Inpatient Strategies to Achieve Joint Commission Certification of Distinction for Inpatient Diabetes Care

Objectives:
- **Describe the benefits of achieving:**
  - *The Joint Commission Certification, Advanced Disease-Specific Care Certification for Inpatient Diabetes Care*
- Define the roles of a multidiscipline team when developing a glycemic committee
- Discuss how to identify obstacles and build on opportunities for improvement when preparing for Certification

Why Strive for Jt. Commission Certification?
- Improves the quality of patient care by reducing variation in clinical processes
  - The Joint Commission's standards and emphasis on clinical practice guidelines help organizations establish a consistent approach to care, reducing the risk of error
- Supports hospital goal of avoiding “never events”
- Through the certification requirements on blood glucose management and medication transitions, the risk of the development of never events is decreased
- Provides a framework for program structure and management
- Certification standards help organize the disease management program. This helps to maintain a consistently high level of quality, using effective data-driven performance improvement
- Creates a loyal, cohesive clinical team
- Certification provides an opportunity for staff to develop their skills and knowledge. Achieving certification provides the clinical team with common goals and a concrete validation of their combined efforts
Continue:

- Facilitates marketing, contracting and reimbursement – Certification may provide an advantage in a competitive health care marketplace and improve the ability to secure new business.
- Recognized by select insurers and other third parties – In some markets, certification is becoming a prerequisite to eligibility for insurance reimbursement, or participation for managed care plans and contract bidding.
- Strengthens community confidence in the quality and safety of care, treatment, and services – Achieving certification makes a strong statement to the community about an organization’s efforts to provide the highest quality services.

Who are the Stakeholders for Certification?

- Patients
- Nursing staff
- Physicians
- Non-clinical staff members
- Insurance companies
- Community members

American Diabetes Association & The Joint Commission Agree:

- Specific staff education requirements
- Written blood glucose monitoring protocols
- Plans for the treatment of hypoglycemia and hyperglycemia
- Data collection of incidences of hypoglycemia
- Patient education on self-management of diabetes
- An identified program champion or program champion team

National Patient Safety Goals

- NPSG.02.03.01
  - Report critical results of tests and diagnostic procedures on a timely basis
  - Fasting blood glucose results <50mg/dL to be reported to the responsible licensed caregiver

- NPSG.03.06.01
  - Maintains and communicates accurate patient medication information
  - Medication reconciliation is intended to identify and resolve discrepancies
  - Prior to arrival medications to be reviewed prior to new medications ordered by healthcare provider

Role of the Glucose Management Team

- Review, revise and/or develop policy, order sets & procedures for glucose management from clinical best practice guidelines (CPG’s)
- Review validates:
  - Implementation of CPG’s
  - Rationale for selection/modification
  - Monitoring and improving adherence
Developing a Glucose Management Team

- Team Leader
- Interdisciplinary Team
  - Licensed independent practitioner
  - Registered Nurse
  - Pharmacist
  - Dietitian/Nutritionist
  - Diabetes Educator
  - Case Manager
  - Behavioral Health care provider
  - Laboratory personnel
  - Social worker
  - Ad Hoc Members:
    - IT
    - Administration
    - Quality

Building a Diabetes Management Program

- Medications:
  - Coordinate insulin administration/ meal tray delivery/ blood glucose monitoring
  - IV insulin administration –
    - Blood glucose targets
    - Transitioning orders
  - Subcutaneous insulin pump –
    - Policies for use
    - Specific documentation requirements

Building a Diabetes Management Program (cont.)

- Blood Glucose Monitoring
  - Per published CPGs, established blood glucose targets, including IV insulin infusions
  - Hypoglycemia
    - Protocols including reassessment of blood glucose level
    - Education of staff on symptomatic hypoglycemia
    - Evaluations of episodes
  - Individualized hypoglycemia and hyperglycemia treatment plans
  - Assessment and if needed, education of patient

Building a Diabetes Management Program (cont.)

- Assessment and Education:
  - Staff: multiple topics in standards – insulin pens, subcutaneous insulin pumps, hypoglycemia, CPGs, etc.
    - Physicians
    - Nurses
    - Other staff members
  - Patient: diabetes self-management topics

Building a Diabetes Management Program (cont.)

- Transitions of Care
  - Medication regimen to follow after discharge
  - Communication of A1C result and glycemic management issues requiring follow-up to patient and outpatient healthcare provider
  - Communication from and to outpatient healthcare provider about diabetes management
  - Documentation of Diabetes Mellitus in medical record including type, if possible
  - Follow-up appointment
Building a Diabetes Management Program (cont.)
- Watch for updates to standards published in Perspectives®
- Register for News and Alerts at www.jointcommission.org at bottom of page
- Ask your hospital’s Joint Commission liaison

Improving Diabetes Management Program
- Performance Measurement:
  - Where does your program need improvement?
  - Hypoglycemia episodes
  - Monthly tracking
  - Monthly reporting to The Joint Commission on four (4) measures
- Performance Improvement:
  - Plans
  - Sustained

The Journey Begins…
- Saddleback Memorial Medical Center
  - Aug. 2011-Patient incident with hypoglycemia
- Glycemic Control Committee (GCC)
  - Sept. 2011-vetted and endorsed by Hospital Leadership Team
  - Approved paid staff hours for all hourly team members for meetings and assignments
  - Endocrinologist, RN’s, RD’s, Pharmacy, Risk Mgt, Case Workers, Social Workers, Professional Development, Quality Improvement,
  - First assigned task:
    - Complete a gap analyze for glycemic control

Gap Analysis
- Each GCC member identified areas of improvement for their own department:
  - Staff educational
  - Written blood glucose monitoring protocols
  - Hypoglycemia and hyperglycemia treatment plans
  - Multiple insulin order-sets
  - Meal tray deliveries with scheduled insulin
  - No true “real-time” blood glucose data to evaluate
  - Critical low reporting from AM lab draw with BG <40mg/dL
  - Patient education material

Gap Analysis (cont.)
- Lack of knowledge
  - Basal, bolus and correction insulin
  - CPG recommendation for blood glucose levels for inpatients
- RN staff lack of knowledge/time for diabetes education at the bedside prior to discharge
  - What constitutes “Diabetes Survival Skills?”
- Sliding Scale insulin order-set only
  - Correction at 151mg/dL

Plan. Do. Study. Act
- What is the background problem?
  - High risk for hypoglycemia events < 70mg/dL
- What is the current condition?
  - 10 of 15 events associated with long acting insulin
- Develop a problem statement
  - Lack of best practice standard work in place for prevention, management and treatment of hypoglycemia
- Target condition
  - Evidenced based best practice is adopted for standard work flow
- Target outcomes
  - Weekly, monthly audits on all blood glucose results < 71mg/dL
  - Leading to improvement in preventing and managing hypoglycemia
Root Cause Analysis

• Knowledge deficits:
  – Physicians, nursing, dietitians, pharmacists

• Standard workflow:
  – Insulin administration, meal deliver, POC testing, treatment of hypoglycemia

• Lack of P&P for glycemic management
  – STP’s for hypoglycemia and PRN POC

Root Cause Analysis (cont.)

• Lack of best practice insulin order-sets
  – Meal (bolus) insulin options
  – Diabetic Ketoacidosis (DKA)
  – Hyperosmolar Hyperglycemic Nonketotic Syndrome (HHNS)

• Lack of identifying patients at risk for hypoglycemia
  – Co-morbidities, age, renal function

• Lead to a Rapid Response Action

Rapid Response Action Plan

• Identify patients at risk for hypoglycemia
• Improve coordination of insulin administration and tray delivery
• Review and revise ‘Standard Treatment Plan’ for treatment of hypoglycemia
• Adjust correction scale from 151mg/dL to 181mg/dL
• Work in conjunction with other campuses to initiate a Diabetes Best Practice Team

Treatment for Hypoglycemia

• Review of hypoglycemia events
• D50 was administered for the majority of BG <71mg/dL
• Poor documentation for POC testing once a hypo event was treated
• Standard Procedure Guideline
  – STP for treatment of hypoglycemia

STP for Hypoglycemia

• Nursing reviewed and revised
  – IM Glucagon was added to options for treatment

• Nursing Education
  – If patient is awake and alert, use juice, milk
  – Recheck BG every 20 mins after treatment until BG is >80mg/dL and retest again in one hour

• Pharmacy tracks use of rescue medications
  – Opportunities for on-going education

Scheduled Insulin and Meal Trays

• Yellow tray liners were placed on all meal trays requiring a meal time or correction insulin dose
• Nursing staff performs POC test up to 30 minutes prior to meal trays arriving
• Insulin can be injected 15 minutes before to 15 minutes after the meal is delivered and consumed
Meal Tray Audits

<table>
<thead>
<tr>
<th>Date</th>
<th>Unit</th>
<th>Auditor</th>
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Instructions:
1. Select a One Morning shift & One Lunch shift per unit - between the dates of __________ through __________
2. Run insulin system list
3. Observe time blood sugar checked.
4. Record time tray cart delivered
5. Count yellow placemats, compare to insulin list
6. Observe time insulin administered
7. If not done, record reasons why.
8. Count and record Accu check Patients per each RN
9. Time Tray Cart Arrived
10. Number of Patients with accu checks assigned to RN
11. Total yellow placemats matches the total number of patients on insulin system list
12. Time Tray Delivered to patient
13. Time Blood Sugar Checked
14. Time insulin given
15. If not, reasons why

Additional Requirements
- Development of patient education material
  - Diabetes survival skills
- Diabetes Nurse Champions
  - Each floor/unit identified
- Discharge planning
  - Transition of care
  - Discharge order-set created by BPT

Best Practice Team (cont.)
- Endocrine Champion
- Certified Diabetes Educators
- Nursing
- Dietary
- Physicians
- IT
- Quality Improvement

Memorial Care Diabetes Best Practice Team
- Six campus sites
- Various patient populations
- No ‘Glycemic Champion’ to oversee evidenced based best practice for healthcare system
- GCC recommended a Best Practice team to be developed
- Approved by all campuses: January 2014

Developing a Insulin Order-Set Basal-Bolus-Correction
- Reviewed current insulin order-set
- Completed a literature review of insulin order-sets from around the country
- Developed a best practice insulin order-set which would meet the recommendations from the Best Practice Team and follow sister campus already in place order-set

New Insulin Order-Set
- Introduced Basal, Bolus, Correction
- Approved blood glucose levels
  - 140mg/dL – 180mg/dL
- Correction at 151mg/dL
- NPO and Tube feeds
  - Recommended the use of REG to match with scheduled POC every 6 hours
Roll out of New Insulin Order-Set

• Pharmacy and Therapeutics approved
  – 6 month trial in ICU and ACS only
• Physician Education
  – Staff meetings, 1:1 on units, emails
• Nursing Education
  – Paid one hour CEU
• Epic build
  – Use ‘front-line’ staff

Education Required Post 6 Month Trial

• Use of meal time insulin
  – If type 1, order meal time insulin
• Correction and meal time is two separate orders
• Increase of long-acting insulin
  – P&T had recommended prior to arrival basal insulin dose to be reduced by 50 % by pharmacy to prevent hypoglycemia

Trial Observations

• Prescribers were not utilizing the embedded ‘TIP-SHEET’ to determine dose requirements
• Activate the lowest correction dosing leading to hyperglycemia
• Hypoglycemia audits demonstrated hypoglycemia was linked to the use of basal insulin dose

Trial Observations (cont.)

• Prescribers were increasing the long-acting insulin dose to correct mid-afternoon hyperglycemia
• ICU prescribers did not feel comfortable correcting BG until >180mg/dL
• Renal clearance was a factor for the hypo events in the early AM hours (0200-0500)
• 0200 POC for anyone on basal or requiring a correction at 2200

Hypoglycemia Audits

• Daily review
• Weekly for root cause analysis
• Monthly review for possible trends developing in the hospital

Daily Hypoglycemia Report

Results Report
Daily <71 mg/dL
Filter:
(Device Facility Equal To Saddleback) AND (Record Type Equal To Patient Results) AND (Result Date Equal To 8/1/2016) AND (Test or Parameter Equal To Glucose) AND (Result or Value < 71) AND (Device Location Equal To SB L 2E, SB L 2N, SB L 2W, SB 3E, SB L 3W, SB L ICU)
Hypoglycemia Audits (cont.)

- Review demonstrated use of basal insulin dosing required ongoing pharmacy support for prescribers
- 50% decrease in prior to arrival basal insulin did not develop hyperglycemia
- GCC reported back to P&T of increase in hyperglycemia, amended to 25% reduction

Where are We Today?

- We have improved our overall care of glycemic control issues
- Less hypoglycemia events
  - Less use of rescue medications
- Nursing staff feels comfortable to discuss possible changes in insulin dosing with prescribers
  - Meal dose, increase correction scale
Where Are We Today? (cont.)

• Improved RN rechecks for hypoglycemia
• Bedside nursing utilizing Patient Survival Book for bedside teaching
• Glucometrics demonstrate a decrease in hypoglycemia and an increase in meeting safe blood glucose ranges (100-180mg/dL)

Where Are We Today? (cont.)

• Currently in the final stages of Magnet® application
  – Hospital focus and financial commitment
• CNS back from Maternity leave 😊 😊
  – Oversees education process for Acute Care Services
• Goal to submit for Certification between Oct. 2016 – March 2017

Questions?

Caroline Isbey RN, MSN, CDE
cisbey@jointcommission.org
630-792-5279

Tammi Boiko MSN, RN, BC-ADM, CDE
tboiko@memorialcare.org

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References

• Joint Commission Resources: 2016 Comprehensive Certification Manual for Disease-Specific Care contact information (877) 223-6866 or www.jcrinc.com
• Joint Commission: www.jointcommission.org
• Contact the Standards Interpretation Group: 630-792-5900, www.jointcommission.org “Ask a Standards Question” (right hand side of page)
• Submit Performance Measure questions to http://manual.jointcommission.org