2021 LEAD Capstone Poster Session

Hyperglycemic Discharge Pathway from the Emergency Department

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Abstract

- **Problem**
  - The estimated cost of diagnosed diabetes in the United States in 2017 was $320 billion
  - Poor glycemic control caries known increased morbidity and mortality risks
  - Patients with the poorest glycemic control have the poorest outcomes and the highest rates of medication and lifestyle non-compliancy
  - Currently no standardized pathway to managing hyperglycemia in the Emergency Department exists

- **Action**
  - **Create and implement a hyperglycemic discharge pathway for diabetic patients from the Emergency Department**

- **Results**
  - Provide immediate goal directed hyperglycemic management to discharged diabetic patients
  - Improve patient outcomes and access to care
  - Reduce costs as well as number of ED visits and hospital admissions related to hyperglycemia
  - Improve patient satisfaction

Objectives

- Create and Implement a Diabetic Discharge pathway from the Emergency Department
  - Create medication discharge protocol
  - Provide real time insulin teaching
  - Ensure prompt follow up
- Decrease diabetic ED visits and admissions
- Improve glycemic control and access to follow up in the outpatient setting

Background Information

- Patients with diabetes account for over 25% of all Emergency room visits
- Parkland sees over 3,000 visits annually for severe hyperglycemia and tens of thousands of mild to moderately controlled diabetic patients, many with associated diabetic related infections
- Significant provider variability on hyperglycemic management as well as comfort level with discharge and starting outpatient diabetic medications
- Sub-optimal ED hyperglycemic management leads to:
  - Poorly controlled outpatient glycemic control
  - Increased diabetic complications
  - Unnecessary ED visits and admissions
  - Decreased availability to appropriate medication and follow up

Specific Aims

- **Patient Aims**
  - Create real-time goal directed discharge pathway for hyperglycemic patients
    - Ensures patients are discharged on appropriate medications
    - Ensures immediate patient education
    - Promotes expedited follow up

- **Hospital and Emergency Department Aims**
  - Increase resident, faculty and APP comfort levels in discharging patients on insulin and other diabetic medications
  - Decrease ED utilization for hyperglycemia
  - Decrease number of diabetic admissions for hyperglycemia and diabetic related infections

Project Plan

PHASE I (3-6 months)

Continued Inter-Disciplinary Discussion and Protocol Buildout

- Endocrine Department
- Pharmacy
- IT/Epic
- Social Work
- Hospital Quality Committee
- Nursing Clinical Education Department

PHASE II (6-12 months)

Pilot Phase

- Nursing and Staff Education
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- Limited availability of educator
- Data Analysis
- Protocol Revisions

PHASE III (12+ months)

Expanded Clinical Educator Availability 24/7

Clinic Referral Expansion

Further Data Analysis and Publications

Application of What You Learned at LEAD

- Strategic styles to development of interdisciplinary projects

- Identification of priority stakeholders and interests to ensure project success

- Self-Awareness of communications styles of myself and others

Proposed Budget

INITIAL PHASE

No Costs

- Build Epic Order Set
- Interdisciplinary Collaboration
- Staff Education

PHASE II

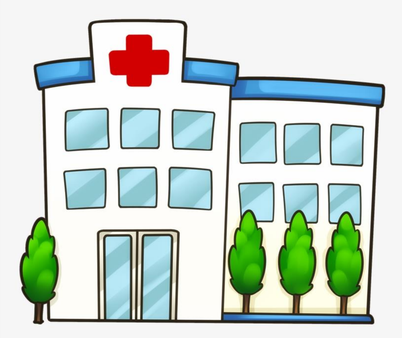
0.5 FTE Nursing Educator

- Nursing Diabetic Educator from Clinical Education
- Limited Hours

PHASE III

1-2 FTE Nursing Educator

- 24/7



Significance and Innovation

- Creates opportunity to meet patients where they are at
  - Gives patient immediate access to diabetic resources and initiates appropriate medication management
  - Improve patient access to care and follow up
  - Decreases cost burden to patients and healthcare system

- Allows us to become clinical leaders in Emergency Department diabetic management
  - Little to no literature on similar initiatives
  - Data and Results from this project can be modeled by other Emergency Departments
  - Improve provider comfort level with hyperglycemic management

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