QUANTITATIVE IMAGING WORKSHOP XX:
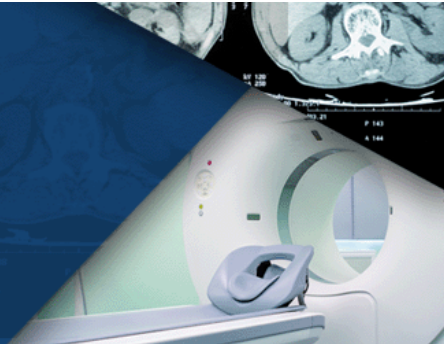## Annual chest CT screening—visualizing the full impact of 20-plus years of smoking

November 2-3, 2023 | Virtual

TECHNICAL BREAKOUT SESSION
Acquiring Screening Thoracic CT Information For Optimal QI Interrogation Of Tobacco-Injury

OVERVIEW

In keeping with our Workshop structure, we initiate conversations that carry discussions from the presentations into a Breakout process. Often it allows a broader perspective as more and different disciplinary colleagues participate more casually in conversations about given topics. Given the nature of QIW, we have set aside time on both days for the Breakouts.

In this Technical Breakout, we will discuss a series of questions to distill action plans to advance screening or the screening research progress. The questions identified for this year's Breakout are listed below.

This session aims to thoroughly review the current status of the technical white paper focused on the imaging of low dose CT scans. The primary objective is to optimize the acquisition of quantitative pulmonary information. Attendees will delve into the latest techniques and findings related to extracting data from thoracic screening images. The discussion will emphasize ensuring that image quality is maintained at its highest standard, allowing for precise and reliable extraction of comprehensive health-related imaging information.

QUESTIONS

1. **Optimization of Imaging:** What are the latest methodologies and techniques in low dose CT scans that ensure the acquisition of optimal quantitative pulmonary information?
2. **Quality Assurance:** From the perspective of image quality, what best practices and standards are currently being employed to guarantee precise and reliable data extraction?
3. **Data Interpretation:** With the emergence of new data extraction techniques for thoracic screening images, how do we ensure that the extracted information translates accurately into actionable health insights?
4. **Future Advancements:** Given the current trajectory of technological advancements in CT, especially photon counting technology and AI-based CT reconstruction, what are the anticipated challenges and breakthroughs in enhancing the quality and reliability of information extracted from thoracic CT scans?