Leassons to learn

The COVID-19 pandemic in Italy

Francesco Paolucci
University of Newcastle and University of Bologna

Marcello Antonini and Chiara Berardi
University of Newcastle.

Outline

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Introduction

Introduction (1)

- Italy was the first Western country to experience the COVID-19 emergency with a spiral of infections and deaths placing the country at the top of the international rankings, overtaking China on 19th March 2020
- The COVID-19 burden has challenged the sustainability of regional healthcare systems and the safety of the healthcare professionals, requiring a huge injection of resources for the reorganisation of hospital infrastructure, recruitment of health personnel and supply of equipment.
- The incidence of the virus has been particularly severe in Northern regions, moderate in Central regions and mild in the Southern regions of Italy

Italian country profile

Italian healthcare system profile (1)

- Since 1993, health policies and constitutional reform have driven a decentralisation of the Italian healthcare system (Sistema Sanitario Nazionale, SSN).
- The decentralisation is reflected in the financing, provision, and governance of the twenty regional health systems
- Regional models range from a mixed quasi-integrated model to a quasi-market in Lombardy.

Italian healthcare system profile (2)

- Italian healthcare expenditure amounts to 8.8% of GDP, on par with OECD average.
- In 2018, compulsory healthcare expenditure per capita was USD 2,545 (PPP), below the OECD average of USD 3,994
- Across regions the healthcare expenditure per capita is heterogeneous, ranging from USD 2,895 in Campania to USD 3,002 in Sardinia
- National government financing accounted for 74.2% of total health spending in 2018, while out-of-pocket payments for 23.1% and voluntary schemes for the remaining 2.7%

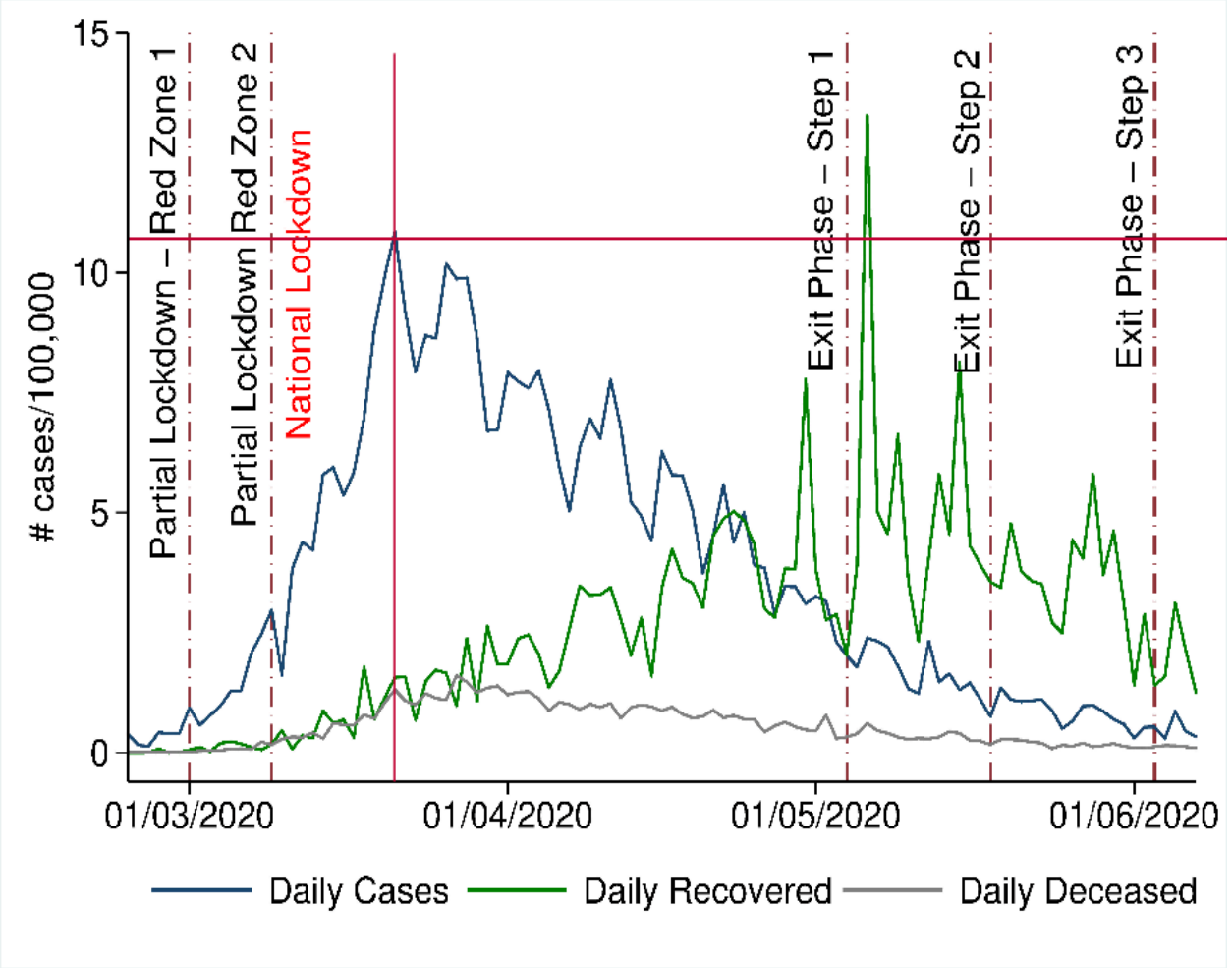
Italian health profile

- Italy has the second highest life expectancy at birth (83.6 years) among European countries, and the eighth highest in the world.
- As a result, its population (median age 46.3 years, 22% over 65 years) is the oldest in Europe and the second oldest in the world.
- Italy’s longevity is associated with high morbidity rates, with 40% of the total population having a chronic condition, and nearly 21% being affected by multi-chronic conditions.

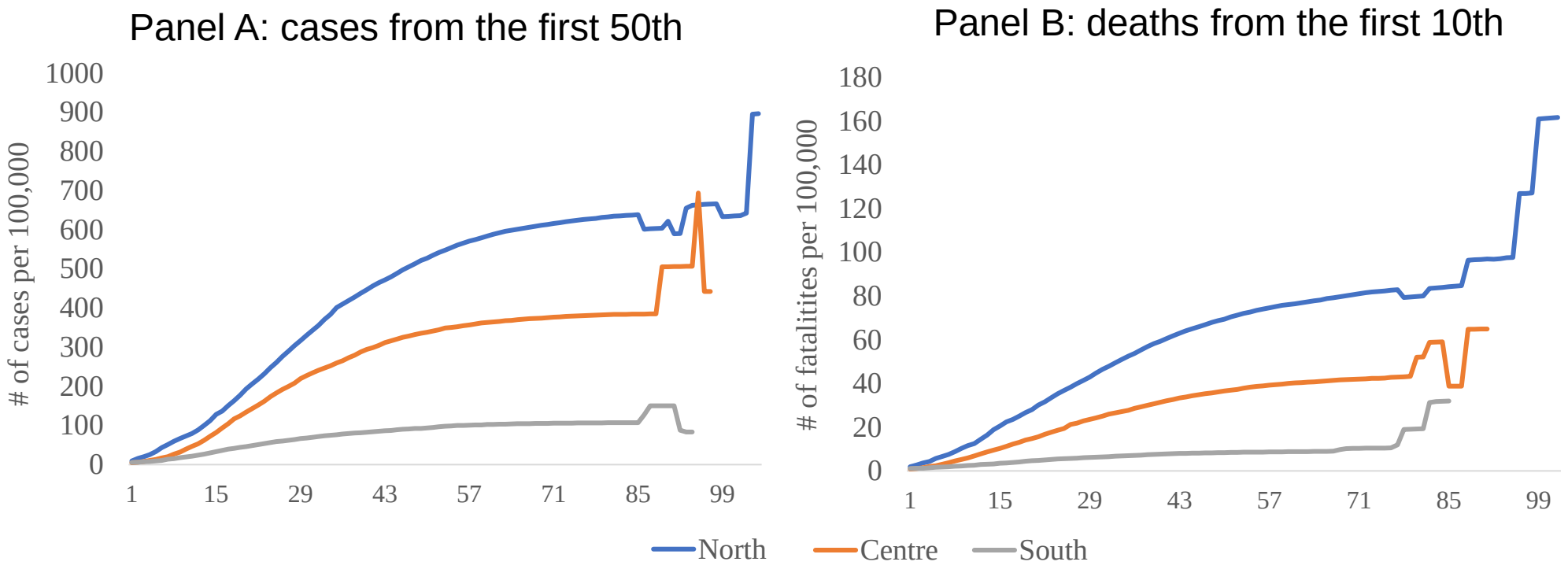
The COVID-19 in Italy

Highlights

- COVID-19 appeared in Italy in late January 2020, when two Chinese tourists tested positive. One month later, patient 1 was detected in Lombardy.
- In the following days, Lombardy and Veneto became the two initial clusters of infection, experiencing a rapid escalation of cases.
- Nationally, the peak of contagion occurred on 21st March 2020, with approximately 11 cases per 100,000 population and the peak of deaths was recorded a week later
- On 26th April 2020, the number of daily new cases was exceeded by the number of recoveries, almost two months since national lockdown measures were implemented.
- However, the Italian experience is better addressed at geographical level



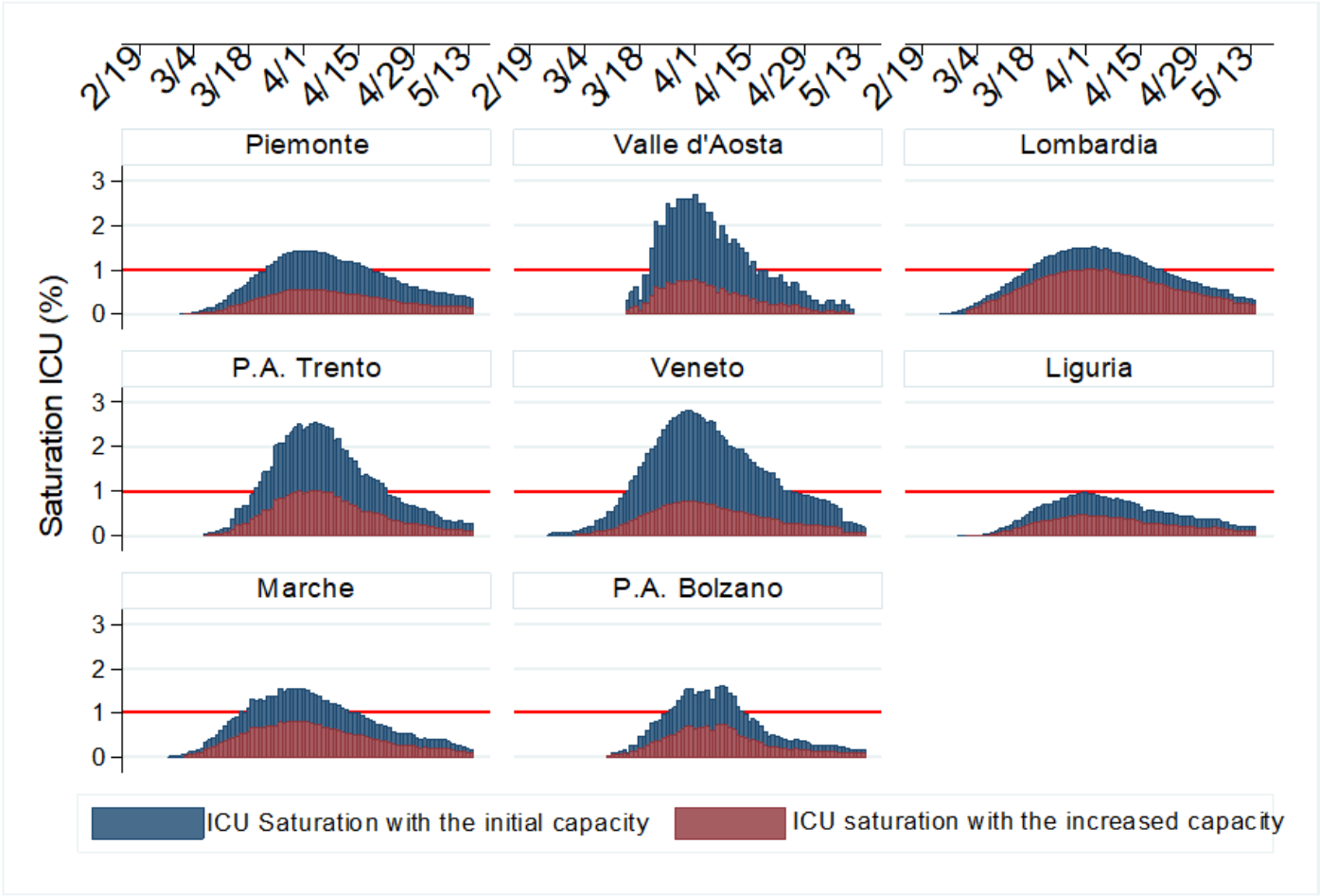
The incidence at geographical level



Note: Northern regions: Piedmont, Aosta Valley, Lombardy, P.A. Bolzano, P.A. Trento, Veneto, Friuli-Venezia Giulia, Liguria, Emilia-Romagna; Central regions: Tuscany, Marche, Umbria, Lazio, Abruzzo. Southern regions: Molise, Campania, Basilicata, Apulia, Calabria, Sicily, Sardinia.

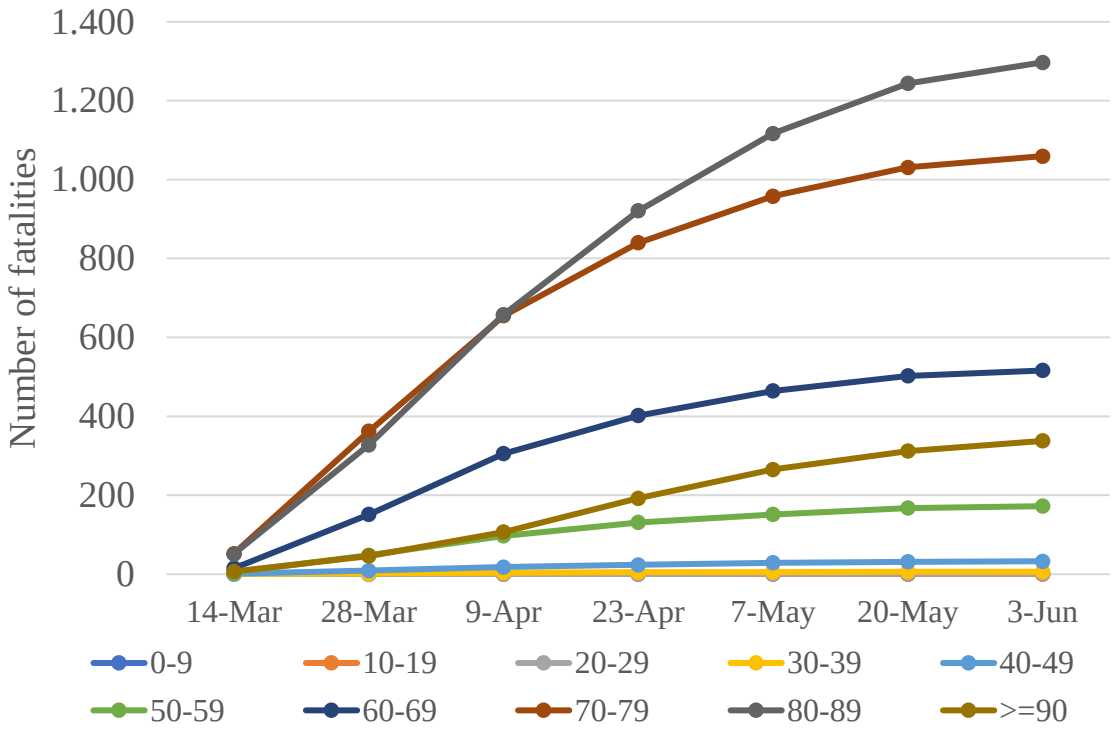
Source: Personal elaboration on Ministry of Health data

The government intervention has been crucial

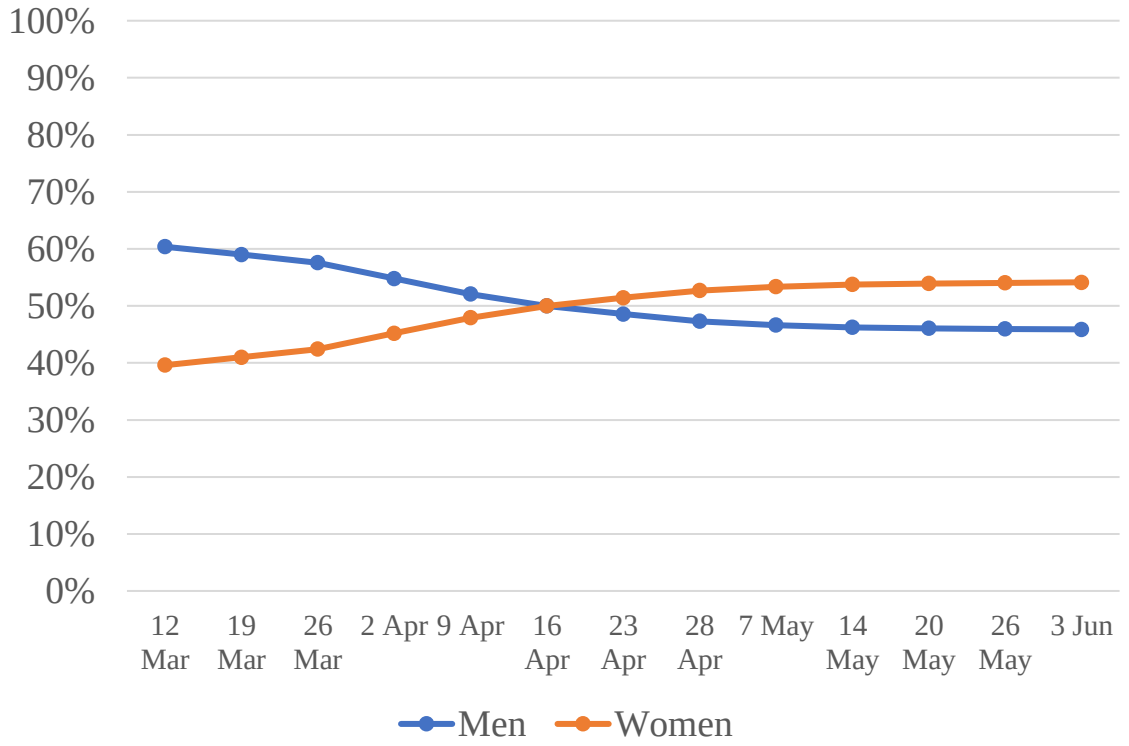


The demographic impact

Deaths distribution by age corrected for the age, (14th March 2020-3rd June 2020)



Incidence per gender, (12th March 2020-3rd June 2020)

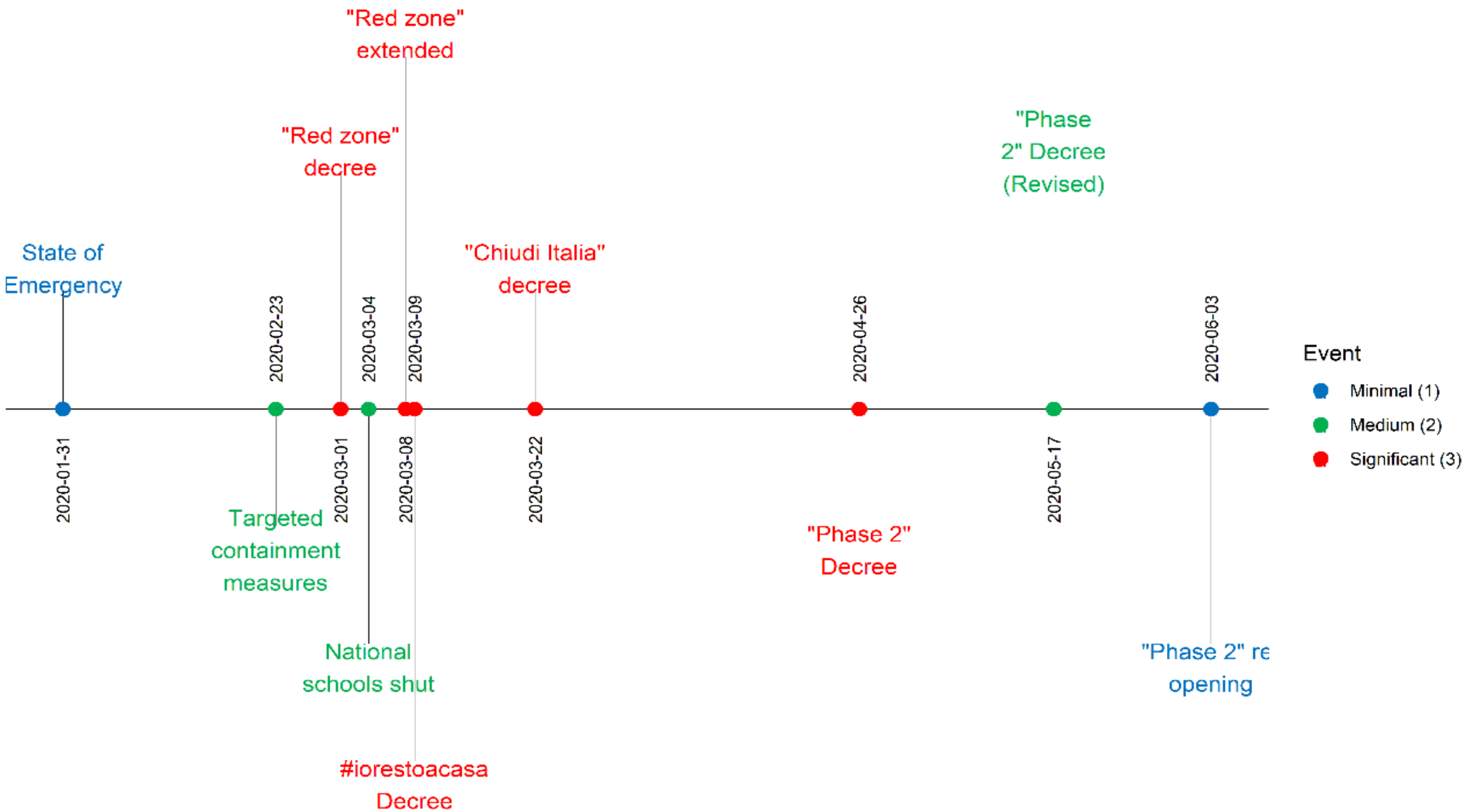


Leading cause of death in Italy (2017) and principal comorbidities among the death cohort due to Covid-19 as of 4th June 2020

	Mortality causes	Covid-19 related comorbidities
1	Ischemic heart disease (12%)	Hypertension (67.6%)
2	Stroke (10%)	Type 2-Diabetes (30.3%)
3	Others hearth disease (8%)	Ischemic heart disease (28%)
4	Lung cancer (6%)	Atrial Fibrillation (22.2%)
5	Alzheimer and other dementia (4%)	Chronic renal failure (20%)
6	Lower respiratory disease (3%)	Chronic Obstructive Pulmonary Disease (16.6%)
7	Diabetes (3%)	Dementia (16.1%)
8	Colorectal cancer (2%)	Active cancer in the past 5 years (15.9%)
9	Breast cancer (2%)	Hearth failure (15.7%)

The government response

Major containment measures



Highlights

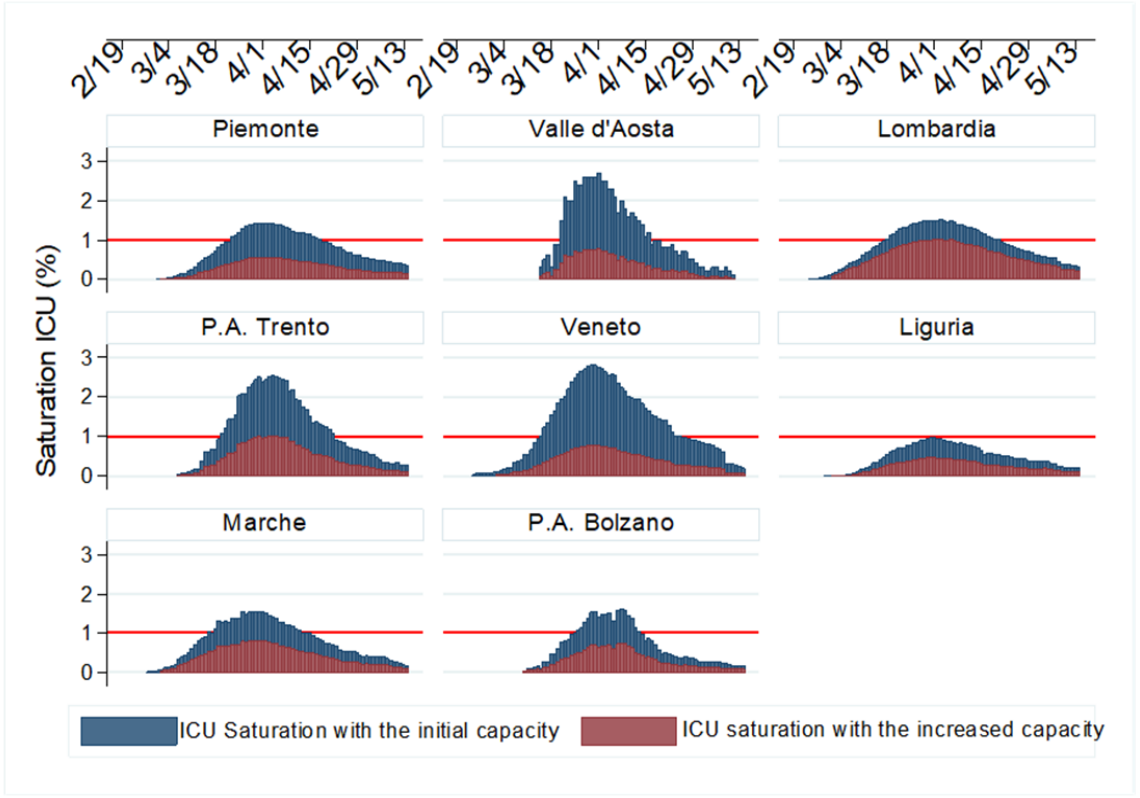
- The public intervention to face the COVID-19 pandemic has been characterised by two major issues:

    1. The misalignment between central and regional governments;

    2. The trade-off between public health and economic prosperity

The pendulum of Covid-19, between public health and economic prosperity (2)

- On March 22, with an increase of 49,966 confirmed cases and 5,013 fatalities compared to the 9th March, the government implemented the “Chiudi Italia" decree, shutting down production activities deemed *non-essential*.
- This measure has declared the surrender of the economic argument in front of the public health emergency.



The pendulum of Covid-19, between public health and economic prosperity (3)

- The trade-off between public health and economy played a central role also in the exit strategy.
- From mid April, as soon as the number of contagion decreased, some regional governors (led by the Lombardian governor) put pressure on the government in order to relax some restriction on the economic activities.
- The central government denied this request imposing a - *gradual* - homogenous exit strategy:

4 - 18 May	Free movement of people within the region of residence and just for necessary activities such as work and health. Visiting relatives is granted but only with masks.
18 May – 1 Jun	Shops re-openings
1 Jun -	Cafés, restaurants and hairdressers

The pendulum of Covid-19, between public health and economic prosperity (4)

- Between the 4th and 18th May, the number of new cases was 13,948, whilst the recovered attested at 44,447.
- The transmissibility index of the disease was lower than 1 for all regions, except for Umbria (1.23) which together with Molise and Lombardy was among the special observed.
- This improvement led to a drastic change in the exit strategy: from the 17th May, the government shifted responsibility to individual regions under the overall supervision of the Ministry of Health.
- This choice implied an heterogeneous re-opening of the economic activities, helping small and medium companies to re-start their business.

The current situation (as of 30th June)

Region	Hospitalised (not ICU)	ICU	Self-isolation	Confirmed cases	New confirmed cases
Abruzzo	33	0	164	197	0
Basilicata	1	0	2	3	0
Calabria	4	0	23	27	1
Campania	29	0	152	181	24
Emilia-Romagna	108	12	890	1010	20
FVG	9	0	36	45	0
Lazio	189	13	634	836	5
Liguria	46	3	231	280	3
Lombardia	297	42	9721	10060	62
Marche	8	0	258	266	0
Molise	0	0	25	25	0
Trentino Alto Adige	4	1	129	134	0
Piemonte	267	12	1144	1423	11
Puglia	25	0	104	129	0
Sardegna	6	0	8	14	2
Sicilia	19	3	106	128	2
Toscana	17	6	306	329	2
Umbria	3	1	6	10	1
Valle d'Aosta	4	0	0	4	1
Veneto	21	0	441	462	8

Lesson learnt from the Italian experience

Lesson learnt (1)

- The differences between regions' governance and response approaches and outcomes suggest that the impact of the COVID-19 is better explained at a regional level.
- The Italian health system surveillance should have been much more prepared considering the demographic and epidemiological profile of the population
- The inconsistency of the communication strategy at a political level influenced people's behaviour from unawareness to panic.

Lesson learnt (2)

- So far, compared to many countries with decentralised or federal (healthcare) systems including Australia, Germany, Spain, the italian system revealed the limitations rather than the virtues of decentralisation.
- In Italy, blame games, particularly directed towards the central administration by the regions reclaiming more flexibility largely for economic reasons, have resulted in a disastrous initial prevention and containment strategy.
- In light of the current discussions many countries are entertaining about optimal exit strategies, regional or local flexibility is key.

Thank You!