safe and effective care will remain a critical task for European primary care.

The provision of primary care, as well as integration in national healthcare systems, varies enormously between European countries. Benchmarking primary care provision in Europe in the initial phase of the pandemic, especially for patients with RTIs, may help in understanding problems that were encountered, provide insight in variation of care and inform future responses, thus potentially harmonising and improving outpatient care in Europe during future pandemic threats.

Therefore, our objective was to describe consultation characteristics (virtual or face-to-face contact and general practitioner's (GP) use of PPE) and management (clinical assessments, diagnostic testing, medication prescribing and provided advice) of patients presenting with RTI symptoms early on in the COVID-19 pandemic in 16 European countries. Second, we aimed to compare these characteristics between countries and with findings from a similar audit conducted just before the pandemic.

METHODS
We performed a prospective point prevalence audit survey (PPAS) of consultation and management characteristics of patients with RTIs in contrasting EU and non-EU European countries (observational exploratory study). It initially ran January and February 2020 (PPAS1) but was reinitiated in all participating countries at the beginning of the initial European COVID-19 wave (March 2020) to capture changes in healthcare delivery, and continued in April and May 2020 (PPAS2). GPs anonymously registered patients who contacted their practice about RTI symptoms. The audit aimed to describe overall patient care. As no personally identifiable information was collected, patients were not asked to provide informed consent.

Setting
We included purposively selected practices from primary care networks in high-income, upper-middle-income and lower-middle-income countries: Armenia (n=1, large paediatric primary care clinic), Belgium (n=6),

Germany (n=2), Denmark (n=4), Spain (n=5), France (n=10), Georgia (n=5), Greece (n=6), Hungary (n=5), Ireland (n=5), Moldova (n=4), the Netherlands (n=8), Poland (n=6), Romania (n=4), Ukraine (n=4) and UK (n=4). The same GPs (in the same practices and with the same patient populations) participated in both phases. National networks were asked to register consultations until they reached the targets of 200–300 in PPAS1 and approximately 200 in PPAS2. Specific focus was on sequentially registering all eligible patients to prevent selection bias. GPs were reimbursed €5–€10 per registered consultation.

Patient and public involvement
This study was set up rapidly, and due to the timelines involved, it would have been difficult to involve patients and the public. The set-up of the registration form was discussed among researchers from most participating counties.

Eligibility criteria
In PPAS1, GPs were asked to sequentially register consulting patients of all ages with either sore throat (symptom duration<14 days) and/or cough (symptom duration<28 days) and to exclude patients with only nasal or ear symptoms. In PPAS2, early on in the pandemic, additionally, patients with coryza and otherwise suspected of having COVID-19 were eligible for registration. Otherwise suspected of COVID-19 refers to patients without signs of an RTI (yet), for whom the GP suspected COVID-19. The case report form (CRF) was used in PPAS2 is shown in online supplemental appendix 1.

Data
Data were entered directly into an online data capture system, Research Online, or could be entered later from paper forms. PPAS1 focused on GPs' management (clinical assessments, diagnostic testing, medication prescribing, advice provided and referral). PPAS2 also included these management variables and was extended with COVID-19-specific items, including use of PPE and additional patient and family advice (CRF in online supplemental appendix 1). Furthermore, GPs rated their level of confidence in the validity of the advice and/or treatment they provided during each contact using a 5-point Likert scale.

Analyses
To enable comparison between the two audits, registrations from patients with sore throat and/or cough symptoms were selected for the analysis, as these were common to both audits. Additionally, patients with suspected SARS-CoV-2 aetiology (CRF item 10.1) and/or an initial diagnosis of COVID-19 (item 11), but without registered sore throat and/or cough were included (this group in PPAS2 comprised 144 patients, 4.7%). Frequency data with 95% CIs (//epitools.ausvet.com.au/ciproportion, Wilson method) were calculated for accumulated data of both PPAS phases, as well as for PPAS2 data in figure 1
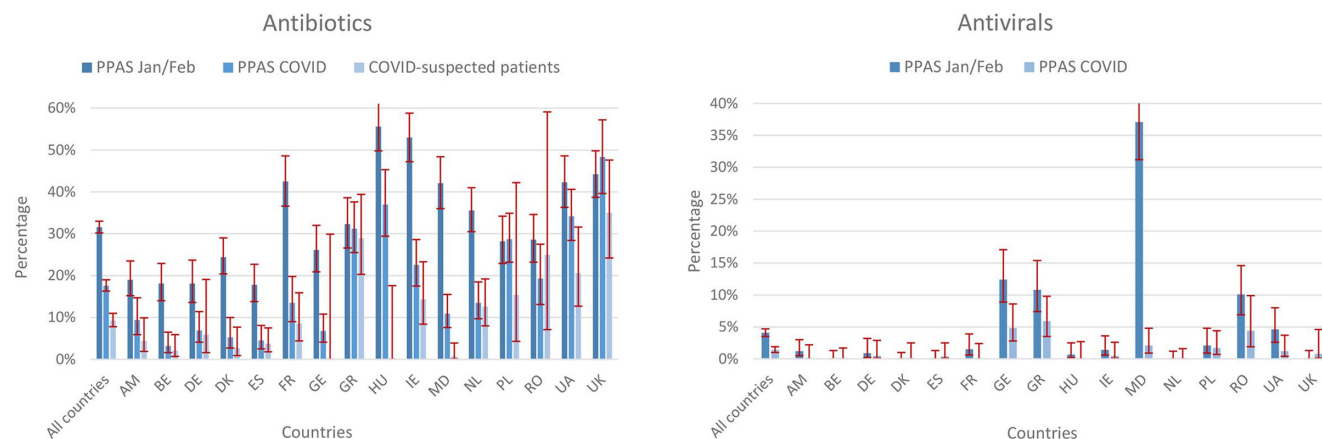
Figure 1 Antibiotic and antiviral prescribing before and early on in the pandemic. The proportions of patients being prescribed antibiotics and antivirals are shown for all countries and per country for patients registered in the first phase and early on in the pandemic. Antibiotic prescribing is also specifically shown for patients suspected of having COVID-19. 95% CIs are added with bars. Note that the numbers of patients suspected of having COVID-19 vary substantially between countries and can be low (table 1). PPAS, point prevalence audit survey.

and online supplemental appendices. Missing data, less than 1% per variable, were not corrected for.

Various exploratory comparisons were done:

1. Consultation and management variables from PPAS2 were calculated by country (presented in the online supplemental appendices) enabling between-country comparisons. Notable between-country differences were identified by the core team and discussed with the national network leads and GPs to better understand these differences and as a face validity check.
2. Within PPAS2, management variables were compared between patients consulting face-to-face or virtually.
3. Within PPAS2, management variables were analysed separately for patients suspected of having COVID-19 (suspected aetiology SARS-CoV-2 and/or working diagnosis COVID-19).
4. Where possible data were compared between the two PPAS phases.

RESULTS

In PPAS1, 4376 consultations were registered (221–381 per country). From 3301 consultations in PPAS2, 3063 (114–238 per country) captured management of patients with sore throat, cough and/or suspected of having COVID-19; the remaining were from patients with only coryza or allergic symptoms. The proportion of patients suspected of having COVID-19 varied markedly between countries, overall 43% (95% CI 41% to 44%), ranging from 4% in Georgia to 84% in Spain (table 1).

Consultations for RTI symptoms

Early on in the pandemic, many countries rapidly transformed from face-to-face to virtual consultations (table 2). Overall, over 50% of consultations were by telephone and 8% by video connection. In Belgium, Denmark, Ireland, Moldova, Netherlands, Romania and UK, over 70% of consultations were by telephone/video (online supplemental appendix 2). Possible reasons for a comparatively

higher proportion of face-to-face consultations in Armenia and Georgia (non-overlapping 95% CIs with many other countries) are described in online supplemental appendix 3. In 97% of face-to-face contacts, GPs reported using PPE, most often face/nose/mouth protection (96%), and also gloves (67%), safety glasses (57%) and/or an apron (52%). There was marked variation between countries with lower use in Denmark (46% face/nose/mouth protection and gloves, no apron and safety glasses), France (21% gloves) and Germany (<2% apron, safety glasses and gloves; online supplemental appendix 2; note the non-overlapping 95% CIs). Possible reported reasons were that use of PPE was up to the discretion of GPs (Denmark) and that strict hand hygiene was initially recommended instead of using gloves (France, online supplemental appendix 3). Early on in the pandemic, oxygen saturation was measured more often (68%, 95% CI 66% to 71%) compared with the prepandemic situation (47%, 95% CI 46% to 49%). Some countries fed back that oximetry is not part of their guidelines and that very few practices had this device. In both audit phases, a similar proportion of 28% of patients underwent additional diagnostic testing, with laboratory SARS-CoV-2 testing (14%) and more chest X-rays (8.9%) requested early on in the pandemic, but fewer CRP (6.6%) and white blood cell testing (7.4%). In Belgium, Ireland and Netherlands, fewer than 10% of patients underwent diagnostic testing, while in Denmark and Moldova, tests were done or ordered for over 60% of patients (non-overlapping 95% CIs), largely due to the high proportion being tested for SARS-CoV-2. Chest X-rays were done in over 20% of patients in Greece and Spain, and none in Netherlands, Belgium, Germany and Ireland (non-overlapping 95% CIs, online supplemental appendix 2).

Prescribed medication

Antibiotics were prescribed to a substantially lower proportion of patients early on in the pandemic (17.6%,

Table 1 Participating countries with numbers of registered patients in the prepandemic phase (PPAS1) and early on in the pandemic (PPAS2), with the % male, mean age and numbers of patients suspected of having COVID-19 in PPAS2

Country	PPAS1	PPAS2	% Male	Age (mean)	Patients suspected of having COVID-19
All countries	4376	3063	43.7	39	1304 (42.6%, 41% to 44%)
Armenia	337	170	51.7	6	114 (67.1%, 60% to 74%)
Belgium	288	216	42.7	39	146 (67.6%, 61% to 73%)
Germany	221	189	43.2	42	34 (18.0%, 13% to 24%)
Denmark	381	152	39.8	38	110 (72.4%, 65% to 79%)
Spain	286	223	34.5	47	188 (84.3%, 79% to 88%)
France	259	155	49.4	46	94 (60.6%, 53% to 68%)
Georgia	234	222	40	35	9 (4.1%, 2% to 8%)
Greece	232	221	45.4	48	83 (37.6%, 31% to 44%)
Hungary	284	138	50.7	46	18 (13.0%, 8% to 20%)
Ireland	281	217	42.5	40	84 (38.7%, 32% to 45%)
Moldova	240	238	45.2	40	140 (58.8%, 52% to 65%)
The Netherlands	312	230	42.1	51	135 (58.7%, 52% to 65%)
Poland	241	230	48.3	32	13 (5.7%; 3% to 9%)
Romania	238	114	48	27	8 (7.0%, 4% to 13%)
Ukraine	241	228	42.4	38	68 (29.8%, 24% to 36%)
UK	301	120	38.6	42	60 (50.0%, 41% to 59%)

Absolute numbers and percentages with 95% CIs between brackets.

95% CI 16.3% to 19%) as compared with before (31.6%, 95% CI 30.2% to 33%), and to an even lower proportion of patients when COVID-19 was suspected (9.3%, 95% CI 7.8% to 11%; figure 1). However, GPs in Greece, Poland, Romania and UK continued to prescribe antibiotics in similar proportions of patients as before the pandemic. Reported reasons include that in Romania, GPs were inclined to advise patients to complete their over-the-counter-purchased antibiotic treatment, and for the UK that antibiotics were considered beneficial for COVID-19 in the first weeks of the pandemic (online

supplemental appendix 3). Antibiotic prescribing was also analysed separately for face-to-face and phone/video consultations, showing higher prescribing proportions during face-to-face consultations (table 3), which was the case in most countries (online supplemental appendix 4). Proportions of patients receiving antivirals, mainly in Georgia, Greece, Moldova and Romania, decreased early on in the pandemic, overall from 4.1% (95% CI 3.5% to 4.7%) to 1.4% (95% CI 1% to 1.9%), also when COVID-19 was suspected (figure 1). Finally, prescription of inhaled medication decreased from 14.9% (95% CI

Table 2 Consultation characteristics, use of PPE and measurements during face-to-face consultations, and diagnostic testing and referral for all contacts

Consultation at/via		Use of PPE (F2F)		Measurements (F2F)		Diagnostic testing (all)		Referral (all)
Practice	38.3% (37% to 40%)	Yes	97.2% (96% to 98%)	Temp	70.2% (68% to 73%)	Yes	28.2% (27% to 30%)	8.1% (7% to 9%)
Telephone	50.9% (49% to 53%)	Apron/body	52.0% (49% to 55%)	O₂	68.3% (66% to 71%)	CRP	6.6% (6% to 8%)	15.4%* (14% to 18%)*
Video/Skype	8.3% (7% to 9%)	Face/nose/mouth	96.1% (95% to 97%)	RR	51.2% (48% to 54%)	SARS-CoV-2	14.1% (13% to 15%)	
Home	2.5% (2% to 3%)	Safety glasses	57.0% (54% to 60%)			WBC	7.4% (7% to 8%)	
		Gloves	67.1% (64% to 70%)			X-ray	8.9% (8% to 10%)	

Mean percentages with 95% CIs are shown.
Data for individual countries are shown in online supplemental appendix 2.
*Patients suspected of having COVID-19.
CRP, C reactive protein; F2F, face to face; PPE, personal protective equipment; RR, respiratory rate; WBC, white blood cell count.

Table 3 Antibiotic prescribing, hospital referral and confidence with management, split for practice/home and phone/video contacts, and specifically for patients suspected of having COVID-19

	Antibiotic	Referral	Confidence advice/treatment*
All patients (F2F)	23.0% (21% to 26%)	10% (9% to 12%)	12.6%-60.6%-24.4%-2.0%-0.5%
COVID-19 suspected (F2F)	11.6% (10% to 14%)	21.2% (19% to 24%)	12.5%-52.3%-30.4%-3.4%-1.4%
All patients (P/V)	13.9% (12% to 16%)	6.8% (6% to 8%)	9.0%-60.0%-27.9%-2.9%-0.2%
COVID-19 suspected (P/V)	8.2% (7% to 10%)	12.7% (11% to 14%)	8.0%-56.0%-31.4%-4.3%-0.4%

Mean percentages with 95% CIs are shown.
Data for individual countries are shown in online supplemental appendix 4.
*Very confident–confident–moderately confident–unconfident–very unconfident.
F2F, face to face; P/V, phone/video.

13.9% to 16%) to 12.3% of patients (95% CI 11.2% to 13.5%) early on in the pandemic.

Referral
Early on in the pandemic, a higher proportion of patients were referred to hospital, overall in 8% (95% CI 7% to 9%) of contacts (table 2), as compared with 3% (95% CI 2.5% to 3.5%) before the pandemic. Low referral rates in Hungary and Ireland (non-overlapping 95% CIs with many other countries) were reported to be caused by the vast majority of patients presenting with mild symptoms (online supplemental appendices 2 and 3). A higher proportion of patients were referred after a face-to-face contact (10%) than after a virtual consultation (6.8%, non-overlapping 95% CIs; table 3). Overall, 15% (95% CI

13% to 17%) of patients suspected of having COVID-19 were referred for hospital assessment and of referrals in the pandemic, 78% had a working diagnosis of COVID-19. Online supplemental appendix 4 shows hospital referral by country, split for face-to-face and virtual consultations.

Advice for patients
GPs reported providing various types of advice to their patients, about symptomatic treatment (76% of contacts), preventive measures (64%), like extra handwashing and social distancing, and advice for home isolation (67%, table 4). The latter was higher when COVID-19 was suspected (83% of contacts, non-overlapping 95% CIs). About half of the patients also received advice for their family members, which was 70% when COVID-19 was

Table 4 Advice provided to all patients early on in the pandemic and separately for patients suspected of having COVID-19

Advice for home isolation	67.2% (66% to 69%) 83.2% (81% to 85%)*		
Advice for symptomatic treatment	75.6% (74% to 77%) 70.4% (68% to 73%)*		
A scheduled follow-up visit/call	49.9% (48% to 52%) 51.5% (49% to 54%)*		
Advice for family members	51.9% (50% to 54%) 69.6% (68% to 72%)*	Home isolation	34.0% (32% to 36%) 54.7% (52% to 57%)*
		Social distancing	40.2% (39% to 42%) 53.1% (50% to 56%)*
Preventive measures for patient	64.1% (62% to 66%) 68.6% (66% to 71%)*	Extra handwashing	56.7% (55% to 59%) 62.4% (60% to 65%)*
		Sneezing in sleeve	47.2% (46% to 49%) 48.4% (46% to 51%)*
		Social distancing	51.1% (49% to 53%) 56.3% (54% to 59%)*
		Nose/mouth protection	37.3% (36% to 39%) 42.2% (40% to 45%)*
		Staying in separate room	27.3% (26% to 29%) 40.6% (38% to 43%)*
Where to find reliable information	20.0% (19% to 21%) 28.0% (26% to 31%)*		

Mean percentages with 95% CIs are shown.
Data for individual countries are shown in online supplemental appendix 5.
*Patients suspected of having COVID-19.

suspected. In Armenia, Belgium, Denmark, Poland and UK, GPs seemed to have provided less frequent advice than in the other countries (online supplemental appendix 5; note the 95% CIs). Reported reasons were that advice on quarantine, social distancing and hygiene were already strongly promoted by the government and considered common knowledge (online supplemental appendix 3). Before the pandemic, a follow-up consultation was scheduled for 9% (95% CI 8% to 10%) of patients, which was markedly higher early on in the pandemic (50%, 95% CI 48% to 52%).

Confidence of GPs in the benefit of their treatment and advice
GPs' confidence in their patient management ('how confident are you that your advice and/or treatment will benefit this patient') was rated only slightly higher for face-to-face consultations (GPs (very) confident in 73% (95% CI 71% to 76%) of contacts) than for virtual consultations (GPs (very) confident in 69% (95% CI 67% to 71%) of contacts, table 3). GPs reported low confidence in over 10% of contacts in Belgium and Denmark, and specifically for virtual consultations in Armenia (online supplemental appendix 4).

DISCUSSION
Key findings
Primary care has been shown to be highly adaptable in meeting the demands of providing patient care under challenging pandemic circumstances. GPs had to manage patients with RTI without knowing whether the aetiology was SARS-CoV-2, or another pathogen. Routine diagnostic testing was not yet implemented and diagnosis was based on clinical view. Primary care dramatically reduced face-to-face contacts and increased consultations by telephone and video. Antibiotic prescribing reduced substantially, but marked differences between countries remained. Other important management issues, such as use of PPE, oxygen saturation and respiratory rate measurements, and diagnostic testing, also varied considerably between countries. Compared with prepandemic care, a higher proportion of patients were referred to secondary care, which probably reflected national guidance to refer patients suspected of having COVID-19 with more severe symptoms to hospital. Proportionally more patients who remained under community care had a follow-up contact scheduled. Despite many uncertainties, lack of guidelines, unprecedented restructuring of, and large between-country differences in care provision, GPs generally reported high confidence in managing their patients with RTI symptoms during the hectic pace of the emerging pandemic.

In contextualising these findings, the timing of the audit —registrations were mainly from the first 2 months of the pandemic— is of relevance. In that phase, estimates of SARS-CoV-2 incidence among patients consulting in primary care with acute RTI-type symptoms were unknown, as rapid (mass) testing was not yet implemented for this patient group. This was shown by the low frequency of laboratory-based testing for SARS-CoV-2; only Denmark and Germany used lab testing for a substantial proportion of symptomatic primary care patients. Therefore, at the point of care, no confirmed COVID-19 diagnosis could usually be made. Moreover, COVID-19 was a new disease and no evidence-based treatment guidance was available, and advice by public health and professional organisations regarding diagnosis, risk-factors, treatment options and referral rapidly changed and was affected by various government measures. In some countries, a COVID-19 diagnosis was based on specific symptoms, such as loss of taste and/or smell, or having had contact with a proven positive case. In other countries, all patients presenting with RTI symptoms were considered as 'COVID-19-suspected'. This is reflected by the high between-country variation in the proportion of patients suspected of having COVID-19 (4%–84%). This variation cannot be explained by differences in disease incidences and looking back COVID-19 incidences were overestimated. All data that we captured, therefore, should be considered in the context of uncertain and rapidly changing circumstances, and cannot be related to retrospectively known variables like incidence rates and prevalence for that period.

Strengths and weaknesses
The main strength was the up and running PPAS infrastructure in 16 European countries. This allowed for (1) the rapid initiation early on in the COVID-19 pandemic when structural testing was not implemented yet, (2) prospective data collection using a standardised instrument, and (3) exploratory comparisons between countries and with prepandemic data. Thereby, we have been able to capture the transition of European primary healthcare in a phase when no rapid (mass) testing for SARS-CoV-2 was implemented, and GPs had to base their treatment and advice on clinical view, and rapidly changing overall and epidemiological information. Findings can be helpful for countries in reflecting on this transition phase and in planning how to better respond to pandemic threats in the future. This study has several limitations too. First, patient registration took place in 1 to 10 primary care practices per country, and therefore may not accurately reflect overall practice at a country level. Second, although all countries started registering early in the first pandemic wave, some reached their target earlier than others, and during the registration period, countries implemented measures and restrictions at different times. Such contextual influences and perceived incidences will have accounted for some of the between-country differences. Lastly, we did not prospectively collect data about possible reasons underlying reported practice. Therefore, we asked the network leads and they in turn their registering GPs for possible explanations for findings. This retrospective reflection may have been influenced by personal experiences and was not analysed using formal qualitative study methods.

Comparison with other studies

Literature on the impact of the pandemic on primary care is emerging. It has been described how national primary care systems have adapted and performed to meet the COVID-19-induced challenges, starting with the transition to phone/video consultations.[3 4 6 8–10] These general descriptions have, however, not been presented as between-country comparisons thus far, and they have not been based on prospectively collected data. Some country comparisons of responses of primary care opinion leaders have been published. A benchmarking study with primary care leaders in 111 countries highlighted that all nations have room to improve.[11] A qualitative opinion exercise with 29 countries learnt that primary care continued as the first point of contact to the health system and rapidly separated RTI from other care, but was poorly informed and ill equipped to provide care while protecting staff and patients.[2] Similar findings resulted from a survey among GPs in the UK, specifically mentioning technical difficulties, financial issues and inadequate provision of PPE.[9 12] A commentary on the primary care response in six well-resourced countries highlighted areas where COVID-19 has directly spurred progress (telemedicine and collaboration with public health), as well as exposed latent weaknesses (non-COVID and chronic conditions management),[13] which was reinforced by interview studies with Flemish GPs.[14] Such opinions might be supported and/or compared with data from the PPAS2. For example, our study reported abundant use of PPE and when not used, other reasons than initial shortage, or costs were mentioned.

Several studies stress the important advisory role of GPs in disseminating fit-for-purpose information and reinforcing critical public health messages.[2 3 5] Our study has shown that GPs, even in the face of pressures from the emerging COVID-19 pandemic, took informing their patients very seriously and provided a lot of tailored advice. With respect to advice provision, we had to rely on the GPs' registration accuracy, as the study design did not allow us to capture this information from patients.

It has been posed that virtual consultations might limit diagnostic capabilities and lead to more empiric and over-prescribing of antibiotics.[15 16] In our study, antibiotic prescribing rates reduced in the majority of countries during the pandemic. Total antibiotic prescribing is, however, not only influenced by the proportions of those who consulted and were prescribed antibiotics but also by the numbers of RTI patients that presented to primary care. Presentations might have increased because of wanting to be assessed for possible COVID-19 and COVID-related anxiety. On the other hand, presentations might have reduced because of a lower incidence of RTI due to social distancing, school closure and the advice to avoid attending healthcare facilities. Consequences of the pandemic on presentation and antibiotic prescribing for infectious diseases have recently been reported for the Netherlands.[17]

Implications for clinicians and policy makers

Our study has shown that European primary care practices reinvented themselves early on in the COVID-19 pandemic by switching to virtual consultations, using PPE, increasing oxygen saturation measurements, and implementing lab-testing for SARS-CoV-2. GPs rapidly changed care provision for patients with RTI symptoms, and despite many uncertainties reported high confidence about the likely effectiveness of the treatment and/or advice they gave to their patients. Despite initial perceptions about potential benefit from macrolide antibiotics for patients with COVID-19,[18] GPs generally did not prescribe antibiotics for those patients. Multicountry, real-time audits, such as our PPAS, could serve as a stimulus for adjusting management strategies during next COVID-19 or new pandemic waves, and thereby aid in coordinating a unified, pan-European pandemic response.

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Data availability statement Data are available upon reasonable request. Additional to the items reported here, outcomes for all items in the Case Report Form (online supplemental appendix 1) are available for all countries, or per individual country, upon request, explaining research question and methods, from the first author (AWvdV) who will seek agreement from the core research team.

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Registration <u>Extended</u> PPAS RECOVER v2 19MAR2020

Eligibility: register data on sequential patients who present or **phone** with CA-ARTI with either:
    a) lower and/or upper respiratory tract infection (≤14 days)
    b) another suspicion of COVID-19
Exclusion: Patients with only ear symptoms

ID: AA-X-000
Consultation date:
Consultation during: □ office hours   □ out-of-hours
Consultation at: □ practice   □ telephone   □ video/skype   □ home
Consultation in this illness episode: □ first   □ follow-up   □ unknown

C1. Has the patient contacted official/governmental phone/online services regarding suspected COVID-19 infection:
□ yes   □ no □ unknown

C2. Has the patient already been tested for COVID-19 infection: □ yes   □ no □ unknown
If yes: □ positive   □ negative   □ unknown

C3. Does the patient have a known, established risk factor for COVID-19 infection: □ yes   □ no   □ unknown
If yes: □ travel to high-risk region/country
□ contact with COVID-19 infected patient
□ other: ………………..

C4. Did you as a GP take protective measures: □ yes   □ no
If yes: □ apron/body protection
□ face, nose/mouth protection
□ safety glasses
□ gloves

Patient characteristics

1.1 Sex: □ male   □ female
1.2 Age: …. months (0-11 months)   …. years (≥1 year of age)

2. Number of days with acute RTI symptoms before this consultation: ... days

3. Any comorbidity present: □ yes   □ no   □ unknown
If yes: □ chronic respiratory condition (asthma, COPD, CF)   □ diabetes   □ cardiovascular disease
□ neoplasm   □ chronic renal failure   □ chronic neurological condition □ other

4.1. Patient reported fever: □ yes   □ no
4.2. Temperature taken in clinic: □ yes   □ no
If yes, physician measured temperature: …˚C

5. Have you measured? O_2 saturation: □ yes   □ no
If yes, value:
Respiratory rate: □ yes   □ no
If yes, value:

6.2. How many days has the patient missed work/out-of-home care/school? …. days   □ unknown

7. Signs and symptoms (either reason for consulting or part of consultation)
7.2. Rhinitis: □ yes   □ no   □ unknown
7.3. Sore throat or difficulty swallowing: □ yes   □ no   □ unknown
7.4. Cough: □ yes   □ no   □ unknown
If yes, tick all that apply: □ short of breath (dyspnea)
□ increased, or purulent sputum
□ abnormal auscultation
□ (pleuritic) chest pain
□ wheezing
□ tachypnea   □ none of the above

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7.5 General symptoms: □ yes □ no □ unknown

    If yes, tick all that apply □ headache
            □ muscle ache
            □ altered mental status/confusion
            □ fatigue/extremely low energy/sleepiness
            □ diarrhea □ none of the above

8.1. Overall illness severity (physician's impression): □ mild □ moderate □ severe
8.2. How confident are you in your assessment of the patient's condition:
    □ very confident □ confident □ moderately □ unconfident □ very unconfident

9. Have you done/ordered additional diagnostic tests? □ yes □ no
    If yes: □ Group A β-hemolytic Strep antigen □ POC □ LAB
          □ CRP □ POC □ LAB   If POC yes, value: ……..
          □ RSV □ POC □ LAB
          □ Influenza □ POC □ LAB
          □ COVID-19 test □ POC □ LAB
          □ Total white blood cell count □ POC □ LAB
          □ Multiplex PCR panel □ POC □ LAB
          □ Chest X-ray
          □ Other test, specify: ………..

10.1 What was the suspected etiology: □ viral (other than COVID-19) □ COVID-19 □ bacterial □ allergic □ not clear
10.2 How certain are you about this suspected etiology:
    □ very certain □ certain □ moderately □ uncertain □ very uncertain

11. Initial working diagnosis   □ acute pharyngitis □ acute tonsillitis □ laryngitis/laryngotracheitis (croup)
                      □ peritonsillar abscess □ influenza-like-illness
                      □ bronchiolitis □ acute bronchitis □ community acquired pneumonia
                      □ wheezing □ exacerbation of chronic respiratory condition
                      □ upper RTI / common cold / sinusitis
                      □ COVID-19 infection, if yes:
                            Have you contacted (public health) authorities about this patient: □ yes □ no
                            Would you recommend this patient be tested for COVID-19: □ yes □ no
                      □ other, specify: ……….

17.1 Have you provided? □ advice for home isolation, if ticked, for how many days? ……..
                   □ advice for symptomatic treatment
                   □ a scheduled follow-up visit/call
                   □ prescribed medication, if ticked: □ inhaled medication
                                □ antibiotic
                                □ antiviral medication, if ticked, which one: …..……
                                □ antihistamines
                                □ other
                   □ advice for family members, if ticked: □ home isolation (quarantine)
                                □ social distancing
                                □ other, specify: ……………………
                   □ preventive measures, if ticked: □ extra handwashing
                                □ sneezing in sleeve
                                □ social distancing
                                □ nose/mouth protection
                                □ staying in a separate room in the house
                                □ other, specify: ……………………
                   □ where to find reliable (home care) information □ none of the above

17.2. How confident are you that you have provided advice/treatment that will benefit this patient:
    □ very confident □ confident □ moderately □ unconfident □ very unconfident

18.1 Did you refer the patient to hospital? □ yes □ no
18.2 Did you advise the patient contacting, or did you refer to a COVID-19 specific health service? □ yes □ no

Appendix 2: Consultation characteristics, use of PPE and measurements during face-to-face consultations, and diagnostic testing and referral for all contacts.

Country	Consultation at/via		Use of PPE (F2F)		Measurements (F2F)		Diagnostic testing (all)		Referral (all)
All countries	*Practice*	38.3% (36.6-40.0)	*Yes*	97.2% (96.1-98.0)	*Temp*	70.2% (67.6-72.7)	*Yes*	28.2% (26.6-29.8)	8.1% (7.2-9.1)
	Telephone	50.9% (49.1-52.7)	*Apron/body*	52.0% (49.2-54.8)	*O₂*	68.3% (65.7-70.8)	*CRP*	6.6% (5.8-7.5)	15.4% [#] (13.6-17.5)
	Video/skype	8.3% (7.4-9.3)	*Face, nose, mouth*	96.1% (94.9-97.0)	*RR*	51.2% (48.4-54.0)	*COVID*	14.1% (12.9-15.4)	
	Home	2.5% (2.0-3.1)	*Safety glasses*	57.0% (54.3-59.8			*WBC*	7.4% (6.5-8.4)	
			Gloves	67.1% (64.5-69.7)			*X-ray*	8.9% (8.0-10.0)	
Armenia	*Practice*	90.0% (84.6-93.7)	*Yes*	98.7% (95.4-99.6)	*Temp*	99.3% (96.4-99.9)	*Yes*	38.8% (31.8-46.3)	12.9% (8.7-18.8)
	Telephone	10.0% (6.3-15.4)	*Apron/body*	7.8% (4.5-13.2)	*O₂*	98.0% (94.4-99.3)	*CRP*	14.1% (9.7-20.1)	14.9% [#] (9.5-22.6)
	Video/skype	0.0% (0.0-2.2)	*Face, nose, mouth*	98.0% (94.4-99.3)	*RR*	32.0% (25.2-39.8)	*COVID*	3.5% (1.6-7.5)	
	Home	0.0% (0.0-2.2)	*Safety glasses*	79.7% (72.7-85.3)			*WBC*	11.8% (7.8-17.5)	
			Gloves	45.1% (37.4-53.0)			*X-ray*	5.9% (3.2-10.5)	
Belgium	*Practice*	25.6% (20.1-31.7)	*Yes*	96.4% (87.9-99.0)	*Temp*	37.5% (26.0-50.6)	*Yes*	0.5% (0.1-2.6)	8.3% (5.3-12.8)
	Telephone	74.0% (67.9-79.5)	*Apron/body*	89.3% (78.5-95.0)	*O₂*	76.8% (64.2-85.9)	*CRP*	0% (0.0-1.8)	11% [#] (6.9-17.1)
	Video/skype	0.0% (0.0-1.8)	*Face, nose, mouth*	96.4% (87.9-99.0)	*RR*	8.9% (3.9-19.3)	*COVID*	0.5% (0.1-2.6)	
	Home	0.5% (0.1-2.6)	*Safety glasses*	89.3% (78.5-95.0)			*WBC*	0% (0.0-1.8)	
			Gloves	91.1% (80.7-96.1)			*X-ray*	0% (0.0-1.8)	

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Germany	Practice	79.4% (73.0-84.5)	Yes	98.0% (94.3-99.3)	Temp	15.9% (10.9-22.6)	Yes	38.1% (31.5-45.2)	0.5% (0.1-2.9)
	Telephone	14.8% (10.5-20.6)	Apron/body	0.7% (0.1-3.7)	O₂	4.0% (1.8-8.4)	CRP	14.3% (10.0-20.0)	0% [#] (0.0-10.1)
	Video/skype	5.3% (2.9-9.5)	Face, nose, mouth	98.0% (94.3-99.3)	RR	1.3% (0.4-4.7)	COVID	31.2% (25.0-38.1)	
	Home	0.5% (0.1-2.9)	Safety glasses	0.7% (0.1-3.7)			WBC	2.1% (0.8-5.3)	
			Gloves	2.0% (0.7-5.7)			X-ray	0% (0.0-2.0)	
Denmark	Practice	8.9% (5.6-14.9)	Yes	46.2% (21.4-67.4)	Temp	0.0% (0.0-21.5)	Yes	63.2% (55.3-70.4)	17.1% (11.9-23.9)
	Telephone	72.6% (64.8-78.9)	Apron/body	0.0% (0.0-21.5)	O₂	0.0% (0.0-21.5)	CRP	4.6% (2.3-9.2)	20.9% [#] (14.4-29.4)
	Video/skype	18.5% (13.1-25.3)	Face, nose, mouth	46.2% (21.4-67.4)	RR	38.5% (16.3-61.2)	COVID	59.2% (51.3-66.7)	
	Home	0.0% (0.0-2.5)	Safety glasses	0.0% (0.0-21.5)			WBC	2% (0.7-5.6)	
			Gloves	46.2% (21.4-67.4)			X-ray	0.7% (0.1-3.6)	
Spain	Practice	45.7% (39.3-52.3)	Yes	100% (96.4-100.0)	Temp	84.6% (76.5-90.3)	Yes	35.9% (29.9-42.4)	10.8% (7.3-15.5)
	Telephone	53.4% (46.8-95.8)	Apron/body	99.0% (94.8-99.8)	O₂	96.2% (90.5-98.5)	CRP	0% (0.0-1.7)	12.2% [#] (8.3-17.7)
	Video/skype	0.0% (0.0-1.7)	Face, nose, mouth	100% (96.4-100.0)	RR	76.0% (66.9-83.2)	COVID	8.1% (5.2-12.4)	
	Home	0.9% (0.2-3.2)	Safety glasses	95.2% (89.2-97.9)			WBC	0.4% (0.1-2.5)	
			Gloves	100% (96.4-100.0)			X-ray	30.9% (25.2-37.3)	

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France	*Practice*	41.3% (33.8-49.2)	Yes	98.6% (92.6-99.8)	*Temp*	76.7% (65.8-84.9)	Yes	29% (22.5-36.6)	5.9% (3.1-10.7)
	Telephone	10.3% (6.5-16.1)	*Apron/body*	42.5% (31.8-53.9)	*O₂*	83.6% (73.4-90.3)	*CRP*	7.1% (4.0-12.3)	8.5% # (4.4-15.9)
	Video/skype	42.6% (35.1-50.5)	*Face, nose, mouth*	97.3% (90.5-99.2)	*RR*	26.0% (17.3-37.1)	*COVID*	16.1% (11.2-22.7)	
	Home	5.8% (3.1-10.7)	*Safety glasses*	47.9% (36.9-59.2)			*WBC*	7.7% (4.5-13.0)	
			Gloves	20.5% (12.9-31.2)			*X-ray*	0.6% (0.1-3.6)	
Georgia	*Practice*	63.1% (56.5-69.1)	Yes	99.3% (96.1-99.9)	*Temp*	80.3% (73.0-86.0)	Yes	35.6% (29.6-42.1)	1.8% (0.7-4.5)
	Telephone	35.1% (29.2-41.6)	*Apron/body*	16.9% (11.6-23.9)	*O₂*	88.0% (81.7-92.4)	*CRP*	13.1% (9.3-18.1)	11.1% # (2.0-43.5)
	Video/skype	0.9% (0.2-3.2)	*Face, nose, mouth*	94.4% (89.3-97.1)	*RR*	93.7% (88.4-96.6)	*COVID*	2.3% (1.0-5.2)	
	Home	0.9% (0.2-3.2)	*Safety glasses*	16.9% (11.6-23.9)			*WBC*	14.4% (10.4-19.6)	
			Gloves	69.0% (61.0-76.0)			*X-ray*	18.9% (14.3-24.6)	
Greece	*Practice*	37.1% (31.0-43.6)	Yes	99.0% (94.4-99.8)	*Temp*	90.7% (83.3-95.0)	Yes	24.9% (19.6-31.0)	14.9% (10.8-20.2)
	Telephone	54.3% (47.7-60.7)	*Apron/body*	58.8% (48.8-68.0)	*O₂*	96.9% (91.3-98.9)	*CRP*	11.8% (8.2-16.7)	25.3% # (17.2-35.6)
	Video/skype	1.8% (0.7-4.6)	*Face, nose, mouth*	97.9% (92.8-99.4)	*RR*	87.6% (79.6-92.8)	*COVID*	1.4% (0.5-3.9)	
	Home	6.8% (4.2-10.9)	*Safety glasses*	61.9% (51.9-70.9)			*WBC*	11.3% (7.8-16.2)	
			Gloves	92.8% (85.8-96.5)			*X-ray*	24.4% (19.2-30.5)	

Hungary	*Practice*	29.7% (22.7-37.8)	*Yes*	100% (91.6-100)	*Temp*	26.2% (15.3-41.1)	*Yes*	19.6% (13.8-27.0)	1.4% (0.4-5.1)
	Telephone	69.6% (61.4-76.6)	*Apron/body*	92.9% (81.0-97.5)	*O₂*	0.0% (0.0-8.4)	*CRP*	8.7% (5.0-14.6)	11.1% [#] (3.1-32.8)
	Video/skype	0.0% (0.0-2.7)	*Face, nose, mouth*	95.2% (84.2-98.7)	*RR*	9.5% (3.8-22.1)	*COVID*	7.2% (4.0-12.8)	
	Home	0.7% (0.1-4.0)	*Safety glasses*	33.3% (21.0-48.4)			*WBC*	0% (0.0-2.7)	
			Gloves	95.2% (84.2-98.7)			*X-ray*	5.8% (3.0-11.0)	
Ireland	*Practice*	16.2% (11.8-21.6)	*Yes*	89.2% (75.3-95.7)	*Temp*	75.7% (59.9-86.6)	*Yes*	9.2% (6.0-13.8)	2.3% (1.0-5.3)
	Telephone	77.3% (71.4-82.5)	*Apron/body*	73.0% (57.0-84.6)	*O₂*	56.8% (40.9-71.3)	*CRP*	0.5% (0.1-2.6)	1.2% [#] (0.2-6.4)
	Video/skype	5.6% (3.2-9.4)	*Face, nose, mouth*	86.5% (72.0-94.1)	*RR*	64.9% (48.8-78.2)	*COVID*	8.3% (5.3-12.7)	
	Home	0.9% (0.3-3.3)	*Safety glasses*	54.1% (38.4-69.0)			*WBC*	0.5% (0.1-2.6)	
			Gloves	70.3% (54.2-82.5)			*X-ray*	0% (0.0-1.7)	
Moldova	*Practice*	24.4% (19.4-30.2)	*Yes*	98.3% (91.1-99.7)	*Temp*	95.0% (86.3-98.3)	*Yes*	66.4% (60.2-72.1)	17.2% (13.0-22.5)
	Telephone	34.9% (29.1-41.1)	*Apron/body*	96.7% (88.6-99.1)	*O₂*	98.3% (91.1-99.7)	*CRP*	8.8% (5.8-13.1)	28.6% [#] (21.7-36.5)
	Video/skype	39.9% (33.9-46.3)	*Face, nose, mouth*	98.3% (91.1-99.7)	*RR*	98.3% (91.1-99.7)	*COVID*	54.2% (47.9-60.4)	
	Home	0.8% (0.2-3.0)	*Safety glasses*	98.3% (91.1-99.7)			*WBC*	27.3% (22.0-33.3)	
			Gloves	98.3% (91.1-99.7)			*X-ray*	15.1% (11.1-20.2)	

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Netherlands	*Practice*	17.0% (12.7-22.3)	Yes	89.8% (79.5-95.3)	*Temp*	76.3% (64.0-85.3)	Yes	9.6% (6.4-14.1)	5.7% (3.3-9.4)
	Telephone	72.1% (66.1-77.6)	*Apron/body*	84.7% (73.5-91.8)	*O$_2$*	86.4% (75.5-93.0)	*CRP*	6.1% (3.7-10.0)	8.1% [#] (4.6-14.0)
	Video/skype	2.2% (0.9-5.0)	*Face, nose, mouth*	88.1% (77.5-94.1)	*RR*	57.6% (44.9-69.4)	*COVID*	3.5% (1.8-6.7)	
	Home	8.7% (5.7-13.0)	*Safety glasses*	86.4% (75.5-93.0)			*WBC*	0% (0.0-1.6)	
			Gloves	89.8% (79.5-95.3)			*X-ray*	0% (0.0-1.6)	
Poland	*Practice*	38.3% (32.2-44.7)	Yes	96.7% (90.8-98.9)	*Temp*	58.2% (48.0-67.8)	Yes	13% (9.3-18.0)	3.5% (1.8-6.7)
	Telephone	59.6% (53.1-65.7)	*Apron/body*	92.3% (85.0-96.2)	*O$_2$*	25.3% (17.5-35.1)	*CRP*	5.2% (3.0-8.9)	38.5% [#] (17.7-64.5)
	Video/skype	0.9% (0.2-3.1)	*Face, nose, mouth*	96.7% (90.8-98.9)	*RR*	23.1% (15.6-32.7)	*COVID*	3.9% (2.1-7.3)	
	Home	1.3% (0.4-3.8)	*Safety glasses*	51.6% (41.5-61.6)			*WBC*	4.8% (2.7-8.4)	
			Gloves	87.9% (79.6-93.1)			*X-ray*	4.3% (2.4-7.8)	
Romania	*Practice*	27.2% (19.9-36.0)	Yes	96.8% (83.8-99.4)	*Temp*	71.0% (53.4-83.9)	Yes	21.1% (14.6-29.4)	7.9% (4.2-14.3)
	Telephone	64.9% (55.8-73.1)	*Apron/body*	48.4% (32.0-65.2)	*O$_2$*	35.5% (21.1-53.1)	*CRP*	9.6% (5.5-16.5)	75% [#] (40.9-92.9)
	Video/skype	7.9% (4.2-14.3)	*Face, nose, mouth*	96.8% (83.8-99.4)	*RR*	32.3% (18.6-49.9)	*COVID*	5.3% (2.4-11.0)	
	Home	0.0% (0.0-3.3)	*Safety glasses*	61.3% (43.8-76.3)			*WBC*	9.6% (5.5-16.5)	
			Gloves	87.1% (71.1-94.9)			*X-ray*	10.5% (6.1-17.5)	

Ukraine	Practice	39.9% (33.8-46.4)	Yes	97.2% (92.1-99.0)	Temp	86.0% (78.2-91.3)	Yes	31.1% (25.5-37.4)	9.6% (6.5-14.2)
	Telephone	46.1% (39.7-52.5)	Apron/body	63.6% (54.1-72.1)	O_2	75.7% (66.8-82.8)	CRP	3.1% (1.5-6.2)	25.0% [#] (16.2-36.4)
	Video/skype	7.0% (4.4-11.1)	Face, nose, mouth	97.2% (92.1-99.0)	RR	81.3% (72.9-87.6)	COVID	15.3% (11.2-20.6)	
	Home	7.0% (4.4-11.1)	Safety glasses	80.4% (71.9-86.8)			WBC	17.5% (13.2-23.0)	
			Gloves	84.1% (76.0-89.8)			X-ray	10.5% (7.2-15.2)	
United Kingdom	Practice	21.8% (15.2-29.9)	Yes	100% (88.3-100.0)	Temp	79.3% (61.6-90.2)	Yes	15% (9.7-22.5)	9.2% (5.2-15.7)
	Telephone	70.6% (62.2-78.2)	Apron/body	100% 88.3-100.0)	O_2	86.2% (69.4-94.5)	CRP	0.8% (0.1-4.6)	16.7% [#] (9.3-28.0)
	Video/skype	5.0% (2.3-10.5)	Face, nose, mouth	100% 88.3-100.0)	RR	75.9% (57.9-87.8)	COVID	8.3% (4.6-14.7)	
	Home	2.5% (0.9-7.1)	Safety glasses	79.3% (61.6-90.2)			WBC	2.5% (0.9-7.1)	
			Gloves	82.8% (65.5-92.4)			X-ray	5.8% (2.9-11.6)	

[#] COVID-19 suspected patients, note that per country this can be a low number.

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Appendix 3: Responses from national coordinators and their GPs to marked higher or lower values for specific issues found in their country.

Question	Highest percentage responses	Lowest percentage responses
Patients consulted in the practice	**AR**: During the pandemic many patients were seen in the practice as there were no national recommendations for phone consultations. **GE:** In Georgia it is common to visit the GP to be checked. COVID-19 prevalence was comparatively low in during the 1st wave and GPs kept seeing their patients.	
Use of PPE during F2F consultations		**DK**: There were very few F2F consultations as the majority of patients were consulted over the phone or directly referred to the hospital. For the very few F2F contacts an individual risk assessment and not wanting to scare the patients might have resulted in sometimes not using PPE (cultural approach). **FR**: French guidelines don't recommend gloves for contact with healthy skin, but only if there is risk of contact with body fluids. Hand hygiene measures were underlined.
Measurement of oxygen saturation during F2F consultations		**DK**: Few Danish guidelines promote the use of oximeters, using them is relatively new in Danish general practice and GPs have to purchase themselves. **HU**: Oximeter not present in all Hungarian practices. **PL**: Oximeters no standard equipment in Polish general practices, some GPs voluntarily use them. **RO**: Oximeters are not in the guidelines, it's not required to have the device, some GPs voluntarily use them.
Additional diagnostic testing	**BE**: Focus was on risk assessment, COVID-19/non-COVID-19 and in case of doubt patients were referred to hospital. Overall mild illness was seen and additional testing in Belgium general practice was already low.	

Antibiotic prescribing	**RO**: For patients with longer symptom duration, and no SARS-CoV-2 test available, GPs could prescribe antibiotics, and if patients were already on antibiotics –from the pharmacy without prescriptions– GPs generally advise to finish this treatment. **UK**: National data show that in the early phase of the pandemic antibiotic prescribing went up but then went down as the pandemic progressed.	**HU**: Mild symptoms, lacking signs of bacterial infection.
Hospital referral		**HU**: Relative less COVID-19 than in other countries, and high rate of patients with mild symptoms. **IE**: Due to extremely strict measures, comparatively low COVID-19 prevalence, many patients with mild symptoms. Only really sick patients were referred to hospital.
Overall advice for preventive measures (e.g. social distancing, mouth/nose protection) and for COVID-19 suspected to home isolate		**DK**: items mentioned in the form considered general knowledge, parts of form overlapping, e.g. home isolation=social distancing. **PL**: These measures, including quarantining, were broadly reinforced by the government. **UK**: Initially the UK favored a casual approach to lockdown thinking the problem would be solved by herd immunity. **AR**: Social distancing was mandatory for everyone, and part of government regulation. GPs additionally advise to those not following the regulation. **BE**: Most focus was on explaining quarantine. In the participating practices, focus was on home isolating and less on social distancing. In the first period there was a lot of controversy about nose/mouth protection, other measures considered common knowledge and on posters in waiting room.

The core trial team identified marked higher or lower values for some of the items in the 2nd phase PPAS and contacted the network facilitator to discuss these issues with the GPs in the registering practices and feedback to us. Germany, Greece and Netherlands haven't responded.

Appendix 4: Medication prescribing (antibiotic and antiviral), diagnostic testing, hospital referral and confidence with the treatment and advice, split for face-to-face (F2F, practice and home) consultations and phone/video (P/V) consultations, and specifically for COVID-19 suspected patients.

Country	Antibiotic	Antiviral	Diagnostic testing	Referral	Confidence advice/treatment*
All countries					
Patients (F2F)	23.0% (20.7-25.4)	1.1% (0.7-1.9)	39.8% (37.1-42.6)	10% (8.5-11.8)	12.6% 60.6% 24.4% 2.0% 0.5%
COVID-19 suspected (F2F)	11.6% (8.9-15.0)	0.7% (0.2-2.0)	43.3% (38.7-48.0)	21.2% (17.6-25.3)	12.5% 52.3% 30.4% 3.4% 1.4%
Patients (P/V)	13.9% (12.4-15.6)	1.3% (0.9-2.0)	20.2% (18.4-22.1)	6.8% (5.7-8.1)	9.0% 60.0% 27.9% 2.9% 0.2%
COVID-19 suspected (P/V)	8.2% (6.5-10.2)	0.81% (0.4-1.7)	31.2% (28.2-34.3)	12.7% (10.6-15.0)	8.0% 56.0% 31.4% 4.3% 0.4%
Armenia					
Patients (F2F)	7.8% (4.5-13.2)	0.0% (0.0-2.4)	38.6% (31.2-46.5)	12.4% (8.1-18.6)	25.5% 41.8% 28.8% 3.9% 0.0%
Patients (P/V)	23.5% (9.6-47.3)	0.0% (0.0-18.4)	41.2% (21.6-64.0)	17.6% (6.2-41.0)	11.8% 35.3% 29.4% 23.5% 0.0%
Belgium					
Patients (F2F)	5.4% (1.8-14.6)	0.0% (0.0-6.4)	1.8% (0.3-9.4)	26.8% (17.0-39.6)	1.9% 11.3% 64.2% 11.3% 11.3%
Patients (P/V)	2.5% (1.0-6.3)	0.0% (0.02.4-)	0.0% (0.0-2.4)	1.9% (0.6-5.4)	3.2% 43.0% 49.4% 3.8% 0.6%
Germany					
Patients (F2F)	8.6% (5.1-14.2)	0.0% (0.0-2.5)	37.1% (29.8-45)	0.7% (0.1-3.7)	1.3% 58.3% 39.7% 0.7% 0.0%
Patients (P/V)	0.0% (0.0-9.2)	0.0% (0.0-9.2)	42.1% (27.9-57.8)	0.0% (0.0-9.2)	0.0% 57.9% 42.1% 0.0% 0.0%

Denmark					
Patients (F2F)	7.7% (1.4-33.3)	0.0% (0.0-22.8)	92.3% (66.7-98.6)	7.7% (1.4-33.3)	0.0% 40.0% 40.0% 20.0% 0.0%
Patients (P/V)	4.5% (2.1-9.5)	0.0% (0.0-2.8)	60.2% (51.7-68.1)	18.0% (12.4-25.4)	4.5% 32.1% 43.8% 18.8% 0.9%
Spain					
Patients (F2F)	4.8% (2.1-10.8)	0.0% (0.0-3.6)	51.9% (42.4-61.3)	15.4% (9.7-23.5)	9.2% 73.5% 16.3% 1.0% 0.0%
Patients (P/V)	4.2% (1.8-9.5)	0.0% (0.0-3.1)	21.8% (15.4-30.1)	6.7% (3.4-12.7)	9.3% 74.6% 16.1% 0.0% 0.0%
France					
Patients (F2F)	17.8% (10.7-28.1)	0.0% (0.0-5.0)	43.8% (33.0-55.2)	6.8% (3.0-15.1)	9.9% 63.4% 21.1% 5.6% 0.0%
Patients (P/V)	9.8% (5.0-18.1)	0.0% (0.0-4.5)	15.9% (9.5-25.3)	4.9% (1.9-11.9)	11.0% 37.8% 47.6% 1.2% 2.4%
Georgia					
Patients (F2F)	9.9% (6.0-15.9)	2.1% (0.7-6.0)	50.7% (42.6-58.8)	2.1% (0.7-6.0)	8.5% 88.0% 3.5% 0.0% 0.0%
Patients (P/V)	1.3% (0.2-6.7)	6.3% (2.7-13.8)	8.8% (4.3-17.0)	1.3% (0.2-6.7)	8.8% 81.3% 10.0% 0.0% 0.0%
Greece					
Patients (F2F)	41.2% (32.0-51.2)	7.2% (3.5-14.2)	49.5% (39.7-59.3)	26.8% (19.0-36.4)	6.2% 71.1% 22.7% 0.0% 0.0%
Patients (P/V)	23.4% (16.8-31.6)	4.8% (2.2-10.2)	5.6% (2.8-11.2)	5.6% (2.8-11.2)	8.9% 67.7% 23.4% 0.0% 0.0%

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Hungary					
Patients (F2F)	57.1% (42.2-70.9)	0.0% (0.0-8.4)	33.3% (21.0-48.4)	2.4% (0.4-12.3)	26.2% 73.8% 0.0% 0.0% 0.0%
Patients (P/V)	28.1% (20.1-37.8)	0.0% (0.0-3.8)	13.5% (8.1-21.8)	1.0% (0.2-5.7)	11.5% 87.5% 1.0% 0.0% 0.0%
Ireland					
Patients (F2F)	29.7% (17.5-45.8)	0.0% (0.0-9.4)	16.2% (7.7-31.1)	10.8% (4.3-24.7)	25.7% 48.6% 25.7% 0.0% 0.0%
Patients (P/V)	21.2% (15.9-27.8)	0.0% (0.0-2.1)	7.8% (4.7-12.7)	0.6% (0.1-3.1)	10.7% 59.3% 28.2% 1.7% 0.0%
Moldova					
Patients (F2F)	28.3% (18.5-40.8)	1.7% (0.3-8.9)	80.0% (68.2-88.2)	8.3% (3.6-18.1)	43.3% 50.0% 6.7% 0.0% 0.0%
Patients (P/V)	5.1% (2.7-9.3)	2.2% (0.9-5.6)	61.8% (54.5-68.6)	20.2% (15.0-26.7)	2.8% 71.9% 24.7% 0.6% 0.0%
Netherlands					
Patients (F2F)	32.2% (21.7-44.9)	0.0% (0.0-6.1)	30.5% (20.3-43.0)	11.9% (5.9-22.5)	8.8% 56.1% 31.6% 3.5% 0.0%
Patients (P/V)	7.1% (4.1-11.9)	0.0% (0.0-2.2)	2.4% (0.9-5.9)	3.5% (1.6-7.5)	5.0% 61.5% 28.0% 5.6% 0.0%
Poland					
Patients (F2F)	39.6% (30.1-49.8)	0.0% (0.0-4.1)	15.4% (9.4-24.2)	5.5% (2.4-12.2)	5.5% 71.4% 22.0% 1.1% 0.0%
Patients (P/V)	21.6% (15.6-29.1)	2.9% (1.1-7.2)	11.5% (7.2-17.9)	2.2% (0.7-6.2)	6.5% 57.6% 32.4% 3.6% 0.0%

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Romania					
Patients (F2F)	25.8% (13.7-43.2)	3.2% (0.6-16.2)	19.4% (9.2-36.3)	6.5% (1.8-20.7)	35.5% 58.1% 6.5% 0.0% 0.0%
Patients (P/V)	16.9% (10.3-26.3)	4.8% (1.9-11.7)	21.7% (14.2-31.7)	8.4% (4.1-16.4)	39.8% 53.0% 7.2% 0.0% 0.0%
Ukraine					
Patients (F2F)	50.5% (41.1-59.8)	1.9% (0.5-6.6)	45.8% (36.7-55.2)	7.5% (3.8-14.1)	2.8% 55.7% 40.6% 0.9% 0.0%
Patients (P/V)	19.8% (13.7-27.8)	0.8% (0.1-4.5)	18.2% (12.3-26.0)	11.6% (7.0-18.5)	14.2% 62.5% 23.3% 0.0% 0.0%
United Kingdom					
Patients (F2F)	55.2% (37.5-71.6)	0.0% (0.0-11.7)	20.7% (9.8-38.4)	20.7% (9.8-38.4)	27.6% 62.1% 10.3% 0.0% 0.0%
Patients (P/V)	46.5% (36.7-56.9)	0.0% (0.0-4.1)	13.3% (7.8-21.9)	5.6% (2.4-12.4)	9.0% 53.9% 36.0% 1.1% 0.0%

* very confident, confident, moderately, unconfident, very unconfident.

Appendix 5: All advice provided to patients during all registered contacts, and separately for patients suspected of COVID-19.

All countries	Advice for home isolation			
	All patients	67.2% (65.5-68.8)		
	COVID-19 suspected	83.2% (81.1-85.1)		
	Advice for symptomatic treatment			
	All patients	75.6% (74-77)		
	COVID-19 suspected	70.4% (67.9-72.8)		
	A scheduled follow-up visit/call			
	All patients	49.9% (48.1-51.6)		
	COVID-19 suspected	51.5% (48.8-54.2)		
	Advice for family members		**Home isolation**	
	All patients	51.9% (50.1-53.7)	*All patients*	34.0% (32.3-35.7)
			COVID-19 suspected	54.7% (52-57.4)
	COVID-19 suspected	69.6% (67.1-72.1)	**Social distancing**	
			All patients	40.2% (38.5-41.9)
			COVID-19 suspected	53.1% (52-57.4)
	Preventive measures for patient		**Extra handwashing**	
	All patients	64.1% (62.4-65.8)	*All patients*	56.7% (55-58.5)
			COVID-19 suspected	62.4% (59.8-65)
	COVID-19 suspected	68.6% (66.1-71.1)	**Sneezing in sleeve**	
			All patients	47.2% (45.5-49)
			COVID-19 suspected	48.4%)45.7-51.1)
			Social distancing	
			All patients	51.1% (49.3-52.9)
			COVID-19 suspected	56.3% (53.6-59)
			Nose/mouth protection	
			All patients	37.3% (35.6-39)
			COVID-19 suspected	42.2% (39.5-44.9)
			Staying in separate room	
			All patients	27.3% (25.8-28.9)
			COVID-19 suspected	40.6% (37.9-43.3)
	Where to find reliable information			
	All patients	20.0% (18.6-21.5)		
	COVID-19 suspected	28.0% (25.6-30.5)		

Armenia	Advice for home isolation			
	All patients	47.6% (40.3-55.1)		
	COVID-19 suspected	64.9% (25.6-30.5)		
	Advice for symptomatic treatment			
	All patients	81.2% (74.6-86.3)		
	COVID-19 suspected	83.3% (75.4-89.1)		
	A scheduled follow-up visit/call			
	All patients	49.4% (42-56.8)		
	COVID-19 suspected	46.5% (37.6-55.6)		
	Advice for family members		**Home isolation**	
	All patients	47.6% (40.3-55.1)	*All patients*	44.1% (36.9-51.6)
			COVID-19 suspected	58.8% (49.6-67.4)
	COVID-19 suspected	62.3% (53.1-70.6)	**Social distancing**	
			All patients	9.4 % (5.9-14.7)
			COVID-19 suspected	11.4% (6.8-18.5)

	Preventive measures for patient		**Extra handwashing**	
	All patients	44.1% (36.9-51.6)	All patients	42.4% (35.2-49.9)
			COVID-19 suspected	53.5% (44.462.4)
	COVID-19 suspected	55.3% (46.1-64.1)	**Sneezing in sleeve**	
			All patients	5.9% (3.2-10.5)
			COVID-19 suspected	7.0% (3.6-13.2)
			Social distancing	
			All patients	6.5% (3.7-11.2)
			COVID-19 suspected	7.0% (3.6-13.2)
			Nose/mouth protection	
			All patients	5.9% (3.2-10.5)
			COVID-19 suspected	7.9% (4.2-14.3)
			Staying in separate room	
			All patients	2.9% (1.3-6.7)
			COVID-19 suspected	4.4% (1.9-9.9)
	Where to find reliable information			
	All patients	2.4% (1-5.9)		
	COVID-19 suspected	1.8% (0.5-6.2)		

Belgium	**Advice for home isolation**			
	All patients	90.7% (86.1-93.9)		
	COVID-19 suspected	89.0% (82.9-93.1)		
	Advice for symptomatic treatment			
	All patients	71.3% (64.9-76.9)		
	COVID-19 suspected	69.2% (61.3-76.1)		
	A scheduled follow-up visit/call			
	All patients	30.1% (24.4-36.5)		
	COVID-19 suspected	34.9% (27.7-43)		
	Advice for family members		**Home isolation**	
	All patients	50.0% (43.3-56.6)	All patients	22.2% (17.2-28.2)
			COVID-19 suspected	18.5% (13-25.6)
	COVID-19 suspected	50.7% (42.7-58.7)	**Social distancing**	
			All patients	42.1% (35.7-48.8)
			COVID-19 suspected	42.5% (34.7-50.6)
	Preventive measures for patient		**Extra handwashing**	
	All patients	31.5% (25.7-38)	All patients	23.6% (18.4-29.7)
			COVID-19 suspected	19.9% (14.2-27.1)
	COVID-19 suspected	26.7% (20.2-34.4)	**Sneezing in sleeve**	
			All patients	18.1% (13.5-23.7)
			COVID-19 suspected	13.7% (9.1-20.2)
			Social distancing	
			All patients	30.6% (24.8-37)
			COVID-19 suspected	25.3% (19-33)
			Nose/mouth protection	
			All patients	6.0% (3.6-10)
			COVID-19 suspected	5.5% (2.8-10.4)
			Staying in separate room	
			All patients	12.5% (8.7-17.6)
			COVID-19 suspected	11.0% (6.9-17.1)
	Where to find reliable information			
	All patients	15.3% (11.1-20.7)		
	COVID-19 suspected	14.4% (9.6-20.1)		

Germany	**Advice for home isolation**			
	All patients	19.6% (14.6-25.8)		
	COVID-19 suspected	88.2% (73.4-95.3)		
	Advice for symptomatic treatment			
	All patients	96.3% (92.6-98.2)		
	COVID-19 suspected	100% (89.9-100)		
	A scheduled follow-up visit/call			
	All patients	91.0% (86.1-94.3)		
	COVID-19 suspected	94.1% (80.9-98.4)		
	Advice for family members		**Home isolation**	
	All patients	9.5% (6.1-14.6)	*All patients*	6.3% (3.7-10.8)
			COVID-19 suspected	35.3% (21.5-52.1)
	COVID-19 suspected	52.9% (36.7-68.6)	**Social distancing**	
			All patients	7.4% (4.5-12.1)
			COVID-19 suspected	41.2% (26.4-57.8)
	Preventive measures for patient		**Extra handwashing**	
	All patients	48.7% (41.7-55.8)	*All patients*	39.7% (33-46.8)
			COVID-19 suspected	97.1% (85.1-99.5)
	COVID-19 suspected	97.1% (85.1-99.5)	**Sneezing in sleeve**	
			All patients	40.2% (33.5-47.3)
			COVID-19 suspected	91.2% (77-97)
			Social distancing	
			All patients	37.0% (30.5-44.1)
			COVID-19 suspected	94.1% (80.9-98.4)
			Nose/mouth protection	
			All patients	22.8% (17.4-29.2)
			COVID-19 suspected	85.3% (70-93.6)
			Staying in separate room	
			All patients	0.0% (0-2)
			COVID-19 suspected	0.0% (0-10)
	Where to find reliable information			
	All patients	10.6% (7-15.8)		
	COVID-19 suspected	58.8% (42.2-73.6)		

Denmark	**Advice for home isolation**			
	All patients	88.2% (82.1-92.4)		
	COVID-19 suspected	92.7% (86.3-96.3)		
	Advice for symptomatic treatment			
	All patients	46.1% (38.3-54)		
	COVID-19 suspected	44.5% (35.6-53.9)		
	A scheduled follow-up visit/call			
	All patients	18.4% (13.1-25.3)		
	COVID-19 suspected	17.3% (11.4-25.4)		
	Advice for family members		**Home isolation**	
	All patients	24.3% (18.2-31.7)	*All patients*	13.8% (9.2-20.2)
			COVID-19 suspected	14.5% (9.2-22.3)
	COVID-19 suspected	23.6% (16.7-32.4)	**Social distancing**	
			All patients	13.8% (9.2-20.2)
			COVID-19 suspected	10.9% (6.4-8.1)
	Preventive measures for patient		**Extra handwashing**	
	All patients	37.5% (30.2-45.4)	*All patients*	21.7% (15.9-28.9)
			COVID-19 suspected	19.1% (12.8-27.4)

	COVID-19 suspected	35.5% (27.1-44.8)	**Sneezing in sleeve** *All patients* *COVID-19 suspected*	18.4% (13.1-25.4) 18.2% (12.1-26.4)
			Social distancing *All patients* *COVID-19 suspected*	23.0% (17.1-30.3) 20.9% (14.4-29.4)
			Nose/mouth protection *All patients* *COVID-19 suspected*	2.0% (0.7-5.6) 2.7% (0.9-7.7)
			Staying in separate room *All patients* *COVID-19 suspected*	0.7% (0.1-3.6) 0.9% (0.2-4.9)
	Where to find reliable information *All patients* *COVID-19 suspected*	7.9% (4.6-13.3) 7.3% (3.7-13.7)		

Spain	**Advice for home isolation** *All patients* *COVID-19 suspected*	81.2% (75.5-85.8) 89.4% (84.1-93)		
	Advice for symptomatic treatment *All patients* *COVID-19 suspected*	84.8% (79.5-88.9) 84.0% (78.1-88.6)		
	A scheduled follow-up visit/call *All patients* *COVID-19 suspected*	74.4% (68.3-79.7) 81.9% (75.8-86.8)		
	Advice for family members *PPAS COVID* *COVID-19 suspected patients*	69.5% (63.2-75.2) 78.7% (72.3-84)	**Home isolation** *All patients* *COVID-19 suspected*	65.5% (59-71.4) 73.9% (67.2-79.7)
			Social distancing *All patients* *COVID-19 suspected*	51.1% (44.6-57.6) 57.4% (50.3-64.3)
	Preventive measures for patient *All patients* *COVID-19 suspected*	80.7% (75-85.4) 87.2% (81.7-91.3)	**Extra handwashing** *All patients* *COVID-19 suspected*	78.0% (72.1-83) 84.0% (78.1-88.6)
			Sneezing in sleeve *All patients* *COVID-19 suspected*	39.5% (33.3-46) 43.1% (36.2-50.2)
			Social distancing *All patients* *COVID-19 suspected*	58.3% (51.7-64.6) 63.8% (56.8-70.4)
			Nose/mouth protection *All patients* *COVID-19 suspected*	56.5% (50-62.8) 60.6% (53.5-67.3)
			Staying in separate room *All patients* *COVID-19 suspected*	62.3% (55.8-68.4) 70.2% (63.3-76.3)
	Where to find reliable information *All patients* *COVID-19 suspected*	20.6% (15.8-26.4) 23.9% (18.4-30.5)		

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France	**Advice for home isolation**			
	All patients	79.4% (72.3-85)		
	COVID-19 suspected	89.4% (81.5-94.1)		
	Advice for symptomatic treatment			
	All patients	80.0% (73-85.5)		
	COVID-19 suspected	81.9% (72.9-88.4)		
	A scheduled follow-up visit/call			
	All patients	47.7% (40-55.6)		
	COVID-19 suspected	61.7% (51.6-70.9)		
	Advice for family members		**Home isolation**	
	All patients	64.5% (56.7-71.6)	*All patients*	51.0% (43.2-58.7)
			COVID-19 suspected	57.4% (47.4-67)
	COVID-19 suspected	72.3% (62.6-80.4)	**Social distancing**	
			All patients	54.8% (47-62.5)
			COVID-19 suspected	61.7% (51.6-70.9)
	Preventive measures for patient		**Extra handwashing**	
	All patients	80.6% (73.7-86.1)	*All patients*	74.2% (66.8-80.4)
			COVID-19 suspected	80.9% (71.8-87.5)
	COVID-19 suspected	84.0% (75.3-90.1)	**Sneezing in sleeve**	
			All patients	63.9% (56-71)
			COVID-19 suspected	73.4% (63.7-81.3)
			Social distancing	
			All patients	76.8% (69.5-82.7)
			COVID-19 suspected	81.9% (72.9-88.4)
			Nose/mouth protection	
			All patients	41.3% (33.8-49.2)
			COVID-19 suspected	44.7% (35-54.7)
			Staying in separate room	
			All patients	40.6% (33.2-48.5)
			COVID-19 suspected	56.4% (46.3-66)
	Where to find reliable information			
	All patients	9.0% (5.5-14.6)		
	COVID-19 suspected	11.7% (6.7-19.7)		

Georgia*	**Advice for home isolation**			
	All patients	86.9% (81.9-90.7)		
	COVID-19 suspected	100%		
	Advice for symptomatic treatment			
	All patients	82.9% (77.4-87.3)		
	COVID-19 suspected	88.9%		
	A scheduled follow-up visit/call			
	All patients	49.5% (43-56.1)		
	COVID-19 suspected	55.6%		
	Advice for family members		**Home isolation**	
	All patients	58.6% (52-64.8)	*All patients*	7.7% (4.8-11.9)
			COVID-19 suspected	22.2%
	COVID-19 suspected	88.9%	**Social distancing**	
			All patients	54.5% (47.9-60.9)
			COVID-19 suspected	88.9%
	Preventive measures for patient		**Extra handwashing**	
	All patients	93.2% (89.2-95.9)	*All patients*	73.9% (67.6-79.2)
			COVID-19 suspected	66.7%

	COVID-19 suspected	100%	**Sneezing in sleeve**	
			All patients	73.0% (66.8-78.4)
			COVID-19 suspected	55.6%
			Social distancing	
			All patients	89.6% (84.9-93)
			COVID-19 suspected	88.9%
			Nose/mouth protection	
			All patients	72.5% (66.3-78)
			COVID-19 suspected	66.7%
			Staying in separate room	
			All patients	10.8% (7.4-15.6)
			COVID-19 suspected	55.6%
	Where to find reliable information			
	All patients	11.3% (7.8-16.1)		
	COVID-19 suspected	0.0%		

Greece	**Advice for home isolation**			
	All patients	75.6% (69.5-80.8)		
	COVID-19 suspected	83.1% (73.7-89.7)		
	Advice for symptomatic treatment			
	All patients	63.8% (57.3-70)		
	COVID-19 suspected	50.6% (40.1-61.1)		
	A scheduled follow-up visit/call			
	All patients	71.0% (64.7-76.6)		
	COVID-19 suspected	77.1% (67-84.8)		
	Advice for family members		**Home isolation**	
	All patients	73.3% (67.1-78.7)	*All patients*	51.0% (44.6-57.6)
			COVID-19 suspected	74.7% (64.4-82.8)
	COVID-19 suspected	96.4% (89.8-98.7)	**Social distancing**	
			All patients	62.4% (55.9-68.6)
			COVID-19 suspected	94.0% (86.7-97.4)
	Preventive measures for patient		**Extra handwashing**	
	PPAS COVID	82.4% (76.8-86.8)	*All patients*	72.9% (66.6-78.3)
			COVID-19 suspected	91.6% (83.6-95.8)
	COVID-19 suspected patients	92.8% (85.1-96.6)	**Sneezing in sleeve**	
			All patients	71.9% (65.7-77.5)
			COVID-19 suspected	91.6% (83.6-95.8)
			Social distancing	
			All patients	71.0% (64.7-76.6)
			COVID-19 suspected	91.6% (83.6-95.8)
			Nose/mouth protection	
			All patients	63.3% (56.8-69.4)
			COVID-19 suspected	89.2% (80.7-94.2)
			Staying in separate room	
			All patients	48.0% (41.5-54.5)
			COVID-19 suspected	75.9% (65.7-83.8)
	Where to find reliable information			
	All patients	0.0% (0-1.7)		
	COVID-19 suspected	0.0% (0-4.4)		

Hungary*	**Advice for home isolation**			
	All patients	45.7% (37.6-54)		
	COVID-19 suspected	83.3%		
	Advice for symptomatic treatment			
	All patients	55.1% (46.8-63.1)		
	COVID-19 suspected	33.3%		
	A scheduled follow-up visit/call			
	All patients	39.1% (31.4-47.5)		
	COVID-19 suspected	0.0%		
	Advice for family members		**Home isolation**	
	All patients	42.8% (34.8-51.1)	*All patients*	32.6% (25.4-40.8)
			COVID-19 suspected	66.7%
	COVID-19 suspected	83.3%	**Social distancing**	
			All patients	35.5% (28-43.8)
			COVID-19 suspected	55.6%
	Preventive measures for patient		**Extra handwashing**	
	All patients	61.6% (53.3-69.3)	*All patients*	58.0% (49.6-65.9)
			COVID-19 suspected	88.9%
	COVID-19 suspected	100%	**Sneezing in sleeve**	
			All patients	48.6% (40.4-56.8)
			COVID-19 suspected	77.8%
			Social distancing	
			All patients	25.4% (18.8-33.2)
			COVID-19 suspected	72.2%
			Nose/mouth protection	
			All patients	25.4% (18.8-33.2)
			COVID-19 suspected	66.7%
			Staying in separate room	
			All patients	11.6% (7.3-18)
			COVID-19 suspected	55.6%
	Where to find reliable information			
	All patients	0.0% (0-2.7)		
	COVID-19 suspected	0.0%		

Ireland	**Advice for home isolation**			
	All patients	76.5% (70.4-81.7)		
	COVID-19 suspected	91.7% (83.8-95.9)		
	Advice for symptomatic treatment			
	All patients	85.7% (80.4-89.8)		
	COVID-19 suspected	86.9% (78.1-92.5)		
	A scheduled follow-up visit/call			
	All patients	10.6% (7.2-15.4)		
	COVID-19 suspected	14.3% (84-23.3)		
	Advice for family members		**Home isolation**	
	All patients	65.9% (59.4-71.9)	*All patients*	52.5% (45.9-59.1)
			COVID-19 suspected	70.2% (59.8-79)
	COVID-19 suspected	81.0% (71.3-87.9)	**Social distancing**	
			All patients	44.7% (38.2-51.4)
			COVID-19 suspected	57.1% (46.5-67.2)
	Preventive measures for patient		**Extra handwashing**	
	All patients	67.7% (61.3-73.6)	*All patients*	58.1% (51.4-64.4)
			COVID-19 suspected	75.0% (64.8-83)

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	COVID-19 suspected	88.1% (79.5-93.4)	**Sneezing in sleeve**	
			All patients	46.5% (40-53.2)
			COVID-19 suspected	60.7% (50-70.5)
			Social distancing	
			All patients	56.2% (49.6-62.7)
			COVID-19 suspected	73.8% (63.5-82)
			Nose/mouth protection	
			All patients	41.9% (35.6-48.6)
			COVID-19 suspected	54.8% (44.1-65)
			Staying in separate room	
			All patients	43.8% (37.3-50.4)
			COVID-19 suspected	58.3% (47.7-68.3)
	Where to find reliable information			
	All patients	54.8% (48.2-61.3)		
	COVID-19 suspected	73.8% (63.5-82)		

Moldova	**Advice for home isolation**			
	All patients	77.3% (71.6-82.2)		
	COVID-19 suspected	75.0% (67.2-81.4)		
	Advice for symptomatic treatment			
	All patients	88.2% (83.5-91.7)		
	COVID-19 suspected	80.7% (73.4-86.4)		
	A scheduled follow-up visit/call			
	All patients	82.4% (77-86.7)		
	COVID-19 suspected	73.6% (65.7-80.2)		
	Advice for family members *All patients* *COVID-19 suspected*	84.0% (78.8-88.1) 98.6% (94.9-99.6)	**Home isolation**	
			All patients	49.2% (42.9-55.5)
			COVID-19 suspected	79.3% (71.8-85.2)
			Social distancing	
			All patients	81.9% (76.6-86.3)
			COVID-19 suspected	95.7% (91-98)
	Preventive measures for patient *All patients* *COVID-19 suspected*	95.8% (92.4-97.7) 95.0% (90-97.6)	**Extra handwashing**	
			All patients	95.4% (91.9-97.4)
			COVID-19 suspected	94.3% (89.1-97)
			Sneezing in sleeve	
			All patients	95.4% (91.9-97.4)
			COVID-19 suspected	94.3% (89.1-97)
			Social distancing	
			All patients	95.0% (91.4-97.1)
			COVID-19 suspected	93.6% (88.2-96.6)
			Nose/mouth protection	
			All patients	94.5% (90.9-96.8)
			COVID-19 suspected	93.6% (88.2-96.6)
			Staying in separate room	
			All patients	55.0% (48.7-61.2)
			COVID-19 suspected	63.6% (55.3-71.1)
	Where to find reliable information			
	All patients	52.9% (46.6-59.2)		
	COVID-19 suspected	75.0% (67.2-81.4))		

Netherlands	**Advice for home isolation**			
	All patients	71.3% (65.2-76.8)		
	COVID-19 suspected	81.5% (74.1-87.1)		
	Advice for symptomatic treatment			
	All patients	49.1% (42.7-55.6)		
	COVID-19 suspected	45.2% (37-53.6)		
	A scheduled follow-up visit/call			
	All patients	26.1% (20.8-32.1)		
	COVID-19 suspected	34.8% (27.3-43.2)		
	Advice for family members		**Home isolation**	
	All patients	54.8% (48.3-61.1)	*All patients*	36.1% (30.2-42.5)
			COVID-19 suspected	43.0% (34.9-51.4)
	COVID-19 suspected	63.0% (54.6-70.6)	**Social distancing**	
			All patients	40.9% (34.7-47.3)
			COVID-19 suspected	51.9% (43.5-60.1)
	Preventive measures for patient		**Extra handwashing**	
	All patients	56.1% (49.6-62.3)	*All patients*	43.5% (37.2-49.9)
			COVID-19 suspected	46.7% (38.5-55)
	COVID-19 suspected	56.3% (47.9-64.4)	**Sneezing in sleeve**	
			All patients	40.9% (34.7-47.3)
			COVID-19 suspected	45.9% (37.8-54.3)
			Social distancing	
			All patients	50.0% (43.6-56.4)
			COVID-19 suspected	51.9% (43.5-60.1)
			Nose/mouth protection	
			All patients	4.8% (2.7-8.4)
			COVID-19 suspected	5.2% (2.5-10.3)
			Staying in separate room	
			All patients	22.2% (17.3-27.9)
			COVID-19 suspected	30.4% (23.3-38.6)
	Where to find reliable information			
	All patients	24.8% (19.7-30.7)		
	COVID-19 suspected	25.9% (19.2-33.9)		

Poland*	**Advice for home isolation**			
	All patients	57.4% (50.9-63.6)		
	COVID-19 suspected	61.5%		
	Advice for symptomatic treatment			
	All patients	73.9% (67.9-79.2)		
	COVID-19 suspected	69.2%		
	A scheduled follow-up visit/call			
	All patients	54.3% (47.9-60.6)		
	COVID-19 suspected	69.2%		
	Advice for family members		**Home isolation**	
	All patients	25.2% (20-31.2)	*All patients*	16.5% (12.3-21.9)
			COVID-19 suspected	76.9%
	COVID-19 suspected	84.6% (49.6-62.3)	**Social distancing**	
			All patients	15.7% 911.5-20.9)
			COVID-19 suspected	61.5%
	Preventive measures for patient		**Extra handwashing**	
	All patients	56.1% (49.6-62.3)	*All patients*	55.2% (48.8-61.5)
			COVID-19 suspected	84.6%

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	COVID-19 suspected	84.6%	**Sneezing in sleeve**
			All patients 43.0% (36.8-49.5)
			COVID-19 suspected 76.9%
			Social distancing
			All patients 31.7% (26.1-38)
			COVID-19 suspected 76.9%
			Nose/mouth protection
			All patients 13.5% (9.7-18.5)
			COVID-19 suspected 84.6%
			Staying in separate room
			All patients 7.8% (5-12)
			COVID-19 suspected 38.5%
	Where to find reliable information		
	All patients	30.4% (24.9-36.7)	
	COVID-19 suspected	53.8%	

Romania*	**Advice for home isolation**		
	All patients	32.5% (24.6-41.5)	
	COVID-19 suspected	75.0%	
	Advice for symptomatic treatment		
	All patients	94.7% (89-97.6)	
	COVID-19 suspected	87.5%	
	A scheduled follow-up visit/call		
	All patients	41.2% (32.6-50.4)	
	COVID-19 suspected	87.5%	
	Advice for family members		**Home isolation**
	All patients	35.1% (27-44.2)	*All patients* 3.5% (1.4-8.7)
			COVID-19 suspected 37.5%
	COVID-19 suspected	87.5%	**Social distancing**
			All patients 34.2% (26.1-43.3)
			COVID-19 suspected 87.5%
	Preventive measures for patient		**Extra handwashing**
	All patients	68.4% (59.4-76.2)	*All patients* 68.4% (59.4-76.2)
			COVID-19 suspected 100%
	COVID-19 suspected	100%	**Sneezing in sleeve**
			All patients 64.9% (55.8-73)
			COVID-19 suspected 87.5%
			Social distancing
			All patients 60.5% (51.4-69)
			COVID-19 suspected 100%
			Nose/mouth protection
			All patients 57.9% (48.7-66.6)
			COVID-19 suspected 100%
			Staying in separate room
			All patients 29.8% (22.2-38.8)
			COVID-19 suspected 87.5%
	Where to find reliable information		
	All patients	4.4% (1.9-9.8)	
	COVID-19 suspected	37.5%	

Ukraine	Advice for home isolation			
	All patients	61.8% (55.4-67.9)		
	COVID-19 suspected	85.3% (75-91.8)		
	Advice for symptomatic treatment			
	All patients	83.3% (78-87.6)		
	COVID-19 suspected	64.7% (52.8-75)		
	A scheduled follow-up visit/call			
	All patients	64.5% (58.1-70.4)		
	COVID-19 suspected	64.7% (52.8-75		
	Advice for family members		**Home isolation**	
	All patients	54.4% (47.9-60.7)	*All patients*	39.9% (33.8-46.4)
			COVID-19 suspected	83.8% (73.3-90.7)
	COVID-19 suspected	88.2% (78.5-93.9)	**Social distancing**	
			All patients	45.6% (39.3-52.1)
			COVID-19 suspected	70.6% (59-80)
	Preventive measures for patient		**Extra handwashing**	
	All patients	64.9% (58.5-70.8)	*All patients*	57.0% (50.5-63.3)
			COVID-19 suspected	69.1% (57.4-78.8)
	COVID-19 suspected	76.5% (65.1-85)	**Sneezing in sleeve**	
			All patients	50.4% (44-56.9)
			COVID-19 suspected	61.8% (50-72.4)
			Social distancing	
			All patients	52.2% (45.7-58.6)
			COVID-19 suspected	66.2% (54.3-76.3)
			Nose/mouth protection	
			All patients	51.3% (44.9-57.7)
			COVID-19 suspected	66.2% (54.3-76.3)
			Staying in separate room	
			All patients	50.4% (44-56.9)
			COVID-19 suspected	67.6% (55.8-77.6)
	Where to find reliable information			
	All patients	28.9% (23.5-35.1)		
	COVID-19 suspected	58.8% (47-69.7)		

United Kingdom	Advice for home isolation			
	All patients	50.0% (41.2-58.8)		
	COVID-19 suspected	66.7% (54.1-77.3)		
	Advice for symptomatic treatment			
	All patients	66.7% (57.8-74.5)		
	COVID-19 suspected	68.3% (55.8-78.7)		
	A scheduled follow-up visit/call			
	All patients	15.8% (10.4-23.4)		
	COVID-19 suspected	21.7% (13.1-33.6)		
	Advice for family members		**Home isolation**	
	All patients	40.0% (31.7-48.9)	*All patients*	31.7% (24-40.4)
			COVID-19 suspected	40.0% (28.6-52.6)
	COVID-19 suspected	51.7% (39.3-63.8)	**Social distancing**	
			All patients	14.2% (9-21.5)
			COVID-19 suspected	25.0% (15.8-37.2)
	Preventive measures for patient		**Extra handwashing**	
	All patients	28.3% (21-37)	*All patients*	20.0% (13.8-28)
			COVID-19 suspected	23.3% (14.4-35.4)

	COVID-19 suspected	31.7% (21.3-44.2)	**Sneezing in sleeve**	
			All patients	5.8% (2.9-11.5)
			COVID-19 suspected	5.0% (1.7-13.7)
			Social distancing	
			All patients	15.8% (10.4-23.4)
			COVID-19 suspected	23.3% (14.4-35.4)
			Nose/mouth protection	
			All patients	5.0% (2.3-10.5)
			COVID-19 suspected	8.3% (3.6-18)
			Staying in separate room	
			All patients	8.3% (4.6-14.7)
			COVID-19 suspected	11.7% (5.8-22.2)
	Where to find reliable information			
	All patients	12.5% (7.7-19.6)		
	COVID-19 suspected	10% (4.7-20.1)		

* For countries with less than 20 COVID-19 suspected patients, 95%CIs were not calculated and data should be interpreted with care.