e-DENT: oral prevention and teledentistry

MACVIA-LR: Combattre les Maladies Chroniques pour un Vieillissement Actif en Languedoc Roussillon
(Fighting chronic diseases for active and healthy ageing)

**Country:** France
**Region:** Region Languedoc Roussillon
**Total Region population:** 2.5 Million

**Good Practice Target population:** Residents of medico-social establishments in Languedoc-Roussillon.

**Topics:** Oral health, dentistry, telemedicine, prevention, fluorescence.

**Relevance to B3 Action Plan**

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**Description:**

Residents of medico-social establishments, with reduced mobility or not, have limited access to dental practitioners. Indeed, different studies carried out by the URCA (Health institution in France) state that 86.2% of residents have not undergone an odonto-stomatological consultation for the past 12 months (PACA) and 42% for the past 5 years (Essonne). On the national level, 35% of residents with teeth need restorative dentistry, whatever the other needs in oral health.

General health state is hugely influenced by the patient’s oral level. Either a general pathology aggravates the oral state or an oral pathology has consequences on the general state. For example, oral pathologies multiply deaths by ischemia cardiopathology by 3 and unbalanced diabetes, risk of pneumonia and under nutrition by 4.

In France, telemedicine has a legal framework since 2010. The law describes different acts of telemedicine, organisation and financing within this activity. Five priorities are targeted for telemedicine on the national level. One of them is “care in medico-social establishments”.

Telemedicine should not decrease the quality of coverage.

We chose to use an intra-oral camera using fluorescence light excitation such as SOPROCARE® and SOPROLIFE® cameras. Dental caries and gingival inflammation with fluorescent light can be revealed. This technology allows dental-teleconsultation.

With this knowledge, teledentistry projects have been designed. This innovating system could be a credible answer to improve the oral health of older and fragile people. In France, dental hygienists do not exist so we have to train nurses to be “odonto-conscious”.

European Innovation Partnership on Active and Healthy Ageing

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They are the “applicant professionals”. They could record pictures and films of patients’ oral cavity after tooth brushing. This information could then be sent to a central server and saved. The “required dentist” could analyse the videos and, if necessary, diagnose pictures and oral pathologies. A therapy plan could then be proposed as well as the best route of care for the patient.

**Highlights: Innovation, Impact and Outcomes:**

Teledentistry does not exist within the European health system. Some research teams have carried out tests on the clinical interest over the past few years but have never included this technology in health policy. It is now time to use new technology and new policies for oral health.

Teledentistry offers multiple benefits:
- **To improve oral hygiene:**
  A better oral follow-up, with oral prevention and training of staff, can change mentality.
- **To add oral state in patients’ files:**
  Currently, oral health is not analysed when a new patient arrives in a medico-social establishment, despite the fact that oral health can have consequences on the general state. A number of health surveys should be designed.
- **Care of oral disease by a specialist:**
  Many establishments allow nurses or medical doctors to diagnose oral pathology, despite having a low knowledge and capacity in oral diagnosis.
- **To plan treatment:**
  Planning oral prophylaxis, increasing knowledge of needs, scheduling and adapting oral education could all increase the efficiency of oral health policies.
- **To coordinate the patient route of care:**
  For older people in particular, but for all people in general, coordination of care is worthy of interest. If a patient can benefit from several specialists’ points of view, then obvious benefits are evident: for the patients, doctors and the health system.
- **To limit health actor movement:**
  Older and weaker people find transportation difficult. Home visits for doctors can be complicated due to busy schedules and lack of time. Reduction of transportation thanks to telemedicine is therefore another of the main advantages.

**Transferability to other organisations/regions:**

Teledentistry is easily transferable to other regions. In all medico-social establishments or in hospital or at home, teledentistry can be used. It is however easier in countries where dental hygienists exist. The only requirement is that of dentists who are ready to take part in this new method of diagnosis.

**Further information**  [http://macvia.cr-languedocroussillon.fr](http://macvia.cr-languedocroussillon.fr)

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