Reviewing current European initiatives on e-HEALTH Technology Assessment & Regulatory Frameworks: introducing the benefits of space technology in everyday health care provision

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Abstract

**Background**: Investments in aerospace research and development are often criticized due to the high cost. Therefore initiatives aiming to foster greater awareness of the practical benefits from direct services and spin-off from space technology, are high in the agenda of the Space Agencies like NASA and ESA. Space Research is playing an increasing role to support various aspects of the e-Health sector. In parallel Healthcare is facing increasing quality and resource challenges and e-health is often regarded as part of the solution.

**Aim:** Review of the current european initiatives on e-HEALTH Technology Assessment (HTA) & Regulatory Frameworks, aiming to provide clear, relevant and impartial information to be used for evidence-based decision making concerning the migration of pilot e-health services into fully operational services.

**Methods**: We performed bibliographic review of published papers together with review of respective studies and study visits of related projects sites, funded by the European Space Agency, the EU Services and the British NHS. These reports were analyzed and the important findings were summarized.

**Results**: Major initiatives have recently been undertaken by the EU, ESA and NHS to evaluate outcomes and impacts generated by aerospace and ICT research in the health sector, aiming to the provision of sustainable e-health services. Parallel actions have been undertaken in USA, Canada and Australia. Nevertheless a series of important topics, regarding the legal framework and liability issues interoperability issues and cost effectiveness of e-health, remain under debate.

**Conclusion**: The foreseen growth of e-health market, together with the healthcare challenges and the recent initiatives on e-health HTA, have the potentials to lead to the introduction of the benefits of aerospace technology in everyday health care provision.