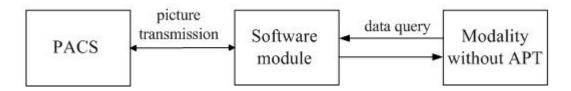
CONNECTING DIAGNOSTIC DEVICES TO PACS

Nenasheva L. V., Romaniuk O. O., Tsarenko K. K.

International Research and Training Center for Information Technologies and Systems of the NAS and MES of Ukraine, Kyiv

Creation of digital medical images data storage is one of the main steps of health care facility informatization. For large amount of data picture archiving and communication system (PACS) is being used. PACS provides economical storage of and convenient access to images from multiple modalities.

Data storage requires access to local network and connectivity with modalities. Thus when connecting diagnostic devices to PACS consideration must be given to such requirements for these devices: DICOM compatibility, networking, query/retrieve of raw images. Most of the old modalities don't support function of Automatic Picture Transmission (APT) to the remote data storage or are incompatible with PACS (metadata of images consists of Cyrillic symbols or file formats are unsupported). To connect the above mentioned diagnostic devices software module was created.



Functions of software module:

- 1. Image collection from modality database on schedule;
- 2. Data export from database to *.dcm DICOM-file metadata;
- 3. Ordering metadata tags according to DICOM 3.0;
- 4. Harmonizing digital medical image data with health care facility MIS patient DB;
- 5. Romanization of filenames and metadata written in Ukrainian or Russian according to [http://zakon2.rada.gov.ua/laws/show/858-2007-π] for proper displaying;
- 6. Copying converted image files to PACS.

