COVID-19 as catalyst for telemedicine perspectives, questions and a demo: how smart glasses are now used to support surgeons in the operating theatre

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1. COVID-19 and telemedicine

2. Smart glasses supporting the surgeon in the operating theatre
Telehealth: 3 flavors

1. Store and Forward (asynchronous): HC worker posts question(s) and (volunteer) remote specialists provide answer(s) in 2 to 48 hours (crowdsourcing of solutions)

2. Telemedicine (synchronous: engaging in real time): Patient or HC provider is assisted real time by remote expert/provider; multiple purposes are possible: observation, diagnosis, treatment, training

3. Remote Patient Monitoring
Telemedicine

Application levels

- Health care provider to patient: acute and non acute
- Peer 2 peer amongst health care providers

COVID-19 impact: from mainly acute to non acute and peer 2 peer (see demo)

Barriers

- Adoption by patients and healthcare service providers
  - Patients seem mostly satisfied; Health care providers seem rather reluctant (before COVID-19)
  - COVID-19 impact in US:
    - Consumer adoption has skyrocketed, from 11 percent of US consumers using telehealth in 2019 to 46 percent of consumers now using telehealth to replace cancelled healthcare visits.
    - Providers have rapidly scaled offerings and are seeing 50 to 175 times the number of patients via telehealth than they did before
- Available technology and (workflow) integration
- Legislation: Applicability & certification; Liability; Privacy & security; Remuneration & reimbursement
Telemedicine and legislation, **impact of COVID-19** (*)

- **US**: Telehealth to become permanent under Trump executive order
  - the temporary flexibilities for telehealth allowed during the COVID-19 pandemic made permanent on 3th of August
  - Medicare will cover telehealth visits at no additional cost and co-payments can be waived for telehealth services.
  - The order will allow Medicare to cover more than 135 services through telehealth, including physical therapy, emergency department visits, home visits, mental health counseling, substance abuse treatment, pediatrics, critical care and more.

- **France**: telemedicine acts have been well defined in the law and teleconsultation and are reimbursed by the Health Insurance at the same price as face-to-face consultations (under certain conditions). In April 2020, further decrees widened the access to teleconsultation to other health professionals (midwives, speech therapists, occupational therapists and psychometricians ...).

- **The Netherlands**: Video consultation is allowed, under certain conditions, in all care sectors, for all patients and for all health care provision performed by any health care professional. Dutch Healthcare Authority treats e-consults and face-to-face consultations equally, so insurers may reimburse at the same rate as the face-to-face. **An exponential increase of video consultations in all sectors (including hospitals) is observed due to the corona pandemic. In the context of the COVID-19 pandemic, the NZa decided to, temporarily, waive restrictions that were mainly applied in the specialized medical care sector and in the nursing care sector (both in care settings and at home).**

- **Belgium**: RIZIV-INAMI opened up temporary reimbursement of video consultation during the COVID-19 pandemic measures for many health care providers, as replacement for face-to-face consultations. New reimbursement codes with a corresponding reimbursement, usually without out-of-pocket payments for the patient.

(*) see also KCE report: Video consultation in the care with a cronic somatic desease
Creating access to affordable, quality healthcare, for all (SDG 3)

• improved convenience and access to care
• better patient outcomes,
• and a more efficient healthcare system.

Can developing countries ‘leapfrog’ developed countries (as happened with the mobile phone)?
- Health care provider to patient: acute and non acute
  - Peer 2 peer amongst health care providers
  - Training & capacity building (task shifting)
  - Maintenance of medical equipment
1. COVID-19 and telemedicine

2. Smart glasses supporting the surgeon in the operating theatre