

# The electronic health record in the general health system of Cyprus: A cross-sectional study

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## ABSTRACT

Since 2019, Cyprus has introduced the EHR into its General Health System. During the period October – December 2022, a first cross-sectional study of users' opinions and attitudes was carried out using an electronic self-report questionnaire. The study involved 429 physicians. During the statistical processing of the data, the minimum value of the level of statistical significance was set at 5%. To measure scale reliability the Cronbach's Alpha coefficient was studied and Confirmatory Factor Analysis was used to check the validity of the scales. The good fit test of the model was done with the SRMR. The investigation of the relationship between the scales related to the use of EHR and demographic and occupational factors was carried out in two stages. Initially, bivariate analysis was performed using the Spearman index, the Point Biserial correlation index, while dispersion analysis (ANOVA) was also used. Multivariate analysis was then performed using Multiple Linear Regression. The results recorded a moderate degree of adoption of EHR functions, moderate efficiency, moderate degree of satisfaction and moderate overall evaluation of the EHR by users. Those with adequate training, technical support and familiarity with the use of EHR and ICT in general recorded higher scores, while users of older age and many years of professional experience recorded lower scores. The limitations of the study were the lack of a sample of other health professionals such as nurses, the timing of the implementation of the EHR with the covid-19 pandemic and the correlation of the results only with those of the international literature, due to the absence of Cypriot scientific data.

In order to fulfill Cyprus' strategic goals on eHealth, health policy makers should proceed with improvement interventions aimed at integrating the EHR as an interoperable system. Education and support of users and equal access for all other health professionals are essential. Finally, new research must follow.

## SPEAKER PROFILE:

Periklis Rompolas BSc, MSc, Med, is completing his PhD at the age of 41 at the Cyprus University of Technology. She has clinical experience in Primary Health Care and works as a nursing teacher in the Vocational Education and Training of the Greek Ministry of Education, Religion and Sports. In the past he has been an associate of the Nursing Department of the University of Patras and is now an associate of the Nursing Department of the University of West Attica in Athens and the School of Pedagogical and Technological Education of Patras. He has 21 publications in Greek and foreign language journals, 4 publications in conference proceedings, 33 posters in scientific conferences, 4 chapters in collective volumes and 1 monograph. He is a judge of the International Conference for the Promotion of Educational Innovation.

Panicos Masouras is Assistant Professor at the Department of Nursing, School of Health Sciences. He holds a BSc degree from the State University of New York at Albany (1985) and an MSc in Information Systems (1996) from the University of Kingston. He worked as Lecturer (1989 – 2002) and as Senior Lectured (2002 – 2007) at the Computer Studies Department of the Higher Technical Institute. He specializes in information systems and data management. His research interests focus on e-health and e-inclusion policies, e-Learning, e-Skills and e-Assessment.

Sotiris Avgousti joined the Department of Nursing, School of Health Sciences, Cyprus University of Technology in 2008 as an Instructor in Health Informatics and served as a Senior Instructor since 2013. Currently he is an Assistant Professor. He has served as member of the CUT Senate for four years, and he is a member of the University Committee for student's welfare. Previous affiliations include the Department of Electrical and electronics of Higher Technical Institute. (1994-2007). His research interests focuses on the fields of Data Communication, computer Networks and Telerobotics / Telemedicine and especially on remote robotized echography. He has a considerable number of publications.

Andreas Charalambous, BSc, MSc, PGCert (Research), PhD (Oncology Nursing), started his nursing career in 1995. He obtained his BSc in Nursing Science in 1999 by the Northumbria University (U.K), his MSc (Nursing Science) from the Middlesex University (UK) in 2002 and his PhD (Oncology Nursing) from the same University in 2008. With a clinical background in cancer care and more specifically in oncology, he has worked clinically and academically in Cyprus and the U.K. He has a long and proven track in academia since 2004. Through this track and additionally to his Doctorate studies he has acquired specialised skills in the development and review of nursing educational programmes, both clinical and academic. Presently he is an Associate Professor of Oncology and Palliative Care at the Cyprus University of Technology and a Docent at University of Turku (Finland). He is the founder and current President of the Cyprus Oncology Nursing Society. He is an EONS Executive Board Member (Research) since 2013 and he is currently involved in the RECaN project (recognition of specialized cancer nursing in Europe) of EONS. Presently he is involved in several National and International research programs in various fields of cancer care. He has published over 80 National and International publications in esteem journals in the fields of cancer care, quality care, supportive care and Integrative Medicine.