The COVID experience at the University Hospital of Novara

Agility and innovation to drive response to COVID-19

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UNIVERSITY HOSPITAL – NOVARA, ITALY

- Second largest Hospital in our Region (Piedmont)
- Hub to 7 spoke (900,000 people)
- Teaching Hospital (University)
- Border hospital (40km from Milano, different Region)
- 3 sites
- 750 beds 108 ambulatories
- 69 Medical Units - 23 Operating Rooms – All disciplines - KidnTspl
- 300mln budget, 2582 employees
- 34k admissions – 2,4mln outp services – 85k ED accesses
THE OUTBREAK OF COVID-19

BEDS AND PATIENTS

>1250 pts

>300 deaths
## THE OUTBREAK OF COVID-19

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14 days +194 beds +7 wards + 7OR + 1corridor
### WHAT WE LEARNED - capacity

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<th>FEBRUARY 2020 – 1st wave</th>
<th>NOVEMBER 2020 – 2nd wave</th>
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<td>• We didn’t expect so many pts (few beds)</td>
<td>• We don’t want many pts (but we have a plan up to 3 wards)</td>
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<td>• We didn’t expect such a violent outburst (dramatic opening of new wards) (corridor to ward in 5 days)</td>
<td>• We don’t expect a violent outburst (we have a much more organized territory – contact tracing)</td>
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<td>• We didn’t plan a COVID hospital</td>
<td>• Area Agreement for COVID hospital (filter – base – subintensive – ICU)</td>
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WHAT WE LEARNED - organization

**FEBRUARY 2020 – 1st wave**

- Patient pathways defined (January) needed an update
- Guidelines on the use of PPE (March 6th - transmission not known)
- Doctors and nurses on a voluntary base. Too many sick.
- Set-up of new wards naïve (facilities layout planning, clean pathways, stock of PPE)

**NOVEMBER 2020 – 2nd wave**

- Patient pathways defined – access control
- PPE guidelines education and training
- Personnel recruitment plan
- Kit and checklist for new wards opening
- Prepared to a second lockdown
## WHAT WE LEARNED - procedures

### FEBRUARY 2020 – 1st wave

- Few basic procedures

### NOVEMBER 2020 – 2nd wave

- Admission - discharge
- Peculiar areas (Pediatrics, Dialysis, OBGY, Psichiatrics, Emergency, Fragile pts)
- Contact tracing (pts and ops)
- Morgue
- Patient goods, comunication
- Monitoring (admissions, PPE,..)
- Psicologic support
- More...
THE MOST USEFUL TOOLS

• DECISION SUPPORTING SYSTEM
  • Steering committee – daily at noon
  • Dashboard – admission, discharge, drugs, tech, PPE
  • Forecast support – growth and decrease of the wave

• DOCUMENTATION
  • Open site where to collect all the provisions
  • Neat and clean, tidy and updated: quick access to the information
  • Openness: literature, confrontation

• COMUNICATION
  • Mailing list of all the corporate e-mail
  • Whatsapp groups
THE MOST USEFUL TOOLS

SCUOLA DI MEDICINA

SCUOLA DI SPECIALIZZAZIONE IN MEDICINA INTERNA
Direttore: Chiar. mo Prof. Mario Pirisi

TESI DI SPECIALIZZAZIONE

MODELLING HOSPITAL BED NECESSITY FOR COVID-19 PATIENTS DURING THE DECLINE PHASE OF THE EPIDEMIC TRAJECTORY
STUDIO SPERIMENTALE

Relatore: Chiar. mo Prof. Mario PIRISI  Candidato: dott. Eyal Hayden
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