

Backstage in Lombardia durante pandemia da Covid -19

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material provided by Giacomo Grasselli and Antonio
Pesenti

The response in Lombardy

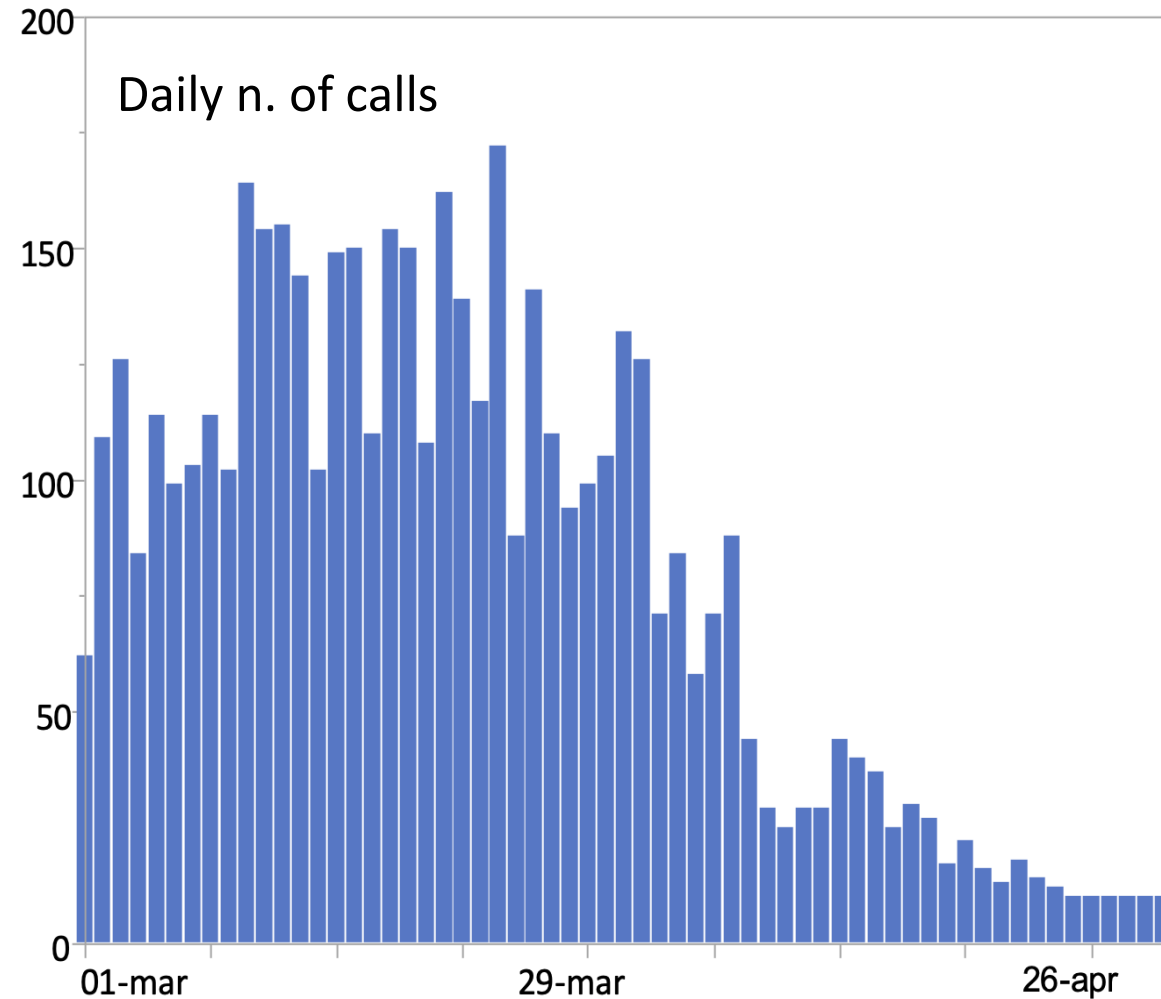
- Emergency Task Force created by the Regional Government
- Network of COVID-19 ICUs with **central coordination** to manage hospital admission of critically ill pts
- Custom-made database
 - real-time collection of demographic and clinical patients' data and
 - real-time monitoring of available resources

Central coordination of the Network

- About 30 people called daily each ICU of the Network to perform real-time monitoring of the patient's admission rate and of the available beds
- The data were reported in the collecting system and available to the Coordinating Center team
- Goal: to optimize resource allocation and to grant an ICU bed to every patient needing critical care
- Weekly meetings of the Network to share clinical informations and management protocols

Activity of the Coordinating Center

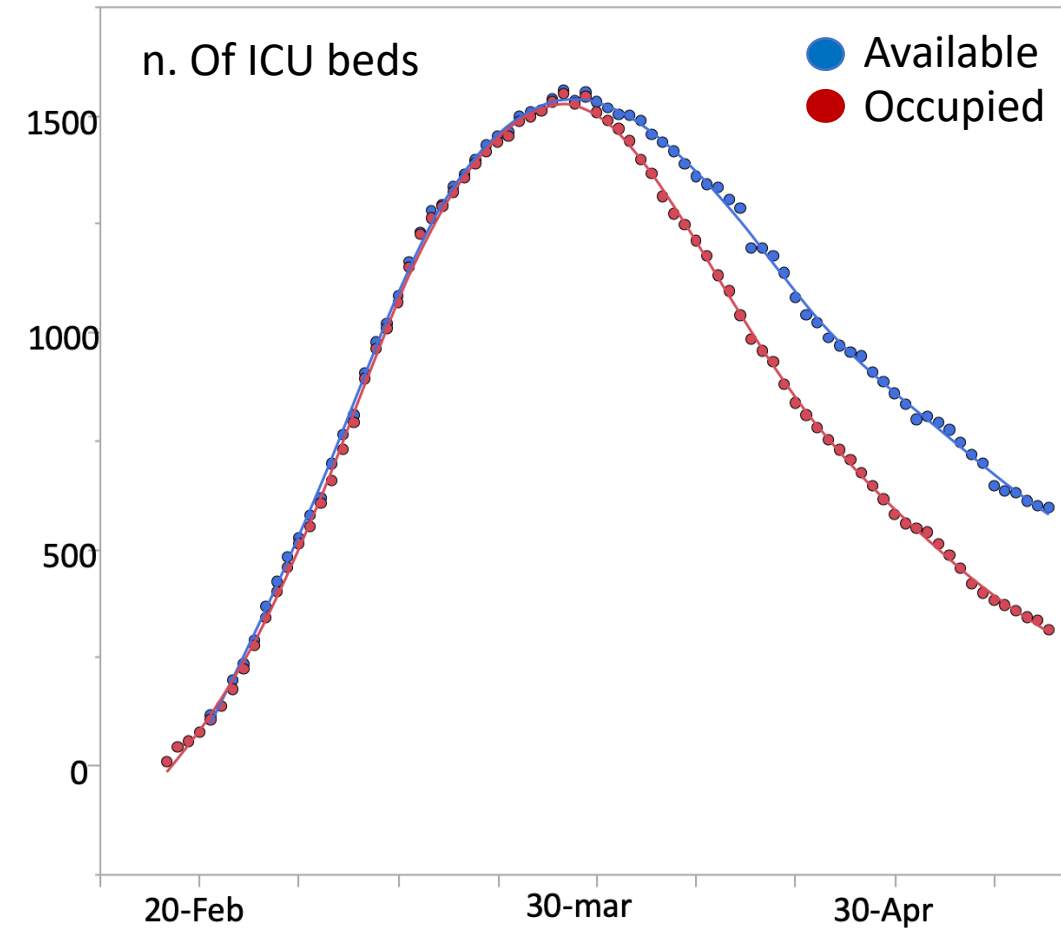
- During the months of March and April more than 5000 calls were managed by the staff members of the Coordinating Center to manage the ICU admission requests



Courtesy Giacomo Grasselli

During the outbreak

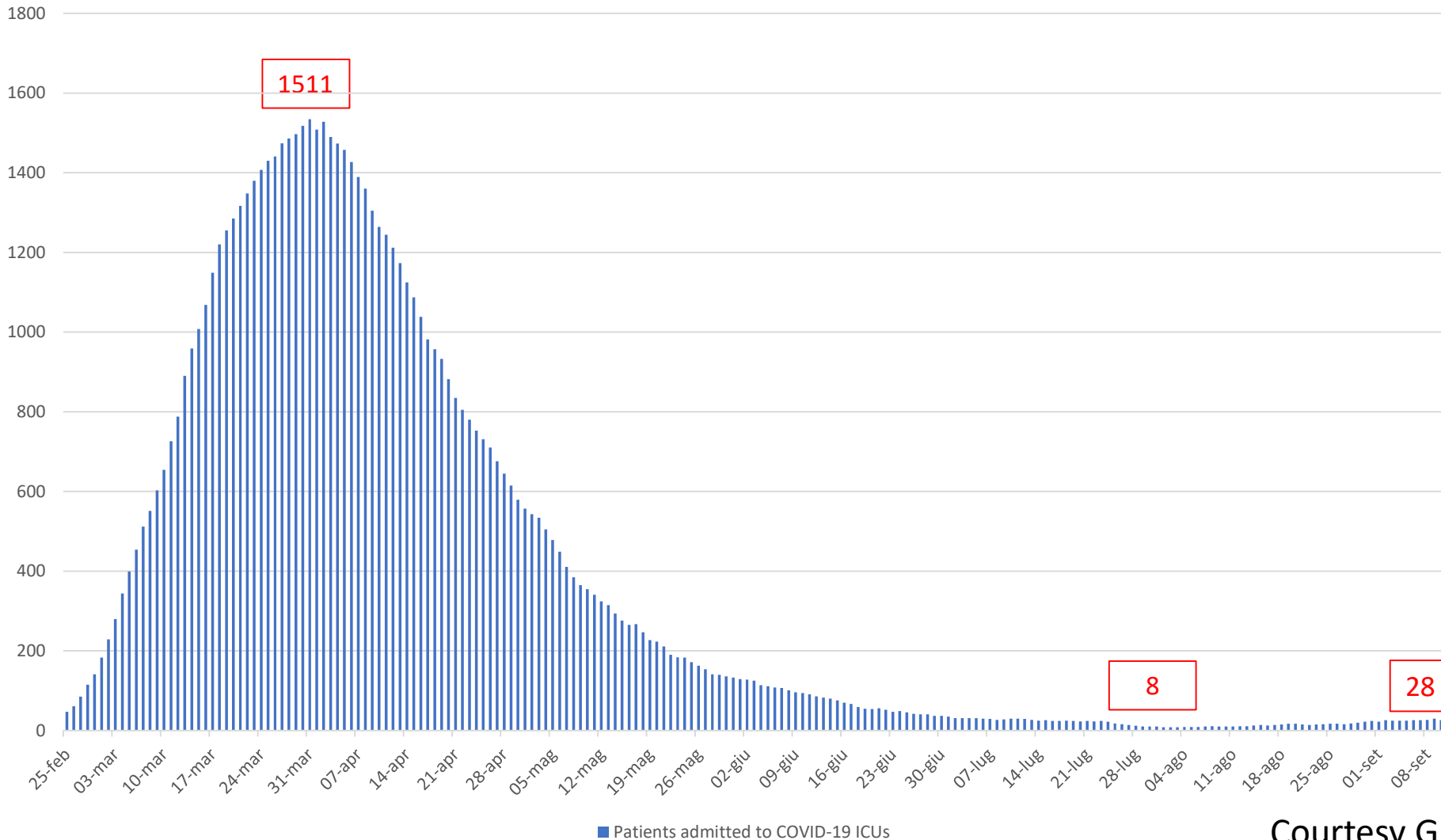
- The number of COVID-19 dedicated ICU beds increased from 130 to 1558 in more than 100 Units in about 75 hospitals
- The daily admission rate increased until a maximum of 151 patients/day (March 13)
- Between February 20 and June 30: 4668 pts admitted to ICU



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Pts admitted to COVID-19 ICUs

Patients admitted to COVID-19 ICUs



- 95 COVID-ICUs in 72 Hospitals
- Total patients: 4668
- Discharged: 2691
- Dead: 1950

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Increased ICU surge capacity

- First week: COVID-19 dedicated ICU cohorts in 15 hub hospitals (with Infectious Disease and Pneumology Depts) → 130 ICU beds
- After 2 months: about 1500 dedicated ICU beds in more than 100 Units in about 75 hospitals
- Hospital Network reorganized: centralization of specific diseases towards a limited number of hub hospitals
- Stopped elective procedures
- Recruitment of HCWs

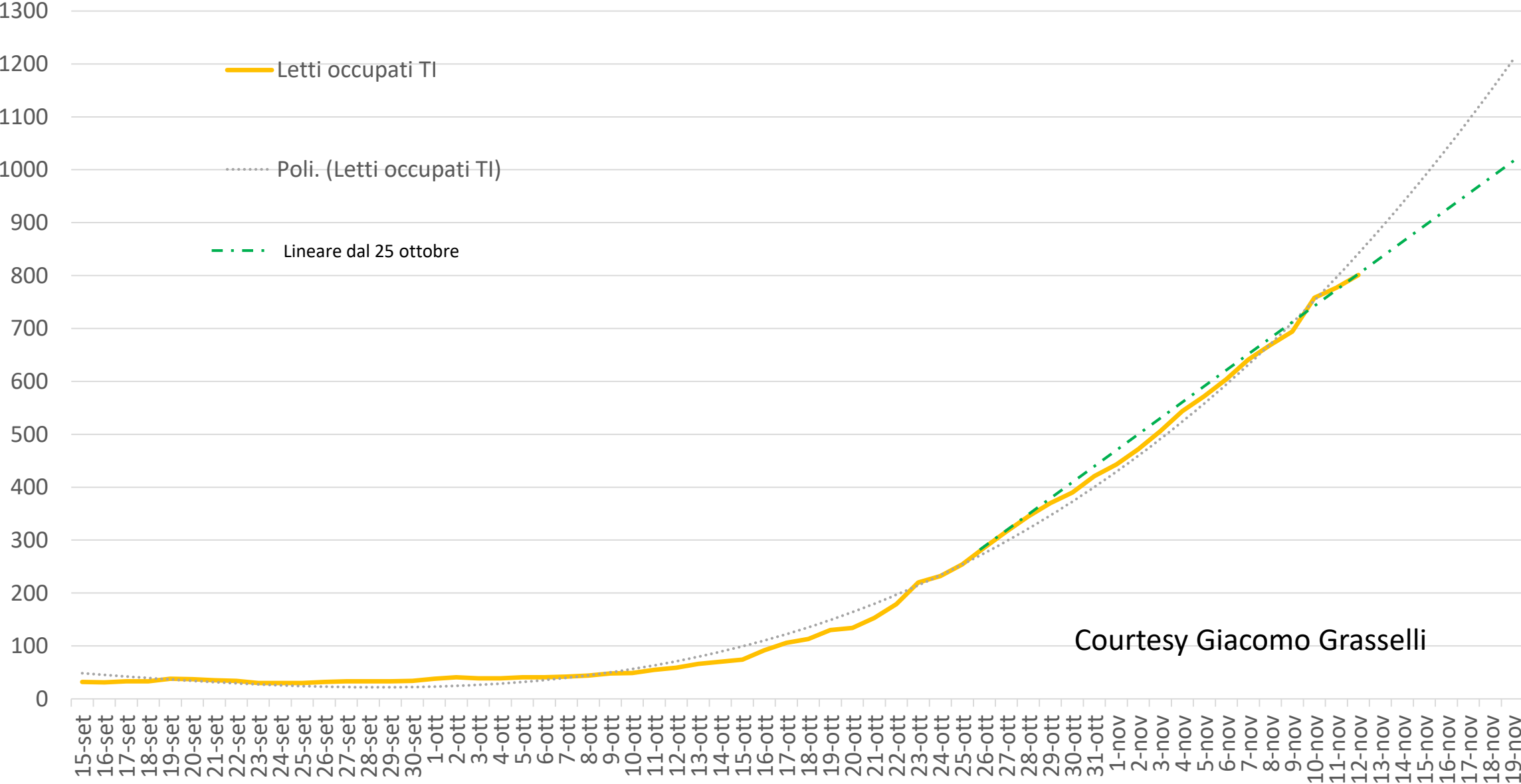
Increased ICU surge capacity

- Re-conversion of step-down units, CCU, Stroke Units, PACU into COVID-ICU
- ICU beds in surgical theatres, Recovery Rooms and even hospital wards
- Temporary ICUs in expo areas
- Transfer of pts to other Regions
- Staffing: doctors and nurses from surgical activities and from other hospital wards

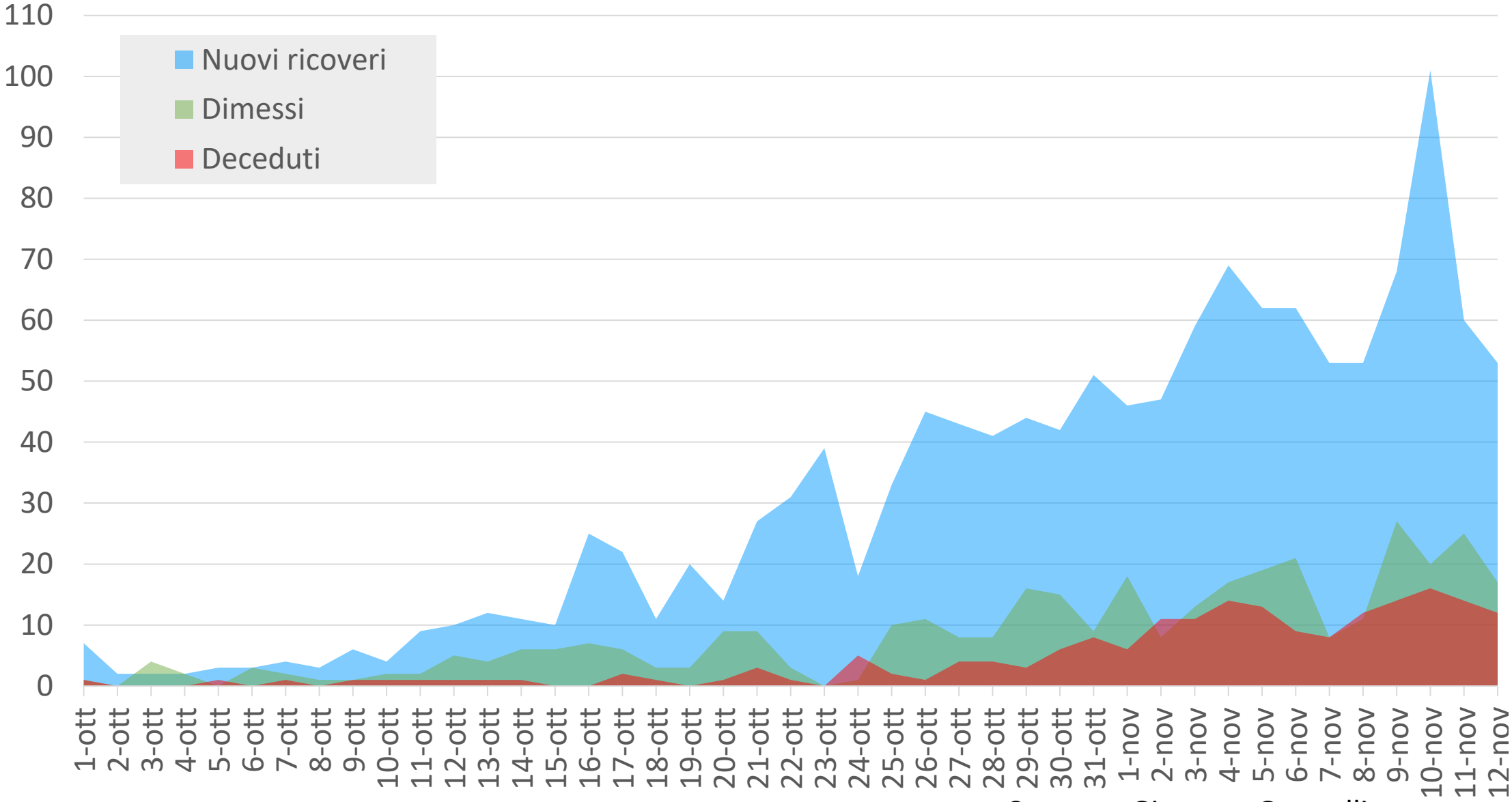
Problems

- Different standards of care (e.g. doctors- and nurse-to-patient ratio)
- Recruitment of doctors and nurses with limited experience in the management of critically ill pts
- Patients admitted to Units with different expertise in the management of ARDS → impact on outcome
- Difficulties in the supply of PPEs and technical equipment (monitors, infusion pumps, ventilators, drugs)

COVID-19 - Terapie intensive - Letti occupati - Lombardia

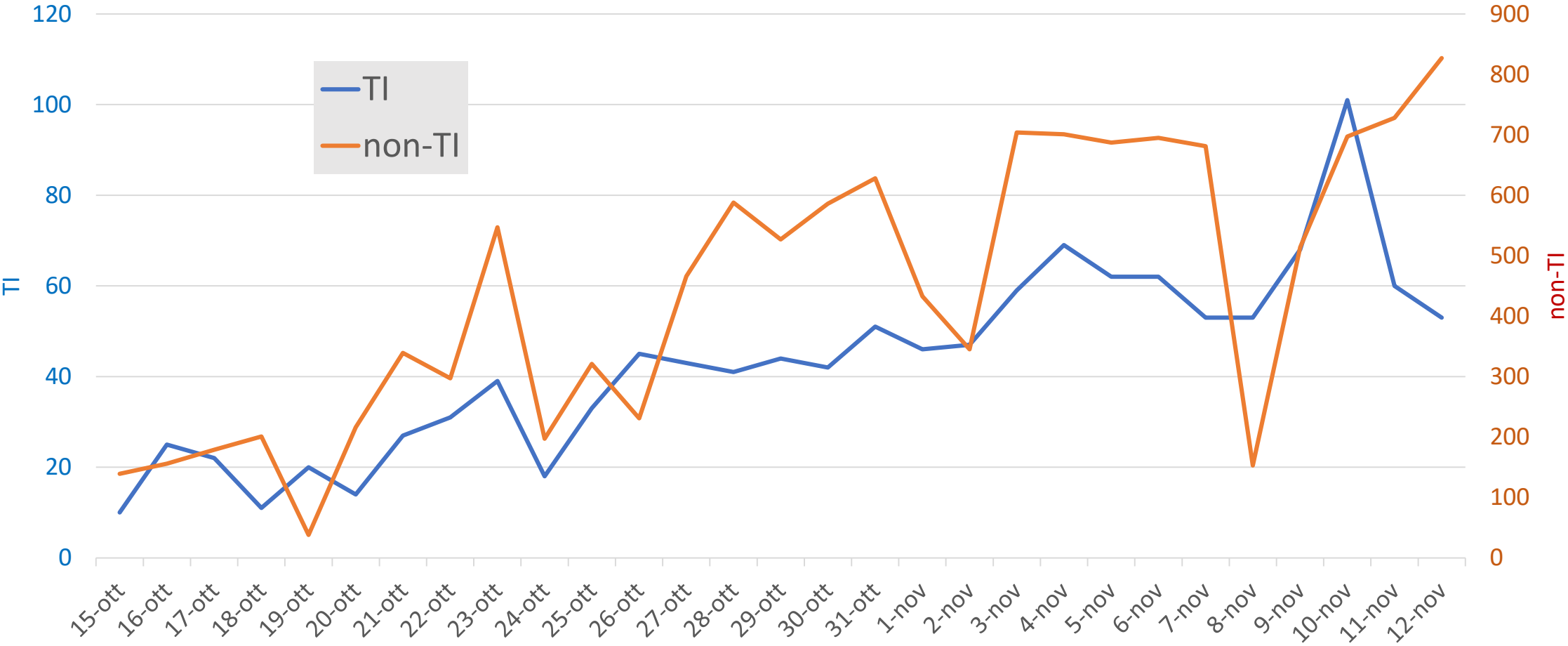


COVID-19 - Terapie intensive - Lombardia



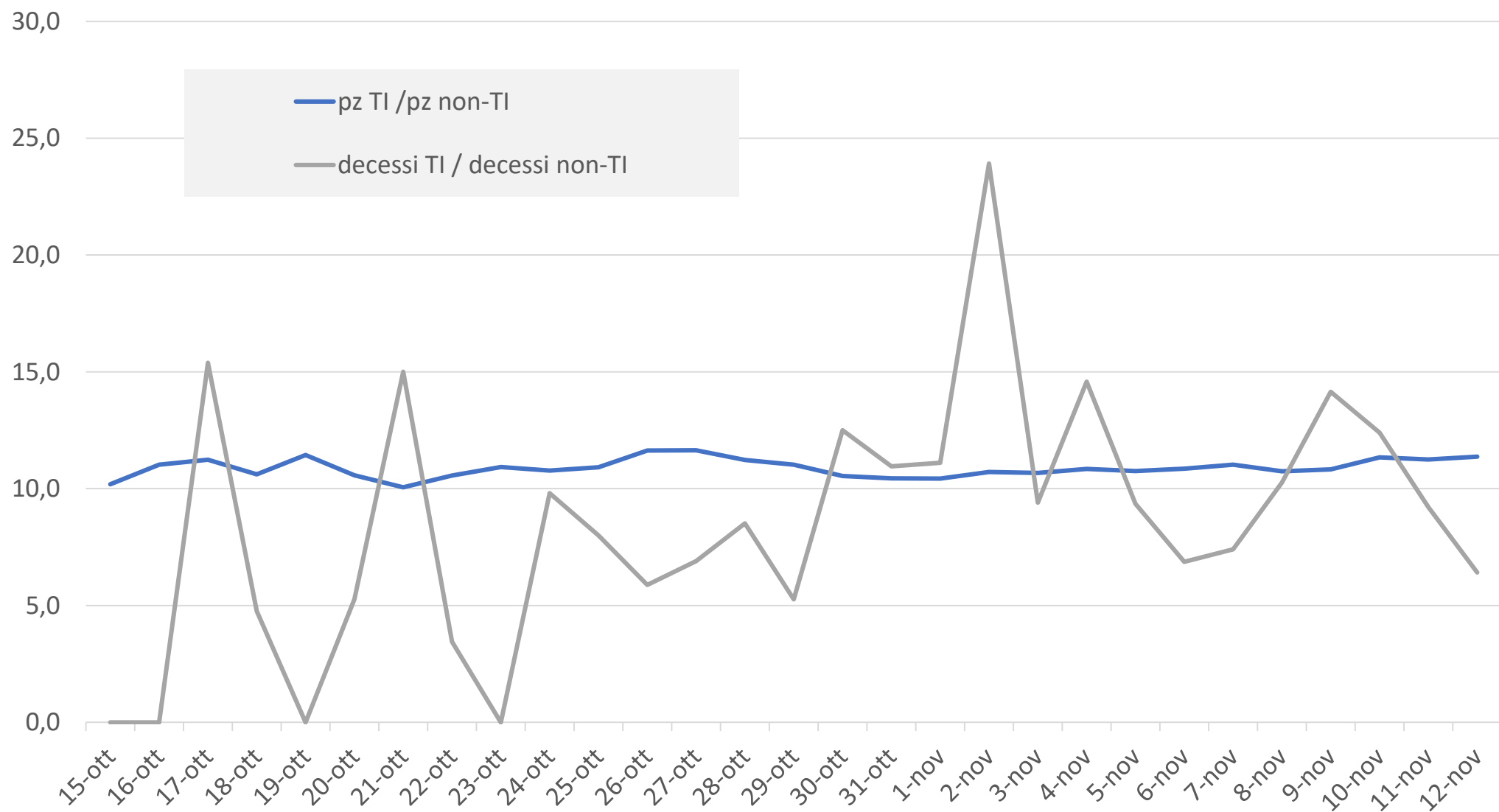
Courtesy Giacomo Grasselli

Nuovi ricoveri giornalieri in TI e non-TI



Courtesy Giacomo Grasselli

rapporto TI / non-TI (%)



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