

## Understanding and Improving Management of Inpatient Diabetes Mellitus: The Mayo Clinic Arizona Experience

Curtiss B. Cook, M.D.,<sup>1</sup> Richard S. Zimmerman, M.D.,<sup>2</sup> Susanne M. Gauthier, B.S.N.,<sup>3</sup>  
Janna C. Castro, B.S.,<sup>4</sup> Kimberly A. Jameson,<sup>5</sup> Stephanie D. Littman, R.N.,<sup>6</sup>  
and Janice M. Magallanez, R.N.<sup>6</sup>

### Abstract

We present an overview of strategies our institution has taken to understand the state of its inpatient diabetes management. We first describe how we utilized information systems to assess inpatient glycemic control and insulin management in noncritically ill patients and discuss our findings regarding mean bedside glucose levels, the prevalence and frequency hypoglycemic and hyperglycemic events, the patterns of insulin therapy, and evidence of inpatient clinical inertia. We also review the development of a survey to determine practitioner attitudes and beliefs about inpatient diabetes. Results of this survey study found that, in general, practitioners believed in the importance of controlling hyperglycemia but were not comfortable with many aspects of inpatient diabetes care, particularly with the use of insulin. Finally, we suggest steps to follow in developing a quality-improvement program for hospitals.

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**Author Affiliations:** <sup>1</sup>Division of Endocrinology, Mayo Clinic Arizona, Scottsdale, Arizona; <sup>2</sup>Department of Neurologic Surgery, Mayo Clinic Arizona, Scottsdale, Arizona; <sup>3</sup>Section of Practice Analysis, Mayo Clinic Arizona, Scottsdale, Arizona; <sup>4</sup>Division of Information Technology, Mayo Clinic Arizona, Scottsdale, Arizona; <sup>5</sup>Division of Planning Services, Mayo Clinic Arizona, Scottsdale, Arizona; and <sup>6</sup>Division of Quality Management Services, Mayo Clinic Arizona, Scottsdale, Arizona

**Abbreviations:** (BedGluc<sub>avg</sub>) composite bedside glucose average, (F24BedGluc<sub>avg</sub>) average bedside glucose measurements obtained during the first 24 h after admission, (ICD-9-CM) International Classification of Diseases, 9th Revision, Clinical Modification, (IDQIP) inpatient diabetes quality-improvement program, (L24BedGluc<sub>avg</sub>) average bedside glucose measurements obtained during the last 24 h before discharge, (LOS) length of stay

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**Corresponding Author:** Curtiss B. Cook, M.D., Division of Endocrinology, Mayo Clinic Arizona, 13400 E. Shea Blvd., Scottsdale, AZ 85259; e-mail address [cook.curtiss@mayo.edu](mailto:cook.curtiss@mayo.edu)