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Fusing Clinical and Business Metrics: How They Unite to Improve Quality and Effect Change

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Abstract

Objective: We developed a database of clinical and business metrics to measure, analyze, and improve patient care and operational efficiency.

Methods: Our committee of specialists looked at our business metrics from a clinical and business standpoint and reviewed questions from the executive team about our patient populations and communities we served. The specialists made a list of key data elements and the committee removed duplicates and made note of overlapping data. A set of definitions and common language for each data set was also developed for consistency. The committee worked with a software engineer to build a database to bring the data together into a connected and usable format. Once the database was ready, the committee assessed data sets looking for areas of improvement.

Results: Case Study 1: Using data to link clinical care teams through common patients and sharing outcomes for physician education and program awareness. Using our database, we made market share maps that defined the gaps within each sites market radius using prior year patient demographic data. Using this information, site managers developed action plans. One site focused on expanding physician outreach and education in market gap areas outside of the primary service area. They monitored activity for 1 year and realized the following percentages of growth: 10 miles = +26%, 25 miles = +17%, 50 miles = +4%, >50 miles = +55%. Their strategy increased market share contributing to a 12% revenue growth. A second site used their market radius map to find their secondary and tertiary market opportunities. They developed an action plan to expand physician outreach and education into the market opportunities. The plan included a general awareness outreach through direct to consumer and direct to physician efforts. This activity was monitored for 1 year and realized an 11% growth. Case Study 2: Using clinical benchmark metrics as a tool to analyze and create an action plan to change clinical behavior and improve clinical outcomes. We analyzed our clinical benchmarks, compared site data to the company average, and chose one component to focus on. We looked at the areas of greatest deficiency and chose one that created positive change for our patients and business. The data lead us to focus on the time frame from patient simulation to first treatment. We developed site specific action plans and looked at interactions that occur throughout the simulation to first treatment process. Our plans included action items related to team member communication, redefining roles and responsibilities, process mapping, planning tools and "Quick Tip" guides, and our scheduling strategy. The goal at the end of the 6 month action plan was to cut time from simulation to first treatment by 20%, resulting in efficient patient

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throughput, better patient experience, and improved quality outcomes. We successfully realized a reduction rate of 29.9%, 20%, and 18% at 3 sites. Our physicians will discuss our results in the community and with referring physicians.

Conclusions: By developing a method of collecting, measuring, and using our data, we have improved patient care and business results. As we continue to improve in these areas, we will seek a stronger understanding of where we are currently and create metrics for effecting change for our future.

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