The Impact of Concurrent Review on Stroke Center Measures at The Miriam Hospital
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Rationale
The Miriam Hospital (TMH), certified three times as a primary stroke center, is committed to providing the highest quality stroke care, work with the community and emergency medical services, to improve issues that affect the rapid recognition and response to acute stroke patients. The hospital used a quantitative measure to assess the impact of concurrent review on stroke center measures.

Background
Little research has been published about which interventions can influence physician and nurse practice patterns such that stroke measures have been impacted. Evidence from this project supports that concurrent review (also known as performance and feedback, served as a mechanism to impact overall stroke performance at TMH. Hospitals examine their quality improvement data to evaluate systems of care, benchmark against other organizations, and make necessary modifications that can support clinician decisions.

Objective
Evaluate the effect of concurrent review on stroke measures.

Methods
A pre/post test design was used to evaluate the effectiveness of concurrent review. Concurrent review in this project, is defined as a process where a stroke nurse quality improvement coordinator reviewed all daily admission reports, examined the medical record, and determined which elements of the stroke patient care management were missing. The coordinator would communicate recommendations to the physician and registered nurse caring for patient. TMH tracked a number of stroke measures including the composite index because it’s value is derived from all stroke core measures. This index is calculated as the proportion of patients who received specific interventions for which they were eligible. Pre-intervention data (Jan 06 – May 08); and post-intervention data (June 08 - Dec 09) was examined.

Results
The stroke composite index score for TMH reached significant improvement post intervention. (p=0.0013) as compared to pre-intervention results(p.<0001). Month to month fluctuations occurred, but composite scores plotted in a trend line, showed significantly increased trends in the composite score (0.61%) per month pre-intervention increasing to 0.95% post-intervention.

Conclusions
This data shows that concurrent review appears to provide an advantage for improving stroke measures over time. The study did not examine other interventions that may have been implemented during the same time period. More research needs to be conducted.

References (abbreviated list)
Ryan, A. M. Effects of the Premier Hospital Quality Incentive Demonstration Wiley Online Library. DOI:10.1111/j.1475-6773.2009.00956.x on Medicare Patient Mortality and Cost - Ryan - 2009 - Health Services Research. The primary stroke center (PSC) composite index was generated by using “This Get With The Guidelines® (GWTG) Aggregate Data report using the Outcome TM PMT R system. Copy or distribution of the GWTG Aggregate data is prohibited without the prior written consent of the American Heart Association and Outcome Sciences, Inc. (Outcome). “The Get With The Guidelines®-Stroke (GWTG-Stroke) program is provided by the American Heart Association/American Stroke Association. The GWTG-Stroke program is currently supported in part by a charitable contribution from Bristol-Myers Squibb/Sanoit Pharmaceutical Partnership and the American Heart Association Pharmaceutical Roundtable. The GWTG-Stroke has been funded in the past through support from Boeringher-Ingelheim and Merck.”
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The graph shows the improvement in the Composite Index Score over time with concurrent review implemented in June 2008.