

Providence St. Joseph Health

Providence St. Joseph Health Digital Commons

[View All](#)

2020 Nursing Summit

9-2020

Exploring the Effect of Inpatient Diabetes Education on Readmission Rates

Cynthia Chun

Providence St. Joseph Health, Cynthia.Chun@stjoe.org

Follow this and additional works at: https://digitalcommons.psjhealth.org/summit_all



Part of the [Endocrinology, Diabetes, and Metabolism Commons](#), and the [Nursing Commons](#)

Recommended Citation

Chun, Cynthia, "Exploring the Effect of Inpatient Diabetes Education on Readmission Rates" (2020). *View All*. 13.

https://digitalcommons.psjhealth.org/summit_all/13

This Poster is brought to you for free and open access by the 2020 Nursing Summit at Providence St. Joseph Health Digital Commons. It has been accepted for inclusion in View All by an authorized administrator of Providence St. Joseph Health Digital Commons. For more information, please contact digitalcommons@providence.org.



Exploring the Effect of Inpatient Diabetes Education on Readmission Rates

Cynthia Chun, MSN, RN, CMSRN



St. Jude Medical Center Fullerton, CA

Background

- Diabetes (DM) is an increasing health concern in the US.
- Inpatient DM Education is associated with less frequent hospital readmission among patients with poor glycemic control (Healy et al., 2013).
- DM is linked to increased mortality and can lead to dangerous cardiovascular complications (Wisnewski, 2017).
- Patients with DM "represent about 8% of the US population, and account for 23% of hospitalizations" (Rubin et al., 2014).

Purpose / Research Hypotheses

- This study examined the difference in readmission rates in type 1 & 2 diabetic inpatients who received formal diabetes education with a Certified Diabetes Educator and readmission rates in type 1 & 2 diabetic inpatients who did not receive formal education.
- Education was given by the certified diabetes educator while the patients were in the hospital in a face-to-face session with an educational pamphlet.

Research Design

Quantitative, comparative, retrospective study

- Noninterventional Group (no formal education by Certified Diabetes Educator)
- Interventional Group (formal education by Certified Diabetes Educator)

A retrospective review of patient data examined admission rates in both groups

Procedures

- Two random samples (N=100) were selected from a group of patients admitted during the study timeframe (1/2017-9/2018)
- Retrospective chart review for both noninterventional & experimental groups: demographics (gender, age, types of DM meds, etc.) and readmission rates
- The interventional group received formal diabetes education from the Certified Diabetes Educator.
- The noninterventional group received their education primarily from the bedside nurse.

Results

- No significant differences were found between readmission rates for patients who received formal education from a Certified Diabetes Educator and readmission rates for patients who had not.
- Patients with a diagnosis of hypoglycemia were more likely to be readmitted within 60 days.

Conclusion/Recommendations

Patients with a diagnosis of hypoglycemia were more likely to be readmitted (60 days). Inadequate insulin administration, lack of support in diabetes management

Type 2 Error: There may be a significance in the difference in readmission rates between patients who received formal diabetes education from a certified diabetes educator and those who did not, but the sample size is too small.

Sample is homogenous (one hospital, too many similarities).

Further study exploring the relationship between hypoglycemia and readmission rates are needed.

Implications for Practice

Improved nursing practice may benefit from repeating the study as follows: (a) control for intervention validity to further standardize the educational process, (b) control for pt. variables that may interfere with learning (such as pain/discomfort, pain medication), (c) obtain a larger sample size and more homogeneous sample (d) use other measures to evaluate pt. DM education/learning and disease management r/t teach-back methods, pt. compliance with insulin admin, family support, outpatient follow-up, etc.