SHM Glycemic Control eQUIPS Benchmarking Program

General Overview
The SHM Glycemic Control eQUIPS Program assists your team with optimizing glycemic control and minimizing hypoglycemia. Upon subscribing to the program you will have access to:

- Data collection and analysis tools that allow you to benchmark your institution against other participating sites
- Internal data reports to track your progress over time and by unit and care type
- The online glycemic control collaborative community
- SHM live webinars

Detailed description
The program is designed to enhance the efficiency and reliability of your quality improvement efforts and optimize best practices and methods for caring for the inpatient with hyperglycemia:

- The Glycemic control data center helps track performance via internal data report and cross-comparative external benchmark performance
- The Implementation guide provides step-by-step instruction for improving glycemic control, preventing hypoglycemia and optimizing care of the inpatient with hyperglycemic and diabetes
- Access to the glycemic control online community
  - The Glycemic control library of tools created by clinician experts and includes sample order sets and protocols, awareness campaigns, patient education materials and various articles
  - The national discussion forum lets you share questions with physician experts and other participating hospitals related to the planning, implementation and evaluation of glycemic control interventions
  - Access to on-demand webinars
- An online glycemic control toolkit including clinical tools and interventions, academic articles, informational papers and case studies, teaching slide sets and more

Data Center Capabilities
- Run reports by care type. (critical care, non-critical care, and other)
- Refine reports to include only certain unit types (mixed medical/surgical, medical, surgical, psychiatry/behavioral, OB/GYN, orthopedics, pediatrics/adolescent, other)
- Group any combination of units, allowing for customization of reports
- Select any date range
- Export favorite reports
- Run overview reports for any time period and month-by-month reports by patient-day and patient-stay
- Track hypoglycemia, glycemic control, and the timeliness of hypoglycemia management

Benchmarking Exercise Description
A benchmark report is generated every six months (typically Spring and Fall) to compare all participating hospitals. All the summaries within the report will represent data from ‘core’ units, including adult medical, surgical, mixed medical/surgical, and orthopedic units, with separate results for critical care and non-critical care. Data from psychiatric units, EDs, pediatric floors, perioperative holding areas, dialysis units, and the like are excluded. The GC benchmark report will be posted in the GC community. Each site is represented by a number and no one outside the analysis group at SHM is given this confidential site ID number.

SHM’s Glycemic Control Program Overview: https://youtu.be/lunAdJ3_iNA
Question 1.
Why is Benchmarking useful and important?

Answer - SHM benchmarking:
- Allows comparison between like hospitals
- Helps hospitals prioritize problem areas, and hypoglycemia vs glycemic control
- Provides local performance context
- Can provide rationale for supporting a glycemic control program
- Can assist hospitals in setting goals based on opportunities for improvement
- The report includes a wide array of metrics
  - Each hospital is ranked against others
    - Median, mean, range, top quartile (benchmark)
  - Available in mmol/l for international sites

Question 2.
What kind of metrics/measures do you use?

Answer - SHM uses a variety of metrics. The unit of analyses for glycemic control and hypoglycemia include patient-days (patient-days with POC BG monitoring), and patient-stays (consecutive patient-days on an inpatient unit). SHM does not use metrics with individual POC BG readings as the unit of analysis. Measures for hypoglycemia, severe hypoglycemia, glycemic control, and uncontrolled hyperglycemia are included. SHM also helps you track recurrent hypoglycemic days, and time intervals to recheck and resolve hypoglycemic events.

Question 3.
Can you describe the data that hospitals upload to the platform?

Answer
- Glucometer POC BG data, organized by unit is uploaded
- Data fields:
  - Date / time stamp
  - glucose value
  - unit of sample collection
  - a MR# that is encoded on upload (SHM does not have or retain your MR#)
  - No medications, diagnoses, service data, or PHI are uploaded

Question 4.
How do we upload our data? Is it difficult?

Answer - Uploading your data is a relatively simple process. SHM will provide you with detailed instructions. Briefly:
- Files are uploaded as CSV files.
- Multiple units with multiple months of data can be uploaded at once.
- The first time you upload, you will be prompted to declare the care type (critical care, non-critical care, other) and unit type (medical, medical / surgical, surgical, adult vs pediatric, orthopedics, OB, etc.).
- In subsequent months, if you use consistent unit labels, the system remembers the care type / unit type.

Question 5.
Who is included in SHM analyses for benchmarking? How do you “scrub” data?

Answer - All patients, regardless of diagnoses, are included if they have ≥ 4 POC BG readings over at least 2 consecutive days
- Only data from your inpatient core adult units are included in benchmarking, but you can run ‘on-demand’ reports for any unit for internal analyses.
- We do not exclude patients from first day of admission, or with all normal values, or from longer hospital stays
- Only POC BG data are analyzed / uploaded
- Data are scrubbed for errors in several ways
  - Readings within 5 minutes of a low BG reading are excluded from analysis, as they likely represent a reflexive repeat test, rather than a recheck to assess efficacy of therapy
  - Details available here: Journal of Diabetes Science and Technology 2014; 8(4) 630-640

Question 6.
How do you guarantee data security? Is there any risk of a HIPAA violation for our hospital?

Answer - This is a secure process, and there is no danger of a HIPAA violation. No demographic data or PHI is made available to others, and your benchmarking results are identified with a site ID #. Only your identified users will have access to this site ID.