Global health-care facilities their monitoring and adequacy to cope with the Covid19 emergency data requirements and future prospective)

Andreas Skouloudis
28 days in lockdown (expected 27 days more)

John Balbus
9 days (in partial) lockdown

3 Apr. 2020
(950 down to 720 fatalities/d)

Emergency Hospitals constructed (at ...exhibition buildings)

Current HCF (all levels):
In Italy 3816.
In Lombardy 737 and in the counties:
- Milano 260;
- Brescia 77;
- Bergamo 76;
- Monza 63;
- Varese 57;
- Pavia 50;
- Mantova 49;
- Cremona 31;
- Como 30;
- Lecco 26;
- Lodi 10;
- Sondrio 8.
### Emergency Hospitals constructed (at ...exhibition buildings)

**Components:**

From [static](#) data (anticipatory) (facility, its management, supply facilities systems, technical & medical equipment, ICT etc.) to...

Time [evolving](#) data (during the crisis):

- Land-use of vicinity adaptation from daily images if possible.
- Assessment of capacity vs critical status.
- Monitoring of daily admission statistics in-situ.
- Evolution of Healthcare employees.

*(Images from Google maps/earth)*

Postdicting data (in the aftermath):

*(New concepts of sensitive/reliable data)*

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### GEO Health Community of Practice (EO4HEALTH 2020-2022)

...and the need of horizontal collaboration several teams

**Elements from satellite observations:**

**For the Health Care Facilities subgroup:**

- Enhancing the infrastructure data images and the verification of the capabilities of specific departments.
- Visual images for change of landscape and speed of new deployments and reactivation of old healthcare or large hotel facilities.

**For Collaborative work between subgroups:**

- Temperature and humidity maps in (at least) 1x1km² resolution.
- CO columns (more closely related to traffic – NO2 as potential surrogate).
- Lights at night (useful for the daily variations).
Thank you for your attention.
@ the GEO Health Community of Practice

For involvement in HCF Assessments subgroup,

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or

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Planned publications (CoP contributions invited)

• What determines the critical operational conditions beyond which health infrastructures are not be able to cope.

• What monitoring knowledge and data might be missing for a reliable containment of epidemics/pandemics.

• Involvement in H2020 calls in July and Oct as well as to NASA’s A.28 Rapid response and novel research.