Breakout Group 1 Report:

Distributed digital cancer image databases for cancer screening and quality control

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Topic

- Distributed Digital Image Database(s) for Cancer Screening, Diagnosis and Therapy
• Creating image databases will have a significant impact on clinical and research merit.
• Digital mammogram and lung cancer screening trials appear to be successful models for cancer screening. The success is based on a common informatics infrastructure superimposed on a diverse but limited number of institutions with expertise in informatics.
• The database has to have a defined quality assurance program. The program needs to encourage the development of a standard lexicon (i.e. define normal and abnormal). The development of common review standards is an essential part of the program.
Technology proposals are not often hypothesis driven. Investigators need to develop endpoints such as improvement of the quality and timeliness of data submission for favorable peer review. Such endpoints could be mandated as part of the RFP process.
• We need to develop peer reviewed mechanisms for image based outcome analysis. This will enhance the integrity of the research.
• Develop and support informatics infrastructure for imaging research and the clinical trials process.
• Develop pathways for heterogeneous databases to be placed in a single file format to support imaging and clinical trials research.
• Can the NCI support proposals for a “Killer App” for imaging research and clinical trials? This would promote standardization of transfer mechanisms and uniform databases.
• Promote sharing of data from all imaging databases.
• Support imaging in clinical trials medicine.