



The ThinPrep Imaging System

The Problem

It has been reported that approximately one third of false negative results are due to abnormal cells being missed or misclassified by the Cytotechnologist or Cytopathologist.

To reduce these diagnostic errors, computerized Pap screening technology was implemented to assist Cytotechnologist's examination of Thin Prep Pap Test specimens. The goal was to create a more safe and patient centered environment.

Aim/Goal

By implementing the Imaging System method of screening Pap Tests in combination with the Thin Prep Pap Test, we expect to provide a more accurate diagnosis for cervical cancer screening; increase Cytotech productivity; and improve staff satisfaction.

We had learned that the ThinPrep system should increase the prevalence of cancer detection (High Grade SIL) significantly since the system uses computer imaging to locate suspicious cells. Prior to the ThinPrep, the cytotechs searched the slide for these suspicious cells. These cells are typically smaller and harder to locate; but have a very high risk of cancer.

The Team

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The Interventions

- Added Cytec Imaging System
- All Cytotechnologists have a new Imager Microscope at their desk connected to the Imaging station server.
- All staff in the department trained and validation was completed
- Work flow was not interrupted

The Results/Progress to Date.....

Patients are reassured that their Pap Test is being imaged electronically first and then reviewed with technical expertise by a Cytotechnologist. Abnormal findings are then reviewed by a Cytopathologist.

Our laboratory's prevalence rate of cancer detection (High Grade SIL) did not increase since the adoption of this technology. What we learned is that our screening methods were superior and that this new system enables the tech to spend more time reviewing relevant areas on the slide and certainly reduces tech fatigue.

Lessons Learned

The Imaging System electronically locates 22 fields of interest for the Cytotechnologist to review thereby allowing the Cytotechnologist to better focus his or her interpretive skills on these defined areas.

The system provides a state-of-the-art method for cervical cancer screening.

Next Steps/What Should Happen Next:

Continue monitoring quality of automated screening and productivity.



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