Call for Papers
Workshop on Assistive Technologies for Decision making in Healthcare (ADH)
Part of PETRA'17 Conference (www.petrae.org) June 21-23, Rhodes, Greece

Workshop page URL:
http://www.petrae.org/workshops/

Important dates:
Paper submission deadline: March 3, 2017
Notification of acceptance: March 17, 2017
Final version due: March 31, 2017

Abstract. The workshop seeks to draw the attention of researchers to submit their work on assistive technologies for decision making in healthcare. By applying data science methods on health care data, physicians can select the most suitable treatment and estimate a patient the prognosis, by predicting future outcomes based on previous data and present conditions. Information as the above is expected to maintain a high level of care and to improve organizational planning. Integrated, data driven and personalized e-health services can improve clinical decisions and health outcomes and can also promote effective disease prevention strategies for healthy populations. Healthcare organizations slowly but steadily started to recognize the need to make decisions based on the analysis of clinical and financial data; it is evident that hospitals that use advanced data analytics have better predictions about their mid and long-term requirements.

We are interested in scientific contributions describing the development and evaluation of systems and technologies to assist healthcare professionals, hospital administrators, and public health stakeholders, so that they can make evidence based, data-driven clinical, administrative and population health decisions. Contributions of applications for chronic patients to self-manage their condition, as well as work on population health monitoring systems, to assist public health surveillance, are also welcome. In addition, we invite submissions discussing evaluation methods, to measure systems usability, the impact of assistive technologies on the quality of healthcare services, and on patient satisfaction. Submissions are not only limited to machine learning based applications (e.g. predictive algorithms), but can also address topics such as the integration of healthcare standards and clinical guidelines into Electronic Medical Records, and interoperability, to assist physicians and health professionals provide high quality healthcare services.

List of Topics:
We invite research papers, systematic reviews, evaluation studies about research and application of e-health technologies, standards and protocols in healthcare and methods and tools for decision making. Topics include, but are not limited to, the following:

- Data-driven decision support (clinical, health administration, or population health direction)
- Multimodal systems for clinical assessment
- Evidence based practice models and systems
- Interoperability to improve continuity of care and holistic communication decisions

- Medical knowledge organization and validation
- Healthcare standards and clinical guidelines integration
- Education and training for decision support
- Evaluation of e-health technologies and decision support systems

Goals: This workshop aims to attract an interdisciplinary group of researchers who are involved in research related to health informatics, information management, systems design and healthcare data analytics, to present novel technologies that aim to make clinical and administrative decision support systems more accurate, clinically useful and accessible. Such systems can contribute to high quality healthcare services and to enhance organizational planning. Data driven e-health services can improve clinical decisions and health outcomes and can also promote effective disease prevention strategies in the community.

As part of the larger theme of the PETRA, the researchers will present their work and will have the opportunity to meet their peers and receive feedback.

Workshop organizers:

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