

The Art of Diabetes Prevention Education in Youth

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Background: The obesity epidemic has led to an increase in type 2 diabetes as well as the precursor condition “prediabetes.” Prediabetes is defined as blood glucose or hemoglobin A1c levels higher than normal, but not high enough for diabetes. Approximately 30% of obese adolescents in the U.S. have prediabetes. Youth with prediabetes have significantly increased risk for developing type 2 diabetes. Literature demonstrates the significant impact of modest weight loss and physical activity on the prevention or delay of type 2 diabetes. Education on diabetes risk and initiation of lifestyle change is the primary treatment modality. Materials are needed to more effectively educate youth on diabetes progression and risk reduction while using consistent information from evidence-based behavior change methods.

Objective: The Youth Diabetes Prevention Clinic is collaborating with the Herron School of Art and Design and a professional design firm to develop an effective tool for communicating the importance of preventing type 2 diabetes while using adolescent-friendly language, visually exciting graphics and relevant messaging.

Methods: The team consists of physicians who specialize in adolescent diabetes, a registered dietician, health educators, and graphic design professionals. The project is being completed in four phases: exploration, design, analysis, and refinement.

Results: Exploration: The design professionals conducted key personnel interviews and a clinic site visit to determine the appropriate product design. Design: A 16-page booklet was created to incorporate the use of age-appropriate graphics, medical language in lay terms, and cohesive messaging in one package. Analysis: Usability will be measured through user-group testing, key personnel interviews, pre and post knowledge assessments and readiness to change scales. Refinement: Messaging will be revised based on analytical findings.

Conclusions: This collaboration exemplifies the benefit of a multidisciplinary approach in the development of patient-centered education materials and provides a framework for others when developing age-specific health communication strategies.