

Foreword and Editorial

International Journal of IT-based Public Health Management

We are very happy to publish this issue of an International Journal of IT-based Public Health Management by Global Vision Press.

This issue contains 4 articles. Achieving such a high quality of papers would have been impossible without the huge work that was undertaken by the Editorial Board members and External Reviewers. We take this opportunity to thank them for their great support and cooperation.

In the paper “Implementation of Drowsiness Detection and Safe Driving System”, According to recent road traffic accidents statistics, drowsiness driving is about 1.8 times more dangerous than drunken driving, and it’s fatal to opponent vehicle driver and pedestrians as well as passengers. In this paper, in order to prevent accidents caused by drowsiness driving, the driver’s head attitude data is collected from the sensor mounted on the driver’s headset, and the drowsiness and forward gazing state are determined by measuring the angle changes of the head associated with the operation time, We want to implement a system that alerts the drowsy driver according to the result. The drowsiness detection system proposed in this paper was confirmed that it would be easy to manufacture and practical by applying low cost parts.

Considering the increased incidence of oral diseases and continuous increase in dental costs, and the escalating implementation of ICT and U-healthcare, the paper “Reduction of the Patient Hygiene Performance Index Based on an Oral Hygiene Program Using Oral Camera” investigated the effect of a remote oral hygiene management program for reducing dental plaque, based on communication between a hospital and patients using information and communication technology. The plaque index of the participants in this study decreased markedly by the end of the program, indicating that the program improved the oral hygiene status of participants by improving their oral hygiene skills, subsequently leading to effective removal of dental plaque. This study illustrates a new oral hygiene management model that may suit the changing dental field by verifying the effectiveness of an oral hygiene program.

In the research paper “Derivation and Analysis of Home Robot Care Services”, as the demand for home robot increases to have a convenient and relaxed life at home, enterprises are developing home robots competitively. The home robots that are currently in the market provide various services such as offering daily life information, monitoring, or communications. Especially with the increase in the number of single households and the aging population, the consumer’s needs have been also changing to spotlight the care services that look after the user. So, this research was to verify what kinds of home robot services that the users prefer. In order to do so, the home robot care services were classified as into four services, which are baby care, pet care, silver care and home care, and their detailed functions were organized. Also, a survey was conducted to investigate the preferences for the home robot care services. For in-depth analysis, the care services and functions were analyzed by each user type. This research is significant because the user’s cognition on the home robot care services has been systematically examined which can be used as a foundation for the enterprises to develop the home robot care services.

The paper “An Overview of Healthcare Interoperability through NODE-RED Workflows” explored that Electronic Healthcare Record (EHR) systems from aren’t designed to meet the increasingly broad and complex enterprise wide analytics as well as to interact with other systems. As a result, clinicians have a hard time leveraging the information they need to improve patient care. This article overviews the authors efforts to prototype the new generations of clinical systems by incorporating clinical workflow frameworks like Node-Red and integrating the dynamic of this integration and the changes that may occur upon these clinical workflows using an extended JDL model.

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**Editors of the March Issue on
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