European Coordination Committee of the Radiological, Electromedical and Healthcare IT Industry

COCIR Virtual Session

Monday 16 Nov. 2020

DIGITALISATION OF HEALTHCARE:
THE NEW NORMAL

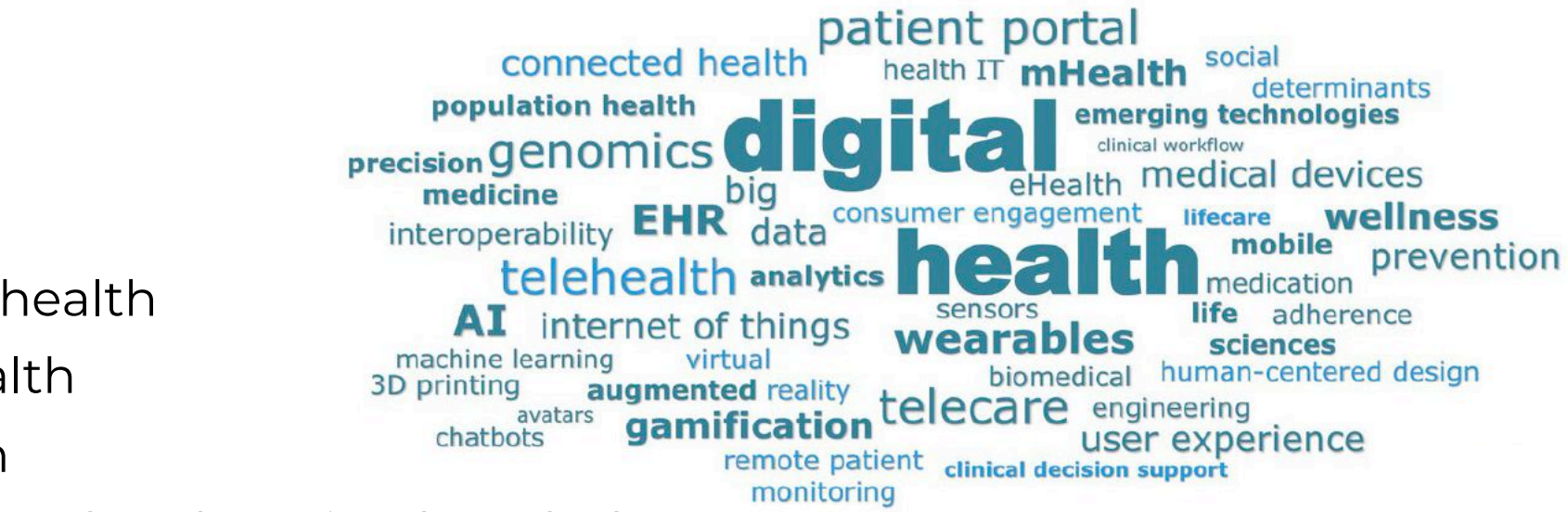
How Digital Health is helping in a pandemic environment?

Dr Nicky Hekster
COCIR Digital Health Committee Vice-Chair and IBM Watson Health

Digital Health

A catch-all concept for the benefit of the patient

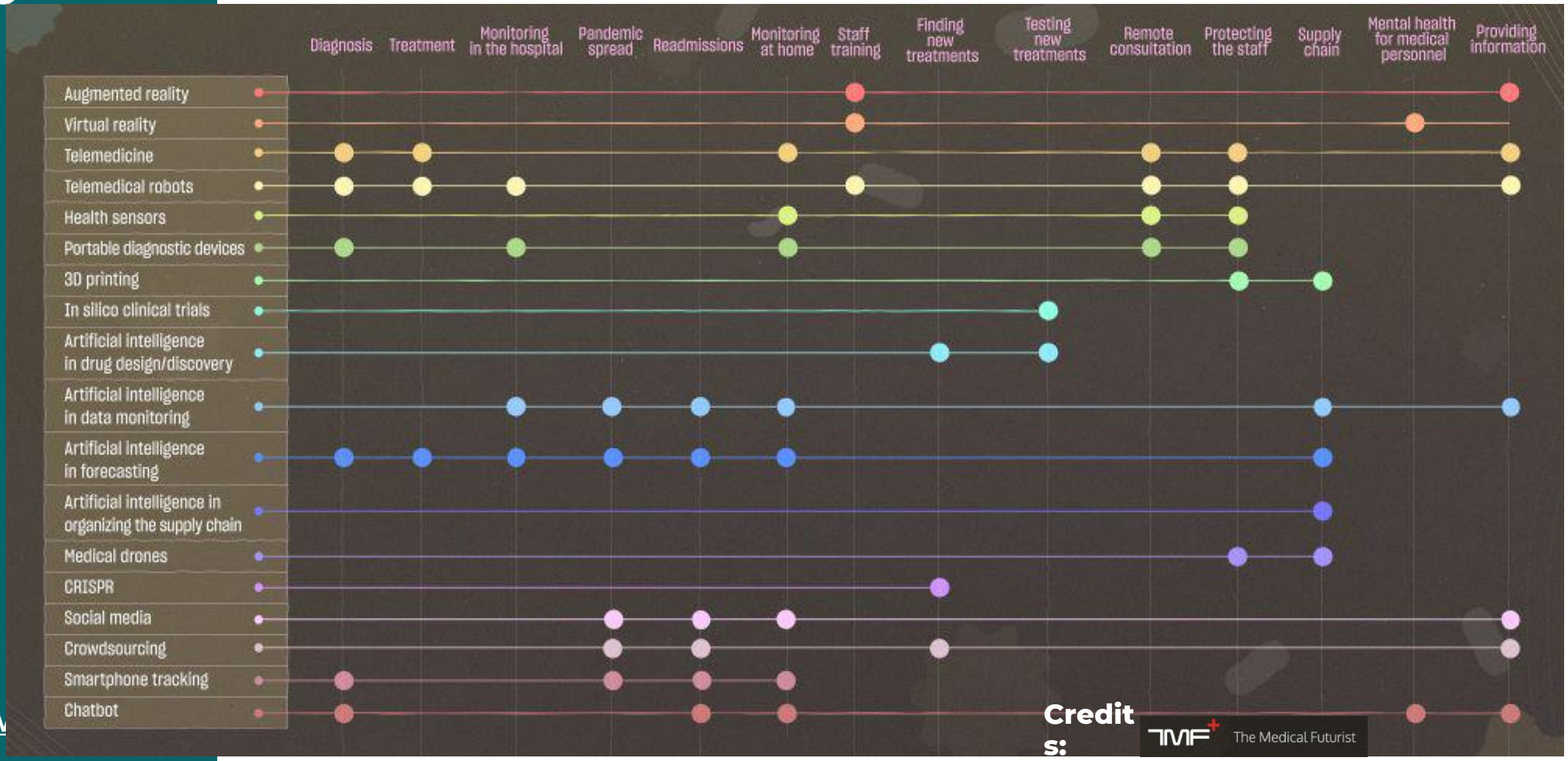
Improving health systems by unlocking the power of digital technology and hence data



- Electronic health
- Mobile health
- Tele health
- Capturing and exchanging health data

- Bringing health services directly to citizens and to underserved communities
- Helping to map and control outbreaks of diseases
- Integrating digital tools making healthcare more responsive, productive and have better outcomes and be value-based

Digital Health and fighting COVID-19



COVID-19 catalyst and booster for Digital Health

The pandemic has pushed healthcare to engage in data sharing and research partnerships, facilitating new strategies that many hope will endure after the crisis subsides.

COVID-19 Data Portal

Knowledge, diagnostics, delivery, detection

- Electronic health records and standards supporting the exchange of data at regional, national and international levels
- Public health portals that provide transparent access to an individual's personal health records
- Clinical decision-making support tools – AI
- Robotics

Screening, Triage & Virtual Care

- Chatbots
- **Triaging apps**
- **Patient or peer-to-peer video consults**
- **Telemedicine**
- Mental care: wellness, stress, anxiety, workplace

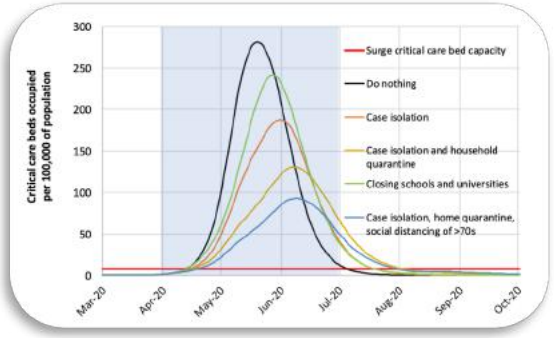
Remote Monitoring

- Smart wearables and associated apps
- Smart homes, domotics
- Internet of Medical Things

And even more examples

PRACE PARTNERSHIP FOR ADVANCED COMPUTING IN EUROPE

EXSCALATE 4COV



Tracking & Tracing

- **Mobile health apps** for quarantine monitoring, alerting, self-diagnosing, prevention; tracking and contact tracing

Research

- HPC: in-silico simulations for drug and vaccine discovery and design
- Cohort selections tools, clinical trial management
- Artificial Intelligence

Population Health

- Epidemiological surveillance and management
- AI and predictive analytics

COVID-19 ushers in a new era of digital healthcare

UNITED KINGDOM

COVID-19 assessment in primary care: Decision support for predicting severe disease

By Digital Health and Care Institute - 7 August 2020

Scotland is again making p
Intercollegiate Guidelines
decision support tool for p
primary care. It provides ac
other risk factors, and clini

NORWAY

COVID-19: How to get started with video consulting

By ehelse.no - 27 May 2020

The Directorate for eHealth in Norway recommends health

Apple and Google release phone technology to notify users of coronavirus exposure

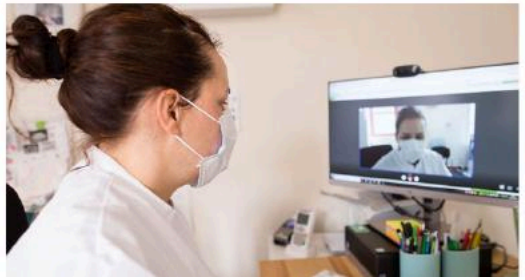
By Kari Paul - 20 May 2020

The two tech giants have released long-awaited smartphone

FRANCE

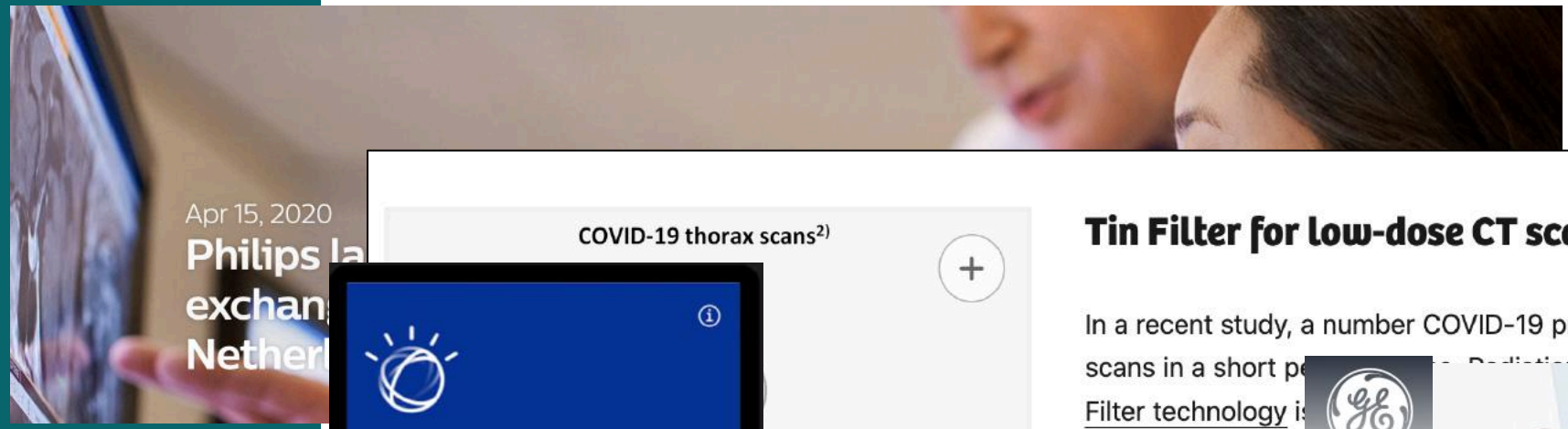
Telemedicine could reduce daily trips in the Ile-de-France region by 300,000 to half a million

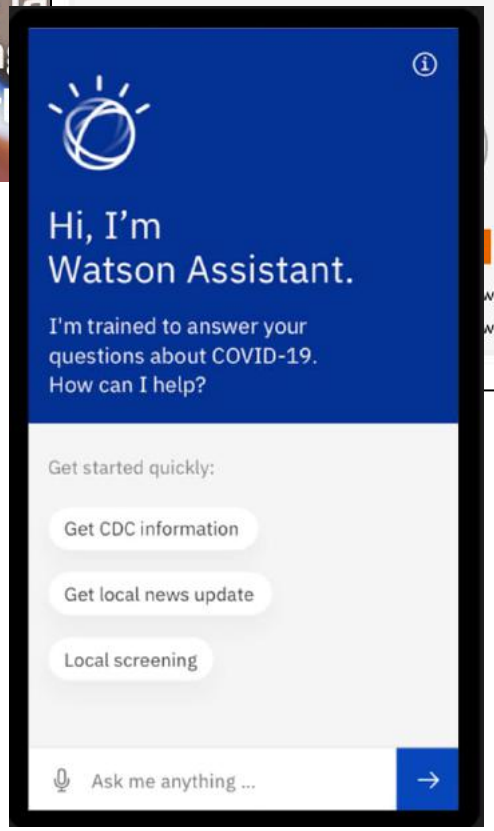
By Paris Match - 14 May 2020

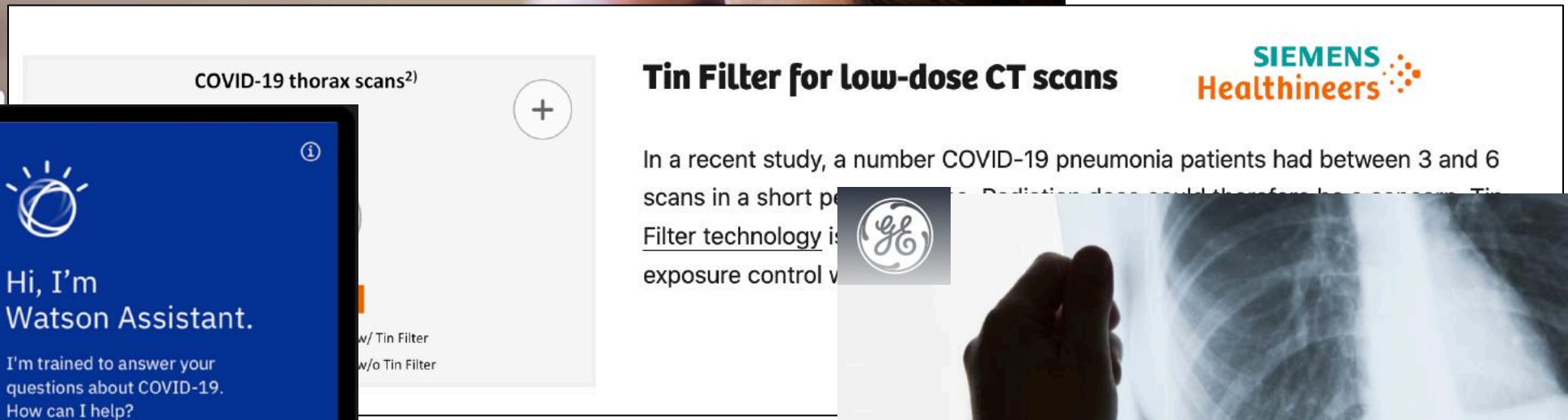


According to research by the Institut Paris Région, the growth in use of telemedicine during the French lockdown could eventually reduce visits to receive health-related care in the Ile-de-France region by anywhere from 300 thousand to 500 thousand a day. Read More (in French) >

Successful use cases of some of COCIR's members







COVID-19

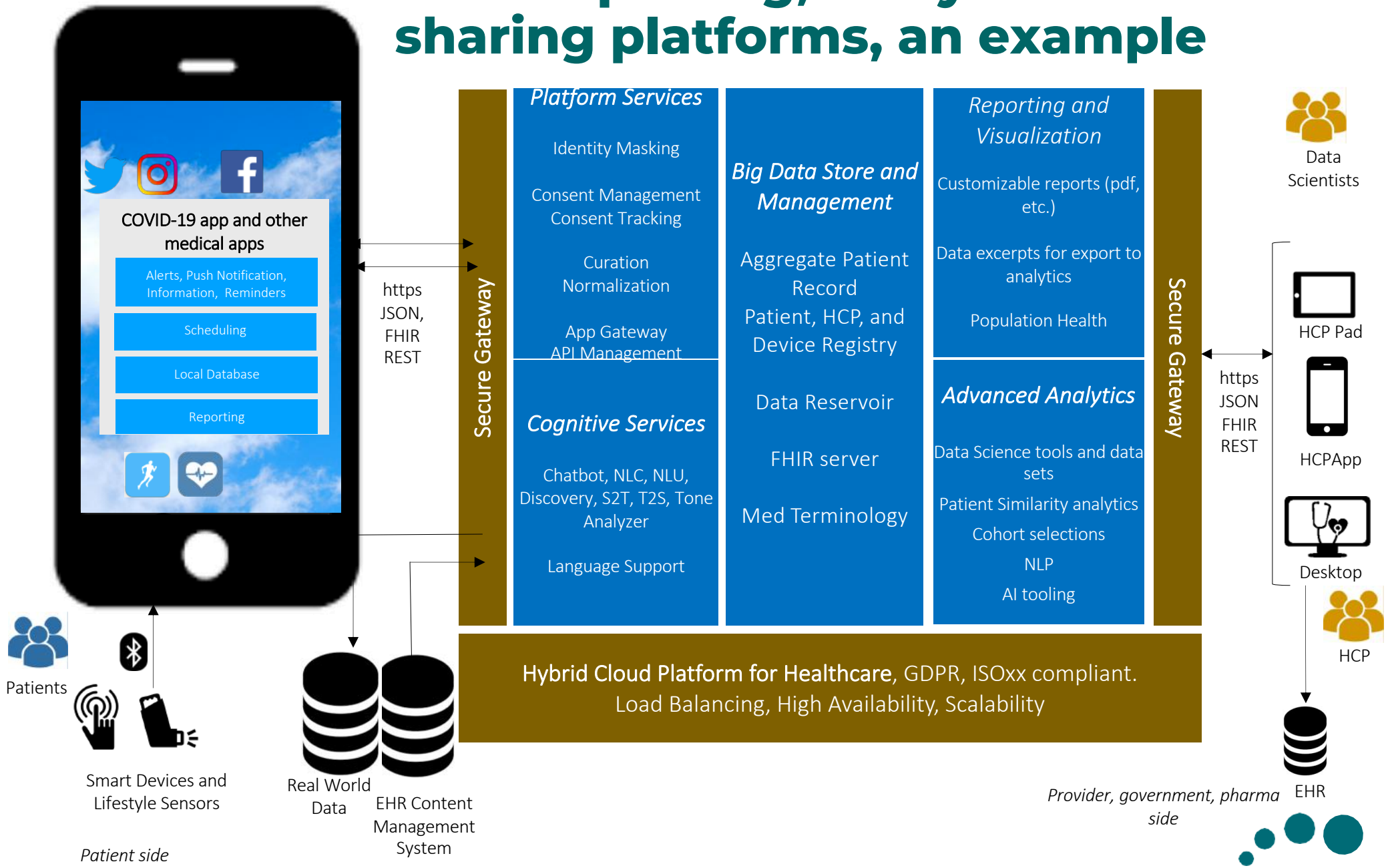
Smart Thinking: Oxford, GE To Use AI Against COVID-19 Pneumonia; French Team Builds Database With GE Software

Key adoption challenges

From stand-alone to integrated ecosystems and solutions

- **Regulatory**
  - Certification, legal implications, liabilities, quality labels, benchmarks, RCTs
  - Data protection, privacy & (cyber)security, ethics
- **Economic**
  - Reimbursement, purchase costs, financial frameworks
- **Structural**
  - Adoption, learning, medical significance, applying scientific methods for proof, education & training, establish trust, coordination
- **Technological**
  - Integration, interoperability, standards; data platforms, national and cross-border data access & exchange

Data capturing, analysis and sharing platforms, an example



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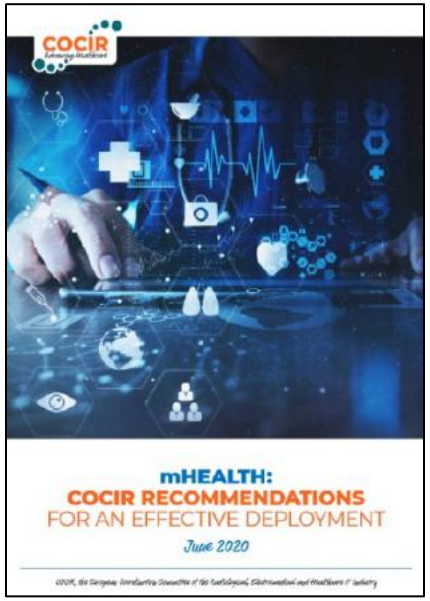
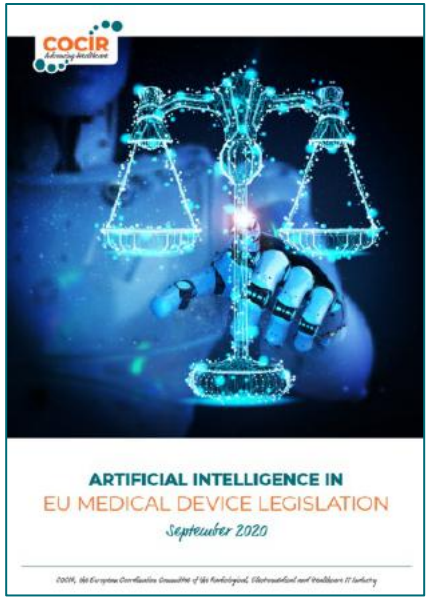
COCIR Thought Leadership: some publications

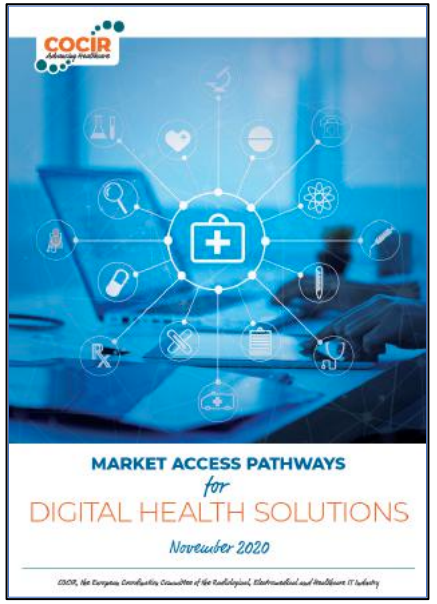
- Create a trusted data governance framework
- Invest in a pan EU infrastructure
- Encourage common data specifications
- Mobilise funds for education and skills
- Support a PPP



- Coordination at national and EU level
- Progress on cross border exchange (EEHRxF)
- Integrate specifications in public procurement
- Educate stakeholders
- Identify high-priority uses cases for deployment



- Existing legal frameworks cover already a lot
- Need to educate and build awareness
- Multi-stakeholder dialogue
- Trust is vital



- Perform a baseline measurement
- Facilitate discussions on the use of clinical evidence and information, exchange, and costs
- Establish data governance framework
- Promote reimbursement consistency
- Create procurement guidelines

COCIR
Advancing Healthcare