The Radiation Therapy Oncology Group 3D Quality Assurance (3DQA) Center provides QA reviews of external beam treatment planning and verification (TPV) information for patients enrolled in multi-institutional 3D radiotherapy treatment protocols. Computer hardware and software components have been implemented which allow participating institutions to submit common format TPV digital data for QA review. While most of the participants have been using the internet for data submissions, more institutions are beginning to qualify for these studies without an adequate internet connection. In these cases magnetic tape (QIC150 and 4mm DAT) has been successfully used. Two site specific (prostate and lung) 3D trials are currently accruing patients. Thus far, over 500 protocol patient TPV data sets have been submitted and reviewed by the 3DQA Center.

Prior to enrolling patients on protocol, each participating institution is required to complete a 3D Facility Questionnaire documenting the planning and delivery systems that the institution will use for patients entered on protocol. In addition, the institution must complete a successful submission of a protocol compliant "dry-run" test data set. This dry run test involves the digital transfer of all protocol required TPV data and supporting hard copy documentation excepting simulation or portal films/images.

Once the QA review is completed, the data are transferred to an interactive image database that will eventually serve as a national resource giving investigators access to the numerical, categorical, and textual information derived from clinical records as well as the quantitative geometric, dosimetric, and imaging data used for treatment planning and verification.

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