

AbstractID:9934Title :TG113:ImprovingTreatmentConsistencyandDataQuality for ClinicalTrials

ThegoalofAAPMTaskGroup113istoprovideguidancetophysicists,QAcen ters,and othersinvolvedinclinicaltrials onmethodstoimprovetheconsistencyandqualityof datageneratedfortrialsinvolvingexternalbeamradiotherapy.

To date,there arenouniversallyagreeduponstandardsforthe physicspractice related toclinicaltrials.Inaddition,astreatmenttechniquesbecomemoresophisticated,itis evenmorechallengingto comprehensively maintainconsistency across multiple institutions.Sincehundreds ofinstitutionsmaybe involvedinclinicaltrials, itis critical toreviewtheentiretreatmentplanninganddeliveryprocess andto identify areaswhere improvementscanbe made toensurethat highqualityandconsistentdata are acquired fromallinstitutions treatingpatientsonclinicaltrials.

Thispresentationwillfocusonfactors that impactdata qualityof thetreatmentplanning anddeliveryprocess.Inaddition,methodsto helpindividualphysicistsimprovethe consistencyof clinicaltrials willbe discussed.Thescopeofthe taskgroup includes imageacquisitionforvolumedefinition,treatmentplanningsystems,patientlocalization, treatmentguidanceanddelivery,andcredentialingforclinicaltrials.

EducationalObjectives:

1. To describe the goals of TG#113 Physics Practice Standards for Clinical Trials
2. To highlight factors that directly impact clinical trials that involve IMRT and IGRT