

# IMPROVING LABORATORY TEST MONITORING FOR HOME IV ANTIBIOTIC THERAPY

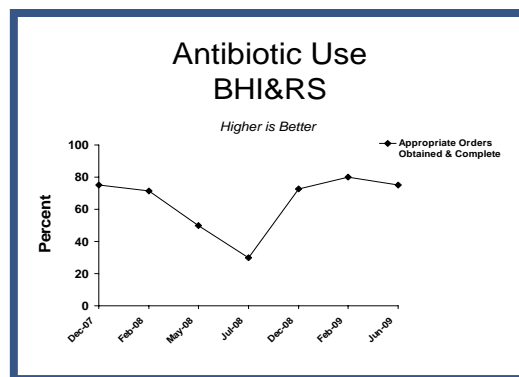
## ***Where we've been...***

**L**aboratory test result monitoring is a critical step in assuring the safe and effective provision of home IV antibiotics. While BHI&RS has always performed this function, it was felt that there may be room for improvement with regard to adherence. For this reason, BHI&RS launched a process improvement project which confirmed that there were opportunities for improvement.

## ***Where we are now...***

Working as a multidisciplinary team, the pharmacy manager, medical director, staff pharmacists, and several nurses developed a plan to improve compliance. In the initial phase, the pharmacy manager worked with the medical director to update our list of antibiotics and corresponding laboratory tests. Standards for obtaining lab orders at the start of therapy, which lab tests to monitor, and how to follow-up on clinically significant values were developed and implemented. The BHI&RS standard outlines which laboratory tests should be ordered when antibiotic therapy is started. These laboratory tests are recommended by the medical director and are included in the document "Plan for Clinical Monitoring of IV Antibiotic Therapy." If the prescriber does not agree with the recommended lab tests, they are referred to the medical director. Results of lab tests are monitored at predetermined time targets and the results are documented in the medical record. When a clinically significant result is noted, the pharmacist reports the result to the prescriber in a timely manner with recommendations, and then documents the result of that interaction in the medical record. Any changes in recommendations, as well as the monitoring standard or follow-up action, are reviewed with the pharmacists and nurses to ensure understanding.

Antibiotic usage patterns on patients who were discharged from service are audited on a quarterly basis. In addition, real-time reports are run on a weekly basis to improve compliance with the standards in real-time. The reports are reviewed by the pharmacist to determine if the recommended lab tests have been obtained. If not, the reports allow for correction in real-time while the therapy is still within a week of initiation. Results of the quarterly chart audits have demonstrated continued improvement, but still reflect opportunity.



## ***Where we are going...***

The results of the quarterly chart audits will continue to be shared with the clinicians to provide feedback on their current performance, as well as showing future opportunities for improvement. Our continued work in this area will improve the safety and efficacy of home IV antibiotic therapy provided by BHI&RS.