

## Insulin Metrics: Need for Development of Consensus Standards for Reporting of Insulin Dosing Data

ANALYTICAL TESTING



TRANSLATIONAL MEDICINE

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### Abstract

The advent of connected insulin pens will generate an avalanche of digital insulin data, especially in the context of prandial- and multiple daily injection-insulin regimens. There is a need for the diabetes community to develop standards for such data, analogous to what has been achieved using the ambulatory glucose profile and associated metrics for glucose, permitting harmonization of data reporting for multiple devices and facilitating integration of glucose, insulin, food intake, and physical activity data. Several studies have estimated the timing of meals by analyses of glucose excursions but using diverse criteria. There is need for uniform criteria for multiple types of insulin boluses, including premeal, perimeal, delayed, missed, and correction boluses to facilitate research studies and patient care. This article contains a first preliminary proposal for standards regarding reporting of insulin dosing data. Clinical usage of these reports will require sensitive communication between health care providers and patients.

