



## THE ROAD TO TELEMEDICINE: MOBILE SOLUTIONS FOR NUCLEAR MEDICINE

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**Aim:** The present dimension of the concept “Telemedicine” includes the application of mobile communication technologies and information systems to provide Health Care at distance. In the medical imaging field, and particularly in Nuclear Medicine, this concept is broader, involving the application of a variety of software and mobile applications at several steps of the process: digital imaging display and processing, data transfer and storage, but also decay calculations and inherent corrections, often in real-time and automatically performed, as well as the exchange of theoretical information. This paper aims to review the current status concerning available software and applications, with a clear accent on those with a close relation to cloud computing and interfacing with smart phones and/or tablets.

**Materials and Methods:** This paper presents a literature review in this field, complemented by a general description of the solutions available in the market. A small introduction based on the relevance and justification of Telemedicine will be presented, followed by the proof-of-concept using several independent solutions. Finally, our vision about this each-day increasingly important issue will be pointed and justified, including the enumeration of the correspondent limitations and predictable difficulties for its wide implementation.

**Results and Conclusion:** Main applications found were related with support guidelines, learning games, DICOM viewers, scientific and education articles access, portal news, technical remote support/equipment assessment and augmented reality. It is widely recognized that this is a complex process, since it ideally requires a change of the mind setting, at different levels, of the distinct players, with some of them more able - and willing to do so - than others. Nevertheless, the added value of these sorts of applications seems to win more and more acceptance, clearly tending to become quite consensual ...and so the need and overall interest to adapt the daily practice of medicine to the commonly available technological tools, assumedly with an extra-urgency created by the present socio-economic reality.



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