Provision of filmless imaging service to Chest Clinic at Yan Oi Polyclinic, Department of Health by NTWC Radiology Department

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Introduction
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Objectives
1. To solve the problem of obsolete hard-copy X-ray films by implementing digital imaging service to Chest Clinic in Yan Oi Polyclinic through installation of soft-reading hardware and secured digital connection to the PACS system of NTWC Radiology Department. 2. By obviating film printing, the project aimed primarily to enhance workflow and improve efficiency in image transfer. Secondary gains included improving management on archive of images, freeing up space for film storage, saving expenditure on film-printing and improving users’ satisfaction. 3. To comply with the standards and requirements prevalent in Hospital authority on data security, backup archive system for images and restriction on access privilege to digital information of HA patients.

Methodology
1. Engage and solicit support from the management team of chest clinic. 2. Design overall planning with focus on the objectives and content of the proposal, potential hurdles that need to overcome, viable options and the technicality, incurred financial costing, pathways to implement and realistic timeline of the project 3. Feasibility analysis through IT support and inviting equipment vendor for site inspection. 4. Seek endorsement from high management, quality and safety (Q&S) division and HAHO information technology (IT) department. 5. Installation of secured network, hardware and X ray equipment. 6. Provide training to end users and develop backup plans for contingency situations. 7. Formal implementation of the project under tight scrutiny to
ensure streamline workflow. 8. Obtain feedbacks from end users at three months’ time after implementation.

**Result**

1. Smooth implementation of project with successful provision of soft-read images to Chest Clinic of Yan Oi Polyclinic. The scheduled timeline was met and no inadvertent problems on hardware, software nor network was encountered. 2. Users at Chest Clinic demonstrated fast adaptation in transition to the new system and expressed favorable feedbacks at interval evaluation. 3. Manual handling on film filing and retrieval were largely obviated after implementation of the project. 4. Film storage space was reduced markedly, paving way for future enhancement on space utilization after natural fading of the historical hard-copies. 5. The digitalized registration method was demonstrated to be convenient and reliable with nil error reported. 6. Compliance with the standards and requirements on data security as well as the restriction on the access privilege to digital information of HA patients was observed.