

Poster W19

Abstract: Using Diffusion of Innovation Theory to Explore Insulin Pump Use in Children Living with Type 1 Diabetes in Spanish

Background: Insulin pump therapy (IPT) can improve glycemic control and quality of life in children living with type 1 diabetes (T1D), including protection against acute diabetes emergencies and long-term complications. Previous studies have shown demographic disparities in IPT use by preferred language.

Purpose/Aims: This project aims: (1) to explore attitudes, access, training, and support around diabetes technology in Spanish at the Children's Hospital Los Angeles (CHLA) Center for Endocrinology, Diabetes and Metabolism (CEDM) through the diffusion of innovation theory from family and team member perspectives; and (2) to understand barriers and potential strategies to support optimal use of diabetes technology as the standard of care for families who prefer to communicate with CHLA CEDM in Spanish.

Methods: Cross-sectional surveys will be completed by CHLA CEDM clinical team members and families living with patients seen at CHLA for T1D. The 17-item surveys were modified to fit this clinical context from previously validated surveys assessing diffusion of innovation in health education settings. The surveys will be collected electronically via Qualtrics over a four-month period. Descriptive statistics will be conducted on each item, and factor analysis will be conducted to understand the application of the constructs of diffusion of innovation. Cronbach's alpha will be used for reliability of constructs. All analyses will be conducted with SPSS.

Discussion: This project will help build an understanding of IPT use by identifying diffusion of innovation constructs that apply to families who prefer to communicate with clinic in Spanish, and the clinic team who works with them.

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