SPRINGFIELD CLINIC CENTRAL ILLINOIS

IMPACT BRIEF

Inside the Ripple Effect

Springfield Clinic in Springfield, Illinois, reduces labor costs and improves turnaround time (TAT) by utilizing the GeneXpert[®] System for Group B *Streptococcus* (GBS), *C. difficile* and methicillin-resistant *Staphylococcus aureus* (MRSA).

GBS Hands-On Labor Comparison

SGBS Annual Hands-On Labor – 2000 GBS Samples



The GeneXpert System requires the least amount of hands-on time when compared to the current method and the other PCR methods that were evaluated.

C. diff Impact Facts Considered

- Understanding of need to utilize PCR
- Requirement to follow recommended guidelines ASM, SHEA, IDSA
- Prior trial with another PCR vendor proved disappointing
- FDA clearence for NAP1/027/B1 strain callout for epidemiological purposes

Impact on MRSA TAT with GeneXpert System



↓ PROFILE

Springfield Clinic's mission is to provide the highest-quality health care to the people of Central Illinois. With more than 350 board-certified providers, Springfield Clinic provides patient care in nearly every field of medicine. From primary care to highly specialized medical treatment, Springfield Clinic offers access to nearly 40 medical specialties in Illinois' capital city of Springfield and several surrounding communities.



SUMMARY

The Springfield Clinic recently obtained new OB/GYN clients that mandated that all GBS specimens be tested using a PCR methodology. This workload is currently being performed at a different laboratory. In an effort to maintain all testing in-house, Springfield began evaluating molecular options for this test. Additionally, Springfield lab was also evaluating another competitive molecular platform for C. difficile. This evaluation was not favorable due to numerous "non-concordant" results in side-by-side testing with their existing method. Needless to say, while the platform was not implemented, the desire to perform C. diff testing using PCR still existed. As various departments of the lab began sharing what they were trying to accomplish, it was realized that they could move to a consolidated platform for both C. diff and GBS, as well as include their MRSA testing to a single, fast, easy-to-use molecular system-the Cepheid GeneXpert® System.

CHALLENGE

- New OB/GYN clients resulted in the need to bring GBS PCR testing in-house
- Volume of GBS specimens increased
- TAT of MRSA culture averages 36-48 hours
- Lab receives 9 cultures/patient on average for MRSA screening
- *C. diff* PCR trial with another platform lacked expected outcome

Implementation of GBS, *C. diff/Epi* and MRSA PCR utilizing the GeneXpert System

- Implementation of GBS PCR; first priority due to physician requests
- Implementation of *C. diff/Epi* PCR to meet recommended guidelines and physician requests
- Implementation of revised MRSA screening protocols to include PCR "one and done"
- Physician education on new testing platform and opportunities

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IMPLEMENTATION

Springfield Clinic plans to validate MRSA PCR, GBS PCR and *C. diff/Epi* PCR on the GeneXpert System.

Xpert® GBS, Xpert® C. difficile/Epi & Xpert® MRSA

PCR Reliable Results

Reduction of TAT and Labor Costs

Faster Diagnosis for Better Patient Treatment

For *In Vitro* Diagnostic Use. Data provided by Springfield Clinic.

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