

1 Problem

What	Problem(s)	Hypoglycemic coma
When	Date	Proactive
	Different, unusual, unique	Poor glycemic control not present on admission; each additional chronic condition increased odds of poor glycemic control by 12%; increased staffing in non-teaching hospitals significantly reduced odds of poor glycemic control
Where	Facility, site	Inpatient hospital
	Task being performed	Inpatient care

Impact to the Goals

Patient Safety	Increased risk of patient death (16 vs 9% when emergencies not present)	
Employee Impact	Second victim	
Compliance	"No-pay" hospital acquired condition	
Organization	Cost of hypoglycemic coma	\$36,581
Patient Services	Increased length of stay (14 vs 7 days)	
Labor, Time	Increased treatment requirements	
	Per incident	\$36,581
Frequency	212 cases in 2007 (CMS)	
	Annualized Cost	\$7,755,172

HYPOGLYCEMIC COMA

Cause Map

Manifestation of Poor Glycemic Control Part 3

Hypoglycemia coma resulting from poor glycemic control within a hospital setting is now considered a hospital-acquired condition by Medicare & Medicaid, meaning that hospitals will not receive additional payment for cases when this condition is acquired during hospitalization.

"Severe hypoglycemia, a complication that partially drives under treatment of hyperglycemia, is avoidable with appropriate management."

From "Prevalence of Hyper- and Hypoglycemia Among Inpatients With Diabetes" by Wexler, MD, et al.

Cause Mapping is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

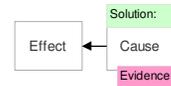
CAUSE MAPPING

Problem Solving • Incident Investigation • Root Cause Analysis

- Step 1 Problem** - What's the Problem?
- Step 2 Analysis** - Why did it happen?
- Step 3 Solutions** - What will be done?

More Detailed Cause Map

Add detail as information becomes available.



For a free copy of our Root Cause Analysis Template in Microsoft Excel, used to create this page, visit our web site.

ThinkReliability
Investigate Problems. Prevent Problems.
Houston, Texas 281-412-7766 ThinkReliability.com

2 Analysis

Basic Level Cause Map -

Start with simple Why questions.



Basic Cause-and-Effect

Hypoglycemic coma results from uncontrolled hypoglycemia, which can sometimes result from overzealous insulin treatment. For this reason, it's sometimes named as a cause of under treatment with insulin, although hypoglycemic coma is less prevalent (per CMS data) and avoidable.

3 Solutions

No.	Action Item	Cause
1	Individualized insulin plan	Failure to adjust insulin for other factors
2	Frequent monitoring of blood glucose	Overtreatment with insulin
3	Immediate estimation of blood glucose level for all unconscious patients	Drug-induced hypoglycemia
4	Ensure tracking of patient's nutritional intake	Inadequate nutrition
5	Tighter procedures, controls involving drugs administered to diabetic patients	Inadequate control of diabetes

