

**MULTIVARIATE RETROSPECTIVE STUDY OF  
HYPOGLYCEMIC EVENTS IN HOSPITALIZED**

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The American College of Endocrinology has called for tighter glycemic control in hospitalized diabetics. This tight control may lead to an increased risk of patients developing hypoglycemia resulting in longer hospitalizations and significant adverse events. At Kaiser Permanente Riverside, a trend of an increased use of Dextrose 50% in water in diabetic patients for hypoglycemic events was noted by the Medication Safety Committee. The goal of this project was to identify trends and variables over an eight month period that could explain the incidence of hypoglycemic events in non-pregnant adults and geriatric hospitalized diabetics. The objective was to determine opportunities to improve patient care and reduce hypoglycemic events. Medical electronic records were reviewed to perform a case controlled, multivariate, retrospective study of hypoglycemic events in hospitalized diabetics. The following variables were collected in all control patients and patients receiving Dextrose 50% in Water following a hypoglycemic event: 1) dietary status of nothing by mouth, 2) use of oral hypoglycemic agents, 3) use of long acting insulin, 4) use of short acting insulin after 2100 hours, 5) presence of chronic renal disease, and 6) presence of sepsis. The outcome and analysis of this study will be presented.

