

Utilization of Whole Slide Image Digital Pathology Communication System for Surgical Pathology Quality Assurance Program

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Introduction

Quality assurance program (QA) is an important component of a surgical pathology service and generally employs a multitude of case review methods.

The Department of Pathology at Dartmouth-Hitchcock Medical Center (DHMC) validated and established:

Post-sign out QA program supported by whole slide image (WSI) digital pathology communication system

The QA experience mimics telepathology or second opinion using WSI.

Technology

Whole slide imaging

+

Digital pathology communication system



Design

Hardware: 2 whole slide scanners + WSI server

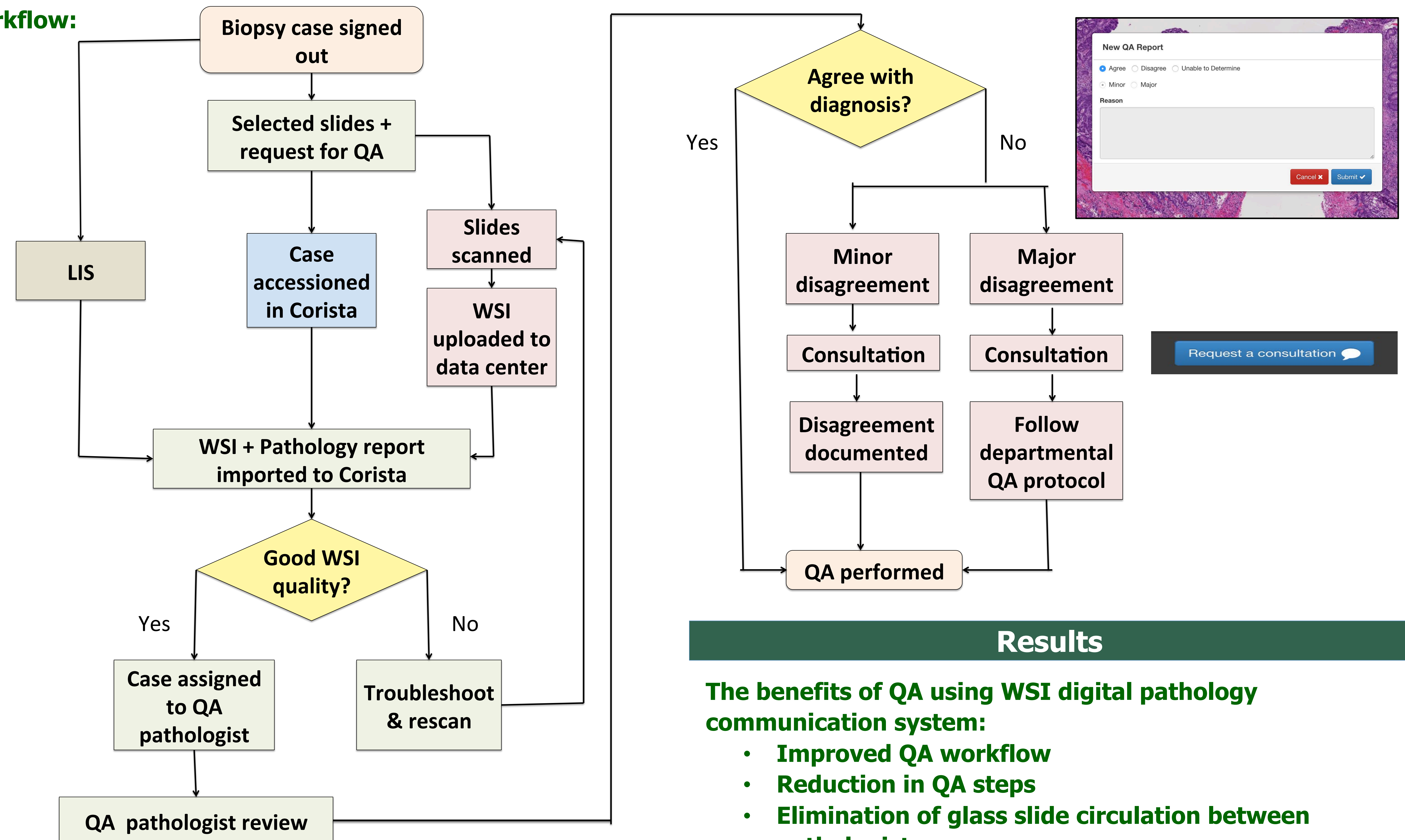
Software: Corista DP3 Pathology platform

Personnel support: 2 histotechnologists

Case selection: Positive/malignant biopsy cases selected at sign out

QA pathologist has to be different from the original pathologist who signed out the case

Workflow:



Results

The benefits of QA using WSI digital pathology communication system:

- Improved QA workflow
- Reduction in QA steps
- Elimination of glass slide circulation between pathologists
- Improvement of pathologists' familiarity and comfort to a diagnostic WSI system
- Pathologists' preparation for WSI telepathology in the future

Conclusion

A case review QA program utilizing a WSI digital pathology communication system significantly improves QA process and its workflow, and indirectly prepares pathologists for diagnostic telepathology in the future.

