An Interdisciplinary Approach to Revising an Insulin Drip Protocol
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PROBLEM: In 2006, we identified four problems with our insulin drip protocol: nurses demonstrated poor compliance with the protocol, physicians frequently omitted parts of the protocol orders, some patients had poor glycemic control, and several patients were on insulin drips for a prolonged time.

EVIDENCE: An interdisciplinary workgroup reviewed current literature, contacted and reviewed protocols from other hospitals, and audited charts for insulin drip practice.

STRATEGY: In spring 2007, our workgroup recommended to the Nursing Practice Council that we adopt a revised insulin drip protocol that was practical, targeted glucose control between 100-150, and resulted in decreased hypoglycemia episodes. Two project managers developed an educational plan about the revisions.

PRACTICE CHANGE: In fall 2007, we instituted the revised protocol and insulin drip flowsheet. Practice changes included: endocrine consults were to be ordered for patients on insulin drips >48 hours, mandatory fields were created in our electronic orders set to prevent omissions, and insulin drip initiation in the Emergency Department. Workgroup members conducted one-hour mandatory education for all staff nurses prior to protocol implementation.

EVALUATION: One year after initiation of the revised protocol, project managers audited records and examined 22 criteria measuring compliance with the revised protocol. They reviewed the electronic orders for resolution of order entry problems previously identified.

RESULTS: Data showed increased nursing compliance with the protocol, a decrease in order entry errors, a decrease in hypoglycemia from 6.9% to 2.5%, and an increase in endocrine consults resulting in decreased total infusion time. The number of insulin drips initiated in the ED increased.

RECOMMENDATIONS: 1) Additional education targeting protocol criteria with less than 80% compliance; 2) meet with MDs to discuss ordering endocrine consults at insulin drip initiation rather than 48 hours post initiation; and, 3) discussion of IVP Regular insulin bolus vs SQ Asparte insulin before meals.

LESSONS LEARNED: The insulin drip project will require ongoing assessment until we achieve optimal evidenced-based practice and optimal patient outcomes.

BIBLIOGRAPHY: