

Initially, DICOM's support for workflow and information management was limited to the 'traditional' image objects. This has changed only recently. Today all DICOM objects – including the RT Objects – contain the same workflow management support. However, the available workflow management functionalities are still very much related to the diagnostic field where DICOM originates from. It has been seen that this will not be sufficient especially for radiotherapy environments where workflow management plays an important role. Thus the RT Objects Working Group currently concentrates mainly on two topics to further improve the DICOM standard for radiotherapy. First, there is a need for an extended Query/Retrieve SOP Class for RT Objects. This is due to the fact that those objects contain more textual information than 'traditional' image objects. There will be a new Query/Retrieve SOP Class supporting the textual information of the RT Object. Query tools that support this new Query/Retrieve SOP Class will be able to display the relevant data for RT Objects (e.g. label of a treatment plan or number of beams in a treatment plan). The second topic is related to the definition of a General Purpose Worklist Service Class (Supplement 52). The proposed extension is based on the original concept that a performing modality shall be able to carry out certain operations on one or more specified objects. Besides this functionality the extension will allow that any modality requests a certain service from a performing modality based on one or more specified objects. In a radiotherapy environment this could mean that for example a virtual simulation application requests a dose calculation and/or optimization from a dose calculation modality.

1. Current status of workflow management support in DICOM and it's RT extension
2. Rationale for extension of workflow management support
3. Update on current and future activities of the DICOM Working Groups