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Journal of Medical Council of Islamic Republic of Iran, VOL. 31, NO. 3, Autumn 2013: 265-271

ORIGINAL ARTICLE CODE:20

Effective factors for implementing PACS in Iran regard to future technology trends

Abstract

Introduction: PACS reduces the cost by automated image processing technology and enterprise integration. PACS will grow for the next 10 years. So, expanding of PACS will be critical in regard to its application in health promotion.

Methods: This paper is presented PACS, and its applications in Iran and the world and technologies that influence it's future. Acceptance factors for this technology is extracted from literature review and examined by questionnaire with 5 scale Likert type. Then it distributed between 110 experts and decision maker managers working in the radiology department at Tehran's hospitals and the results evluated with appropriate statistical test.

Results: Kolmogorov-Smirnov test approved data normality. T-test approved the importance of factors. KMO and Bartlett's test confirmed feasibility using of factor analysis. The results of performing factor analysis eliminated 2 factors and categorized others in 6 groups: 1) The ability to choose and buy a suitable PACS system, 2) attention patient satisfaction, 3) Desire to implement a comprehensive health care program, 4) Feasibility of successful implementation, 5) Appropriate infrastructure, 6) Implementation PACS as a pilot.

Conclusion: Ability to select & purchase PACS, a patient- centered health care system and keeping up with a comprehensive Country-wide health care system are the most important factors in PACS implementing in Iran's hospitals.

Keywords: Picture archiving and communication system (PACS), future trends, Success factors