Implementation and Operation of An Ultrasound Mini-PACS in A Multi-Sites Tertiary Health Care Center

An ultrasound mini-PACS has been implemented and operational for 3 years in a tertiary health care center with imaging and interpretations at 5 sites in both hospital and clinic environments. There are both fixed room and portable modes for ultrasound machines. Network accesses are provided at more potable scanning locations. If not in use, any fixed room ultrasound machine is assigned on portable to respond calls at designated locations with network configured, so that images can be transmitted to central reading workstations realtime. This improves exam/report turnaround time and the use efficiency of all ultrasound machines. Currently the PACS holds two and half years of 30,000 exams with more than 1.1 million images online. To minimize human resources for removing old optical disks (OD) and reinserting when requested, a second OD jukebox was added for additional online storage. Works-in-progress includes upgrade for the total jukebox capacity to be increased to 1.2 Tera byte so that 5 years of exams on OD can be online. Having all exams on OD and online saves film costs, personnel involvement in film/OD sorting and reduce film/OD retrieval time, save film storage space which is almost always tight for urban institutions. The implementation of an ultrasound PACS is successful for the multi-sites tertiary healthcare center. Disadvantages include equipment costs, learning curve for interpreting physician and technical staffs.