Mills RD, Schwartz F, Shubrook JH. Evaluation of diabetes management in a rural community hospital. *Endocr Pract.* 2008 Jan-Feb;14(1):50-5.

OBJECTIVE: To evaluate the effectiveness of implementing standardized insulin protocols in a small, rural community hospital. METHODS: This retrospective review was performed on charts of 300 inpatients who received insulin treatment while hospitalized between January 1, 2006, and June 30, 2006. For patients who met the inclusion criteria, the collected information included the following: serum glucose level at hospital admission, glucose level that initiated the treatment protocol, time-to-fasting euglycemia, time-to-random euglycemia, and method of insulin administration. Comparisons were performed between the effectiveness of the new insulin protocols and routine insulin treatment orders. RESULTS: A total of 168 patients met the study inclusion criteria. The mean glucose concentration that triggered initiation of insulin treatment was 262 mg/dL, which is significantly higher ($P<.001$) than levels recommended by the American Diabetes Association (ADA) and the American College of Endocrinology (ACE). There was a statistically significant relationship ($P = .007$) between time-to-fasting euglycemia and length of hospital stay. Implementation of the standardized insulin protocol did not improve the achievement of fasting euglycemia ($P = .753$). Most patients never reached the target glucose level goals despite the use of standardized protocol. CONCLUSION: Significant delays in initiating the insulin protocol and frequent failure in achieving target glucose levels demonstrate delayed recognition of hyperglycemia by hospital staff as well as ineffective use of standardized insulin protocols. Protocol improvement and increased hospital staff education concerning appropriate hospital target glucose levels are required to achieve ADA/ACE recommendations in small community hospitals.