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On the Combination of Patient-Generated Data with Data from a Secure Clinical Network Environment: A Practical Example

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Abstract : With increasingly more mobile health applications appearing due to the popularity of smartphones, the possibility arises that these data can be used to improve the medical diagnostic process, as well as the overall quality of healthcare, while at the same time lowering costs. However, as of yet there have been no reports of a successful combination of patient-generated data from smartphones with data from clinical routine. In this paper, we describe how these two types of data can be combined in a secure way without modification to hospital information systems, and how they can together be used in a medical expert system for automatic nutritional classification and triage.

Keywords: mobile health, data integration, expert systems, disease-related malnutrition

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