QUESTIONNAIRE TO BE FINALIZED FOR ALL ENROLLED PATIENTS

for all eligible patients hospitalized in the previous 72 hours and overnight hospitalization, who are able to communicate (alt. through a proxy), who have given consent to participate in the study and who are experiencing symptoms in the last 10 days prior to admission

In the following questions, “do not know” answers apply for unknown information or not collected variables

Screening

1) How was patient identified as a potential surveillance case?

1.a. Case finding based on pre-defined admission diagnosis (Refer to Annex1) ○ Yes ○ No

If Yes:

i. Admission diagnosis (letter/code.subcode) □□□□□□□□□□ Not available

ii. ICD version used ○ ICD-9 ○ ICD-10

1.b. Case finding based on hospital admission logs for acute respiratory illness ○Yes ○ No

1.c. Case finding based on positive swab from hospital diagnostic test for admitted patients ○Yes ○ No

2) Date of admission (yyyy-mm-dd) □□□□□□□□□□□□□□□

3) What is the hospital ID? □□□□□□□□□□□□

4) Patient study identification number □□□□□□□□□□□□□□□

5) Sex ○ Female ○ Male

6) Age □□□□□□□□□○ days ○ months ○ years

7) Has the patient had any one of these symptoms in the last 7-10 days prior to admission? (mark all that applies)

a) ILI systemic symptoms
✓ Fever/history of fever
✓ Malaise/fatigue/lethargy
✓ Headache
✓ Myalgia/muscle ache/body-ache

b) ILI respiratory symptoms
✓ Cough
✓ Sore throat
✓ Shortness of breath/difficult breathing
✓ Wheezing
✓ Nasal congestion/runny nose

8) Case definition used: *(Refer to Annex 2) – One answer only*

8.1. SARI case definition
8.2. Extended SARI case definition
8.3. ECDC modified case definition
8.4. Acute respiratory illness case definition
8.5. Laboratory confirmed influenza
8.6. Laboratory confirmed Covid-19
8.7. Other (please detail: .................)

Sequencing scheme for all samples (patients of all ages):

<table>
<thead>
<tr>
<th>Hemisphere</th>
<th>Early season</th>
<th>ICU/deaths and vaccine failures</th>
<th>Samples per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern</td>
<td>all samples until 15 January</td>
<td>All</td>
<td>10-30 (during season)</td>
</tr>
<tr>
<td>Southern</td>
<td>all samples until 15 July</td>
<td>All</td>
<td>10-30 (during season)</td>
</tr>
<tr>
<td>Intertropical</td>
<td>NA</td>
<td>All</td>
<td>5-15 (all year)</td>
</tr>
</tbody>
</table>
Swabbing

9) a. Date of swabbing (yyyy-mm-dd) (During hospital stay)
   _______ • _______ • _______  ○ Do not know

   b. Date of swabbing (yyyy-mm-dd) (For COVID-19 Only - if done within 14 days from hospital admission date)
   _______ • _______ • _______  ○ NA

Laboratory Results

10) a. Does the patient have a positive flu result?  ○ Yes  ○ No  ○ Inadequate sample

   b. If yes, tick the boxes corresponding to the positive virus(es)
   □ H1N1pdm09
   □ H3N2
   □ B/Yamagata
   □ B/Victoria
   □ Influenza A not subtyped
   □ Influenza B no lineage information

11) a. Did you test for other respiratory viruses?  ○ Yes  ○ No  ○ Inadequate sample

   b. If yes, tick the boxes indicating for which pathogen test was requested and whether test was positive or not

<table>
<thead>
<tr>
<th>Test performed</th>
<th>Test result positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>♠ SARS-CoV-2</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>♠ Human coronavirus</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>♠ Metapneumovirus</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>♠ Respiratory syncytial virus</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>♠ Adenovirus</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>♠ Bocavirus</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>♠ Parainfluenza virus</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>♠ Rhinovirus</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>♠ Others, please detail:</td>
<td>○ Yes ○ No</td>
</tr>
</tbody>
</table>

Submission of samples to GISAID EpiFlu™ database via the GISAID platform:
All genome sequence data from selected severe influenza cases and all COVID-19 cases are to be submitted on the GISAID platform on a continued basis (http://gisaid.org/EPI_ISL/123456)
Clinical history

Patient characteristics

12) Other signs or symptoms at disease presentation (i.e., started in the past 10 days) *Mark all that applies or select not applicable*

- Nausea or vomiting
  - Yes
  - No
  - Do not know
- Diarrhea
  - Yes
  - No
  - Do not know
- New loss of taste or smell
  - Yes
  - No
  - Do not know
- Chest pain
  - Yes
  - No
  - Do not know

13) a. Pregnancy status

- Yes
- No
- Non-applicable

b. If yes, pregnancy weeks:

|   |   |   | weeks
|---|---|---|---
|   |   |   | Do not know

14) **Height** *(Only for children <5 years - Round up to the nearest integer)*

|   |   |   | cm
|---|---|---|---
|   |   |   | Do not know

15) **Weight** *(Only for children <5 years - Round up to the nearest integer)*

|   |   |   | kg
|---|---|---|---
|   |   |   | Do not know

16) a. Does the patient have any chronic conditions?

- Yes
- No
- Do not know

b. If yes, indicate which ones *(Mark all that applies)*

- Cardiovascular disease
- Chronic lung disease (such as chronic obstructive pulmonary disease [COPD] and cystic fibrosis)
- Asthma
- Diabetes
- Immunodeficiency *(except HIV)* / Organ transplant
- Renal impairment
- Rheumatologic disease / Autoimmune disease
- Neurological or neuromuscular disease
- Cirrhosis / Liver disease
- Neoplasm (active)
- Obesity
- Active tuberculosis
- Malnutrition *(Only for children <5 years)*
- HIV infection
- HIV exposure *(if children < 5 year)*
- Hemoglobinopathies
- Born premature, ie., <37 week gestation *(Only for children < 5 years)*
- Other
17) a. Use of influenza antivirals (oseltamivir, zanamivir, favipiravir or peramivir) for the current episode initiated before this admission?
   
   b. Starting Date (yyyy-mm-dd)

18) a. Use of influenza antiviral (oseltamivir, zanamivir, favipiravir or peramivir) for the current episode initiated during this admission
   
   b. Starting Date (yyyy-mm-dd)

19) a. Use of antibiotics preceding this admission?
   
   b. Starting Date (yyyy-mm-dd)

20) a. Use of antibiotics during this admission?
   
   b. Starting Date (yyyy-mm-dd)

Vaccination Status

1) Vaccination status influenza:
   a. Influenza vaccination for the current season
   
   If yes:
   
   b. Vaccinated more than 14 days before onset of acute respiratory symptoms
   
   c. Vaccination history for current season validated through registry or medical records?
   
   d. Type of influenza vaccine?
   
   e. Influenza vaccination in the preceding season?

2) Vaccination status COVID-19:
   a. How many COVID-19 vaccine doses received? None
   
   b. Date of last vaccine dose (yyyy-mm-dd)
   
   c. If at least one dose received, which type(s) of COVID-19 vaccine(s)? (check all that apply)

   mRNA (e.g., Moderna, Pfizer BioNtech)
   Inactivated whole virion (e.g., Sinopharm, Sinovac)
   Viral vector vaccine (e.g., AstraZenica, Sputnik)
   Protein subunit vaccine (e.g., Novavax)
   Do not know
### Severity (measured at admission)

3) **Confusion/lethargy**
   - Yes
   - No
   - Do not know

4) **Blood pressure** (systolic/diastolic)
   - __________ / __________ mmHg
   - Do not know

5) **Respiratory rate** (breaths per minute)
   - __________ bpm
   - Do not know

6) **Oxygen saturation value on ambient air (%)**
   - __________
   - Do not know

7) **Supplemental oxygen without mechanical ventilation**
   - Yes
   - No
   - Do not know

8) **Vasopressor support**
   - Yes
   - No
   - Do not know

9) **Apnea (only for children <5)**
   - Yes
   - No
   - Do not know

10) **What is the baseline frailty score of the patient (only for all patients 50 years and older), prior to onset of the current illness?** (category 1-9) *(see annex 3 for definition of the scale)*
    - Category __________
    - Do not know

### Severity (measured at any time during admission)

11) **ICU admission (at any time during hospitalization)**
    - Yes
    - No
    - Do not know

12) **High dependence unit (at any time during hospitalization)** *(See Annex 4 for definition)*
    - Yes
    - No
    - N/A or Do not know

13) **Mechanical ventilation (at any time during hospitalization)**
    - Yes
    - No
    - Do not know

### Outcome

14) **Death while hospitalized**
    - Yes
    - No
    - Do not know

15) **Discharge/death date (yyyy-mm-dd)**
    - __________ - __________ - __________

16) **Transfer to another hospital/Left against medical orders**
    - Yes
    - No
    - Do not know

17) a. **Main diagnose at discharge/death** (letter/code.subcode)
    - __________ . __________ . __________
    - Not available

b. **Secondary 1 diagnose at discharge/death** (letter/code.subcode)
    - __________ . __________ . __________
    - Not available

c. **Secondary 2 diagnose at discharge/death** (letter/code.subcode)
    - __________ . __________ . __________
    - Not available

d. **ICD used**
    - ICD-9
    - ICD-10

18) **What is the frailty score of the patient at discharge (only for all patients 50 years and older)?** (category 1-9) *(See annex 2 for definition of the scale)*
    - __________
    - Do not know
19) GISAID EpiFlu™ database sharing:
   a. Did you submit the sample to GISAID EpiFlu™ database? ○ Yes ○ No ○ No, failed sequencing

   b. If yes, please enter the GISAID Accession Number (EPI_ISL) _______ _______ _______ _______ _______

   The GISAID Accession Number needs to be completed for the data linkage (clinical/sequencing).

   c. Please indicate if it is an influenza sample or a Covid-19 sample:

   End of the questionnaire. Please send the questionnaire to PI for recording.
Annex 1: Admission diagnoses

Case ascertainment/Case finding

You can use this Table as a guidance to identify patients that may be eligible to participate in the surveillance system. You can use the list of acute events and/or ICD codes if available at your hospital or you can rely on other case ascertainment strategies, like looking at hospital admission logs, or looking at emergency department logs, infectious disease contacts etc.

Table 1. Example of admission diagnoses possibly associated with an influenza infection that could be taken into account when looking for eligible patients. International Classification of Diseases Code version 9 and 10.

<table>
<thead>
<tr>
<th>For patients less than 5 years</th>
<th>ICD 9 Codes</th>
<th>ICD 10 Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute upper or lower respiratory disease</td>
<td>382.9; 460 to 466</td>
<td>J00-J06, J20-J22</td>
</tr>
<tr>
<td>Dyspnea, breathing anomaly, shortness of breath, tachypnea (polypnea)</td>
<td>786.0; 786.00; 786.05-786.07; 786.09; 786.9</td>
<td>R06.0, R06, R06.9, R06.3, R06.00, R06.09, R06.83, R06.02, R06.82, R06.2, R06.89</td>
</tr>
<tr>
<td>Acute asthma or exacerbation</td>
<td>493.92</td>
<td>J45.901</td>
</tr>
<tr>
<td>Pneumonia and influenza</td>
<td>480 to 488</td>
<td>J09-J18</td>
</tr>
<tr>
<td>Acute respiratory failure</td>
<td>518.82</td>
<td>J96</td>
</tr>
<tr>
<td>Acute heart failure</td>
<td>428-429.0</td>
<td>I50-I50.9; I51.4</td>
</tr>
<tr>
<td>Myalgia</td>
<td>729.1</td>
<td>M79.1</td>
</tr>
<tr>
<td>Altered consciousness, convulsions, febrile convulsions</td>
<td>780.01-780.02; 780.09; 780.31-780.32</td>
<td>R40.20, R40.4, R40.0, R40.1, R56.00, R56.01</td>
</tr>
<tr>
<td>Fever or fever unknown origin or non specified</td>
<td>780.6-780.60</td>
<td>R50, R50.9</td>
</tr>
<tr>
<td>Cough</td>
<td>786.2</td>
<td>R05</td>
</tr>
<tr>
<td>Gastrointestinal manifestations</td>
<td>009.0; 009.3</td>
<td>A09.0; A09.9</td>
</tr>
<tr>
<td>Sepsis, Systemic inflammatory response syndrome, not otherwise specified</td>
<td>995.90-995.94</td>
<td>R65.10, R65.11, R65.20, A41.9</td>
</tr>
<tr>
<td>Nausea and vomiting</td>
<td>078.82; 787.0; 787.01-787.03</td>
<td>R11; R11.0; R11.10 - R11.12; R11.2</td>
</tr>
<tr>
<td>Loss of smell, loss of taste</td>
<td></td>
<td>R43.8 , R43.8,</td>
</tr>
<tr>
<td>Pneumonia due to coronavirus disease 2019</td>
<td></td>
<td>J12.82, U07.1,</td>
</tr>
<tr>
<td>Coronavirus infection, unspecified</td>
<td></td>
<td>B34.2, U07.1, J12.81</td>
</tr>
<tr>
<td>Condition</td>
<td>ICD 9 Codes</td>
<td>ICD 10 Codes</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>---------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>GIHSN Core questionnaire</td>
<td></td>
<td>B97.21</td>
</tr>
<tr>
<td>SARS-associated coronavirus as the cause of diseases classified elsewhere</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bacterial infection, unspecified, in conditions classified elsewhere and of unspecified site</td>
<td>041.9</td>
<td></td>
</tr>
<tr>
<td>Transient cerebral ischemia</td>
<td>435</td>
<td></td>
</tr>
<tr>
<td>Acute, but ill-defined, cerebrovascular disease</td>
<td>436</td>
<td></td>
</tr>
<tr>
<td>Chronic bronchitis</td>
<td>491</td>
<td></td>
</tr>
<tr>
<td>Asthma</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>Chronic airway obstruction, not elsewhere classified</td>
<td>496</td>
<td></td>
</tr>
<tr>
<td>Dizziness / Vertigo, NOS</td>
<td>780.4</td>
<td></td>
</tr>
<tr>
<td>Altered mental status</td>
<td>780.97</td>
<td></td>
</tr>
<tr>
<td>Symptoms concerning nutrition, metabolism and development: Feeding difficulties and mismanagement</td>
<td>783.3</td>
<td></td>
</tr>
<tr>
<td>Symptoms concerning nutrition, metabolism and development: Other</td>
<td>783.9</td>
<td></td>
</tr>
<tr>
<td>Viremia, unspecified</td>
<td>790.8</td>
<td></td>
</tr>
</tbody>
</table>

For patients 5 years and older

<table>
<thead>
<tr>
<th>Condition</th>
<th>ICD 9 Codes</th>
<th>ICD 10 Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute upper or lower respiratory disease</td>
<td>382.9; 460-466</td>
<td>J00-J06, J20-J22, H66.90</td>
</tr>
<tr>
<td>Acute myocardial infarction or acute coronary syndrome</td>
<td>410-411 and 413-414</td>
<td>I20-I25.9</td>
</tr>
<tr>
<td>Acute asthma or exacerbation</td>
<td>493.92</td>
<td>J45.901</td>
</tr>
<tr>
<td>Acute Heart failure</td>
<td>428-429.0</td>
<td>I50-I50.9, I51.4</td>
</tr>
<tr>
<td>Pneumonia and influenza</td>
<td>480-488</td>
<td>J09-J18</td>
</tr>
<tr>
<td>Bronchitis and exacerbations of Chronic Pulmonary Obstructive disease</td>
<td>490, 491.21 and 491.22,</td>
<td>J40; J44.0; J44.1</td>
</tr>
<tr>
<td>Acute respiratory failure</td>
<td>518.82</td>
<td>J96</td>
</tr>
<tr>
<td>Myalgia</td>
<td>729.1</td>
<td>M79.1</td>
</tr>
<tr>
<td>Acute metabolic failure (diabetic coma, renal dysfunction, acid-base disturbances, alterations to the water balance)</td>
<td>250.1- 250.3; 584-586; 276-277</td>
<td>E11.9, E10.9, E11.65, E10.65, E10.11, E11.01, E10.641, E11.641,</td>
</tr>
<tr>
<td>Condition</td>
<td>Code(s)</td>
<td>ICD-10 Codes</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>----------------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>Altered consciousness, convulsions, febrile convulsions, syncope and collapse</td>
<td>780.01-780.02; 780.09; 780.2; 780.31-780.32</td>
<td>E10.69, E11.00, E10.10, E11.69, N17.0, N17.1, N17.2, N17.8, N17.9, N18.1, N18.2, N18.3, N18.4, N18.5, N18.6M N18.9, N19, E87.0, E87.1, E87.2, E87.3, E87.4, E87.5, E87.6, E87.70, E87.71, E87.79, E86.0, E86.1</td>
</tr>
<tr>
<td>Dyspnea/respiratory abnormality</td>
<td>786.0</td>
<td>R40.20, R40.4, R40.0, R40.1, R55, R56.00, R56.01</td>
</tr>
<tr>
<td>Respiratory abnormality</td>
<td>786.00</td>
<td>R06.0, R06-R06.9</td>
</tr>
<tr>
<td>Shortness of breath</td>
<td>786.05</td>
<td>R06.9</td>
</tr>
<tr>
<td>Respiratory abnormality not otherwise specified</td>
<td>786.09</td>
<td>R06.3, R06.00, R06.09, R06.83</td>
</tr>
<tr>
<td>Respiratory symptoms/chest symptoms</td>
<td>786.9</td>
<td>R06.89</td>
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<td>Fever or fever unknown origin or non-specified</td>
<td>780.6-780.60</td>
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<td>Viremia, unspecified</td>
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<td></td>
</tr>
</tbody>
</table>
Annex 2: Case definitions

1. **Severe acute respiratory infection (SARI) case definition**

   An acute respiratory infection with:
   - history of fever or measured fever of ≥ 38°C
   - and cough;
   - with onset within the last 10 days.
   - and requires hospitalization

2. **Extended SARI case definition**

   An acute respiratory infection with cough and onset within 10 days that requires hospitalization (no fever required)

3. **ECDC modified case definition for influenza like-illness (ILI) in last 7 days**

   Combination of:
   - at least one of the following four systemic symptoms: fever or feverishness, headache, myalgia, or malaise;
   - at least one of the following three respiratory symptoms: cough, sore throat or shortness of breath

4. **Acute respiratory illness case definition**: Acute onset of at least one of the following four respiratory symptoms: cough or sore throat or shortness of breath or coryza and a clinician’s judgment that illness is due to infection

5. **Laboratory confirmed influenza** — a hospitalized person who has a positive laboratory test for influenza within 48 hours of hospital admission

6. **Laboratory confirmed COVID-19** — Laboratory confirmed Covid-19 — a hospitalized person who has a positive laboratory test for Covid-19 before or during hospital admission. If test result before admission, the current admission should be associated with this episode of COVID-19
Annex 3: Frailty scale

The frailty scale according to the categories defined below. If a subject is in between levels use best judgement.

Category 1: Very Fit. People who are robust, active, energetic and motivated. The people commonly exercise regularly. They are among the fittest for their age.

Category 2: Well. People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally

Category 3: Managing Well. People whose medical problems are well controlled but are not regularly active beyond routine walking.

Category 4: Vulnerable. While not dependent on others for daily help, often symptoms limit activities. A common complaint is being “slowed up”, and/or being tired during the day.

Category 5: Mildly Frail. These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

Category 6: Moderately Frail. People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.

Category 7: Severely Frail. Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months)

Category 8: Very Severely Frail. Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

Category 9: Terminally Ill. Approaching the end of life. This category applies to people with a life expectancy <6 months, who are not otherwise evidently frail.
Annex 4: High dependency units

When considering high dependency units, please bear the following in mind:

- **High dependency units (HDUs) are wards for people who need more intensive observation, treatment and nursing care than is possible in a general ward but slightly less than that given in intensive care unit (ICU).**
- Another way to distinguish the two units is by the nurse to patient ratio. In ICU you may have the nurse to patient ratio as 1:1 whereas this may be 1:2 or 1:3 in HDUs. In a normal ward we can have 1 nurse covering up to 15 patients. Again, these are realities that may differ from country to country depending on resource availability.
- Not all hospitals will have HDUs, and each country or hospital may have a different level of accepted care at their HDU facilities. For instance, often mechanical ventilation is implemented in the ICU environment, but some hospitals (depending on country’s policy) may have patients in mechanical ventilation staying at their HDUs.

If your hospital does not have a HDU, please choose “not applicable” option in the database.