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# ICT methods and tools for health

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Introduction. An actual challenge of health systems is the practical implementation of ICT. It is useful to introduce new organizational models and guide decision makers towards an appropriate use of resources. Thanks to a strictly cooperation with healthcare units using ICT techniques and technologies, innovative applications have been studied, designed and implemented.

Telemedicine. Telemedicine is the provision of healthcare services, through use of ICT. It has been proposed in a variety of health care fields with significant advantages: As a matter of fact today at national level there are patchworked telemedicine initiatives not well coordinated. The ICCSB has collaborated in the design of new teleconsultation, telemonitoring and teleassistance services1. These projects involve territorial and specialist hospitals from different regions. Particular experience dealt with teleconsultation and sharing of clinical documentation for second-opinion, As technology is beyond clinical practice, making operative telemedicine it is necessary building confidence in and acceptance of new services. Last but not least it is necessary to bring legal clarity in management sensitive data. In practice, the design of each project must consider functional and ethical requirements, organizational requirements, technological requirements, legal requirements (GDPR). Some active telemedicine services will be presented.

Home care. A theme ancillary to telemedicine and care outside of hospital is related to the high intensity home care. The use of medical devices at patient's home by personnel who are not healthcare practitioners introduces new potential risks. A methodological approach to investigate potential failures and define improvement actions to address the dangerous potential situations in home care has been developed2.

Process Modelling. A third application regards healthcare process modelling and simulation. The use of software tools allows the representation of the system (As Is) to study the performances and the design of suggested variations (To Be) to predict the effect of designed changes. Application has been developer for home care and to study the emergency department optimization3.

H2020 Project. An effective study on the security, privacy data protection in e-health has been carried out in the framework of the participation at H2020 KONFIDO project devoted to cross border data exange4.

References
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2. Clemente et al 2019 Heliyon 5 (12), e03034.
3. Faiella et al, 2019 IFMBE Proceedings, 68 (1), pp. 567-572
4. Nalin et al. 2019 Journal of Biomedical Informatics 94,103183

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