

Picture archive computer system

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Picture Archive and Communication System PACS: purpose and goals
The picture archiving and communication system (PACS) is prevalent in the field of medicine and can be defined as the imaging technology that provides efficient storage facility with easy access to images from various machine types. Almost all possible imaging instruments like computed and digital radiography, mammograms, ultrasound, computed tomography, magnetic resonance, etc have incorporated the use of PACS. It uses the Digital Imaging and Communications in Medicine (DICOM) format to store and share images. A standard regulation that accompanies the PACS system is that since it is a highly critical source of data, the users with access to the system should be few. Correct authorisation is required to ensure that all crucial data are intact and not easily accessible. While usage of the PACS system has increased many folds, it also brings in the possibility of data misuse and data loss. (Wiley, 2005)

Data privacy and easy access

As is the case with any data storage system, PACS always has to have a backup. All images should be copied and saved, with easy means of recovery in case there is an error or any sort of disaster. Image archiving and backup plans are critical while using PACS system. Backup can be done online like sending off copies through emails, copying onto removable hard drives or copying into servers at remote locations. All these increase the risks of data loss, data misuse and data redundancy. There are possibilities of data being compromised, the patients privacy compromised and confidentiality terms broken.

Implementing PACS

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Before one can implement PACS in the healthcare centre, the basic and important things taken into consideration are: 1. the cost, 2. the equipment and its components, and 3. training the staff. Proper financial planning is required before venturing into the purchase of the equipment as it involves a huge amount of money. The equipments ideally should be purchased based on the requirement of the users, based on what is used the most frequently. All the above would prove useless if the staffs operating the systems are not proficient and well trained. Regular updating of technology needs to be done for the systems to be used properly. (Huang, 2010)

PACS Administrator

Irrespective of whether it's a community hospital or a huge enterprise, a PACS administrator is required based on: The size of the organization or, number of patients walking in for examination or, facilities that operate 24/7. The PACS administrator has to play a multi faceted role, that of a project manager with excellent interpersonal and organizational skill and above all with in-depth knowledge of radiology workflow. Apart from the daily workload management, the PACS administrator needs to undergo training regularly to be updated with the latest technology. (Dreyer, 2006)

PACS: Advantages and disadvantages

Overall, PACS has been able to handle huge sets of data very resourcefully and quickly, maintaining the efficiency for the physicians and radiologists. It has eradicated the use of film based radiology practices, thereby proving to be more cost effective and reliable in terms of data accuracy and data archiving . The PACS offer comprehensive communication systems that are able to bring up any kind of image or data, without the physicians having to hunt for them, thus being time efficient. The only concerns that the PACS

system can have would be: the overall cost of the equipments and their implementation, in case of system failures proper back up plans and data retrieval contingency plans, regular data backups required, staff training on PACS operations and computer literacy mandatory.

References

Wiley, G. (2005). The Imaging Story. The Prophet Motive: How PACS Was Developed and Sold. Retrieved at : http://www.imagingeconomics.com/issues/articles/2005-05_01.asp

Huang. H. K. (2010). PACS and Imaging Informatics: Basic Principles and Applications. UK: John Wiley and Sons.

Dreyer. K. J. (2006). PACS: a guide to the digital revolution. Germany: Birkhauser publications.