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Title: Concentrated U500 Insulin Education: Assessment of Correct Dosing and Draw Up

Background: As type 2 diabetes mellitus prevalence continues to grow like it has over the last several decades, it is crucial to make certain health care providers are adequately trained in diabetes management to ensure their patients are getting optimal care. Proper diabetes management can be hindered if providers lack the knowledge to accurately calculate total daily insulin requirements, create regimens for patients, and teach patients how to prepare these doses for self-administration.

Methods: The purpose of this study is to assess the ability of healthcare professionals to convert a patient with diabetes from a basal/bolus insulin regimen to an insulin R U-500 regimen. This will be determined by the providers’ ability to accurately calculate the daily insulin requirements of mock patients and represent individual doses in different syringe types.

Results: Overall, there was a statistically significant increase in the participants’ knowledge and self-confidence in U-500 insulin (p <0.001). There was also a significant increase in the healthcare providers’ ability to calculate and prepare U-500 insulin doses.

Conclusion: These results indicate that further education on U-500 insulin is warranted. An education session similar to the one provided could make an impact in patient care, keeping in mind that providers felt they needed more time learning about the dosing calculations.