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ACCESSIBILITY, EQUITY, AND HEALTH SAFETY
FOR ALL PERSONS DESPITE COVID-19 AND AFTER IT

ISTITVTO SVPERIORE DI SANITA

# The lesson of COVID-19 to Italy on the use of digital technologies to defend universalist public health and the values of volunteering: knowing how to change and protect the most fragile people

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Italian National Institute of Health (ISS)

Euro Science

Fondazione Internazionale Trieste

# National Centre for Telemedicine and New Healthcare Technologies

Italian name: *Centro Nazionale per la Telemedicina e le Nuove Tecnologie Assistenz*iali

**Establishment :**
June 15th, 2017

**MISSION (by Ministry Decree):**
to lead, promote and coordinate **research** and **governance of the system** for the **social and healthcare applications** of the new digital technologies and the telemedicine.

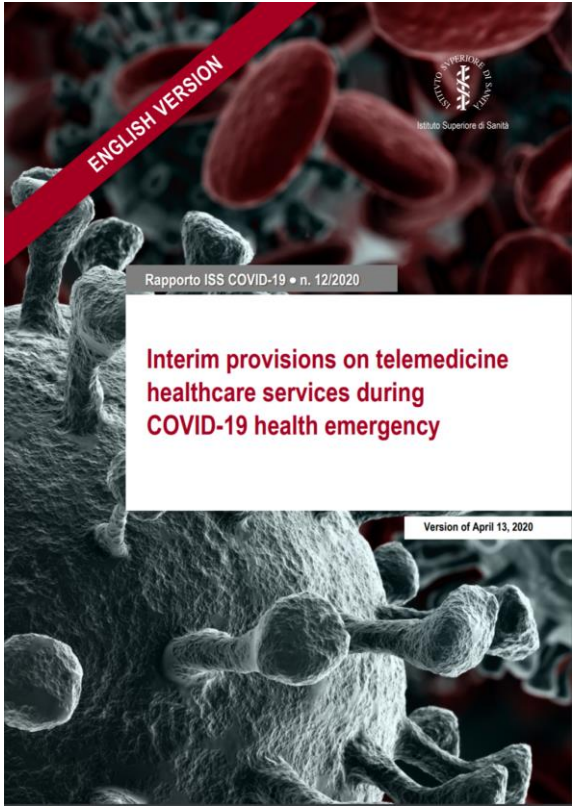
## Paths for development

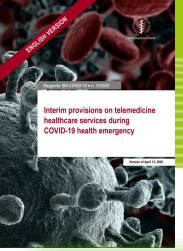
- **SUPPORT LOCAL PROJECTS :** the Centre works on demand as consultant for local public healthcare organizations to support the construction of new services
- **COORDINATE NATIONAL INITIATIVES:** National Groups of Study addressed to debate specific issues and elaborate steering national documents to face them
- **DEVELOP PROFESSIONAL COMMUNITY :** allocate resources to make sharing experiences possible (web tools, conferences, training courses, publications)

## Strategic goals

- **Development of ITALIAN TELEMEDICINE MODEL**
- **Promote international collaborations**

# DIGIT: COVID 12 TELEMEDICINE ENGLISH




## COORDINATION OF THE SERVICE

Professionals contact all the people in the area of jurisdiction who are in a position to use remote services (situations A, B and C).

People are informed about the service.
The digital technology in their possession and their connection possibilities are identified.

**Type 1**
tele-surveillance

**Type 2**
tele-control

**Type 3**
tele-control

**Type 4**
tele-psychologist

Switch
1 >> 2

Switch
2 >> 3

Standard data on C-19, also not automatic

Standard automatic data on C-19 (+ expected alternatives)

Standard automatic data on C-19 + additions on basic pathology

Cadenced video-call and on request to check conditions and general info

(nurse)

Daily health video-call, clinical check and personal info

(doctor)

Medical video-call and clinical check according to the case and personal info

(doctor)

Video call on request for support interview

(psychologist)

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| Objective sign to measure | Measuring instrument | Recommended measurement frequency |
|---|---|---|
| Body temperature | Thermometer | 2 times a day |
| Respiratory rate per min. | Wearable sensors (Bluetooth LE or other automatic online transmissions) or manual counting | 4 times a day |
| Heart rate | Digital frequency counter (Bluetooth LE or other automatic online transmissions) | 4 times a day |
| Peripheral oxygen saturation (+ heart rate) | Digital pulse oximeter (Bluetooth LE or other automatic online transmissions) | 4 times a day; it may be helpful to detect oxygen saturation much more frequently, if necessary |
| Systolic and diastolic blood pressure | Automatic digital sphygmomanometer (Bluetooth LE or other automatic online transmissions) | According to medical indication |
| Cardiac electrical activity | Digital ECG (Bluetooth LE or other automatic online transmissions) | According to medical indication |

**Flexibility can be organized starting from medical procedures better than technological innovations**

**=**

**Increase of trust (professionals)**

**The trust of patients comes from the relationship with physicians overall**

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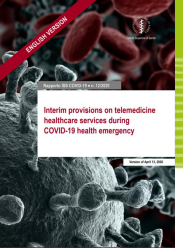


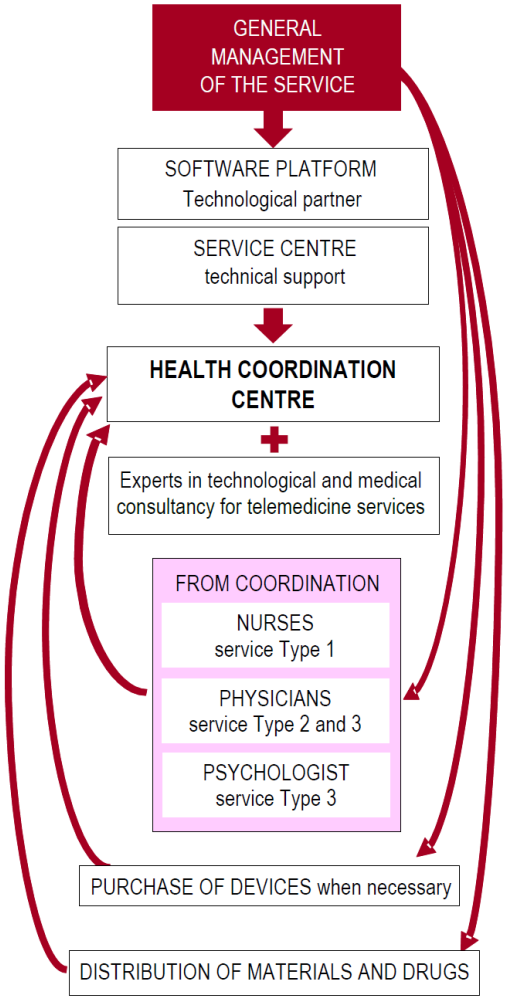


**ROLES**

General governance of the service from the start-up; Recruiting professionals

Supply of the software system and support

Technical support for ICT, equipments and medical devices

Operating coordination of health activities

Scientific advice to support coordination activities

Medical treatment in telemedicine and remote healthcare through collection of information and data from physical exam

# Organization scheme of the Telemedicine system for COVID-19

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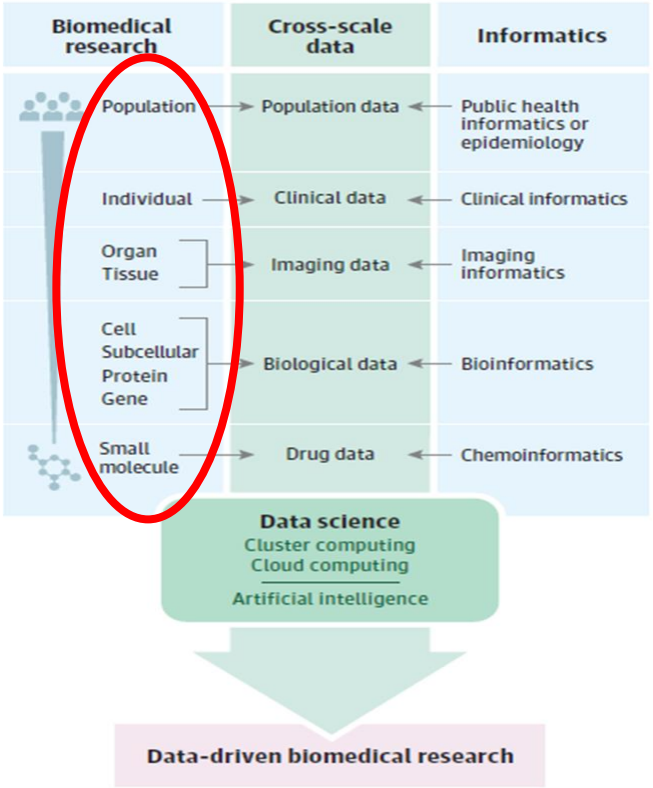
**Figure 1. Biomedical Research and Informatics Approaches in Artificial Intelligence**

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JAMA FULL TEXT

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Zhu L[1], Zheng WJ[1].

Author information

1 School of Biomedical Informatics, University of Texas Health Science Center, Houston.

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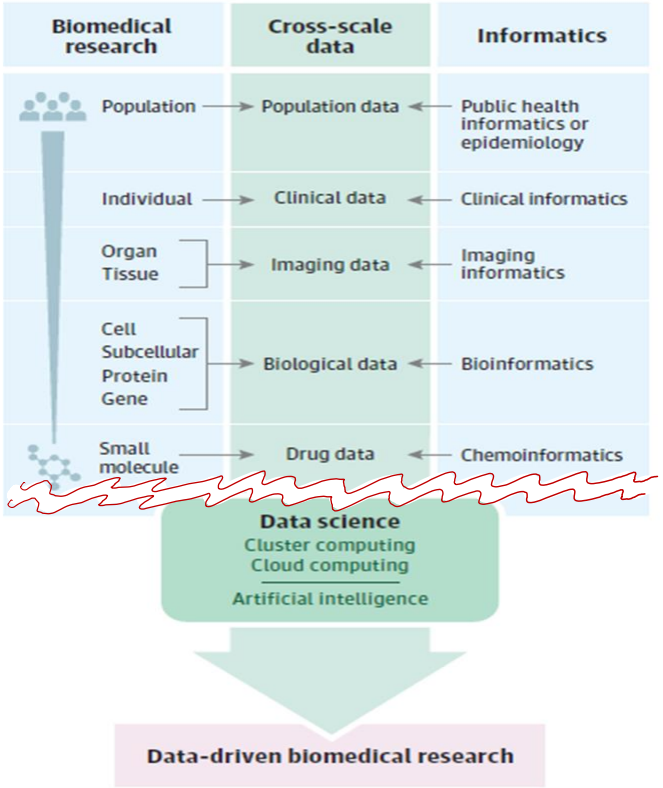


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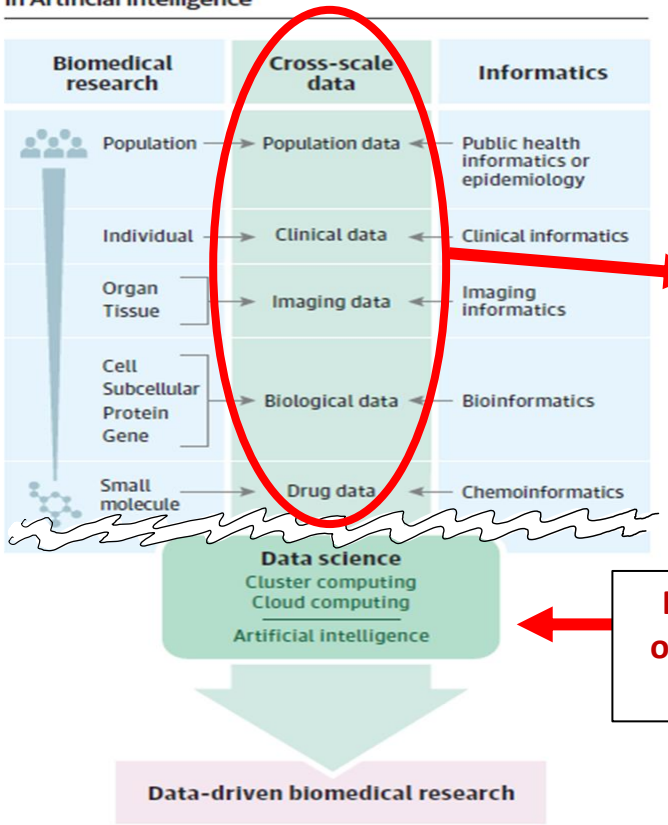


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**Internet of Things**

- Certifications for Medical Devices (app ?)
- Broadband (mobile ? 5G ?)
- Interoperability Platforms

**Laws (National / Regional ?)**
**Medical Guide Lines (Trials ?)**
**Technical Standards**

**Real provision of Telemedicine services**

**What interoperability means ?**

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Thanks…
Please, if you have an idea
do not hesitate to contact us.
Together we will find a way to collaborate.

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