



## **Clinical Business Intelligence to Drive Decision Support and ROI**

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Healthcare organizations are under increasing scrutiny to assure the public that delivered care yields a safe, quality outcome. The challenge we face is to satisfy the demand for cost effective delivery of services. Healthcare executives must review all operations and create internal accountability required for ongoing success. Healthcare professionals are willing to change: they simply need information and leadership showing how improvements can and should be made. An information technology broadly referred to as Business Intelligence provides timely integrated outcomes information that can be used across an enterprise. Merged clinical and financial information supports administrators and clinicians alike, enabling aligned objectives and performance.

Healthcare organizations face many challenges accessing integrated data. The goal is an easy-to-use, intuitive interface that produces meaningful analytics and reports key priorities and opportunities. Without this, an organization is severely hampered in its ability to drive change and necessary improvements.

The first obstacle is the sheer amount of data currently being captured and stored in separate data silos. As organizations become more computerized, generating more electronic records, growth becomes exponential. In addition, current IT infrastructures (data in silos, lack of interoperability and standardization), methods of working with the data (limited access to the data, complex questions requiring sophisticated analytics) and the time lag in receiving and processing the data combine to create a difficult operating IT environment.

Transparent information access yields many benefits. Combined, validated, accurate data, integrated, organized and linked with scientifically derived risk adjustment methods enable analysis for pattern recognition and identification of opportunities for reducing morbidity and mortality while decreasing costs, especially when using comparative benchmarks.

Of particular interest is the ability to identify hospitals demonstrating improved or declining performance over time and in relation to their peers. The metrics that yield additional information about hospital performance and appropriate embedded statistical testing assure validity. These metrics combined with drill down capabilities can identify quality and cost savings. Generating a variety of comparative databases serves as a way to pinpoint areas where further focused analysis can help improve quality or decrease the cost of care.

All stakeholders would benefit from broad access to just-in-time data with easy-to-use interfaces. The ability to customize and configure applications is important, given the number of different audiences across any typical organization. People receive and process information differently. This results in a need for configurable end user data views that focus on specific data analysis requirements.

Healthcare organizations face numerous challenges in managing clinical, operational and financial performance. They need to support multiple purposes of multiple stakeholders and help respond to the key business challenges by providing methods to collaborate, plan, manage and monitor performance. Migrating to proactive methods and strategies is critical for sustained improvement. With the right business intelligence tools, it is possible to make necessary changes in healthcare systems and processes. Integrated quality, safety and cost information delivered to those who need to make decisions about care delivery, operations and policy will yield demonstrable benefits in providing safe, quality care, in a cost effective manner.