



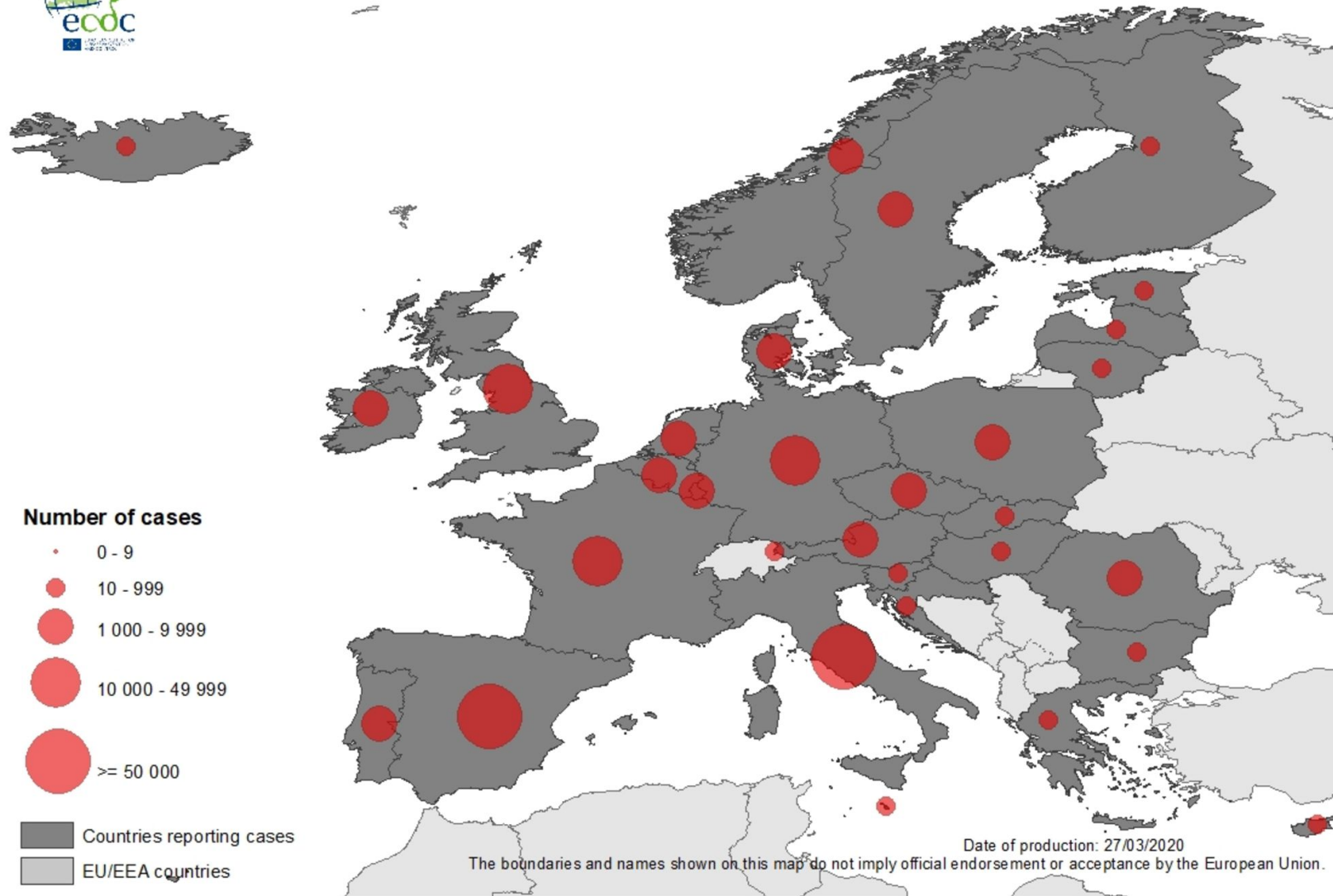
WEBINAR COVID-19:
Sharing experiences of high COVID-19 impact countries.

Moderator: Luis Castrillo
Position: EUSEM President
Country: Spain

EUSEM Covid-19 Webinar



EUSEM





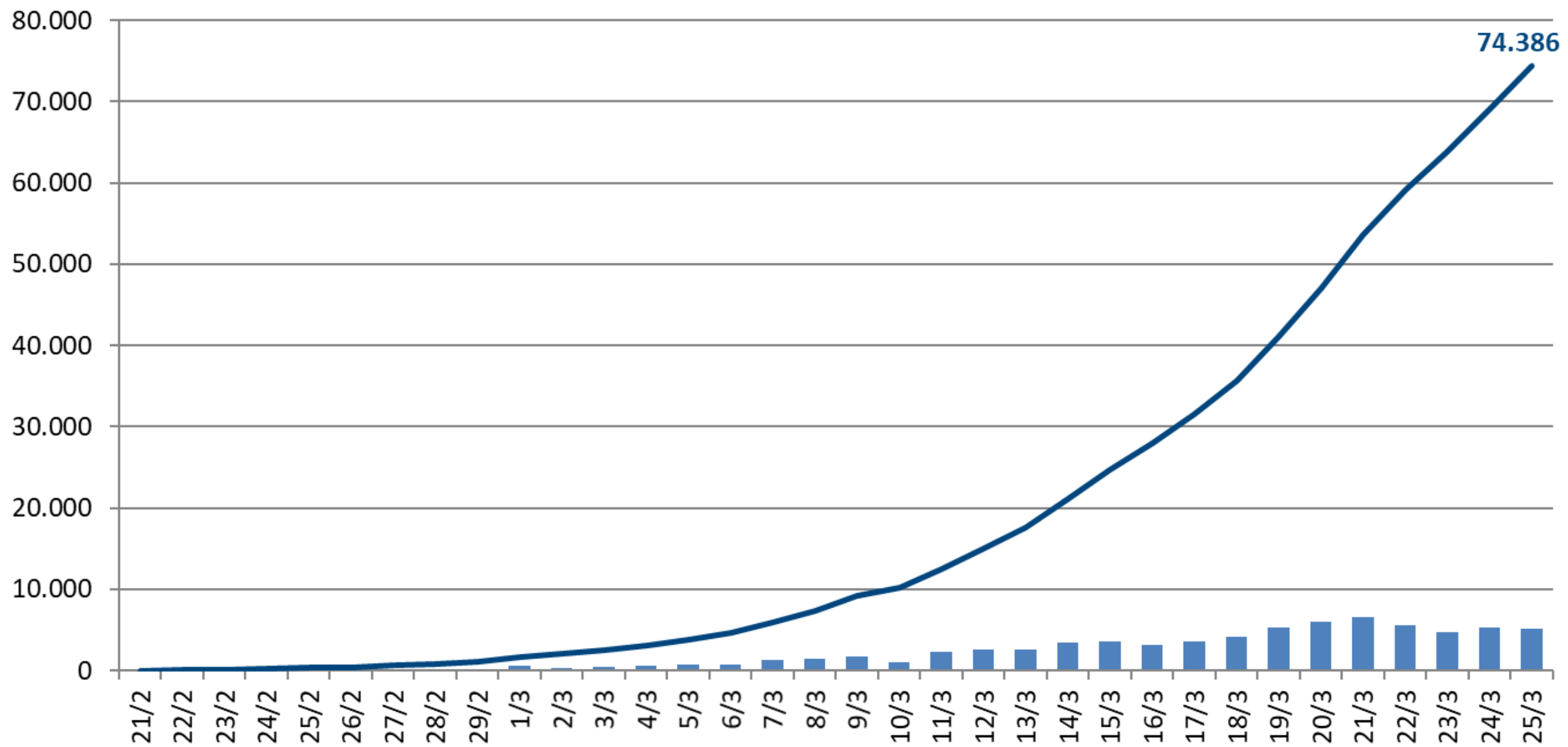
WEBINAR COVID-19:
Sharing experiences of high COVID-19 impact countries.

Name: Paolo Groff

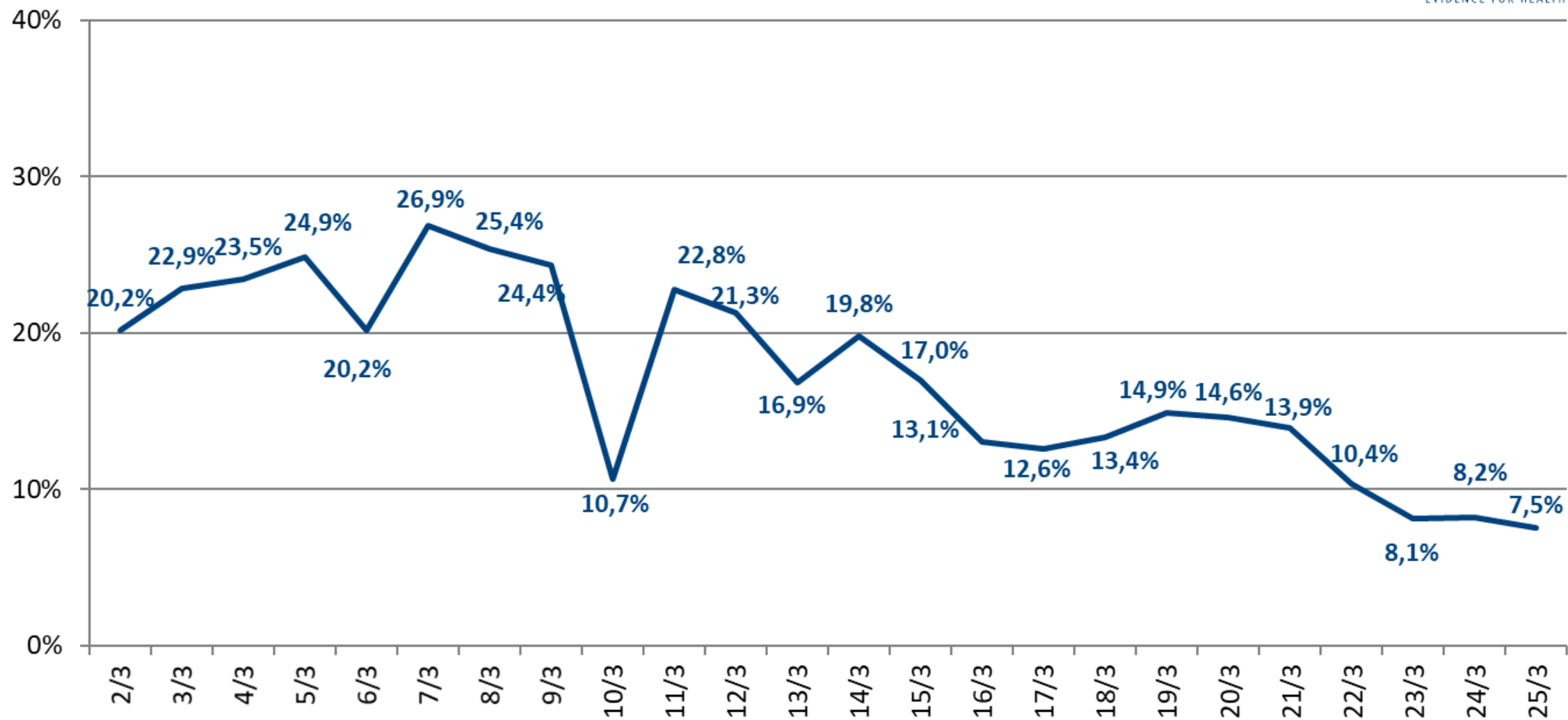
Position: Director, ED, S. Maria della Misericordia H, Perugia

Country: Italy

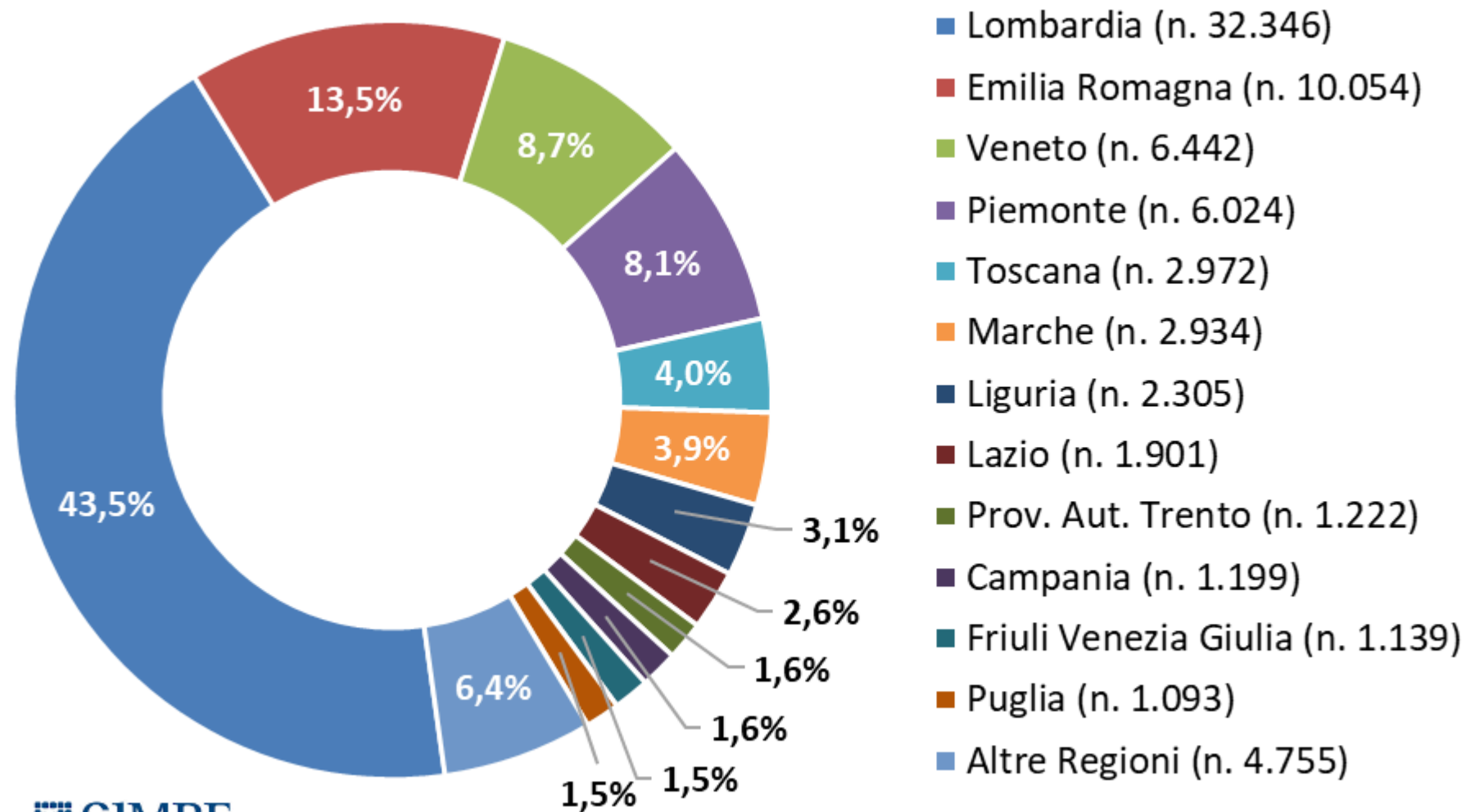
Aumento in termini assoluti dei casi di infezione da nuovo Coronavirus in Italia.



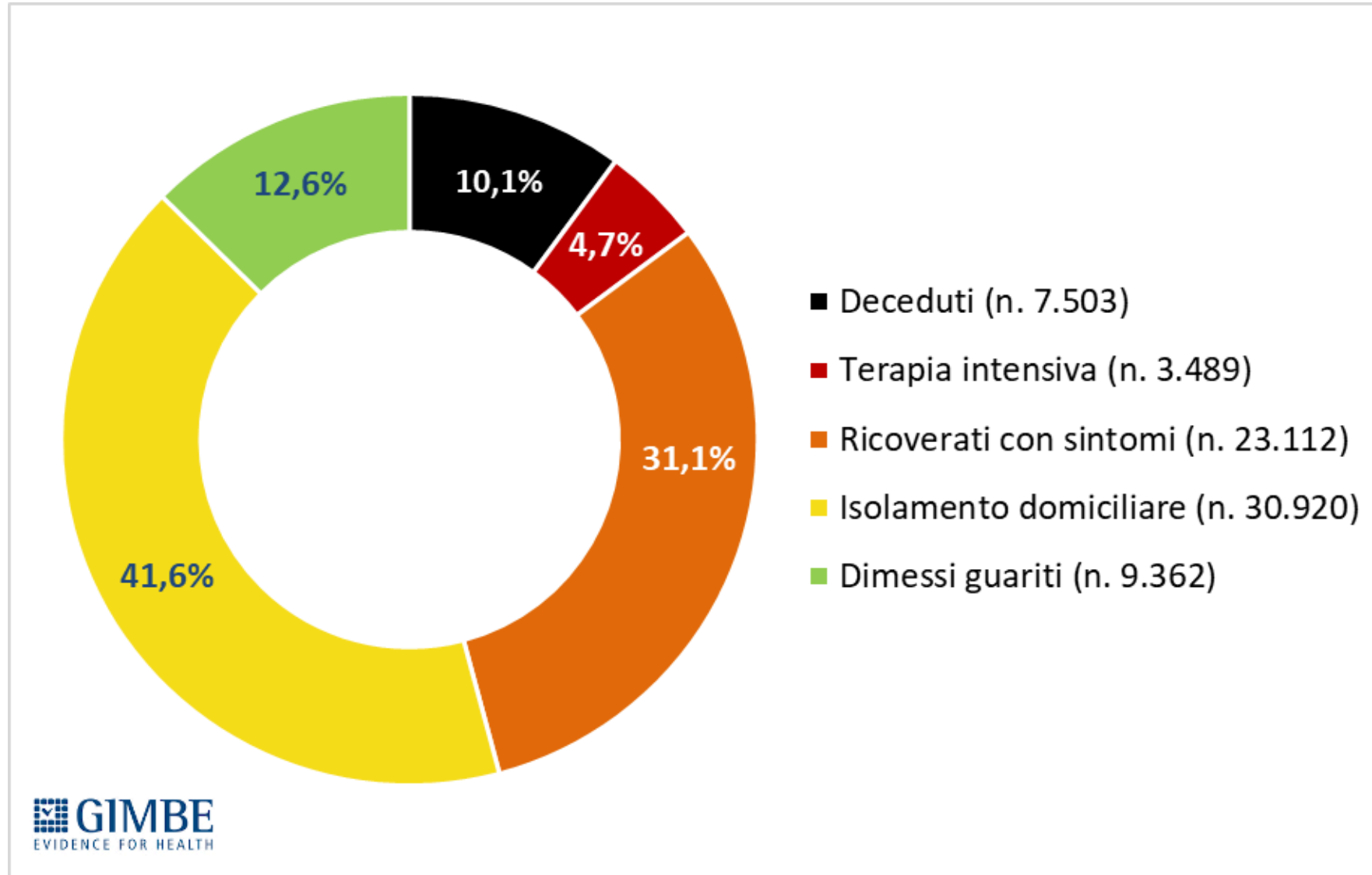
Aumento percentuale dei casi di infezione da nuovo Coronavirus in Italia



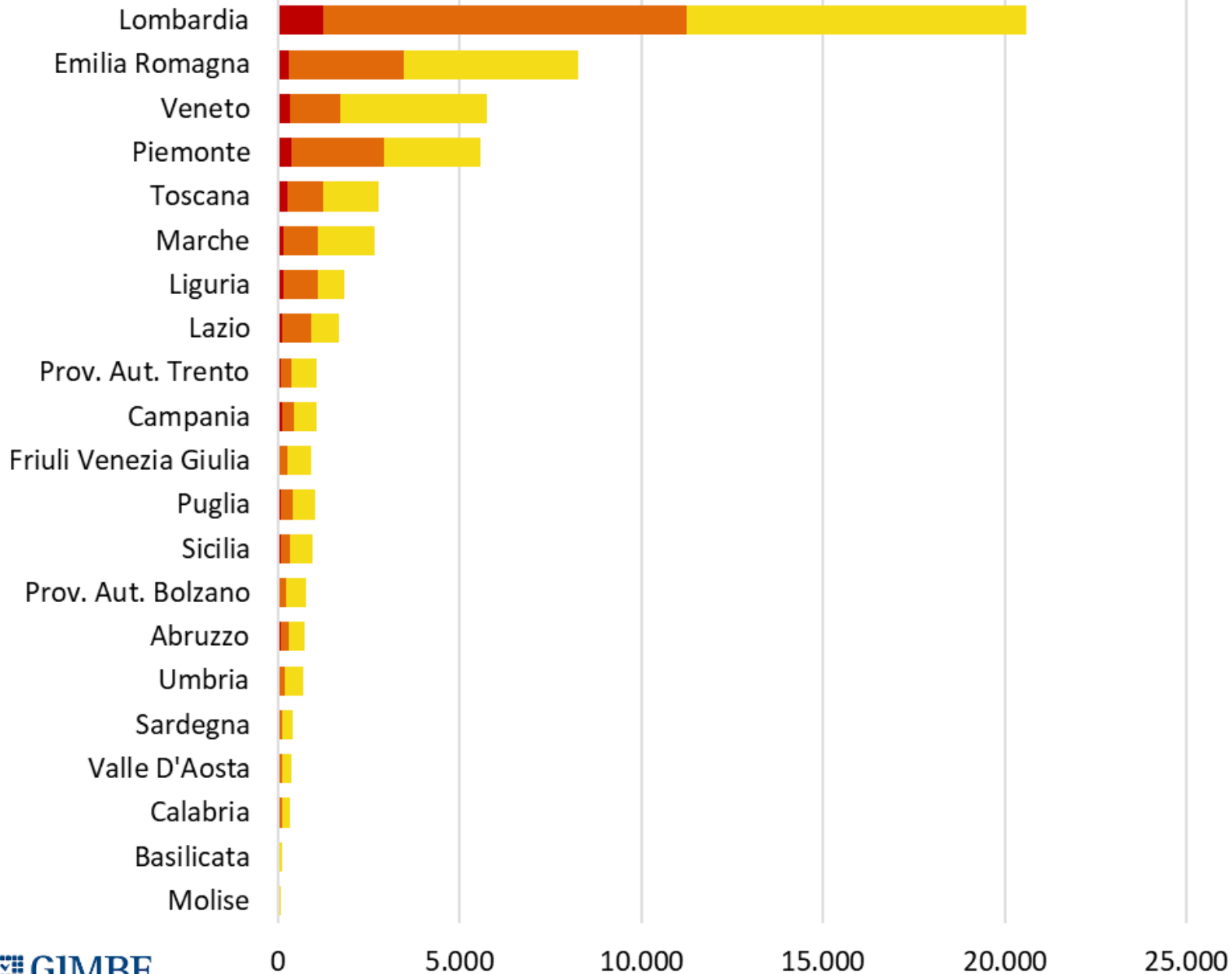
Distribuzione geografica dei casi di infezione da nuovo Coronavirus in Italia in termini percentuali e assoluti.



Percentuale dei casi di infezione da nuovo Coronavirus in Italia suddivisi per setting assistenziale (isolamento domiciliare, ricovero ospedaliero, ricovero in terapia intensiva) e la percentuale di pazienti guariti e deceduti



■ Terapia intensiva ■ Ricoverati con sintomi ■ Isolamento domiciliare

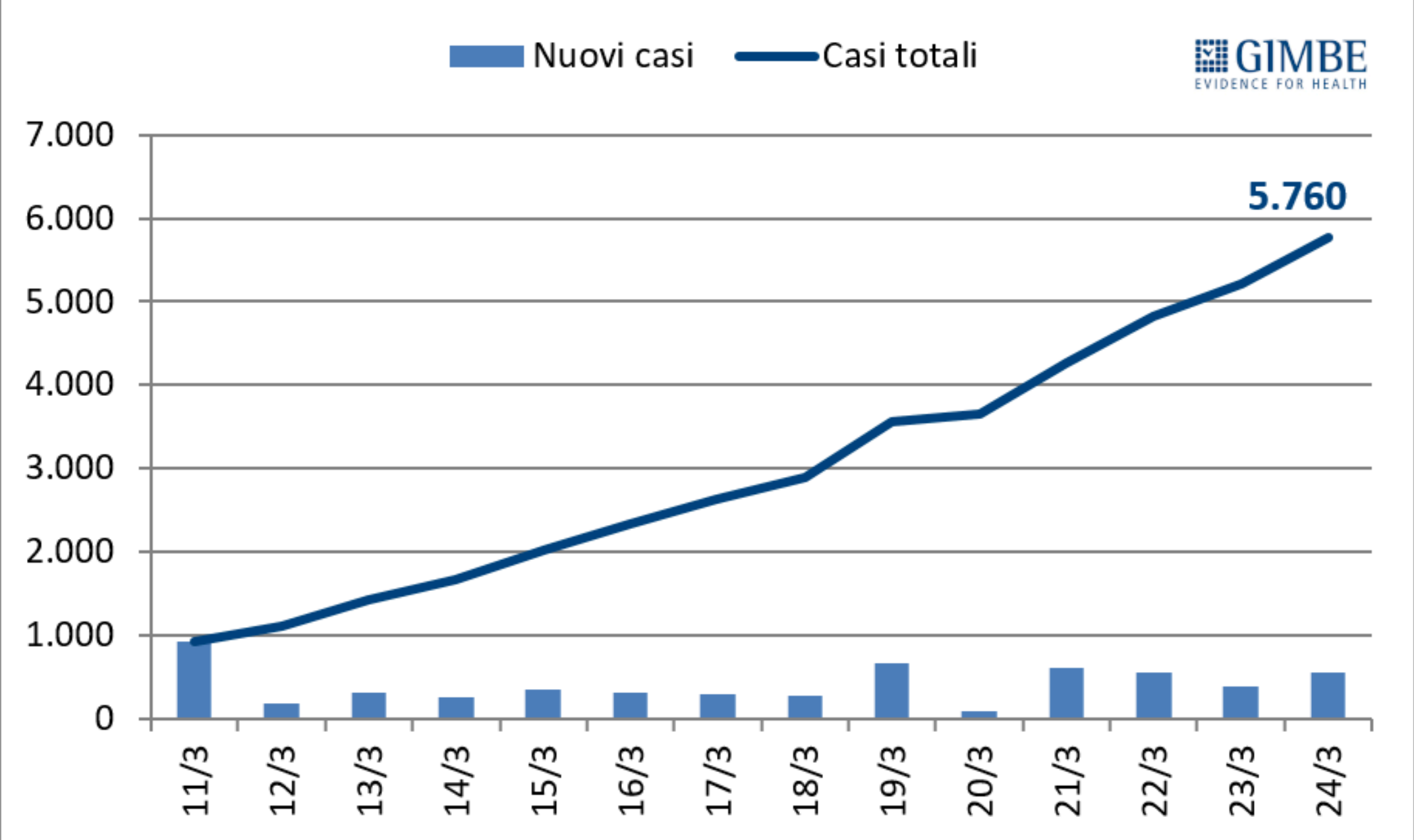


Casi di COVID-19: pazienti isolati, ricoverati con sintomi e ricoverati in terapia intensiva per Regione

Il grafico illustra i casi di infezione da nuovo Coronavirus in Italia suddivisi per Regione e setting assistenziale (isolamento domiciliare, ricovero ospedaliero, terapia intensiva).

Numero di operatori sanitari con infezione da Coronavirus in Italia

Il grafico illustra i nuovi casi giornalieri e il numero totale di casi di infezione da nuovo Coronavirus tra gli operatori sanitari in Italia.



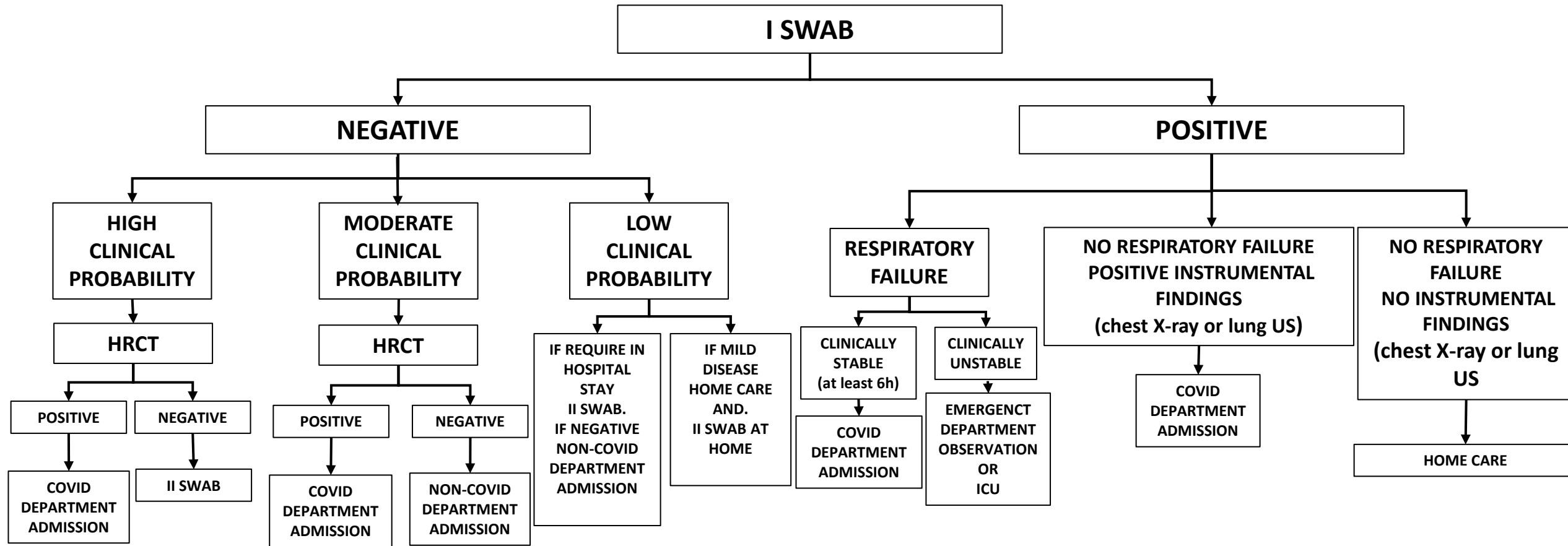
«PRE»-TRIAGE

- Placed «outside» the ED (tents or containers)
- Identification of «suspect cases» based on a clinical-epidemiological form
- Start of the patients on the «clean» or the «dirt» pathway (suspects, Covid-19 +) based on the above questionnaire
- Direct registration of pts. inside the «dirt» area in the case of high suspicion, Covid-19 +, and dyspnoea/ARF (ED alerted by EMS)
- Triage out of all patients who do not need an ED visit and those asymptomatic who refer «contacts» with Covid-19 pts or those who are suspect of being positive but have a mild disease (started to domiciliary quarantine with activation of the Public Health System)

Covid-19 + Clinical Phenotypes

- 1. Fever without ARF (normal BGA and Walking test) and Normal CXR (home care→domiciliary quarantine)
- 2. Fever with positive CXR and PaO₂ > 60 mmHg room air (Oxygen mask, admission to conventional ward or Observation Unit)
- 3. Fever with PaO₂ < 60 mmHg room air (Oxygen mask→CPAP conventional ward admission/intermediate care)
- 4. Severe Acute Respiratory Infection (onset in the last 10 days, fever, cough, need for HF oxygen or PEEP) (CPAP/ETI; Intermediate Care/ICU admission)
- 5. ARDS (ETI-MV; ICU admission)

SUSPECTED COVID-19 MANAGEMENT AFTER I PHARYNGEAL SWAB



HIGH CLINICAL PROBABILITY:

Contemporary presence of:

- **Lab criteria:** leukopenia/ lymphocytopenia; ↑CRP, normal PCT
- **Instrumental criteria:** typical findings on chest X-ray or lung US

MODERATE CLINICAL PROBABILITY:

At least one of:

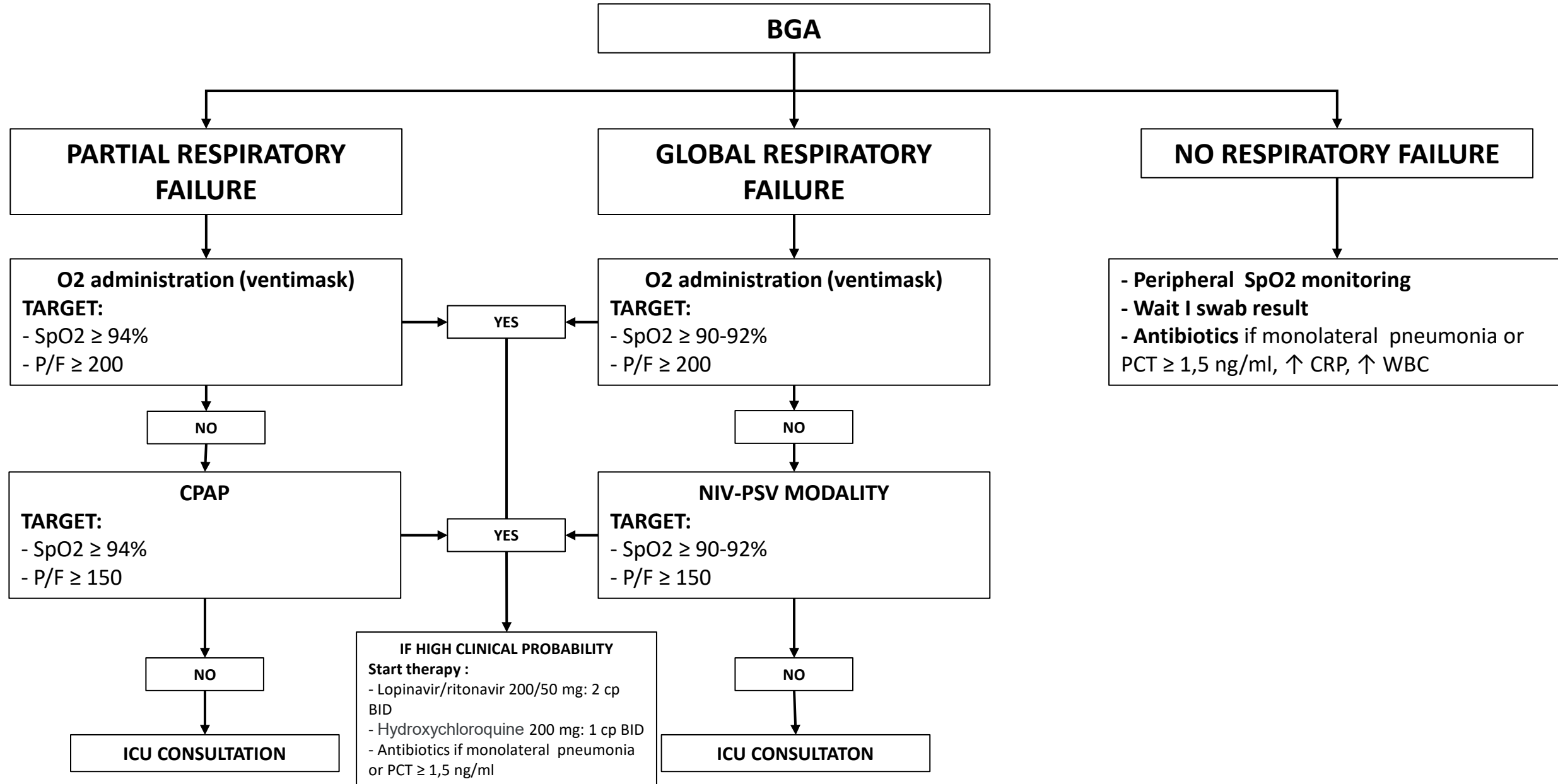
- **Lab criteria:** leukopenia/ lymphocytopenia; ↑CRP, normal PCT
- **Instrumental criteria:** typical findings on chest X-ray or lung US
- **Contact with certain covid + case**

LOW CLINICAL PROBABILITY:

No one among:

- **Lab criteria:** leukopenia/ lymphocytopenia; ↑CRP, normal PCT
- **Instrumental criteria:** typical findings on chest X-ray or lung US
- **Contact with certain covid + case**

THERAPEUTIC MANAGEMENT DURING ED OBSERVATION



Final Lessons Learned

- Italian Hospitals were not prepared to the effects of a pandemic
- Future layouts must take in count this possible evenience
- It is necessary to spread a «mass casualty culture»
- As to this events, a «per intensity» organization of the Hospital seems to work better than a «per unit» organization
- As ICUs appear rapidly saturable, «intermediate» units may be the ax
- Governaments must carry on a Individual Protection Devices and Respiratory Technologies Supply Policy in time of peace in order to be prepared when the storm knocks on the door

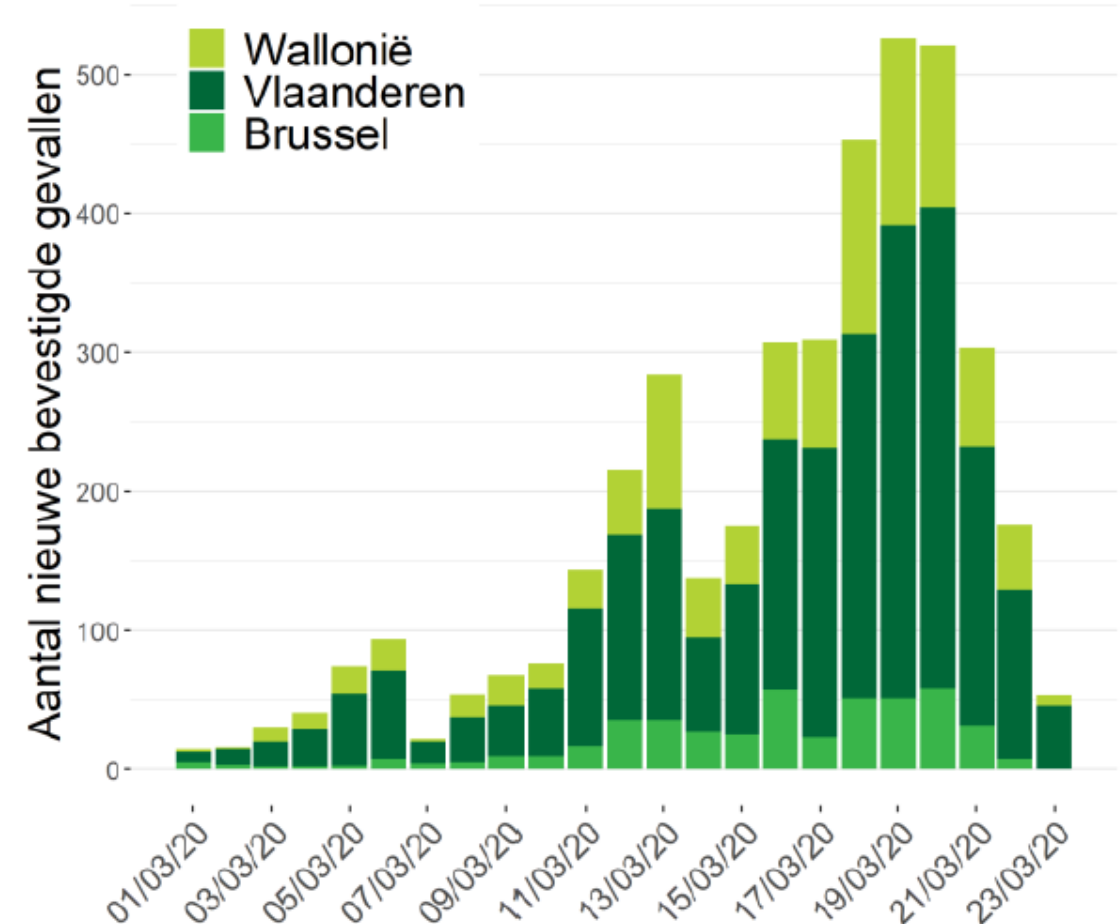


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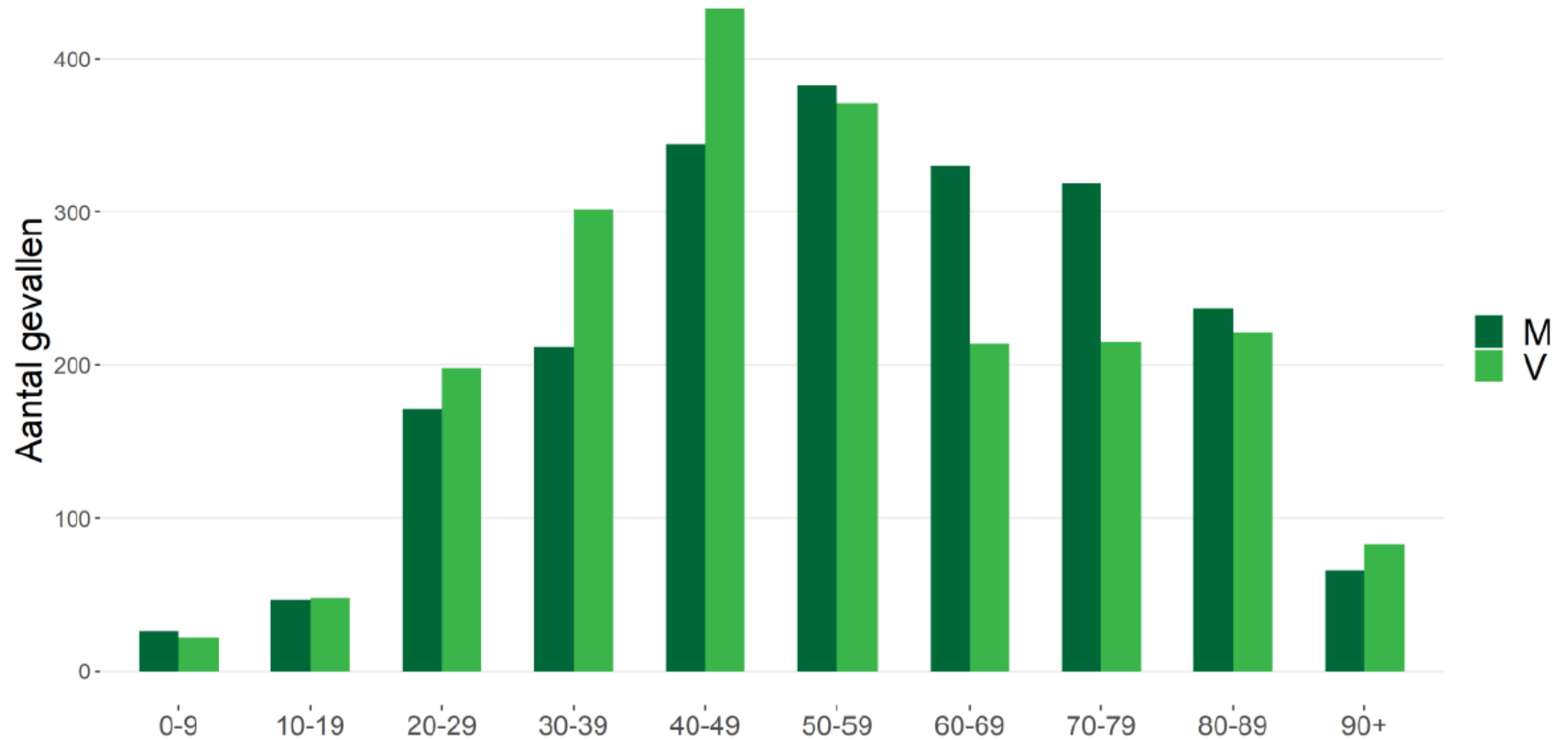
Name:	Prof Dr Marc Sabbe
Position:	Medical Disaster coordinator UZ Leuven
Country:	Belgium

1. Actual situation for Belgium on the 24th of March
 - a. Cases: 1859 admitted to hospital – 381 on ICU
 - b. Case Fatality Rate (CFR)
 - a. 122 fatal cases
 - b. CFR: variations in definitions
 - c. Test Used:
 - a. Swab: following WHO definition
 - b. CT scan: clinical suspicion
 - d. Trend in the country
 - a. Curve is getting flatter

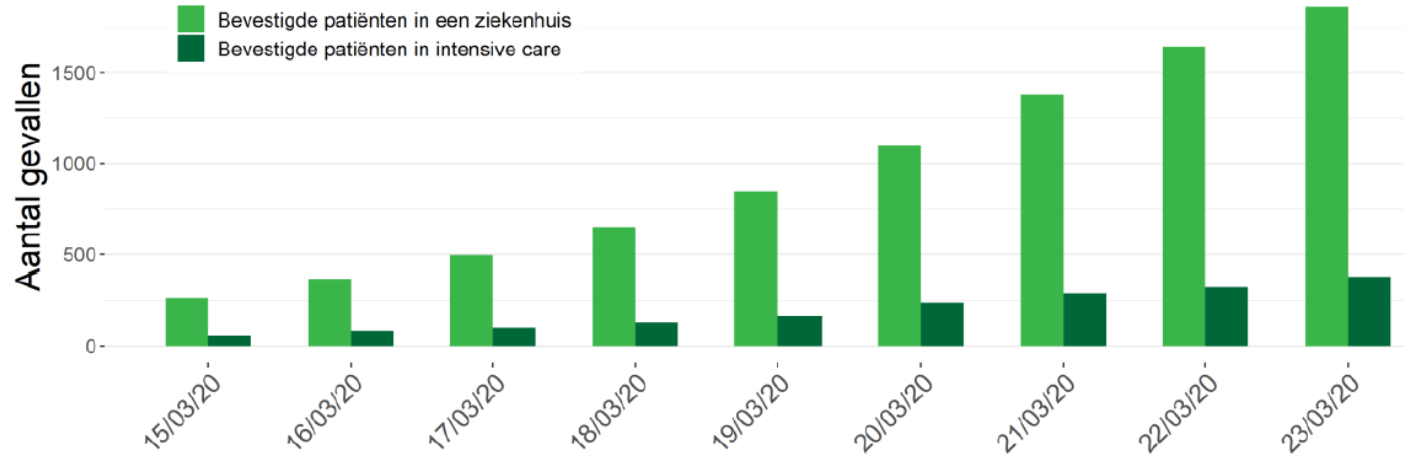
Evolutie van het aantal bevestigde gevallen per
gewest en datum van diagnose*



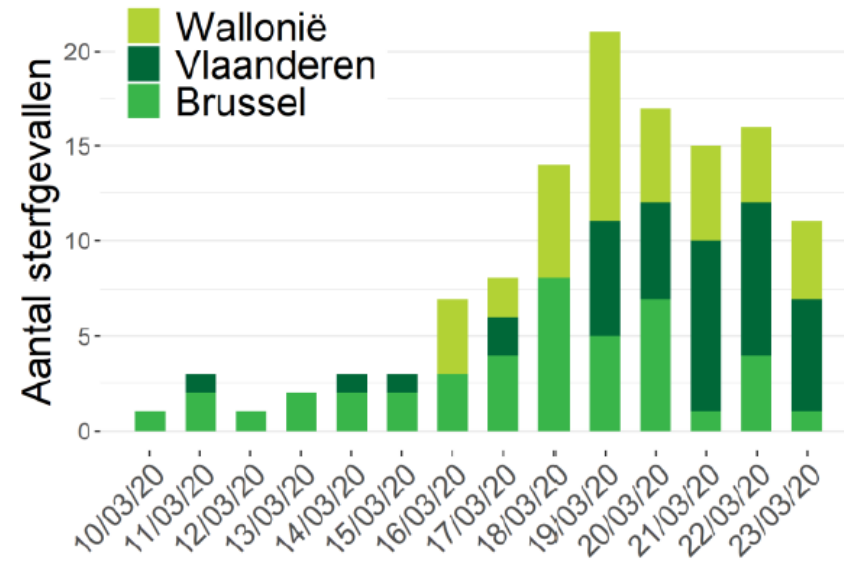
Distributie per leeftijd en geslacht van bevestigde gevallen*



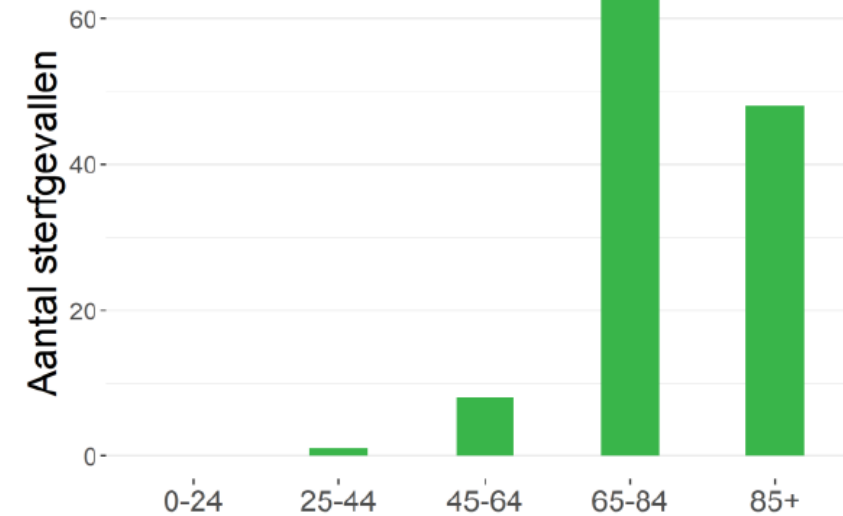
Evolutie van het totaal aantal gehospitaliseerde gevallen



Evolutie van het aantal COVID-19 sterfgevallen per gewest



Aantal COVID-19 sterfgevallen per leeftijd



2. General Approach to a suspected COVID-19 case
(If a protocol available please share as additional document)

- First selection by GPs
 - Telephone triage
- Immediate separation of two flows Covid + & - by physical triage
- Covid + flow: screening by swab & CT

3. ED Impact

- a. Changes in patients flow
 - a. Two TOTALLY separated flows
- b. COVID in Health ED workers.
 - a. Different protective measures in both flows
- c. Quick impression about the “other”(normal) demand
 - a. We still see the real emergencies
 - b. Where are the other urgencies? Risk of coming too late

- 4. Triage procedures
 - a. Structure
 - a. Telephone triage by GP
 - b. Physical triage at ED
 - c. screening
 - b. Process
 - a. Telephone triage following protocols
 - b. Physical triage: any sign = positive until proven otherwise

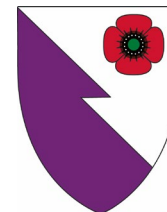
5. Final lessons learned.

- Correct info is essential to “prepare” a further evolution in “crisis management” mindset for each individual: professional & lay person
- This mindset evolution is essential to stay ahead of the speedy pandemic expansion
- Correct translation of strategic crisis management to field operations
- Those who had good disaster planning including pandemic harvest now the fruits of their preparative work



WEBINAR COVID-19:
Sharing experiences of high COVID-19 impact countries.

Name: Ian Higginson
Position: Vice President RCEM
Country: UK



The Royal College of
Emergency Medicine

1. Actual situation

- a. Cases: Admitted(Severe) and UCI cases. Unable to access reliable information. 11568 positive cases as of 27th March 1300
- b. Case Fatality Rate (CFR): Unknown. 578 who have tested positive have died
- c. Test Used: Criteria for test use. Viral swab and PCR. Initially screening travellers / contacts with symptoms, then moved to hospital admissions only with some limited testing for health care workers to get them back to work more quickly. Still not enough testing available in the UK
- d. Trend in the country: We are at the start of our COVID journey. London is currently our epicentre

2. General Approach to a suspected COVID-19 case (If a protocol available please share as additional document)

Standard management but emphasis has been on early ventilation rather than NIV at this stage

RCEM webpage with summaries of most recent UK guidance here:

https://www.rcem.ac.uk/RCEM/Quality_Policy/Safety/Covid-19/RCEM/ForProfessionals/Safety/Coronavirus_Covid-19.aspx?Coronavirus

UK specialty guidance available here: <https://www.england.nhs.uk/coronavirus/secondary-care/other-resources/specialty-guides/>

3. ED Impact

- a. Changes in patients flow
- b. COVID in Health ED workers.
- c. Quick impression about the “other”(normal) demand

a. EDs switching to dual track approach. We believe most of this is taking the form of “green” or “red” areas within existing EDs. Some EDs are setting up completely duplicate departments for “green” and “red” patients where they have the infrastructure. Variable practice around paediatric patients.

b. Early days yet but widespread and significant concerns about PPE: conflicting advice, kit shortages, lack of trust in centre around this issue. RCEM supporting national guidance but this feels uncomfortable at times. We are lobbying for upgrading of PPE recommendations in ED

c. Other demand has fallen off significantly, which concerns us. Primary care has largely switched to telemedicine and many community services downgraded. We expect this to result in increased and late presentation of diseases which we feel are still likely to be prevalent, and there are concerns about mental health given the increased anxiety around at the moment

Concerns about increase in morbidity and mortality in non-COVID patients for variety of reasons

4. Triage procedures

- a. Structure
- b. Process

a. Triage either based on prehospital information or more normally a risk assessment at the front door based on case definition / symptoms

b. Initially EDs setting up small “red” respiratory areas and facilities where aerosol generating procedures can occur. However there is the expectation that these will need to be scaled up significantly as incidence in each area increases

Major process changes include consideration of streaming options and alternative provision for minor illness and injury, a move to specialities seeing patients directly in readiness for increased EM demand, and preparation for dealing with usual EM workload but in two cohorts: Green and Red

Also many systems exploring changes to pathways, such as shorter NAC regimes, single trop chest pain pathways etc

Prehospital cardiac arrest likely to receive different responses. Air ambulance services changing criteria

Downstream process changes include designated suspected COVID and proven COVID areas within hospitals, need to dedicated imaging, theatre facilities etc. All elective surgery now stopped. Telemedicine being widely implemented

5. Final lessons learned

Too early to say

- Our speciality is amazing
- There is a need for speciality leadership and unity at a time of crisis. We have been lucky to have the RCEM infrastructure to support this
- We are proud of our NHS and there has been widespread public support
- Many colleagues across disciplines have stepped up and many silos have been broken down
- Govt has failed its staff over planning and preparation with regard to PPE. Protecting our staff hasn't been a priority
- If you run a system on empty during normal times it can't cope with surge
- Opportunity to change systems for the better in the future



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WEBINAR COVID-19:
Sharing experiences of high COVID-19 impact countries.

Name: Wilhelm Behringer

Position: Director Center of Emergency Medicine,
Jena

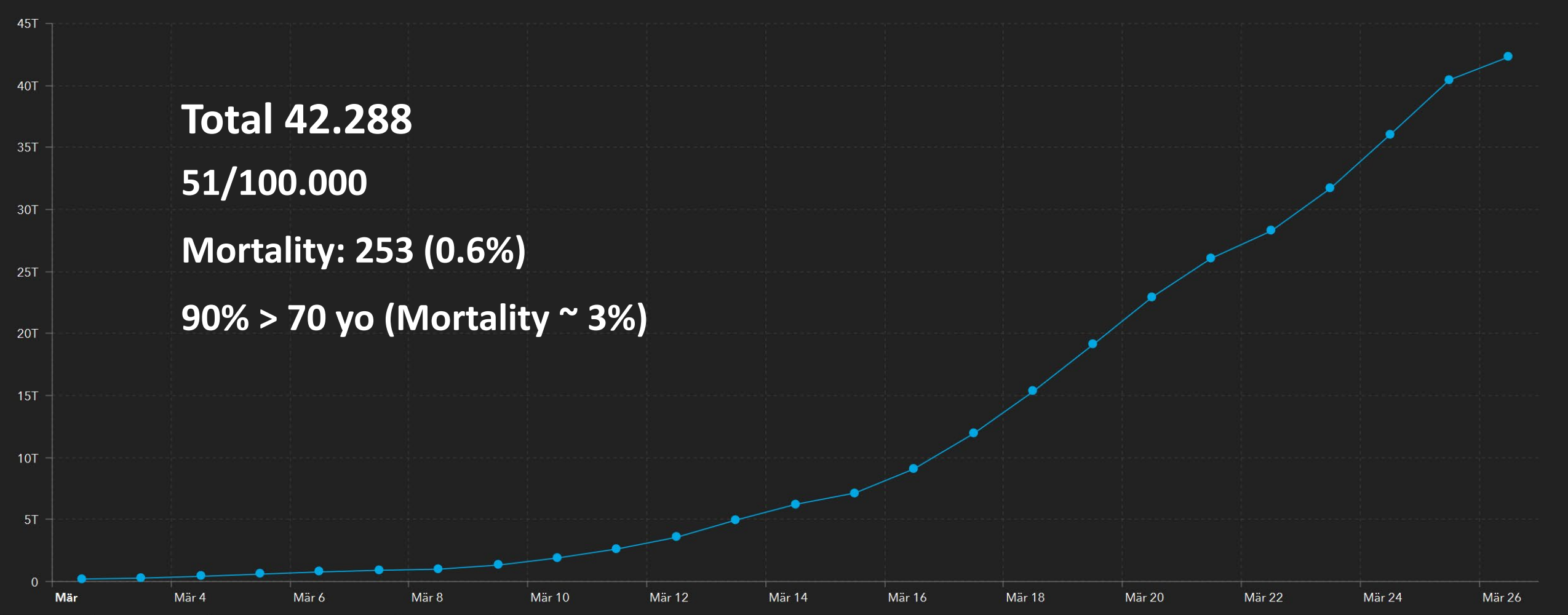
Country: Germany

Total 42.288

51/100.000

Mortality: 253 (0.6%)

90% > 70 yo (Mortality ~ 3%)



4

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8

10

12

14

16

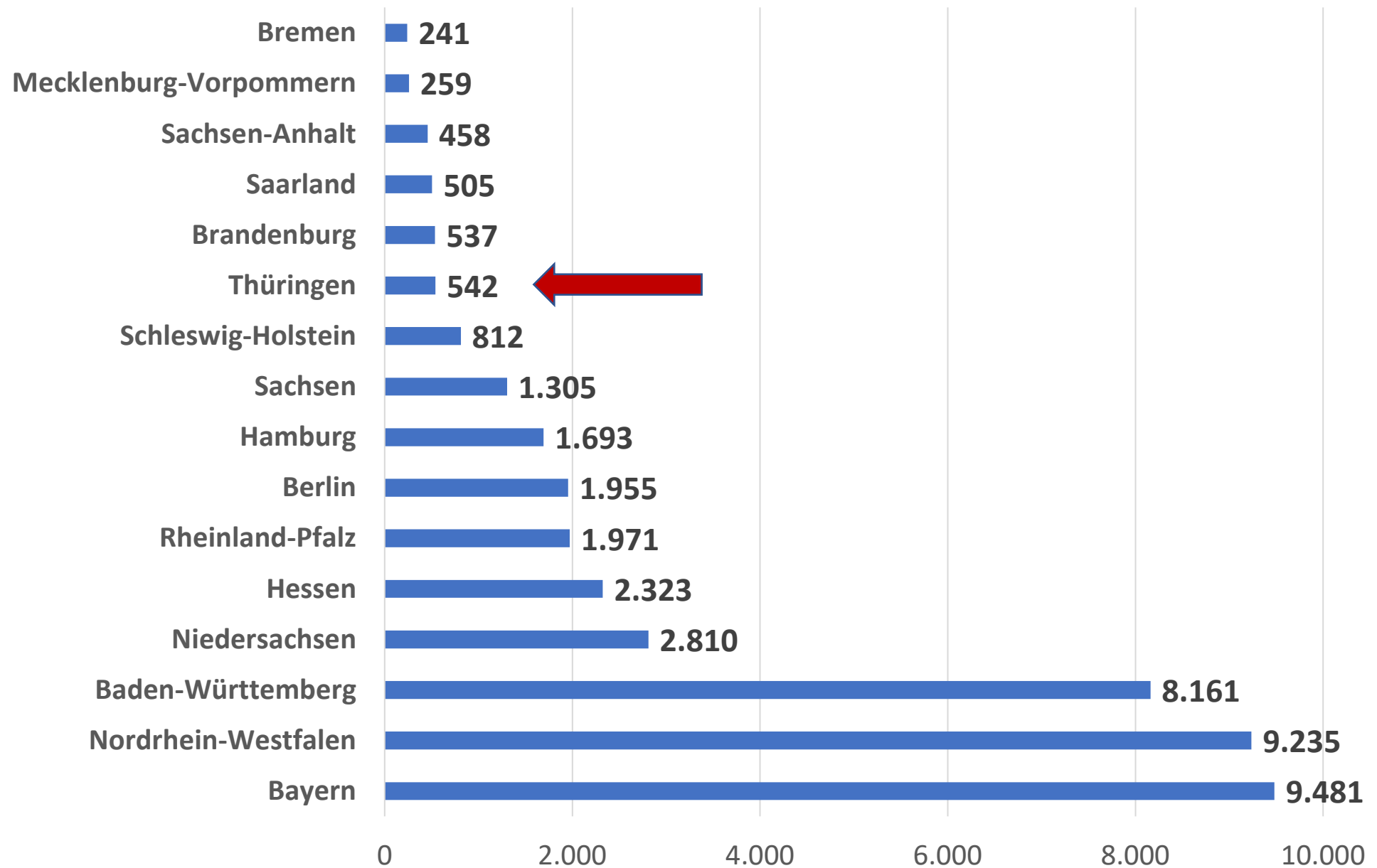
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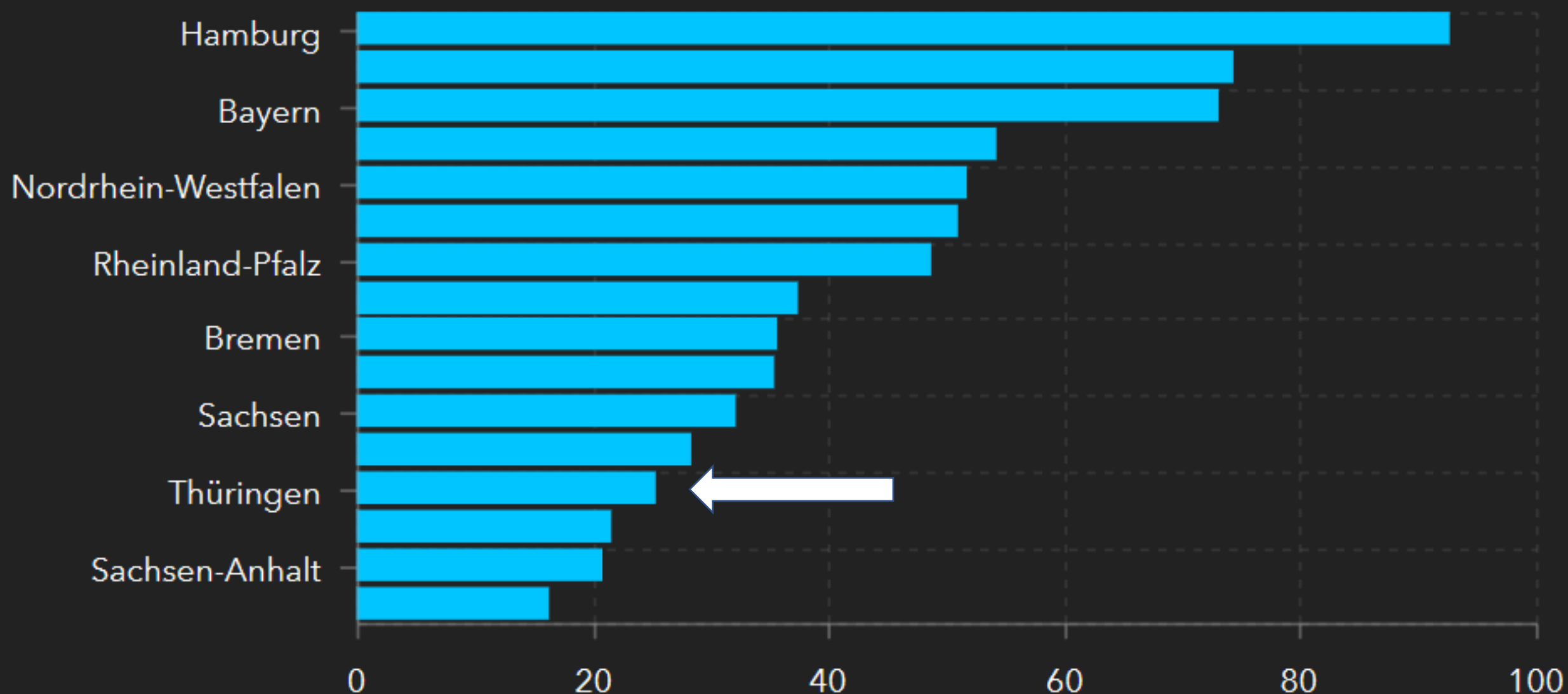
22

24

26



COVID-19-Fälle/100.000 Einwohner



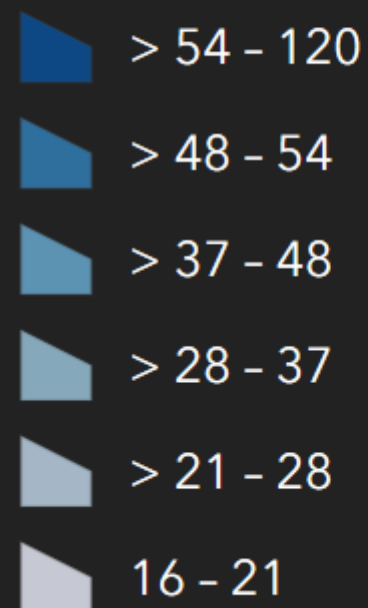
COVID-19-Fälle/100.000 Einwohner



Legende

Coronafälle in den Bundesländern

Pro 100.000 Einwohner

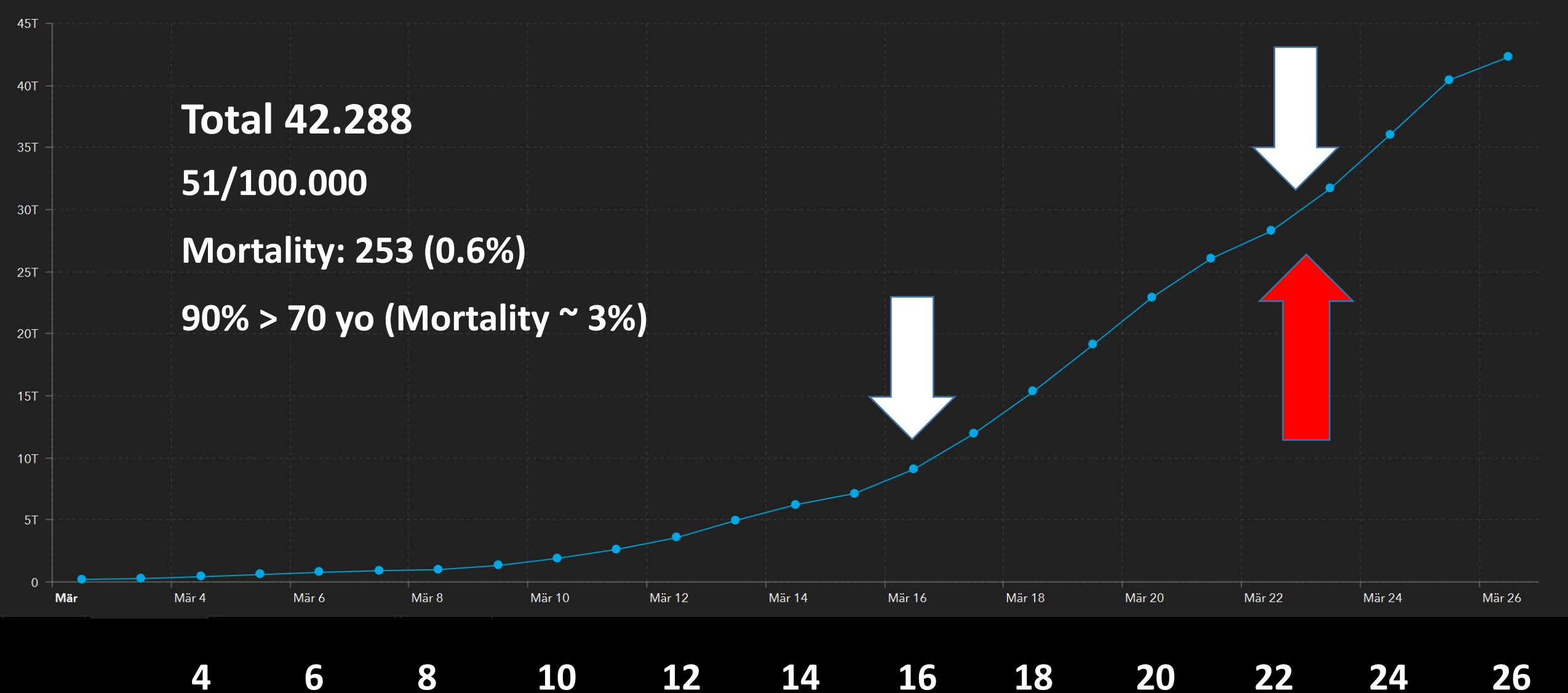


Total 42.288

51/100.000

Mortality: 253 (0.6%)

90% > 70 yo (Mortality ~ 3%)





Willkommen

7NA / Zentrale Notaufnahme / Räumlichkeiten

8 patients

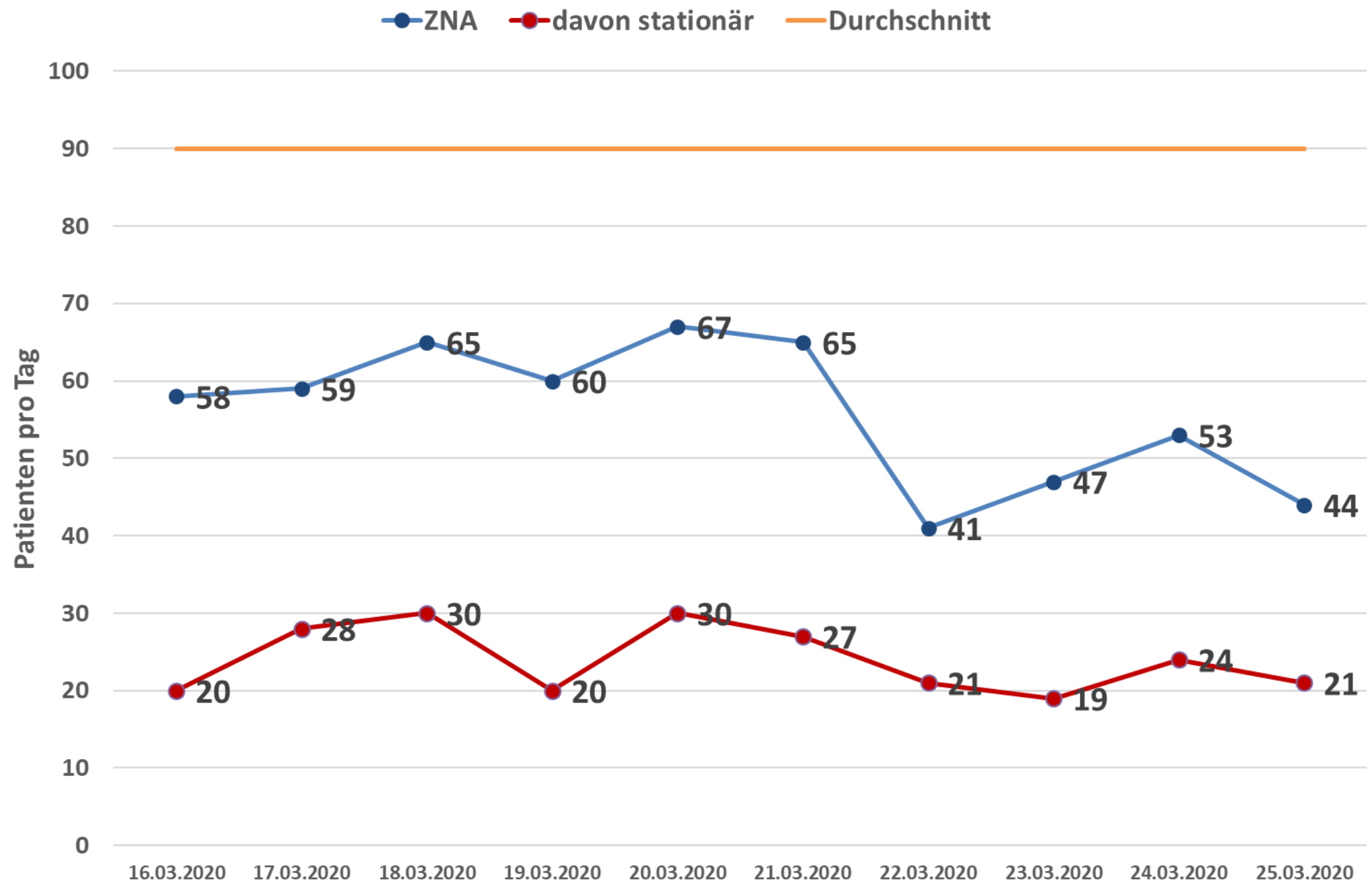


Confirmed
CoV
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Suspected
CoV 8

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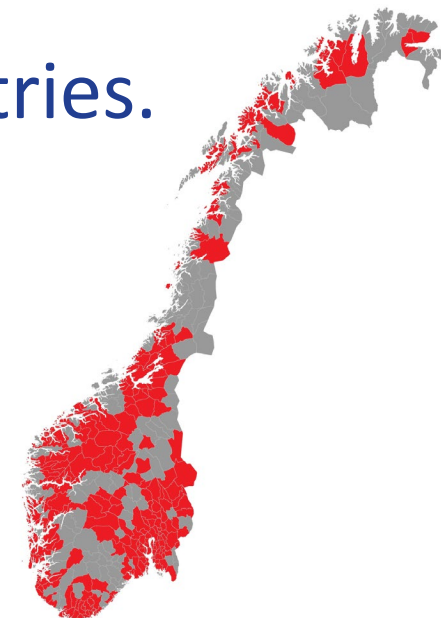
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WEBINAR COVID-19:

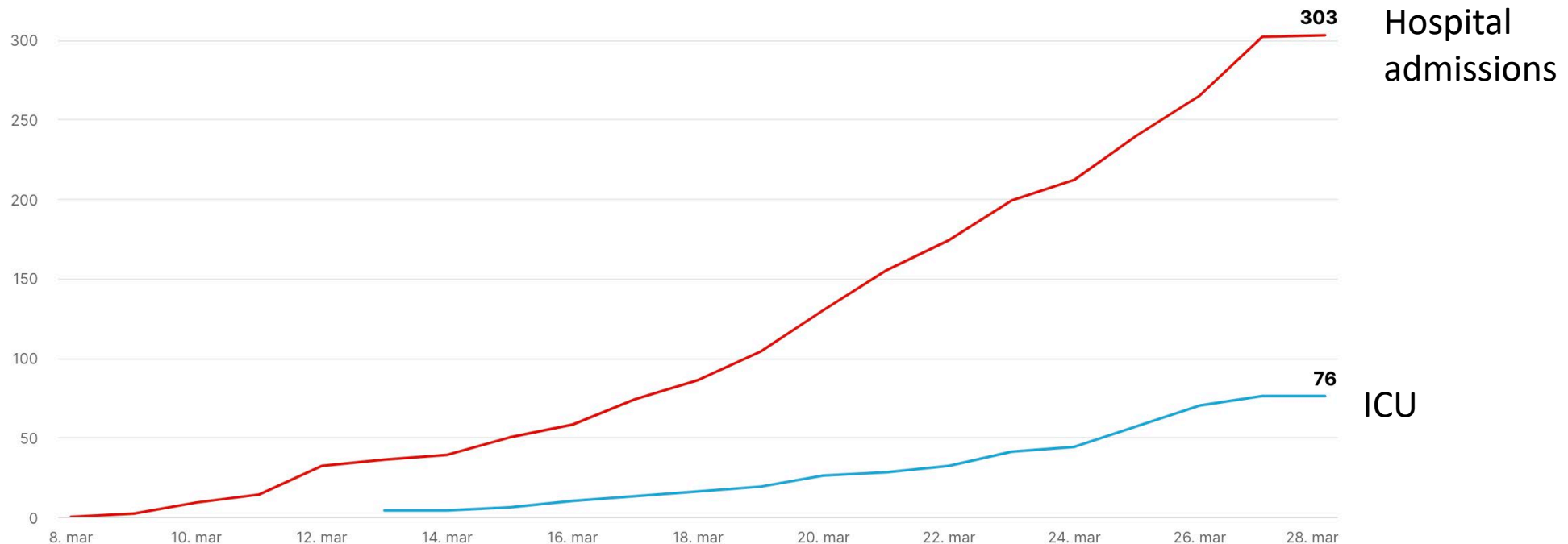
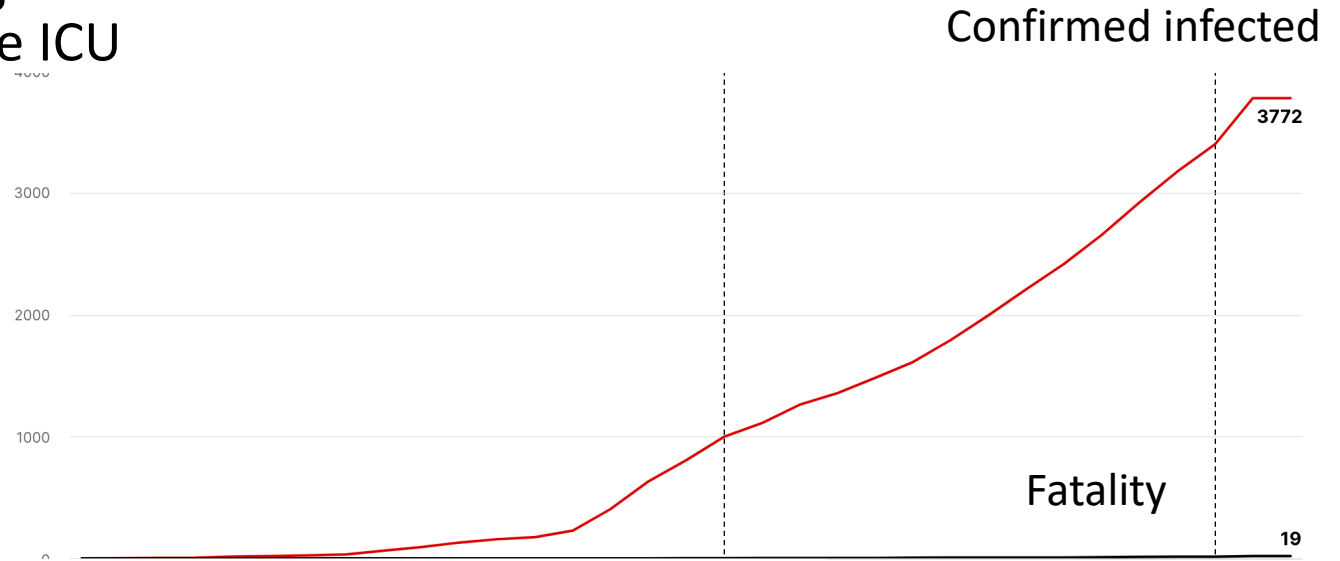
Sharing experiences of high COVID-19 impact countries.

Name: Lars Petter Bjornsen, MD, PhD, FESEM
Position: Assistant Prof./Emergency Physician
Country: Norway



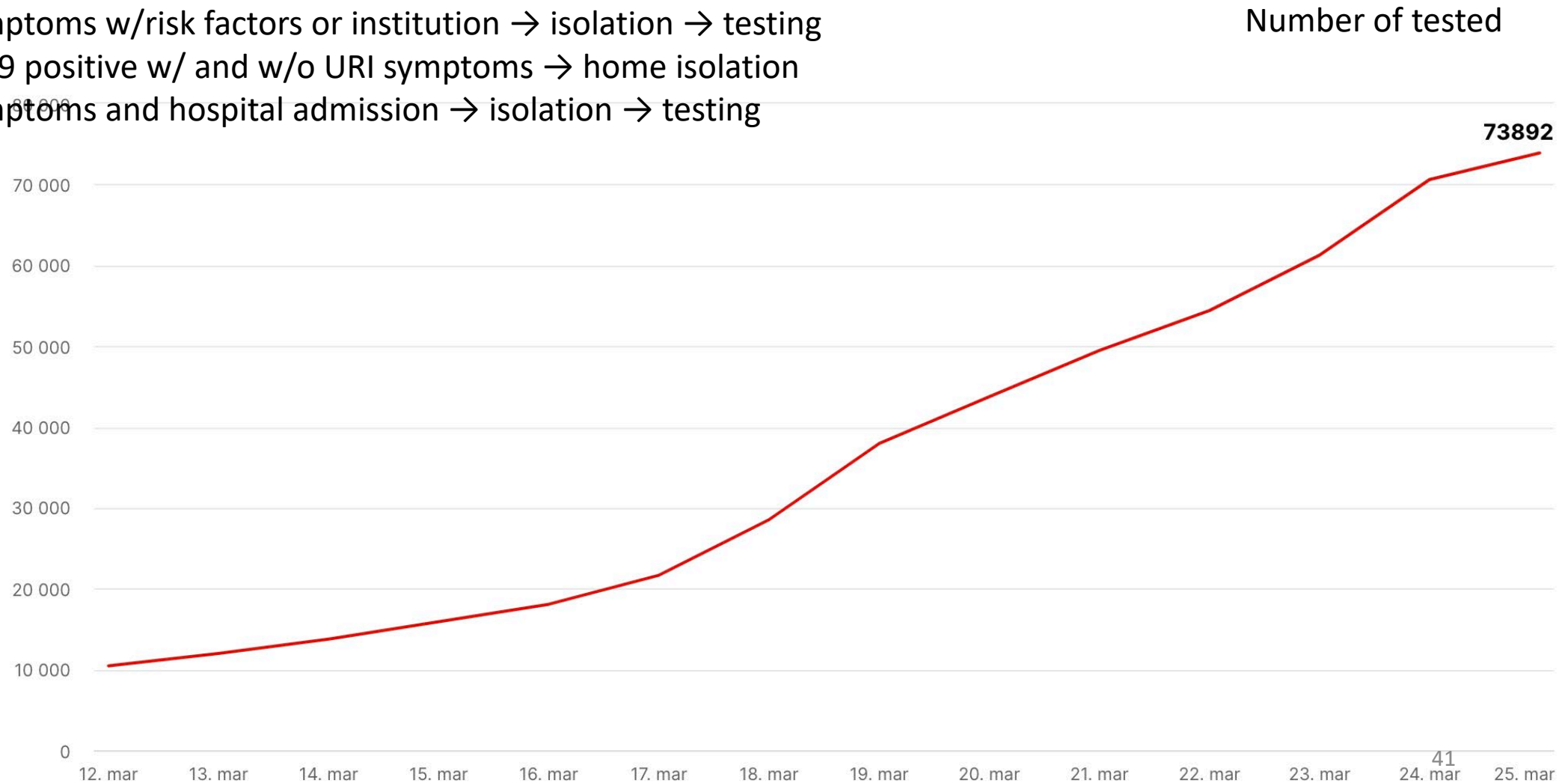
Norway on the 26th of March

- a. Cases: 3772 are confirmed infected, 303 admitted patients, and 76 patients in the ICU
- b. Case Fatality Rate (CFR) 0,42 (14/3316)
 - a. 19 Fatal Cases (Average age 83 yo)
- c. Test used
 - a. PCR (Swab/nasopharynx)
 - b. Symptomatic people
 - a. Health care workers
 - b. Risk factors and health care facilities
 - c. COVID-19 exposure
- d. Trend in country: Curve is still climbing



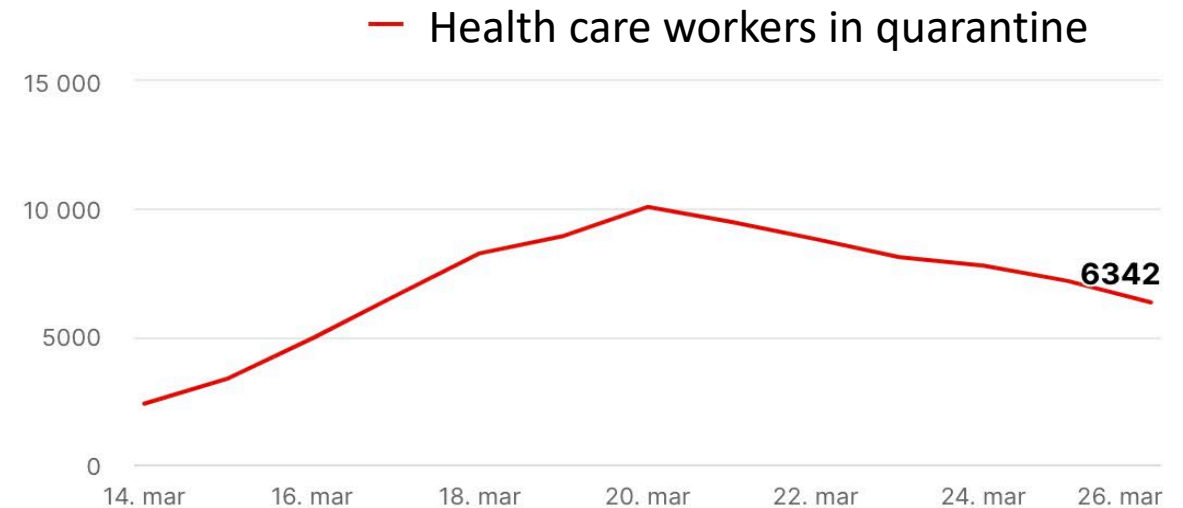
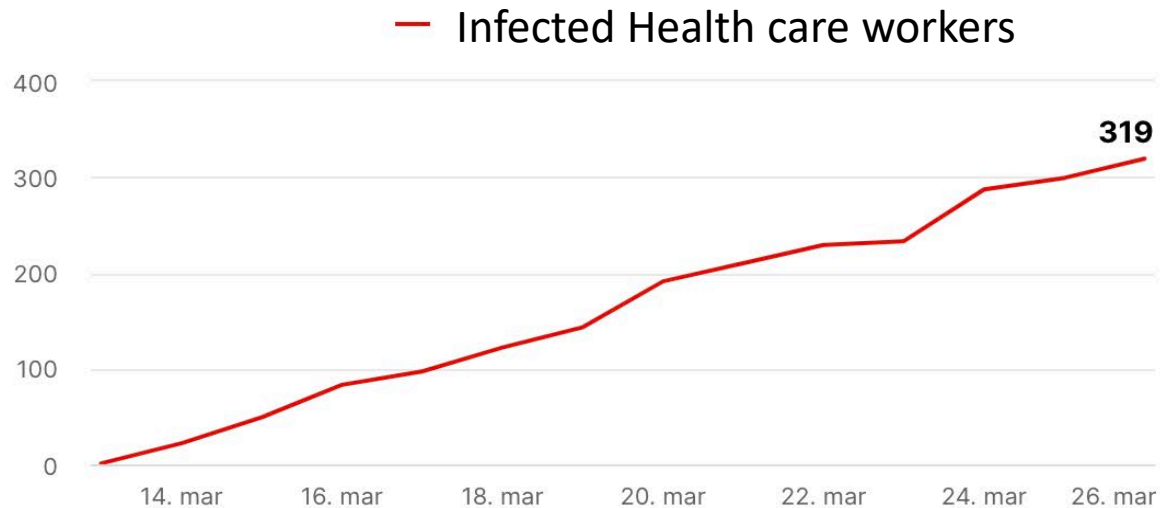
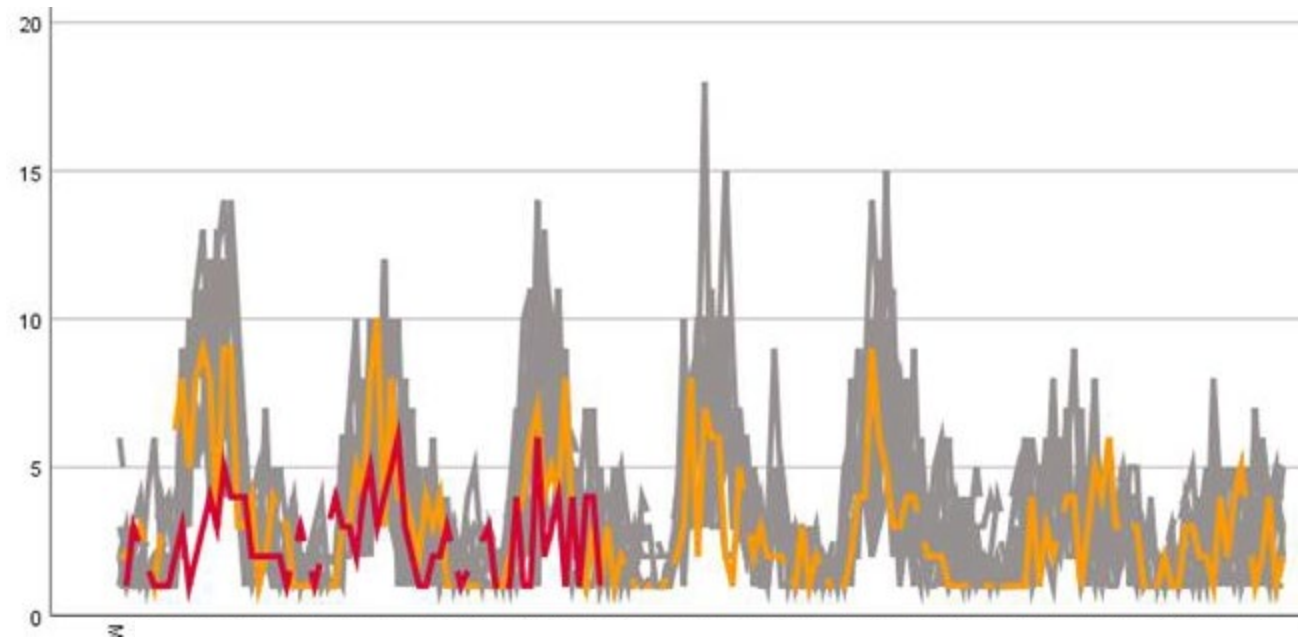
2. General Approach to a suspected COVID-19 case

- a. Screened by primary care/GP and health care workers in the municipality. Modified CURB-65 for admission)
 - a. Exposure or travel history → Home Quarantine 14 days
 - b. URI symptoms → Home Quarantine 14 days
 - c. URI symptoms w/risk factors or institution → isolation → testing
 - d. Covid-19 positive w/ and w/o URI symptoms → home isolation
 - e. URI symptoms and hospital admission → isolation → testing

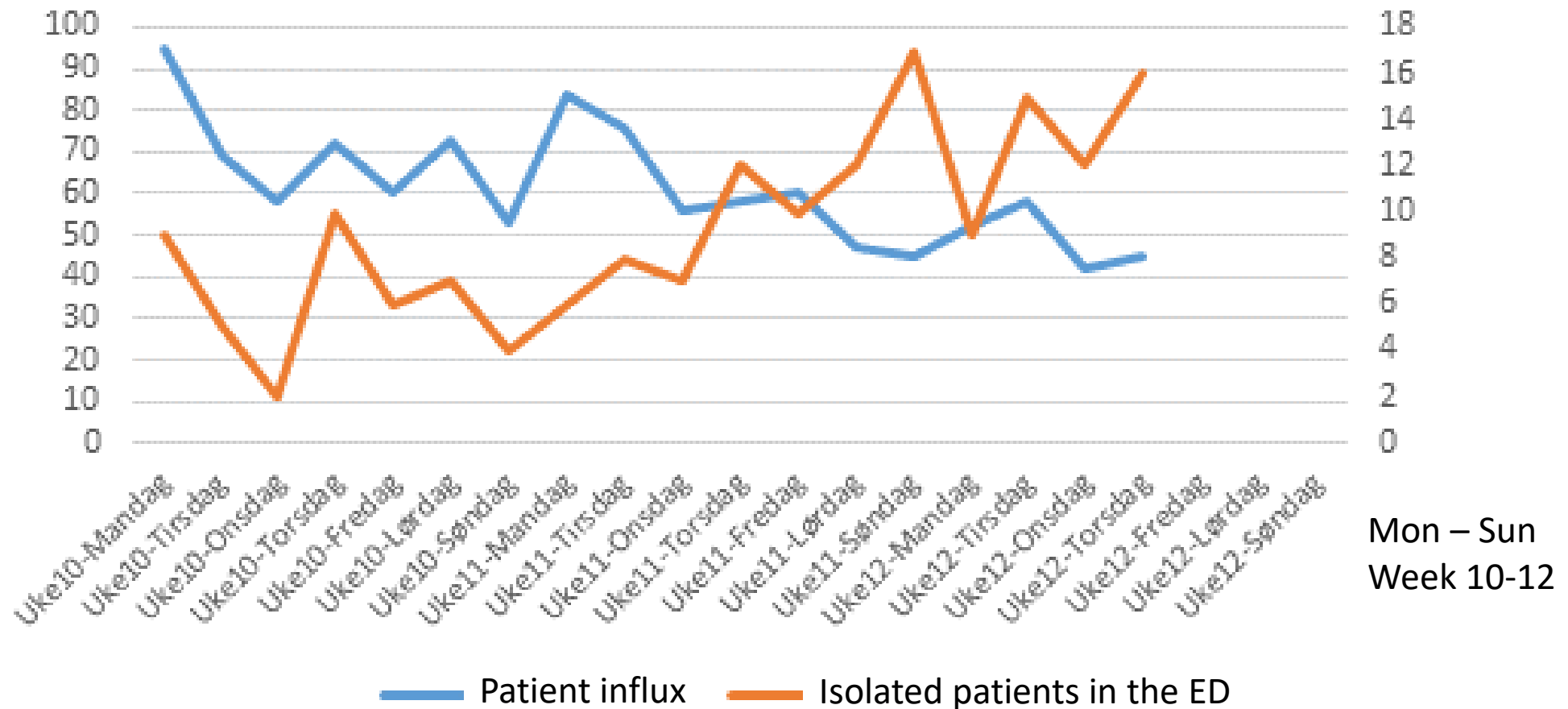


3. ED Impact

- a. Changes in patients flow
- b. COVID in Health workers (not only ED).
- c. Quick impression about the “other”(normal) demand
 - a. Decreased ED patient influx
 - b. Fewer ambulance transport
 - c. Patient delay in seeking care
 - d. Decreased elective treatment and surgeries
 - e. Increased hospital bed availability



4. Triage procedures
 - a. Structure
 - a. Pretriage (suspected/confirmed vs non-suspected)
 - b. Process
 - a. Infected vs clean zone in the ED
 - b. Triage according to RETTS
 - c. Primary evaluation by Emergency Physicians



5. Final lessons learned.

5. Norway was “shut down” in 12th of March → Curve is still climbing, but decreased hospital admissions
6. Norway has the benefits of learning from other European countries
7. COVID-19 affect patients in all ages.
8. Fight against a common goal → unit health care workers between all specialties



Daily ED briefings



PPE



Preparing for increased patient influx



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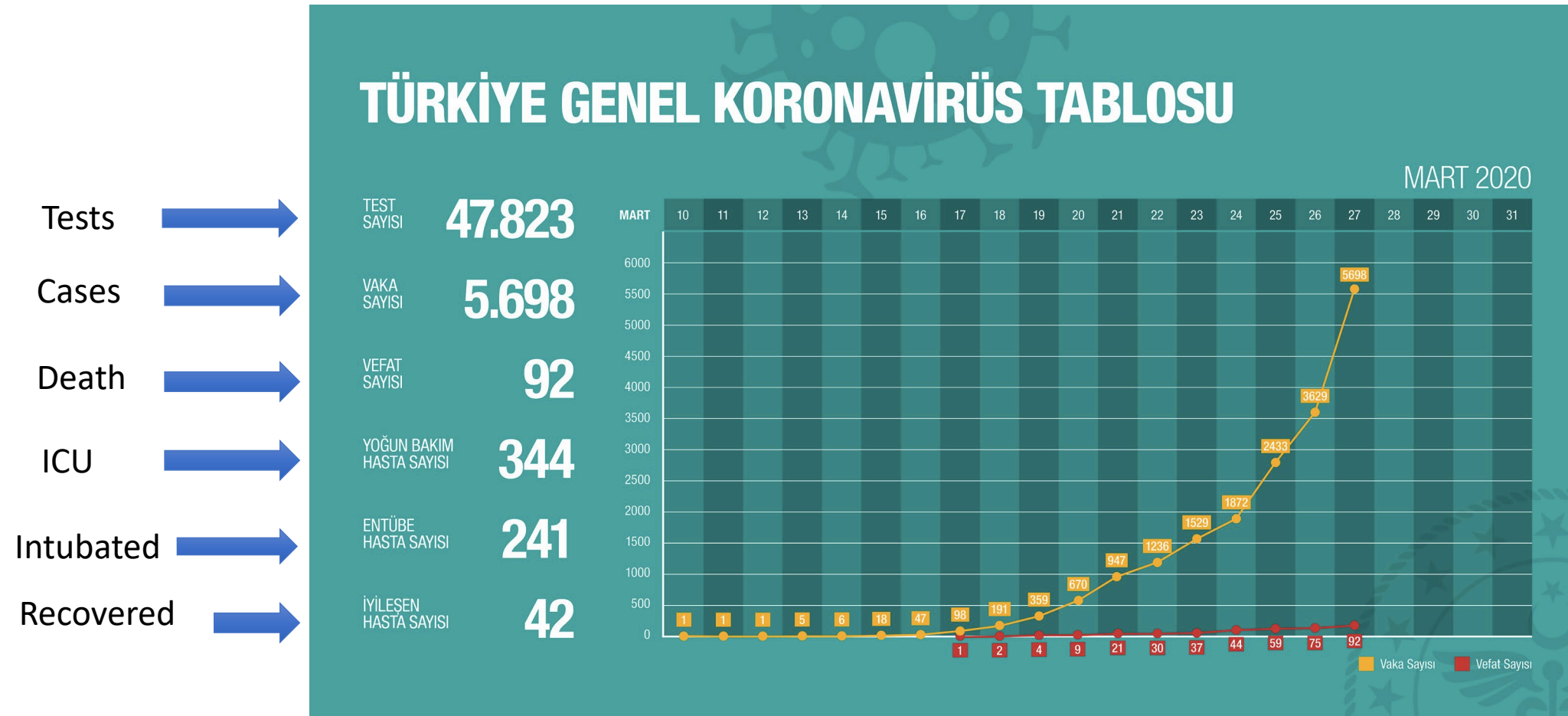
Orhan CINAR, MD. Prof.of Emergency Medicine

Vice President of Emergency Medicine Association of Turkey

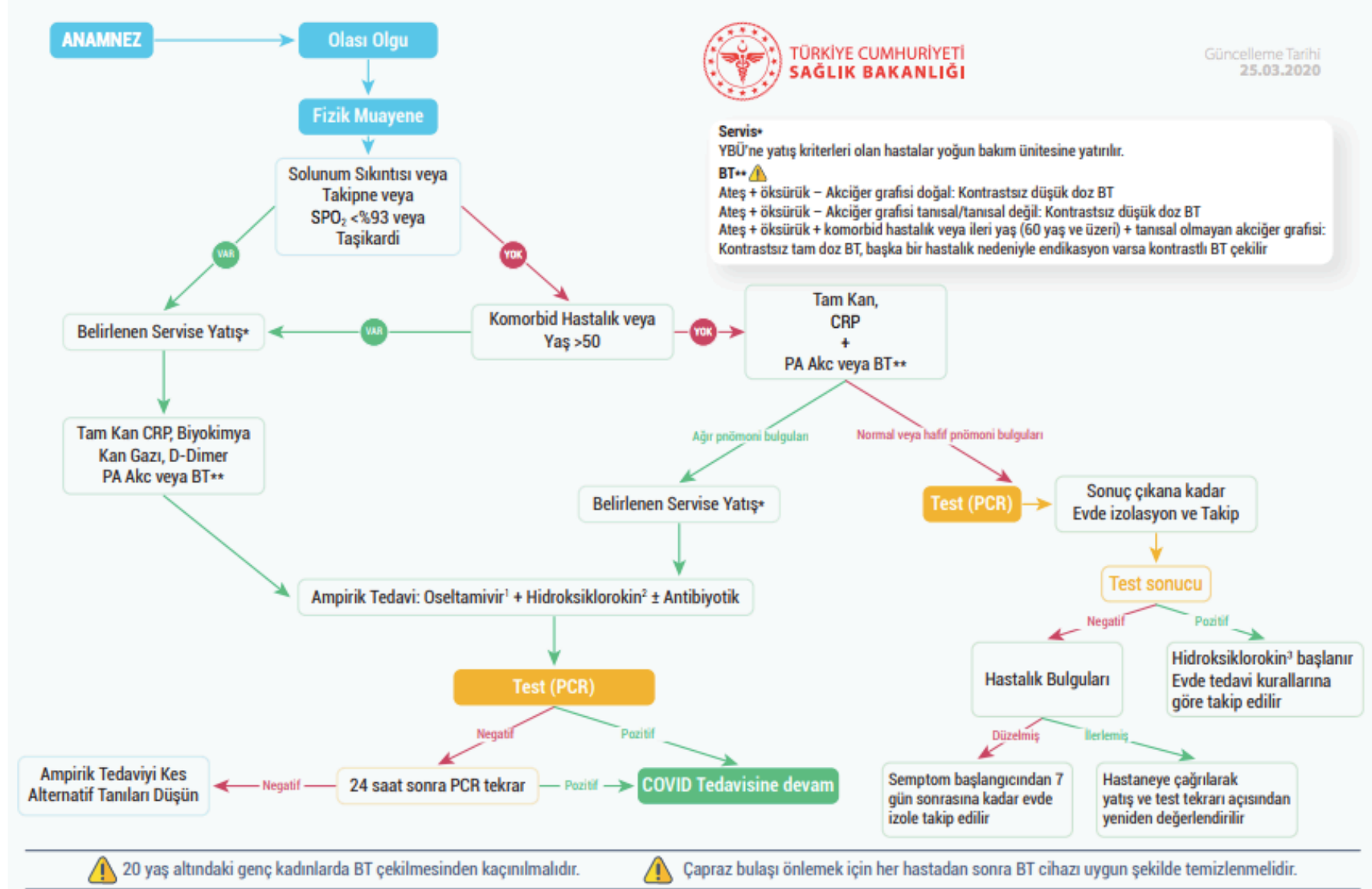
Ankara/TURKEY

Actual Situation

- a. Case Fatality Rate (CFR): **%1.6**
- b. Test Used/Criteria for test use: **PCR/ Fever + Dyspnea or Cough**
23 Cities/37 Centers



2. General Approach to a suspected COVID-19 case



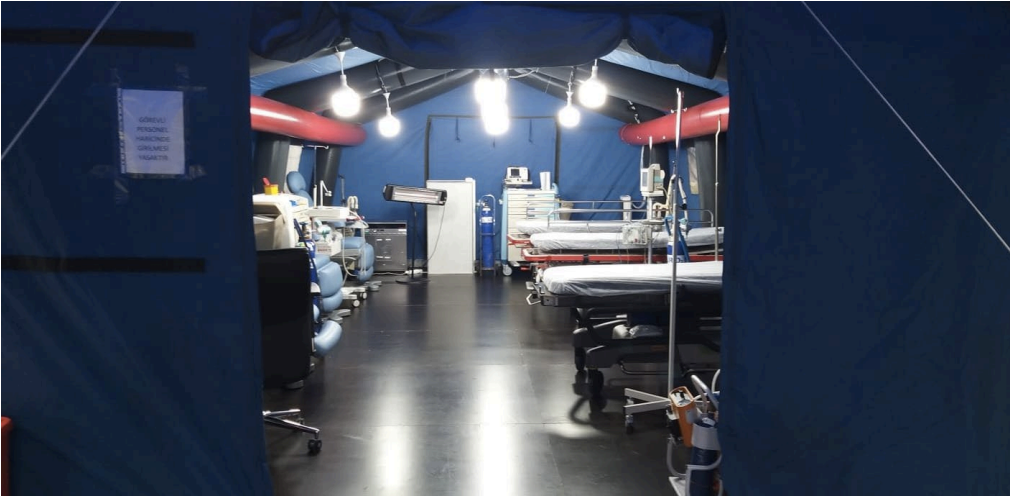
3. ED Impact

- a. Changes in patients flow: Both emergencies and COVID 19 Cases
- b. COVID in Health ED workers: 4 ED Physician

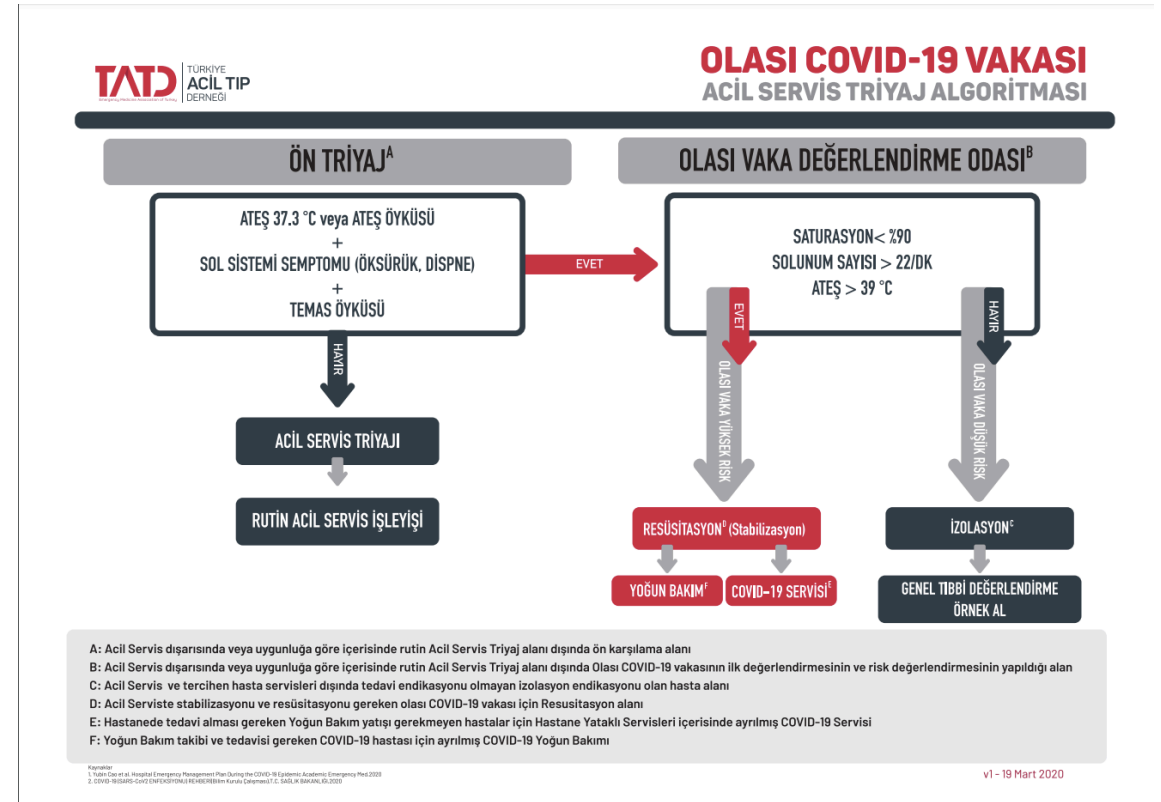
- Different models for cities and hospitals
 - Pandemic Hospitals
 - Pandemic Clinics
- EDs are in the center of the plan
 - COVID 19 patients
 - Other emergencies
 - ICU Patients (%63 of ICU beds are full)

4. Triage procedures

- Structure: **Front Triage**
- Process: **COVID 19 Evaluation Clinics**



CT is used for screening instead of PCR test in practice.



5. Final lessons learned.

- This is just the beginning
- Emergency physicians are alone at the frontline.
- Personal Protective Equipment is key for the motivation to fight.





WEBINAR COVID-19:
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Name: Pascual Piñera Salmerón
Position: Vicepresident 2º SEMES
Country: Spain

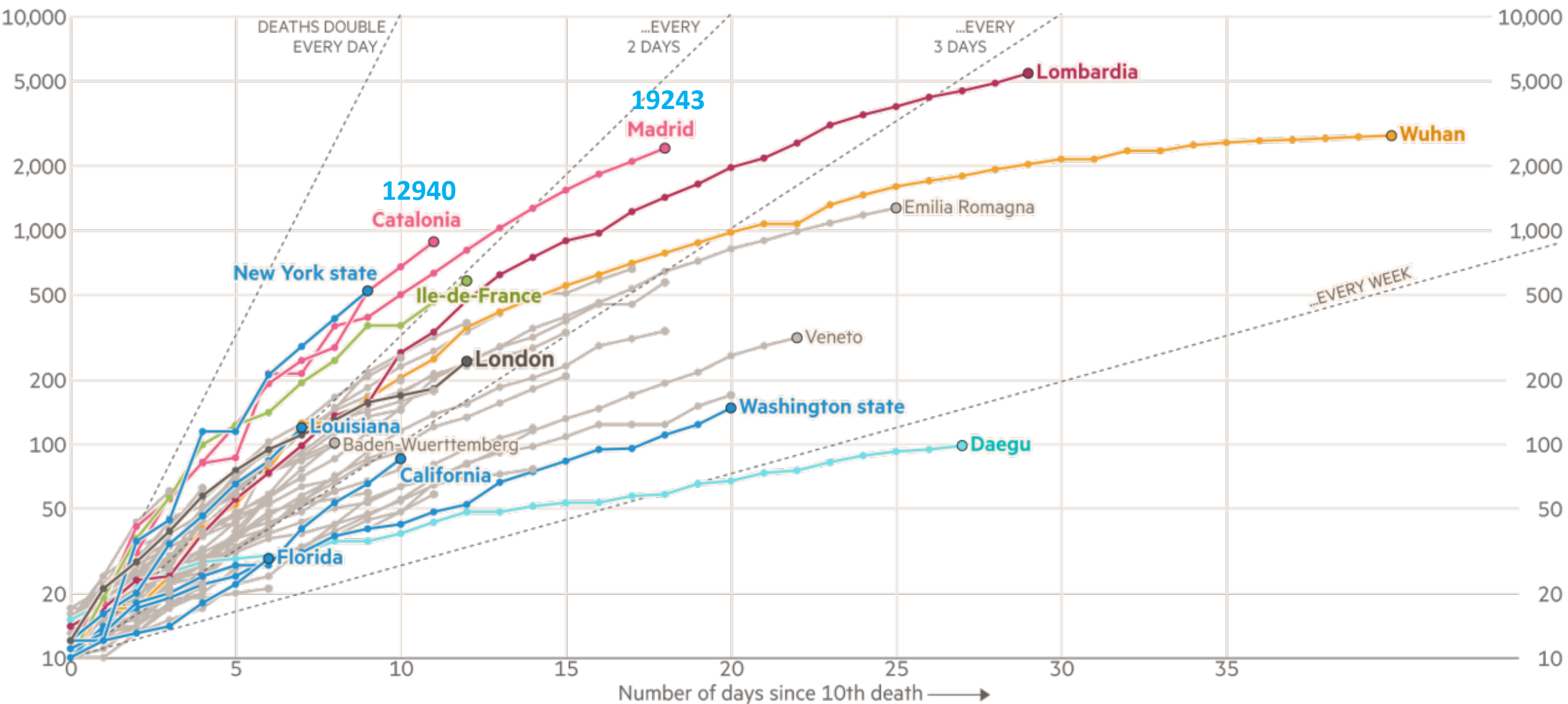
CCAA	TOTAL casos confirmados	Pacientes que han precisado UCI	Fallecidos	Curados
Andalucía	3.793	148	144	92
Aragón	1.338	114	58	8
Asturias	900	47	29	52
Baleares	755	46	22	67
Canarias	878	61	27	20
Cantabria	810	29	21	19
Castilla La Mancha	3.934	273	367	153
Castilla y León	4.132	228	252	423
Cataluña	12.940	1.187	880	2.348
Ceuta	17	2	0	0
C. Valenciana	3.532	252	198	73
Extremadura	1.231	41	69	33
Galicia	2.322	98	43	67
Madrid	19.243	1.312	2.412	5.044
Melilla	42	2	1	0
Murcia	714	53	15	12
Navarra	1.641	75	58	70
País Vasco	4.601	154	207	814
La Rioja	1.236	43	55	62
ESPAÑA	64.059	4.165	4.858	9.357

We do not have clear data on the actual number of tests performed
In Madrid, all cases with a compatible clinic are considered Covid-19 patients.

New York, Catalonia and Madrid could pass Lombard as the worst affected subnational regions

Cumulative number of deaths, by number of days since 10th death

Showing US states and selected subnational regions in Italy, Spain, China, France, S Korea and UK



FT graphic: John Burn-Murdoch / @jburnmurdoch

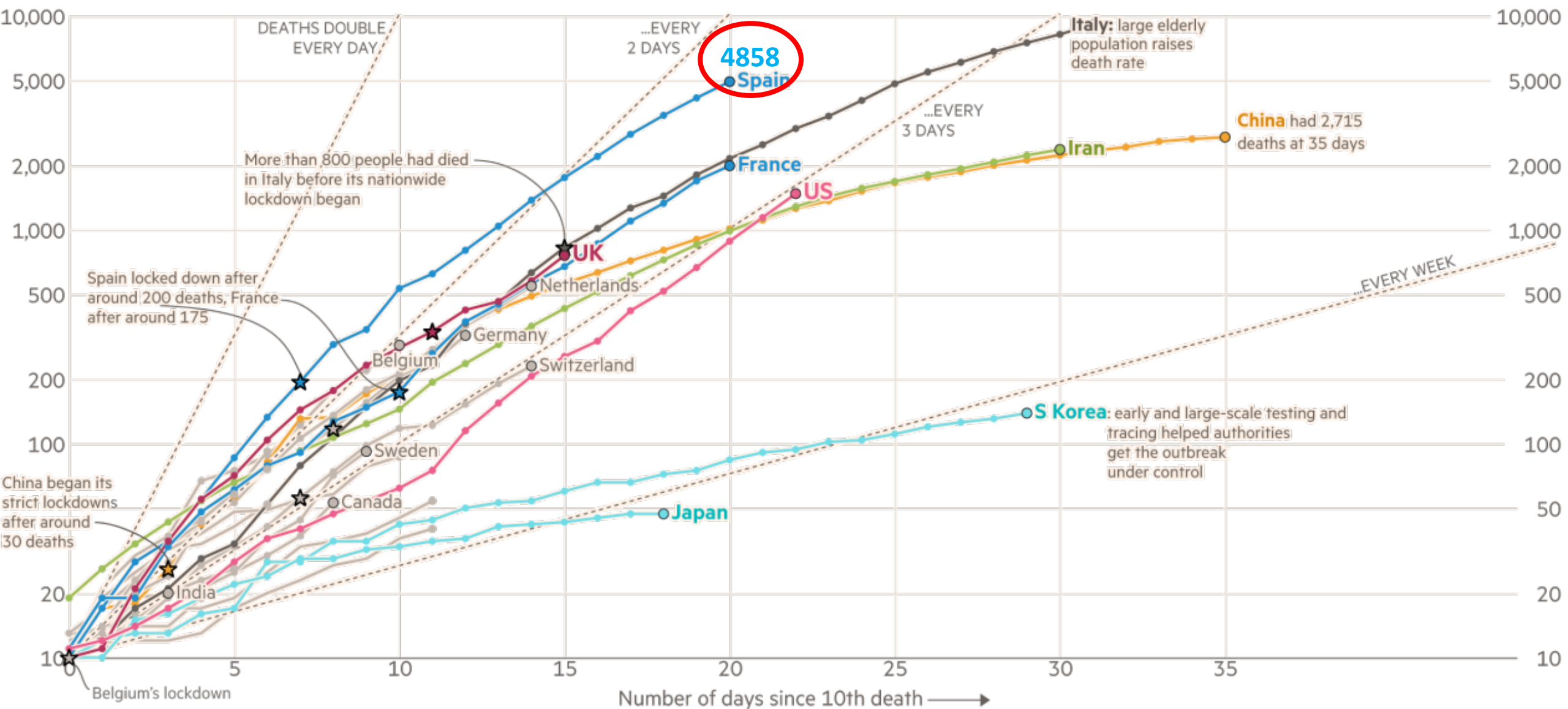
Sources: NHS; Covid Tracking Project; Providencialdata19; Santé Publique France; Berliner Morgenpost; OpenZH. Data updated March 27, 19:00 GMT

© FT

Coronavirus deaths in Italy, Spain and the US are increasing more rapidly than they did in China

Cumulative number of deaths, by number of days since 10th death

Nationwide lockdowns: ★



FT graphic: John Burn-Murdoch / @jburnmurdoch

Source: FT analysis of Johns Hopkins University, CSSE; Worldometers; FT research. Data updated March 27, 19:00 GMT

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Documento técnico

Manejo en urgencias del COVID-19

Versión de 27 de marzo de 2020



https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov-China/documentos/Manejo_urgencias_pacientes_con_COVID-19.pdf



Documento técnico

Manejo clínico del COVID-19: atención hospitalaria

19 de marzo de 2020



https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov-China/documentos/Protocolo_manejo_clinico_ah_COVID-19.pdf

ED Impact

1. We have had to make two different circuits in emergency services.
 - a. Respiratory pathology
 - b. Other emergencies
2. Spain has 9.444 infected health workers, 15% of all confirmed cases
3. Decrease of up to 70% in the number of emergencies in all country

Identify

- First contact with patients who come to the ED
- Zone of the Admission Service or in the triage or even at the entrance door to the hospital.

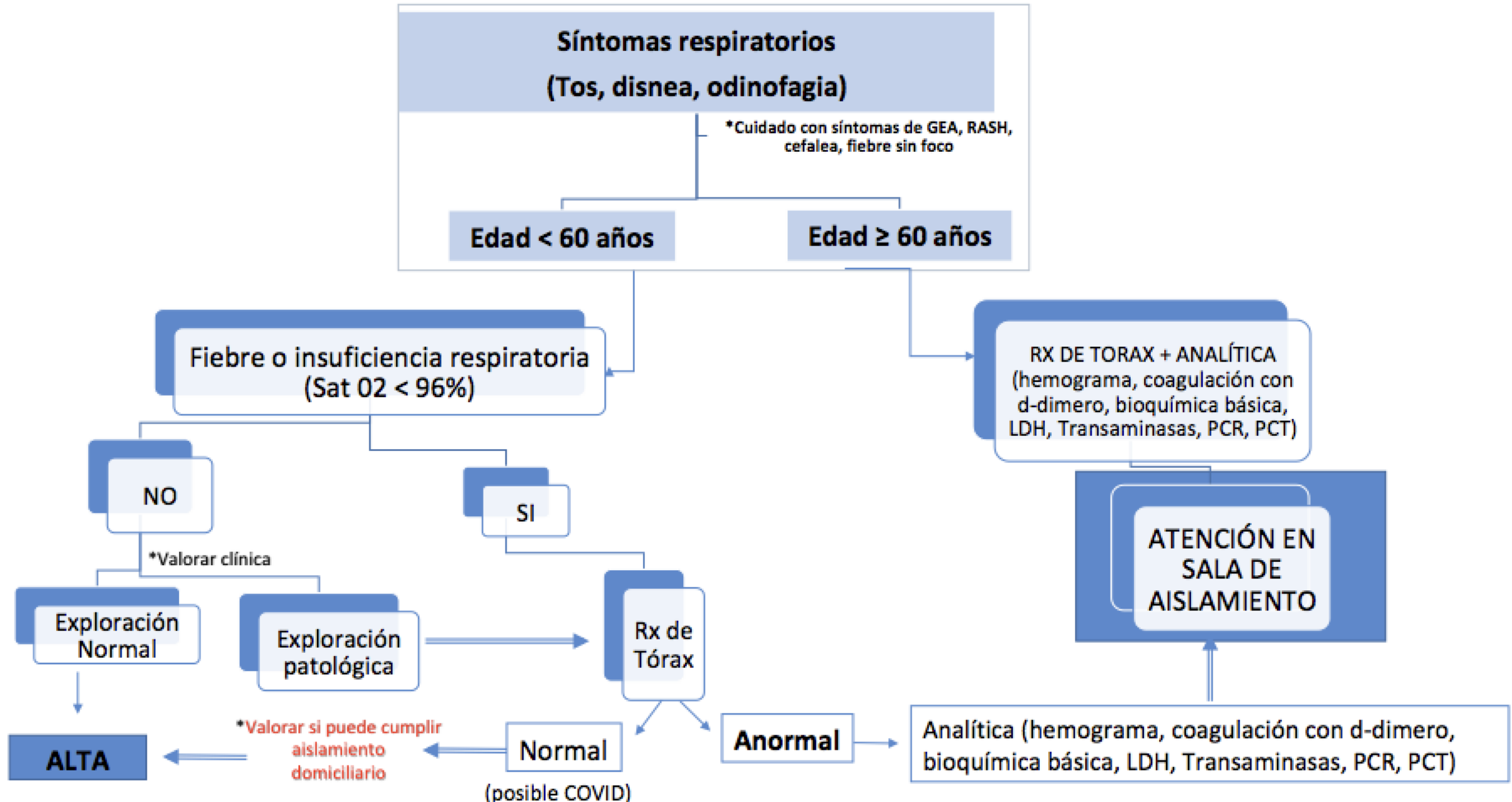
Isolate

- Each hospital must establish its own specific isolation procedure
- The patient's family or companions must not enter the isolation circuit,

Report

- Report of all the procedure that we are going to carry out with the patient, both the patient himself and the family

Actuación inicial en Urgencias ante un posible caso de infección por COVID-19



1. In Europe we must be less arrogant.
2. In this crisis we have learned to help each other and the entire society to health workers
3. At times like this there are no specialties, all together.
4. Spanish society has recognized the importance of the health they enjoy every day.
5. The political management of the crisis is being chaotic
6. It is not a time for reproaches, just work, then we will have to make a deep reflection.



WEBINAR COVID-19:

Sharing experiences of high COVID-19 impact countries.

Name: Effie Polyzogopoulou

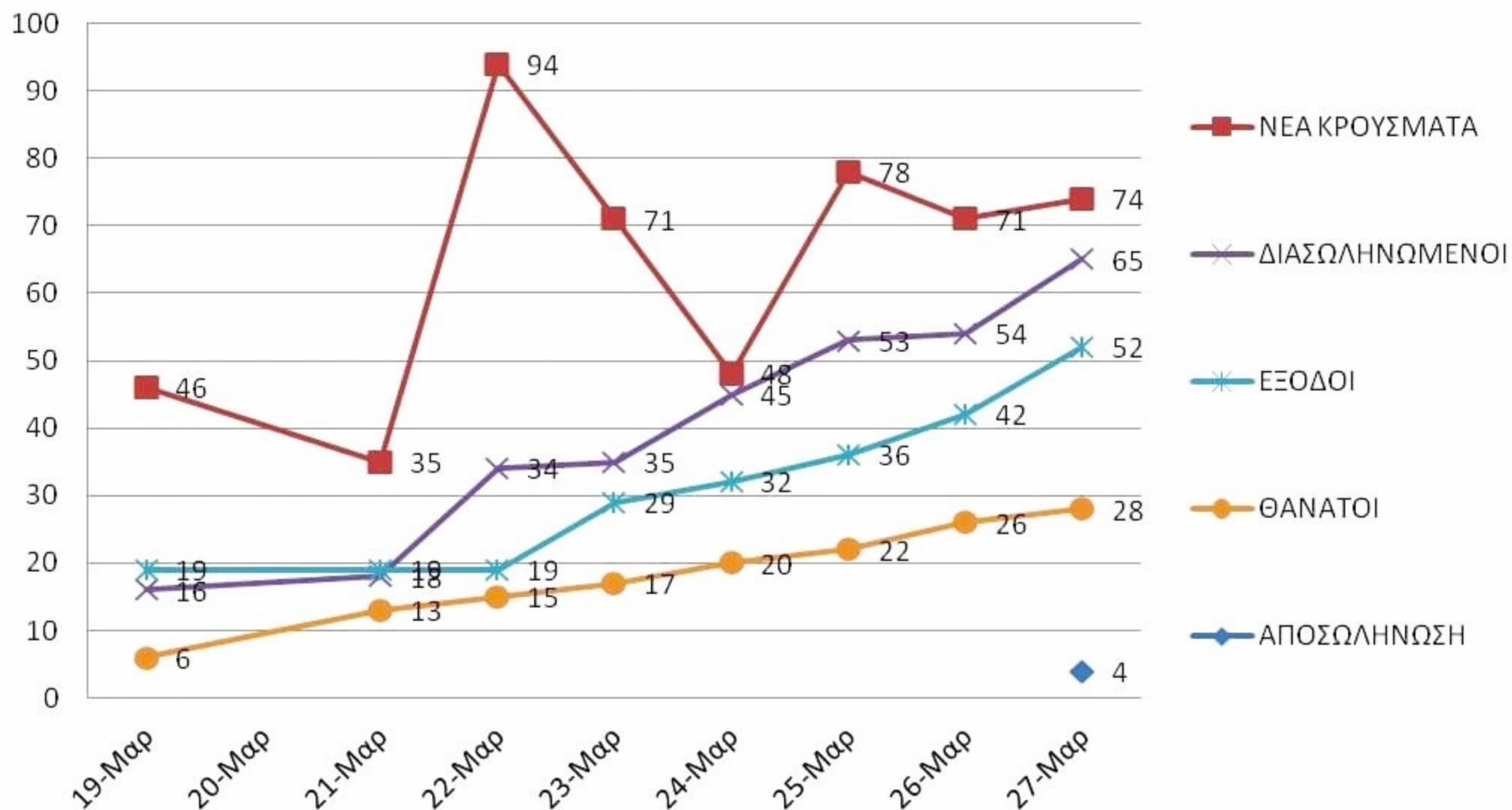
Position: ED Clinical Director, Attikon University Hospital, Athens

Country: Greece

Actual situation: Greece (27/03/2020)

Confirmed cases	966
Hospitalized cases	139 (14.4%)
Patients in ICU	66 (6.83%)
Deaths	28
Case Fatality Rate	2.898 %

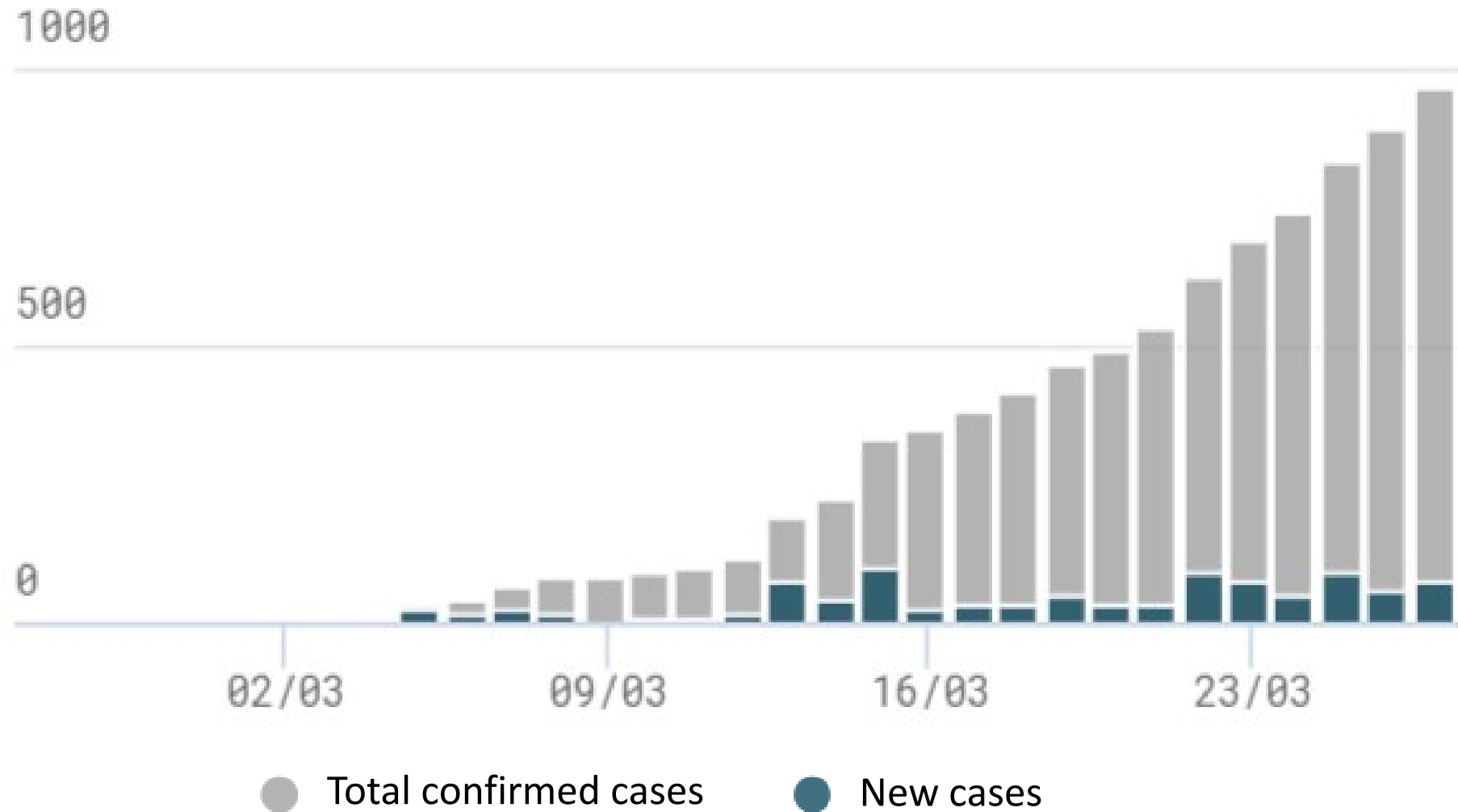
Στατιστική Καταγραφή COVID-19-Ελλάδα



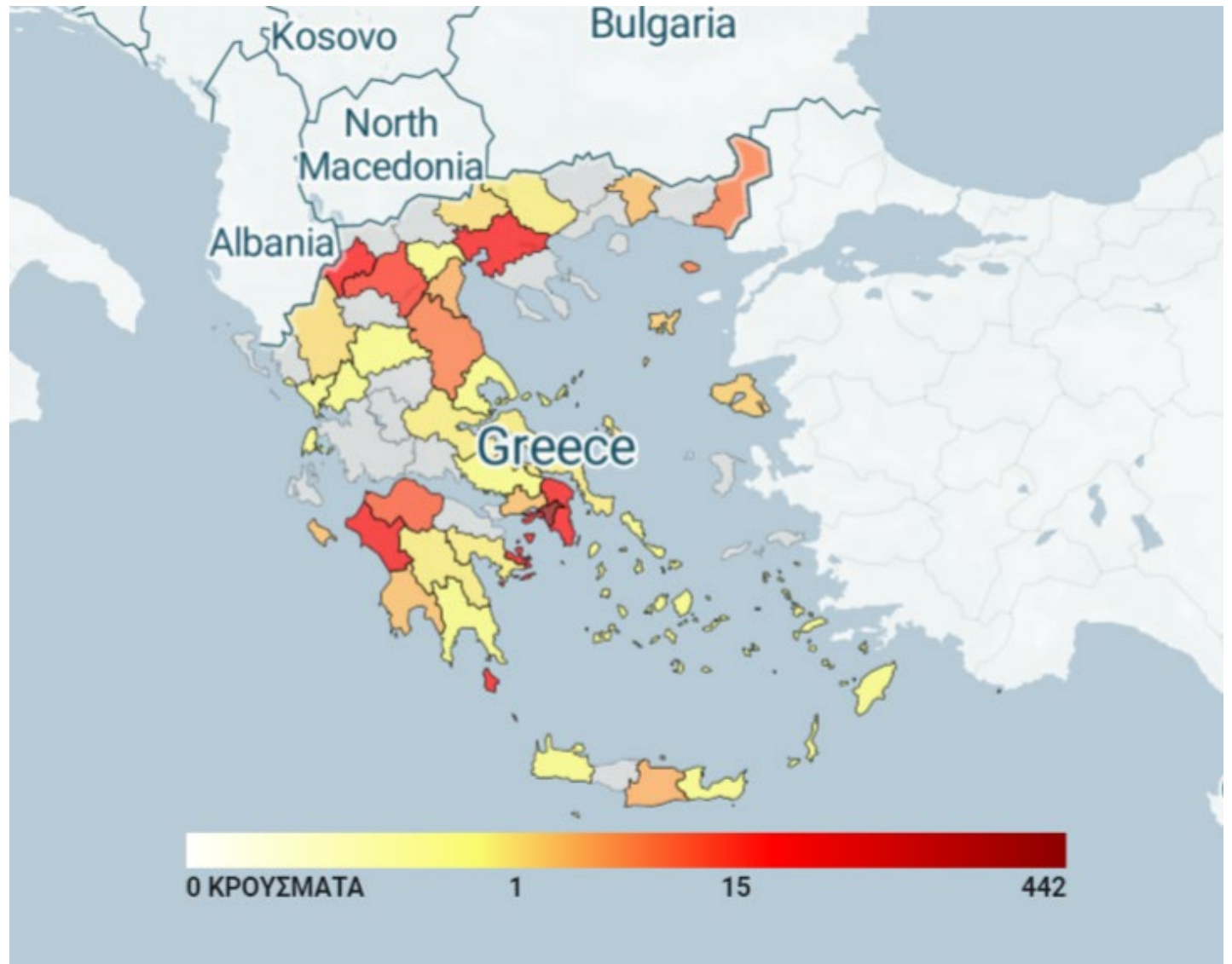
Criteria for test use

1. Patients with SARI (Severe Acute Respiratory Illness) who need hospitalization or are hospitalized
2. Healthcare personnel who develop acute respiratory infection with fever
3. Patients of age >70 years *or* with important chronic disease (cardiovascular, respiratory, diabetes mellitus, immunosuppression) who develop acute respiratory infection with fever and cough or dyspnoea
4. Patients from nursing homes who develop acute respiratory infection with fever and cough or dyspnoea

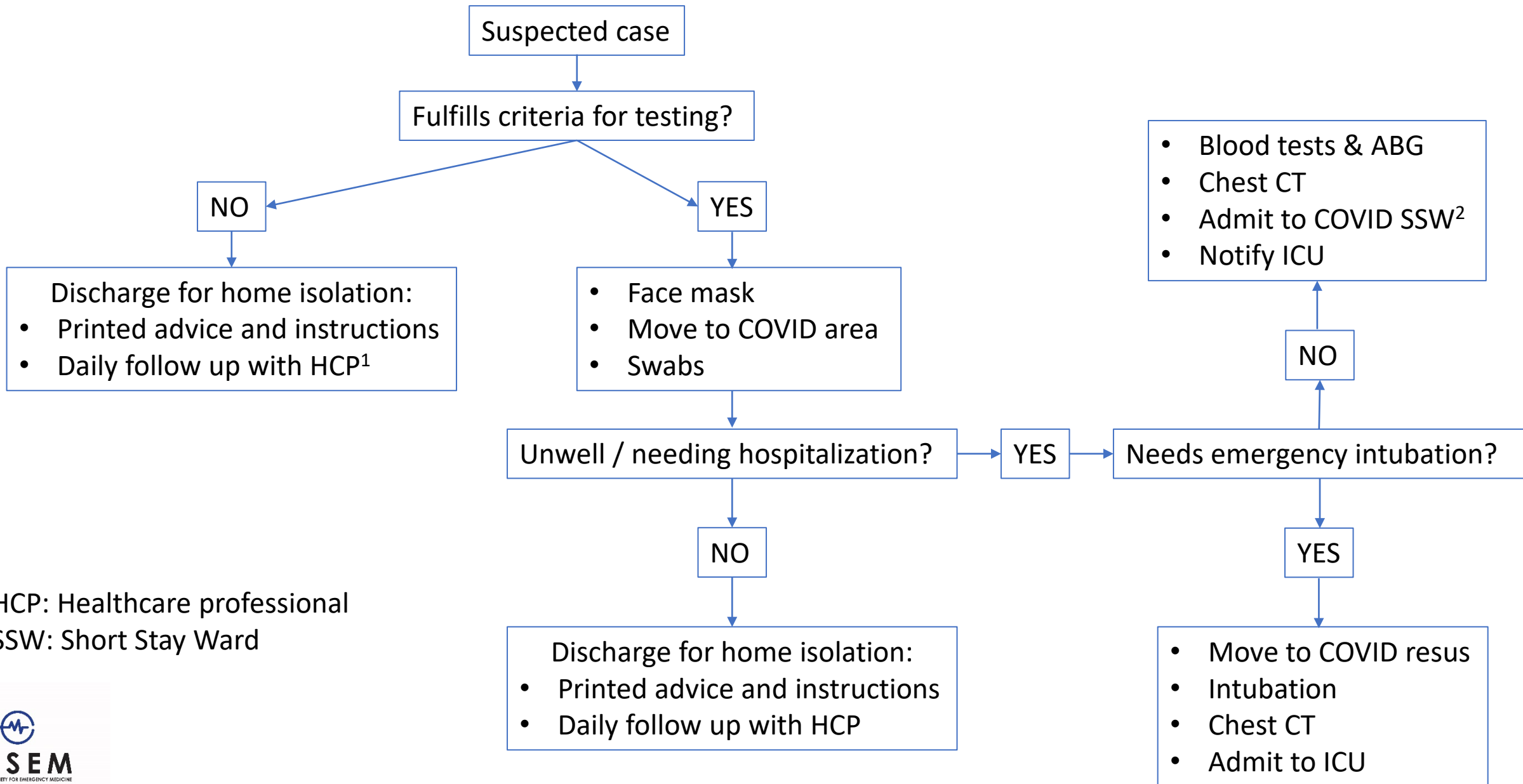
Trend in the country (Greece) until 27/03/2020



Geographical
distribution of
confirmed
cases
(27/03/2020)



2. General Approach to a suspected COVID-19 case



3. ED Impact

a. Changes in patients flow

- COVID stream in all EDs
- Focus on COVID only-Delays in diagnosis in patients with other conditions

b. COVID in Health ED workers

- No separate data available for ED Health Workers
- 90 confirmed cases of hospital personnel (9.31% of all cases)

c. Quick impression about the “other”(normal) demand

- Approx. 65% reduction of other ED presentations (data from 4 major hospitals only)

4. Triage procedures

a. Structure

- COVID triage outside ED
- COVID triage precedes regular triage

b. Process

- Identification of suspected cases with closed questions according to the definition of suspected cases
- Face mask applied to patient as soon as a suspected case is identified
- Patient moved to COVID area, without passing through ED (where possible)

5. Final lessons learned

We haven't reached the top of the mountain yet.....

Learn from each other

European COVID ED protocol, adjusted to local needs



WEBINAR COVID-19:
Sharing experiences of high COVID-19 impact countries.

Name: Pr Said Laribi

Position: Chair EUSEM Research network University hospital, Tours,

Country: France



Données au 27/03/2020



COVID-19 en France

5698[⊕]

(+750)

retours à domicile

1995[⊕]

(+299)

décès à l'hôpital

15732[⊕]

(+1828)

hospitalisations

3787[⊕]

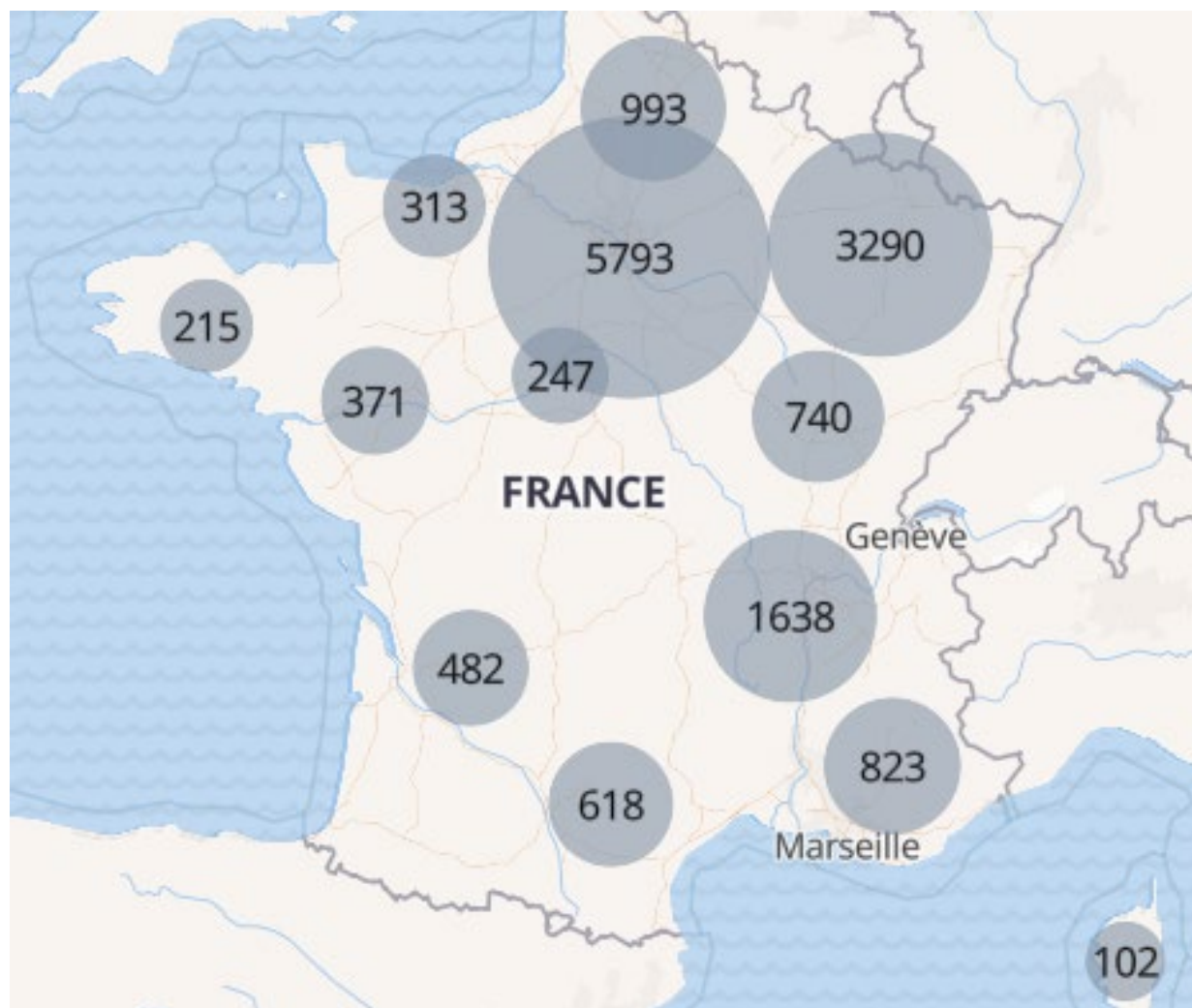
(+412)

en réanimation

32964[⊕]

(+3809)

cas confirmés

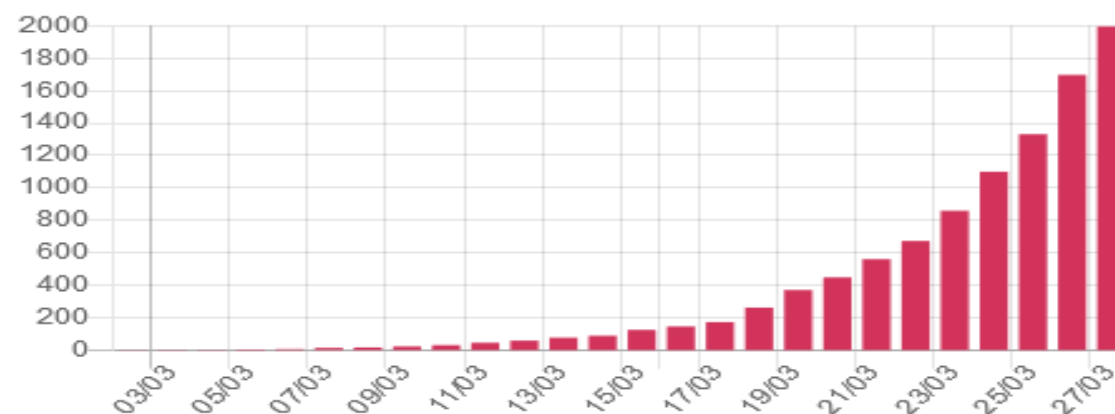




Données au 27/03/2020



COVID-19 en France



TOUT AFFICHER

CAS CONFIRMÉS

HOSPITALISATIONS

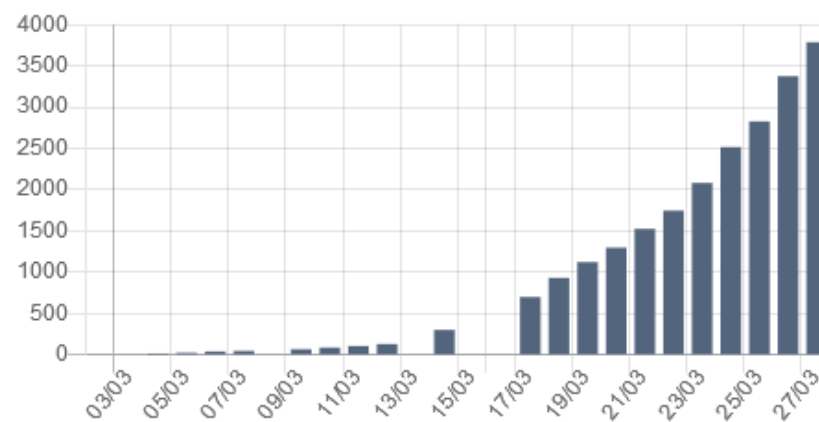
RÉANIMATIONS

DÉCÈS À L'HÔPITAL

RETOURS À DOMICILE

< **Données au 27/03/2020** >

COVID-19 en France



TOUT AFFICHER

CAS CONFIRMÉS

HOSPITALISATIONS

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DÉCÈS À L'HÔPITAL

RETOURS À DOMICILE