Information and Communication Technologies (ICT) to Improve Prescription Appropriateness and Therapy Adherence in the Multi-morbid Elderly

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Multimorbidity patients pose severe challenges to which information and communication technology (ICT) can help patients and doctors to answer with effective and efficient care.

We first examine the role that can be played by Artificial Intelligence based systems built on effective knowledge representation to coordinate the activity of the different specialists. Such systems have also the potentiality to build a collective knowledge that can be delivered back, for instance, in the form of personalized guidelines for multimorbidity.

Artificial Intelligence systems can be integrated by pervasive physiological sampling that can be carried out safely at home. This can provide an updated clear picture of patient status. Physiological data can be uploaded to care centers that are such enabled to monitor the patient remotely; these data can also be used to plan, coordinate and tune clinical intervention.

Such systems can be complemented by education relying on multi-media digital content and gamification. A few examples on this will be portrayed.

Finally, a few ideas on how to increase the compliance of patients, providing personalized memos through mobile phone technology will also be presented.