Study Title: Acute respiratory infection (ARI) in primary care (PC) settings in Europe: point prevalence audit survey (PPAS) of presentation and management.

Short title: PPAS-PC-ARI

Date and Version No: 01.0 29NOV21

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Chief Investigator Signature:

The Investigators declare that there are no conflicts of interest.

Confidentiality Statement

This document contains confidential information that must not be disclosed to anyone other than the Investigator Team, host organisation, and members of the national regulatory bodies, unless authorised to do so.

TABLE OF CONTENTS

KEY CONTACTS

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Statistician	TBC
Committees	Trial Management Group

1. LAY SUMMARY

The invention of antibiotics was a major breakthrough in medical science. Antibiotics are used to treat illness caused by bacteria. Development of these medicines meant that illnesses, like pneumonia, which were once often fatal, could now usually be successfully treated. That saved millions of lives. But effectiveness of antibiotics is now decreasing because they are being overused. Microorganisms that are being exposed to antibiotics change genetically over time, making it harder for the antibiotics to work against them. As a result, "superbugs" are developing. We have no effective treatment for some of these "superbugs". The development of resistance to antibiotics is a major public health concern worldwide. Unhelpful, clinically unwarranted variation in care is a major contributor.

This study aims to record information about patients, adults and children, who seek healthcare for acute respiratory infection (ARI) in primary care setting across Europe. This will help researchers benchmark patterns of testing and antibiotic prescribing in contrasting European settings simply by observing what happens now in routine care.

The study will run over the winter period from January 2022 for approximately 16 weeks in ~20 European countries. Researchers will collect information from primary health care settings where antibiotics are prescribed for patients who have respiratory infections. These primary care settings may include general

practice, urgent care centres, accident and emergency and other acute services in hospitals, paediatric care centres, and long-term care facilities, both in and out of office-hours care.

Patients with symptoms of lower RTI where acute cough is the main symptom, patients with symptoms of acute sore throat, and patients otherwise suspected of having COVID-19 will be registered by participating clinicians.

This will be an anonymous cross sectional audit study, and because this study is purely descriptive, there is no intervention (study drug, test or interview) and no personally identifiable information will be collected, patients will not be asked to provide written informed consent. Personally identifiable information such as patient names, date of birth, address will not be collected. The study aims to give a description of overall current patient care, rather than any information about specific individuals. All eligible patients will be registered. Researchers will collect information such as age, symptoms, diagnostic tests performed or requested (if routinely done) and the treatment that the patient received.

2. SYNOPSIS

Study Title	Acute respiratory infection (ARI) in primary care (PC) settings in Europe: point prevalence audit survey (PPAS) of presentation and management.	
Internal ref. no. / short title	PPAS-PC-ARI	
Funder	European Union's Horizon 2020 research and innovation programme (RECOVER) grant agreement No 101003589	
Study Design	Clinical audit	
Study Participants	Patients presenting in primary care, with symptoms suggestive of a lower respiratory tract infection (predominant symptom: cough, duration of less than 28 days), or, symptoms suggestive of an upper respiratory tract infection (predominant symptom: sore throat, duration of less than 14 days), or otherwise suspected of having COVID-19.	
Sample Size	Total of approximately 2000 over one winter period	
Planned Study Period	Minimum two week period; maximum 16 weeks	
Planned Recruitment period	January 2022 – April 2022	
	Objectives	Outcome Measures
Primary	To provide an infrastructure of up to 20 European PC networks with a total of 50-100 primary care clinics capable of rapidly implementing prospective registration and observational studies, RCTs and other clinical trials related to	Participation in the PPAS and performance related to network set-up and management, patient registration, data collection and data analysis.

	aetiology, diagnosis, treatment or prevention of ARI in the primary care setting.	
Secondary	To generate a description of the presentation and management of patients with ARI by primary care healthcare workers, by benchmarking current practice in approximately 20 EU Member states and H2020 Associated Countries. To describe the: • patient population presenting with ARI in primary care • variations in current practices in diagnosing, treating and preventing ARI in the countries participating in the PPAS • To identify 'unwarranted' variation in current practices • trends in antibiotic prescribing for the various indications linked to ARI • trends in POC/lab/hospital diagnostics used for diagnosing pneumonia and other severe ARI	Participating healthcare workers will be asked to fill out a brief, personally non-attributable Case Report Form (CRF) for all patients who consult with symptoms of ARI during the PPAS. Information recorded (potential confounders/endpoints/outcomes) will include: • Consultation information; • Demographic details including: age, co-morbidities (cardiovascular disease, lung disease (COPD/asthma), diabetes, other chronic conditions), vaccination status; • Duration of ARI symptoms prior to consulting; • COVID-19 testing status and result; • Presence of selected symptoms and overall severity rating; • Clinical assessments taken: body temperature, respiratory and heart rates, oxygen saturation; • All diagnostic tests done or ordered, including results of POC testing; • Antibiotic, antiviral prescription (which ones); • Additional prescribed medicines; • Certainty benefit of treatment; • Suspected aetiology; • Working diagnosis (e.g., Pharyngitis, Tonsillitis, Exacerbation of chronic obstructive pulmonary disease (COPD), bronchitis, pneumonia, COVID-19, Influenza); • Advice about other treatments, taking time off work or school, referral to hospital

3. ABBREVIATIONS

AMR	Antimicrobial Resistance
ARI	Acute Respiratory Infection
CA-ARTI	Community Acquired Acute Respiratory Tract Infection
CI	Chief Investigator

CRF	Case Report Form
CTRG	Clinical Trials & Research Governance, University of Oxford
Dx	Diagnostic
ECDC	European Center for Disease prevention and Control
eCRF	Electronic Case Report Form
ESCAN	European Standardised Care Network
ESCMID	European Society of Clinical Microbiology and Infectious Diseases
GCP	Good Clinical Practice
GDPR	General Data Protection Regulation
GP	General Practitioner
GRACE	Genomics to Combat Resistance against Antibiotics in Community-acquired LRTI in Europe
HRA	Health Research Authority
ICF	Informed Consent Form
ICMJE	International Committee of Medical Journal Editors
IMI	Innovative Medicines Initiative
JC	Julius Centre
LMIC	Low and middle-income countries
NHS	National Health Service
NoE	Network of Excellence
RES	Research Ethics Service
PC-CTU	Primary Care Clinical Trials Unit
PENTA	Global Paediatric Research Network
PENTA-ID	PENTA- Infectious Disease
PI	Principal Investigator
PIL	Participant/ Patient Information Leaflet
PPAS	Point Prevalence Audit Survey
R&D	NHS Trust R&D Department
REC	Research Ethics Committee
RO	Research Online
SD	Standard deviation
SOP	Standard Operating Procedure
TMF	Trial Master File
TMG	Trial Management Group
TSC	Trial Steering Committee

TRACE	Translational Research on Antimicrobial Resistance and Community-acquired infections in Europe
UK	United Kingdom
UMC	University Medical Centre
UMCU	University Medical Centre Utrecht
UOXF	University of Oxford
URTI	Upper respiratory Tract Infection
Value-Dx	The value of diagnostics to combat antimicrobial resistance by optimising antibiotic use
WI	Working Instruction

4. BACKGROUND AND RATIONALE

This project builds on three point-prevalence audit surveys (PPAS) that were implemented from January 2020 as part of the EU-funded VALUE-Dx project. Anonymized consultations of patients with community-acquired acute respiratory tract infection (CA-ARTI) were registered by their general practitioner (GP). This was a highly efficient approach to capture presentation, illness severity, illness characteristics, and management (diagnostic testing, prescribed and advised treatments, other provided advice), of nearly 5000 patients in 18 European countries. The PPAS4 will follow on from the previous audits conducted under VALUE-Dx but as part of the RECOVER Project. RECOVER is one of the 18 projects that the European Union has founded in response to the COVID-19 pandemic. It aims to obtain crucial unknown information about the disease through clinical research to help the EU fight the virus and save patients' lives. The research from RECOVER will help improve the EU's response to future epidemics and pandemics. As the SARS-CoV-2 virus has imposed a major burden on the management of ARI in primary care the audit will link well into this project.

The current COVID-19 pandemic has led to unprecedented public health measures across the globe. Meanwhile, the scientific research community is developing epidemiological intelligence, diagnostics, vaccines and antiviral treatments to reduce the impact of COVID-19. In addition to the challenges posed by EID, the emergence and spread of antimicrobial resistance (AMR) has increased mortality and morbidity caused by bacterial infections that were once easily treatable with antibiotics. Parallel to the global emergence of AMR, the development of new antibiotics has declined. About 80-90% of antibiotics are prescribed in primary care, where over-prescribing is common for acute respiratory infections (ARI) .1-2. Moreover, ARI is often of viral aetiology and self-limiting, making this condition the main target for improving the quality of antibiotic prescribing decisions.3-4. Sequential studies by the European Centre for Disease Prevention and Control have identified important between-country differences in the numbers and class of antibiotics used,5-6 and there is evidence that this variation is not warranted on clinical grounds.7. Despite antibiotic surveillance and stewardship programs in many countries, these differences persist.8-10 Challenges facing prescribers include uncertainly about aetiology, unavailability of (valid) point-of-care (POC) diagnostic testing to aid prescribing decisions, unfamiliarity with current guidelines, risk-adverse prescribing behaviour and non-evidence based patients' expectations about effectiveness of antibiotics.11-15 Additional influences include health care system and cultural factors.7, 16-17. However,

management of ARIs is an issue that is appropriate for standardised international care pathways promoting conservative antibiotic prescribing.7.

The challenges posed by EID and AMR can only be effectively resolved through international collaboration and coordination. The expertise required to clinically evaluate new diagnostics, treatments, vaccines and other preventive and/or therapeutic interventions is not confined to a single institute or country. The large investments needed for clinical research on ID cannot be made by a single country. Lack of international collaboration and solidarity leads to fragmentation and isolation of research efforts, inefficient use of scarce research resources and suboptimal impact on the combat of ID.

The PPAS-PC-ARI study will enable the systematic collection of data in primary care to address key scientific questions on infectious disease indications or particular public health concerns to Europe. The study will build on an already highly effective pan-European Primary Care Research Network, that has demonstrated the capacity to deliver well-powered audits, observational studies and randomised controlled trials of infectious diseases diagnostics in the primary care setting across Europe, and is currently active in the IMI funded VALUE-Dx project. In the near future it will provide a warm-based primary care network with the capacity to allow implementation of additional clinical trials in ECRAID-base.

PPAS4 will be a multi-country audit among patients presenting in primary care with acute respiratory tract infection (ARI). Primary care includes: medical clinics (general practice, urgent care centres, paediatric care centres and acute emergency hospital care) both in and out of office hours. The PPAS-PC-ARI will be used to benchmark the case-mix, management (including POC/lab/hospital investigations, treatments and advices) of patients consulting in the primary care setting with ARI. PPAS will help provide an estimate of overall incidence of illness, and will be able to identify variation in management between sites and countries. Benchmarking best practice and identifying technically unwarranted variations in care is expected to lead to sharing of best practice and provision of enhanced evidence-based clinical guidelines.

5. OBJECTIVES AND OUTCOME MEASURES

Objectives	**Outcome Measures**	**Timepoint(s) of evaluation of this outcome measure (if applicable)**
Primary: To provide an infrastructure of up to 20 European networks with a total 50-100 primary care clinics capable of rapidly implementing prospective registration and observational studies, RCTs and other clinical trials related to aetiology, diagnosis, treatment or prevention of ARI in the primary care setting.	Participation in the PPAS and performance related to network set-up and management, patient registration, data collection and data analysis.	Jan – Jul 2022

To generate a description of the presentation and management of patients with ARI by primary care healthcare workers, by benchmarking current practice in approximately 20 EU Member states and H2020 Associated Countries. To describe the: • patient population presenting with ARI in primary care • variations in current practices in diagnosing, treating and preventing ARI in the countries participating in the PPAS • To identify 'unwarranted' variation in current practices • trends in antibiotic prescribing for the various indications linked to ARI • trends in POC/lab/hospital diagnostics used for diagnosing pneumonia and other severe ARI	Participating healthcare workers will be asked to fill out a brief, personally non-attributable Case Report Form (CRF) for all patients who consult with symptoms of ARI during the PPAS. Information recorded (potential confounders/endpoints/outcomes) will include: • Consultation information; • Demographic details including: age, co-morbidities (cardiovascular disease, lung disease (COPD/asthma), diabetes, other chronic conditions), vaccination status; • Duration of ARI symptoms prior to consulting; • COVID-19 testing status and result; • Presence of selected symptoms and overall severity rating; • Clinical assessments taken: body temperature, respiratory and heart rates, oxygen saturation; • All diagnostic tests done or ordered, including results of POC testing; • Antibiotic, antiviral prescription (which ones); • Additional prescribed medicines; • Certainty benefit of treatment; • Suspected aetiology; • Working diagnosis (e.g., Pharyngitis, Tonsillitis, Exacerbation of chronic obstructive pulmonary disease (COPD), bronchitis, pneumonia, COVID-19, Influenza);	Jan – Apr 2022 (~16 weeks). At routine patient consultations (data may be entered retrospectively).

	• Advice about other treatments, taking time off work or school, referral to hospital	

6. STUDY DESIGN

We will conduct a cross sectional, point prevalence audit survey (PPAS) on the presentation and management of ARI. This audit will be performed in approximately 20 EU Member States and H2020 Associated Countries, that will benchmark the case-mix and care of patients consulting in primary care settings. These include general practice, urgent care centres, accident and emergency and other acute services in hospitals, paediatric care centres, both in and out of office hours care, where the vast majority of antibiotics are prescribed for ARI.

PPAS4 will run from January 2022 to April 2022. The expected number of primary care practices registering patients will be 50-100 throughout the duration of the project. If needed a practice within a network can be replaced with another practice for feasibility and/or logistical reasons. The audit is prospective and data can be captured during or soon after the consultation. Data can be entered online later. Data collection will be kept as simple as possible and a CRF is shown in appendix A.

7. PARTICIPANT IDENTIFICATION

7.1. Study Participants

Patients presenting in primary care, with symptoms suggestive of a lower respiratory tract infection (predominant symptom: cough, with a duration of less than 28 days), symptoms suggestive of an upper respiratory tract infection (predominant symptom: sore throat, with a duration of less than 14 days), or patients otherwise suspected of COVID-19. Patients of both sexes and all ethnic background can be registered.

7.2. Inclusion Criteria

Eligible patients will be those consulting in a participating practice/clinic with symptoms suggestive of ARI.

- Symptoms suggestive of a lower respiratory tract infection (predominant symptom: cough, with a duration of less than 28 days), OR
- Symptoms suggestive of an upper respiratory tract infection (predominant symptom: sore throat, with a duration of less than 14 days), OR
- Other symptoms suggestive of COVID-19

7.3. Exclusion Criteria

A potential subject who meets any of the following criteria will be excluded from participation in this study:

- Symptoms of presumed non-infective origin

- Patients with only ear or allergic symptoms

8. PROTOCOL PROCEDURES

8.1. Registration

This will be an audit study that generates aggregated, non-personally attributable, minimal data.

We have expressions of interest from networks in approximately 20 EU Member States and H2020 Associated Countries and within those ~20 networks will recruit from a range of primary care facilities including general practice, urgent care centres, accident and emergency and other acute services in hospitals, paediatric care centres, both in an out of office hours care.

Patients presenting to those facilities that meet the eligibility criteria will be registered. Using an audit approach, the clinicians will record personally non-attributable data on the presentation and management of the consulting patients with ARI. Only data requested on the CRF will be collected and data on the CRF will only be collected if it was part of the routine consultation. The audit will collect anonymised, personally non-identifiable, unlinked patient data. The data will be coded with a network and site number and sequential patient registration number for that site. Data will be collected prospectively (during or soon after each routine consultation)or retrospectively (data on all eligible patients consulting over the required time period will be collected at the end of that period from medical records).

Data will only be collected from the patients' index consultation appointment, and once this is captured, there will be no further data collection and no follow-up. All study documents will be stored securely and only accessible by trial staff and authorised personnel.

8.2. Screening and Eligibility Assessment

Eligible patients will be those consulting with symptoms of lower RTI where cough is the predominant symptom (<28 days), or, symptoms of an upper RTI where sore throat is the predominant symptom (<14 days), patients otherwise suspected of COVID-19.

Any person consulting with participating clinicians that meet the inclusion/exclusion criteria will be eligible.

8.3. Informed Consent

As this study is purely observational and will generate aggregated, personally non-identifiable data about routine care, as there is no intervention, no follow-up and no linked data collection, individual consent will not be required for PPAS4. Regarding information about individuals, we will record only age and sex. Names, date of birth, address, or any other personal identifiable data will not be recorded.

8.4. Blinding and code-breaking

There is no blinding or need for code-breaking in PPAS4.

8.5. Description of study intervention(s), comparators and study procedures (clinical)

There is no study invention, comparators or clinical study procedures in PPAS4.

8.6. Study Visit

Over a 16 week period from January 2022 to April 2022 any patients that consult to a participating primary care site that meet the eligibility criteria will have a minimal, anonymised data set about their presentation and management recorded. During and/or soon after the consultation the healthcare worker will complete a brief, personally non-attributable, online or paper CRF. Information recorded will include:

- Consultation information;
- Demographic details including: age, co-morbidities (cardiovascular disease, lung disease (COPD/asthma), diabetes, other chronic conditions), vaccination status;
- Duration of ARI symptoms prior to consulting;
- COVID-19 testing status and result;
- Presence of selected symptoms and overall severity rating;
- Clinical assessments taken: body temperature, respiratory and heart rates, oxygen saturation;
- All diagnostic tests done or ordered, including results of POC testing;
- Antibiotic, antiviral prescription (which ones);
- Additional prescribed medicines;
- Certainty benefit of treatment;
- Suspected aetiology;
- Working diagnosis (e.g., Pharyngitis, Tonsillitis, Exacerbation of chronic obstructive pulmonary disease (COPD), bronchitis, pneumonia, COVID-19, Influenza);
- Advice about other treatments, taking time off work or school, referral to hospital.

There will only be one CRF per patient consultation with no further visits or follow up data collection required.

8.7. Subsequent Visits

Not applicable.

8.8. Sample Handling

No clinical samples will be taken as part of PPAS4. Samples may be taken as part of the patients' usual clinical care. Details of tests done POC and their results, and/or ordered will be recorded in the CRF.

8.9. Early Discontinuation/Withdrawal of Participants

Not applicable.

8.10. Definition of End of Study

The end of study is the point at which all the study data has been entered and queries resolved.

9. SAFETY REPORTING

Not applicable for this audit of usual care.

10. STATISTICS AND ANALYSIS

10.1. Statistical Analysis Plan (SAP)

The plan for the statistical analysis of the study are outlined below. A separate SAP will be finalised before the final analysis according to the previous PPAS's under ValueDx. The plan will provide details of other analysis and handling of missing data.

10.2. Description of the Statistical Methods

Descriptive statistics by setting, network, country and overall will be calculated by using means and standard deviations (SD), medians (interquartile ranges), and proportions as appropriate.

Differences in clinical presentation will be controlled for by using baseline symptoms, demographic data and comorbidity data. Antibiotic prescribing (prescriptions per 100 consultations) by networks and setting will be investigated using a two-level hierarchical logistic model fitted to the data from the CRFs with patients nested within sites. For antibiotic prescribing, the dependent variable will be whether they were prescribed antibiotics or not. Network will be included as a fixed effect, with all networks being compared to the overall mean. The impact of co-morbidities, age, and duration of illness before consulting etc. will be explored between networks while accounting for clustering.

10.3. Sample Size Determination

Registration of 3000 patients in up to 20 European countries is planned. Sample size may vary according to the variation in presentation, management and outcomes not only at the individual, but also at country level. Although each country will include 5-10 primary care practices, there will be power in pooling these observations and also in comparing to the previous audits in the same practices.

10.4. Analysis populations

All patients registered into PPAS4 will be analysed.

11. DATA MANAGEMENT

The plan for the data management of the study is outlined below. There is not a separate Data Management document in use for the study.

11.1. Source Data

Source documents are where data are first recorded, and from which the CRF data are obtained. These include, but are not limited to clinical and office/hospital charts, laboratory and pharmacy records.

CRF entries will be considered source data if the CRF is the site of the original recording. All paper and/or electronic CRFs will be stored safely in confidential conditions. On all study-specific documents, the registration will be referred to by the study ID number, not by name or personal identifiers of the patient.

11.2. Access to Data

Direct access will be granted to authorised representatives from the host institution for monitoring and/or audit of the study to ensure compliance with regulations.

11.3. Data Recording and Record Keeping

Research Online (RO) is an electronic data capture (EDC) system that will be used for data collection. Web-based case report forms (eCRF) are implemented into the system to facilitate the study specific data collection. These forms can easily be accessed by all standard web browsers.

The participants will be identified by the unique study ID number in any database. The name and any other identifying detail will NOT be included in any study data electronic or paper files.

Validation and range checks will be programmed in the eCRF to assure complete and high quality data. Data that does not comply with these rules or ranges will generate a query that must be resolved. Electronic workflows will employ skip and jump rules to ensure that only information that is applicable to the patient will appear. After the data of the last subject is entered, the database can rapidly be closed and data made available for further analysis and publication purposes.

RO meets all requirements according to GCP standards for electronic data entry with respect to safeguarding data integrity and data security regulations. Users will have role-based access to the system by logging in using their personal username and password. The system will log all data entry steps with timestamps and user information. The role-based access to the system will avoid unauthorised data access and prevents users from performing actions that they do not have authorisation for. RO data traffic over the Internet is encrypted using secured data communication protocols. Dedicated databases and web servers are hosted in a secure data centre, the database (PostgreSQL) is backed up on a daily basis.

To assure high quality the Data Management Department of the Julius Centre (JC), who will be responsible for the data management within the study, works according to a Quality Management System. All work is carried out in accordance with Standard Operating Procedures (SOP) and Work instructions (WI).
Project management of the study is facilitated by the integrated real live study progress reports.

12. QUALITY ASSURANCE PROCEDURES

The study will be conducted in accordance with the current approved protocol, GCP, relevant regulations and PC-CTU Standard Operating Procedures.

12.1. Risk assessment

Not applicable, due to this being an audit of routine care.

12.2. Study monitoring

PC Network staff have been trained in performing the audit. They will cascade training to their new sites if needed. The University of Oxford Primary Care and Vaccines Collaborative Trials Unit will take overall management of regulatory aspects, and the Julius Center of UMCU will cover communication, RO-related activities and data management. During the course of the project, we will have at least monthly Trial Management Meetings (TMG). No on-site monitoring visits are expected. Data entry will be monitored by the Julius Center and reviewed by the trial management team.

12.3. Study Committees

A Trial Management Group (TMG) will be appointed in line with standard PC-CTU procedures. The TMG is responsible for the day-to-day running of PPAS4 and ensuring that the protocol is being adhered to.

13. PROTOCOL DEVIATIONS

A study related deviation is a departure from the approved study protocol, from GCP or any applicable regulatory requirements. Any deviations from the protocol will be documented in a protocol deviation form and filed in the study master file.

14. ETHICAL AND REGULATORY CONSIDERATIONS

14.1. Declaration of Helsinki

The Investigators will ensure that this study is conducted in accordance with the principles of the Declaration of Helsinki.

14.2. Guidelines for Good Clinical Practice

The Investigators will ensure that this study is conducted in accordance with relevant regulations and GCP.

14.3. Approvals

Each country network will ensure the correct regulatory approvals are gained. If regulatory approvals are not required, this will be documented and filed in the TMF.

14.4. Other Ethical Considerations

As PPAS4 does not involve the collection and recording of confidential or linked patient data or samples, ethical and other regulatory approval may not be required or can be waived.

14.5. Participant Confidentiality

PPAS4 will comply with the General Data Protection Regulation (GDPR) and Data Protection Act 2018. Patients will be registered by age (in years, or months for those under 1 year of age) and sex only, and we will use a unique study ID number on the paper CRF and in the electronic database. All documents will be stored securely and only accessible by study staff and authorised personnel.

15. FINANCE AND INSURANCE

15.1. Funding

European Union’s Horizon 2020 research and innovation programme (RECOVER) grant agreement No 101003589.

15.2. Contractual arrangements

Appropriate contractual arrangements will be put in place with all networks.

16. PUBLICATION POLICY

The Investigators (those listed on the protocol) and a maximum of one investigator from each network, (to be decided at publication) will be involved in reviewing drafts of the manuscripts, abstracts, press releases and any other publications arising from the study. Authors will acknowledge that the study was funded by EU's Horizon 2020 research and innovation programme (RECOVER). Authorship will be determined in accordance with the ICMJE guidelines and other contributors will be acknowledged.

17. DEVELOPMENT OF A NEW PRODUCT/ PROCESS OR THE GENERATION OF INTELLECTUAL PROPERTY

Not applicable.

18. ARCHIVING

At the conclusion of the study and after the database has been locked, all essential documents and data will be archived for at least five years in accordance with the PC-CTU's Archiving SOPs. The CI is responsible for authorising retrieval and disposal of archived material.

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20. APPENDIX A: PPAS CRF

Registration PPAS_PC_ARI 16NOV2021

Eligibility: register data on sequential patients who consult (F2F or phone/video) with either:

a) symptoms of a lower and/or upper respiratory tract infection (≤14 days)
b) another suspicion of COVID-19

Exclusion: Patients with only ear or allergic symptoms

ID: AA-X-000 Consultation date:

Consultation at/via: □ practice □ telephone □ video/skype □ home □ urgent outpatient clinic □ ED

Consultation in this illness episode: □ first □ follow-up □ unknown

1 Has the patient been tested for COVID-19 in the past 2 weeks: □ yes □ no □ unknown
If yes: □ self-testing □ testing street □ GP/hospital
□ positive □ negative □ awaited

2 For F2F consultations, did you use personal protective equipment: □ yes □ no □ N/A
If yes: □ apron/body protection
□ face, nose/mouth protection
□ safety glasses
□ gloves

3 Patient vaccinated for
COVID-19: □ yes □ no □ unknown
If yes: □ 1 dose □ 2 doses □ 3 doses
which vaccine(s): ……..
Influenza: □ yes □ no □ unknown
Pneumococci: □ yes □ no □ unknown
If yes: □ PCV7 □ PCV10 □ PCV13 □ PPV23 □ unknown

Patient characteristics

4 Sex: □ male □ female

5 Age: …. months (0-11 months) …. years (≥1 year of age)

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

7 Comorbidity present: □ yes □ no
If yes: □ chronic respiratory condition (asthma, COPD, CF) □ diabetes □ cardiovascular disease
□ obesity □ other

8 Patient/parent reported fever: □ yes □ no

9 Have you measured? Temperature: □ yes □ no If yes: …….˚C
O_2 saturation: □ yes □ no If yes: ……. %
Respiratory rate: □ yes □ no
Heart rate: □ yes □ no

Signs and symptoms (either reason for consulting or part of consultation)

10 Rhinitis: □ yes □ no □ unknown

11 Sore throat or difficulty swallowing: □ yes □ no □ unknown
If yes, tick all that apply: □ tonsillar exudate
□ swollen tonsils
□ tender cervical nodes
□ peritonsillar abscess □ none of the above □ not examined

12 Cough: □ yes □ no □ unknown
If yes, tick all that apply: □ short of breath (dyspnea)
□ increased, or purulent sputum
□ abnormal auscultation
□ wheezing
□ breathing fast (tachypnea) □ none of the above □ not examined

13 General symptoms: □ yes □ no □ unknown
If yes, tick all that apply □ headache
□ muscle ache
□ fatigue/extremely low energy
□ diarrhea
□ loss of taste/smell □ none of the above □ not examined

14 Overall illness severity (GP's impression): □ mild □ moderate □ severe

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

16 What is the suspected etiology: □ viral (other than SARS-CoV-2) □ SARS-CoV-2 □ bacterial □ not clear

17 How certain are you about this suspected etiology:
□ very certain □ certain □ moderately □ uncertain □ very uncertain

18 Working diagnosis: □ acute pharyngitis □ acute tonsillitis □ laryngitis/laryngotracheitis (croup)
□ peritonsillar abscess □ bronchiolitis □ acute bronchitis □ CA pneumonia □ infectious wheeze □ exacerbation of chronic respiratory condition
□ Influenza □ COVID-19
□ upper RTI / common cold / sinusitis □ other, specify: …….

19 Have you? □ prescribed medication, if ticked: □ inhaled medication
□ antibiotic, if ticked, which one:
……..

□ antiviral medication, if ticked, which one: ……..

□ antihistamines
□ other
□ advised/prescribed days off work and/or school
□ advised home isolation/quarantine
□ advised symptomatic treatment
□ scheduled a follow-up visit/call
□ advised on preventive measures for patient and/or family members
□ none of the above

20 How confident are you that the medication you prescribed will benefit this patient:
□ very confident □ confident □ moderately □ unconfident □ very unconfident
□ NA

21 Did you refer the patient to hospital? □ yes □ no

21. APPENDIX D: AMENDMENT HISTORY

Amendment No.	Protocol Version No.	Date issued	Author(s) of changes	Details of Changes made

List details of all protocol amendments here whenever a new version of the protocol is produced.