Leaping Away from Sliding Scale Insulin: A System-Wide Initiative
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Problem: Despite numerous advances in drug therapy for hyperglycemia and the development of insulin analogs, sliding scale insulin (SSI) remains widely used throughout hospitalizations. A 662-bed two hospital system in the mid-Atlantic region identified numerous opportunities to provide optimal diabetes care and evidence-based medicine.

Evidence: Numerous publications have identified the limitations and inadequacy of SSI. The Society of Hospital Medicine has estimated that 1 of every 3 hospitalized patients have hyperglycemia. Basal/bolus insulin therapy is the standard of care. SSI alone or as adjunct to oral hypoglycemic agents is no longer appropriate.

Strategy: By eliminating the SSI alone and offering diabetes type 1 or type 2 protocols, providers are more likely to order appropriate weight-based basal/bolus insulin therapy.

Practice Change: The SSI alone protocol was ordered for 90% of the diabetes patients during July 2011. The average glucose per stay at this time was >299 mg/dl for 20% of the hospitalized patients. To change these numbers, the following was implemented: grand rounds, letters to providers, newsletters, internet blog, division/leadership meetings, staff meetings, resident conferences, media-blitz and campaign buttons. By February 29, 2012, the SSI alone protocol was eliminated from the order menu.

Evaluation: Blood glucose data is analyzed by the Glycemic Control Mentored Implementation Program database. In addition, the hospital informatics department has provided internal prospective data regarding protocol use.

Results: At this time, there has not been a significant decrease in the >299 mg/dl glucose since July 2011, but SSI alone protocol has decreased by 52%. Decreases in hypoglycemia and increases in normoglycemia should be achieved with these interventions.

Recommendations: To complete a system-wide initiative, a constant visible campaign must be employed with support of administrative leaders.

Lessons-Learned: Implementation process continues after the “go live” date. Real-time data collection and feedback to providers and staff regarding issues is crucial in changing and sustaining practice.
Bibliography:
