

## Translation of Data into Clinical Practice

The Epsilon Group, Virginia, LLC (Epsilon) has provided consultative services to Roche Diagnostics Corporation Point-of-Care Diagnostics Hospital Group to assist in creating clinically important applications of the RALS<sup>®</sup> Plus glucose data. These products leverage the RALS data warehouse, which contains billions of point-of-care glucose measures (the only data resource of its kind), to provide clinical evidence for glycemic control in hospitals.

Epsilon translates the RALS data into important clinical information through data management, statistical analyses, results reporting, technical writing and clinical interpretation services. Additionally, we work with clinical investigators to support their clinical inquiry

- **Data Management & Statistical Analyses.** Data management, and data mining employing industry-standard quality control procedures are followed by the development of hospital-specific databases. Customized scripts are written for conducting statistical analyses on each hospital database to generate tables and graphs of the results.
- **Results Reporting & Technical Writing.** Using these results, the Epsilon team designs and develops technical reports, which describe clinically meaningful trends extrapolated from the data. These reports contain both evidence for change in clinical practice and gaps in evidence to support further clinical inquiry.
- **Clinical Inquiry & Clinical Interpretation Services.** MAS and Epsilon then provide glycemic control benchmarking information as a clinical knowledge service to RALS customers as well as to Roche Hospital Diagnostics partners to advance best, evidence-based glycemic management information to hospitals.

The clinical reporting and benchmarking tools, the RALS-Tight Glycemic Control Module<sup>™</sup> and the RALS-Report<sup>™</sup>, were developed to meet the increasing demand for data in clinical practice settings. The data management and statistical analyses for the prototypes were designed and conducted by Epsilon staff to provide pilot reports for RALS customer review and comment. Additionally, Epsilon clinicians provide background understanding for users of the ICU Tracker<sup>™</sup> and SUGAR<sup>™</sup> program database.

Beyond RALS, Epsilon conducts clinical research studies and surveys to gather more evidence of the current state of hyperglycemia, diabetes and related disease management, and glycemic control in hospitals to support ongoing MAS initiatives.

This Epsilon clinical research perspective supports a larger vision for the RALS data warehouse to incorporate other point-of-care (cardiac markers, urinalysis, coagulation) analyses going forward. Clinicians, administrators, and healthcare regulators increasingly look for clinical data to drive their quality improvement and care delivery initiatives. MAS/Epsilon provides the clinical evidence for evidence-based patient care.

**MAS/MDN/Epsilon will ultimately transform healthcare benchmarking practices and become the foundation for the genesis of improved evidence-based healthcare delivered across the entire healthcare arena.**