

A Pharmacist-led Inpatient Diabetes Stewardship Program Mitigates Therapeutic Inertia

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Cooperman Barnabas Medical Center RWJBarnabas HEALTH

BACKGROUND

One third of hospitalized patients will experience a hyperglycemic event

• 10.1% of hospitalized patients will suffer from a hypoglycemic event



Both hyperglycemic and hypoglycemic events negatively impact patient outcomes during hospital admission and lead to longer lengths of stay



Centers for Medicare and Medicaid Services (CMS) released two electronic clinical quality measures in January 2023 which will impact hospital reimbursement for both severe hyper and hypoglycemic events

PURPOSE

This poster discusses the role of a pharmacist-led inpatient diabetes stewardship program in decreasing severe hyper/hypoglycemic events, ensuring appropriate medication regimens upon hospital discharge, and mitigating therapeutic inertia for hospitalized patients with glycemic excursions

PHARMACIST ROLE

The pharmacist completes daily prospective audits for patients at risk of severe hyperglycemia and hypoglycemia that do not have an Endocrinology consult for diabetes management The pharmacist contacts the primary team taking care of the patient to recommend pharmacotherapy modifications.

Description of pharmacist recommendations in the setting of hyperglycemia:

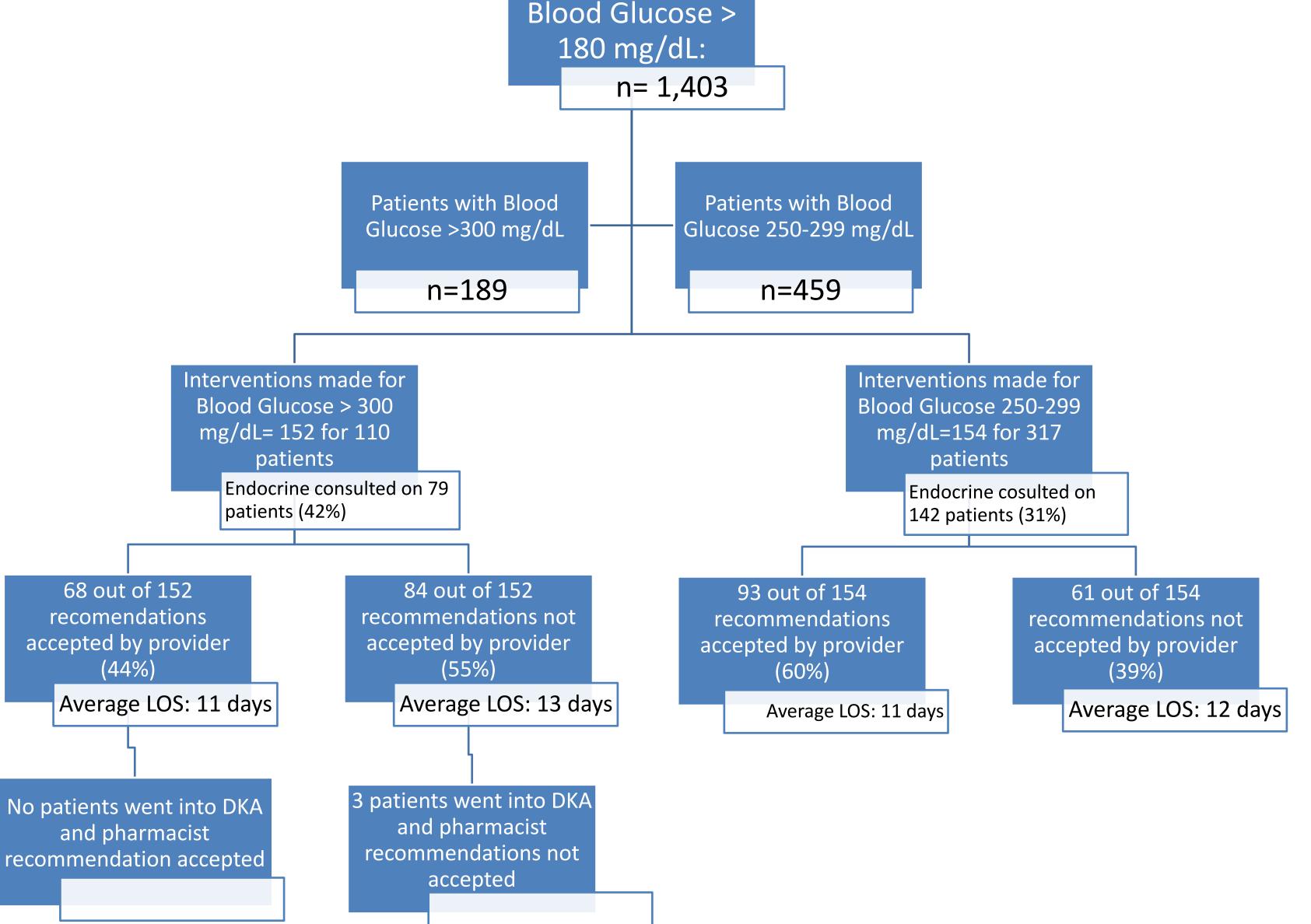
- Recommend proper insulin titration
- Addition/Increasing of basal insulin
- Addition/Increasing of prandial insulin
- Adjustments of sliding scale insulin
- Recommend addition of home antidiabetic medications at appropriate time
- Recommendations for enteral feeds/dietary

Description of pharmacist recommendations to mitigate hypoglycemia:

- Recommend proper insulin dose reductions
- Education on risk factors for hypoglycemia
- Order hypoglycemia order set
- Order appropriate blood glucose monitoring

OUTCOMES ASSOCIATED WITH PHARMACIST INTERVENTION

Patients with Blood Glucose > 180 mg/dL:



Hypoglycemia Outcomes

Outcome	Pre-Implementation N= 150	Post-Implementation N= 172	Incidence Rate Ratio	95% Confidence Interval	p-value
Primary Outcome					
Hypoglycemia per 100 patient days	9.0	5.9	0.65	0.50-0.84	< 0.05
Secondary Outcomes					
Recurrent hypoglycemia per 100 patient days	5.2	4.2	0.80	0.58-1.10	0.16
Severe hypoglycemia per 100 patient days	1.1	1.1	0.96	0.48-1.96	0.91
Blood glucose >300 mg/dL, n (%)	71 (47)	81 (47)	_	_	0.97
Length of stay, days (IQR)	8 (7-13)	8 (6-16)	-	-	0.59

CONCLUSION

- The pharmacist-led diabetes stewardship program implemented at Cooperman Barnabas Medical Center highlights the importance of collaboration and a team based approach to overcome therapeutic inertia when managing patients admitted to the hospital with diabetes.
- The different services included in this program are transferrable and can be implemented in hospitals throughout the country.

STEPS FOR IMPLEMENTATION

- Engage Key Stakeholders:
 - Quality Department
 - Endocrinology Service
 - Pharmacy Department
 - Internal Medicine
 - Diabetes Education and Care Specialists
 - Nursing Education
- Develop inpatient diabetes work group or committee consisting of these team members
- Have a dedicated specialist for managing and intervening on glycemic management reports to prevent severe hyper/hypoglycemic events

DISCLOSURES

The authors have nothing to disclose.

REFERENCES

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