

Post implementation views of end users of Picture Archiving and Communication System (PACS) in Nelson Mandela Academic Hospital (NMAH), Mthatha, South Africa.

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Abstract and Objective

NMAH is a level 2 and 3 academic hospital in Mthatha, Eastern Cape Province of South Africa. In the process of modernizing the hospital, the PACS & RIS (Radiographic Information System) system was installed and handed over in August 2004 it was removed one year later. The objective is to explore the views of end users of PACS service in NMAH.

Keywords:

PAC's Radiology, Imaging, Picture archiving, Implementation

Introduction

PACS is an information system which handles radiological film images in digital form. It is responsible for the storage, distribution and viewing of digital images. The reliability of images via a PACS not only depends on the reliability of each component of the system, but must also be continuously operational and accessible.

According to the literatures available, easy accessibility and better image qualities seems to be the two main benefits of PACS. Acceptance by clinicians is especially necessary to avoid adverse effects on patient care.

Method

This study was undertaken in NMAH in Eastern Cape in South Africa in September 2008. A questionnaire was used as a data collection tool. It used a combination of responses to statements and questions, graduated from 1 to 6, and some opportunities for free text opinion.

Questionnaire was distributed to the available 47 clinicians of this hospital who used PACS. Response was received from all 47 clinicians.

Results

Majority of users (81%) judged PACS to be a useful advance for the NMAH. Almost 92% of the viewers rated the image of

high quality. The availability of radiology reports alongside the images was considered useful by the majority (72.3%). Almost 62% of the respondents strongly said that their consultation improved by helping to show patients their radiology images. For the 2/3 of clinicians (66%), PACS resulted in a significant change in working practice. When asked to amplify the reasons for this change, the most common factors were efficient ward round, better time management, improved access to images and improved teaching.

Discussion

PACS in NMAH in Eastern Cape Province in South Africa was considered as a useful advance. One of the remarkable findings of this study is that quality of images received was high meaning that PACS can help in diagnosis ultimately benefiting in the treatment of the patients. PACS had improved consultations in different ways. It had also enabled some improvement in the way in which ward rounds were conducted. The system had lessened frustration and improved their working lives. However the expectations were not met fully.

References

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