

MAKING PROGRESS TOWARDS A COPD AND LUNG NODULE PROTOCOL

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Consideration for developing a multi-task protocol

- My view from a technical implementation perspective
- What issue should the joint protocol solve?
 - Clinical
 - Identify clinical conditions to accommodate
 - CPOD conditions
 - Lung nodule conditions
 - Joint conditions
 - New conditions/research exploration
 - Application area
 - Which are real-world clinical?
 - Which are research?
 - Measurements
 - Define QI functions/measurements to accommodate based on clinical task above
 - Set of well defined measurements
 - Radiomics approach
 - Deep learning approach

Consideration for developing a multi-task protocol

- Technical Implementation
 - Define imaging requirements
 - Answering question on previous slide will help determine imaging requirements for a single protocol
 - Or need for additional studies to determine protocol requirements
 - Is the joint protocol drive by the COPD needs, lung nodule needs or a combination?
 - If driven by one technique then this becomes less a protocol development issue and more a distribution/use issue
 - Determine the QA/QC required for each task
 - Physics measurements
 - Phantoms measurements
 - User training/qualifications