Tissue procurement quality assurance benefits from shared experience:

Midwestern Division Cooperative Human Tissue Network (CHTN), 2004 - 2010.



Kelly Senecal, Procurement Lead Technologist

Jasmine Ramaradjou, Amy Gewirtz, Leona W. Ayers The Ohio State University, Columbus, Ohio

Midwestern CHTN The Ohio State University

The Midwestern CHTN is an NCI funded program since 1989 that provides prospective investigator-defined procurement of malignant, benign, diseased and uninvolved (normal adjacent) tissues. The investigator may choose from several methods to prepare the specimen such as fresh, frozen, or chemically fixed.

Ohio State University Medical Center and the Comprehensive Cancer Center



Tissue Procurement Service is located in the Surgical Pathology Suite procuring from the Ohio State University Medical Center, the Ross Heart Hospital and The James Cancer Center.

Service quality before and after January, 2009

- Until January, 2009
 - QC was a standard practice of Tissue Procurement Service (TPS) established and reviewed in a CHTN research setting.
- January, 2009 to present
 - TPS is member of institutional Anatomic Pathology Technical Quality Improvement Committee (APTQI) where QC and quality monitor results are established and reviewed. Results are also reviewed in the Midwestern CHTN.

Anatomic Pathology Technical Quality Improvement Committee (APTQI)

- AP/CP Medical Director
- Surgical Pathologist
- Pathology Compliance officer
- Pathology Administrator
- Supervisors from:
 - Autopsy, Neuropathology, Hematopathology, Histology, Immunohistochemistry, Renal Pathology, Cytology, Pathology Core Facility, Surgical Pathology Gross Room, Consultations, Transcription
 - Research Tissue Procurement

APTQI Committee



Activities: Monthly meeting with quarterly reports from each participating group. Review, discussion and establish quality indicators and monitors.

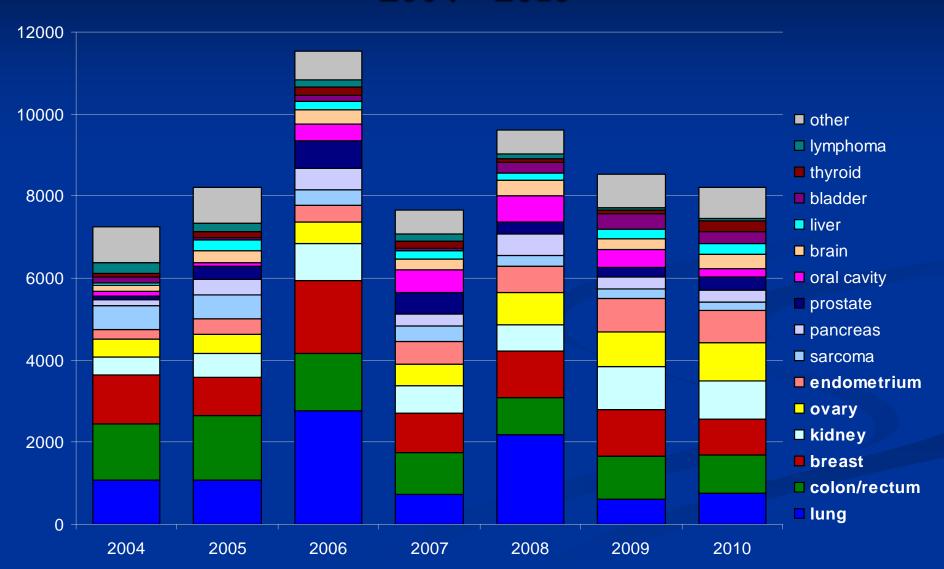
APTQI new monitors

- Detail of tissue quality; 6 reasons for unconfirmed tissue by QC blocks.
- Specimen QC failure; corrective action plan.
- Tissue procured incorrectly; not meeting protocol expectation.
- Tissue procurement errors; negative impact to diagnostic dissection.
- Dissector/PA and TP communication tool developed.

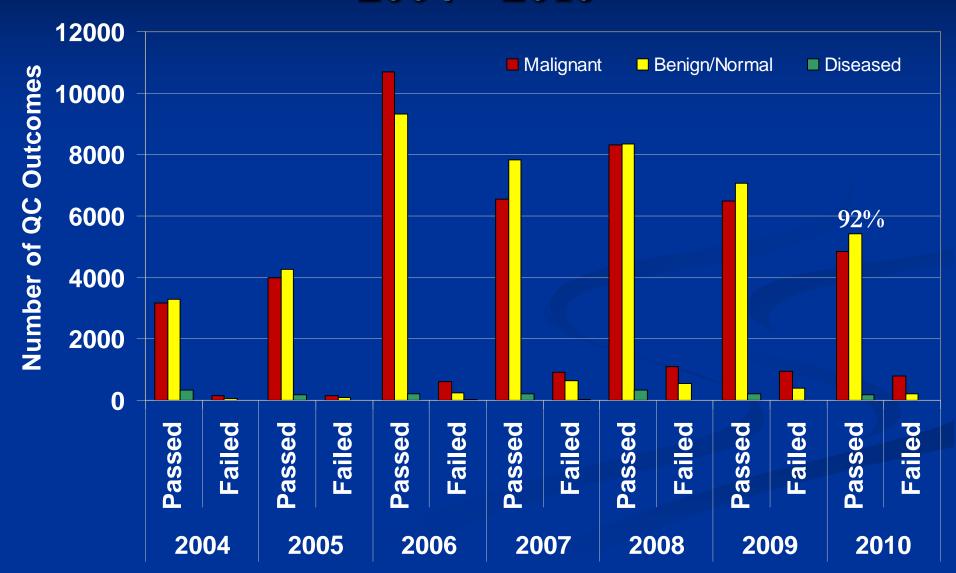
APTQI enhanced procurement

- Improved specimen flow secondary to shared experiences
- Stimulated interchanges among APTQI participants
- Rapid initiation of corrective action plans
- Improved procurement skills from shared experiences

Procured malignant samples by site and year, 2004 - 2010



Tissue QC by pathology status, 2004 - 2010



Conclusions

- Institutional QA programs encourage adequate regular record keeping.
- Process improvement works best within a context of related laboratory disciplines.
- Quality monitors have been added over time, thresholds met and regular reviews completed and acted upon.
- Ongoing QA monitoring underpins the development of best practices for tissue procurement.
- Sharing this data with other TPS programs provides opportunity for discussion and consensus in developing best practices for quality research tissue procurement in a clinical setting.