

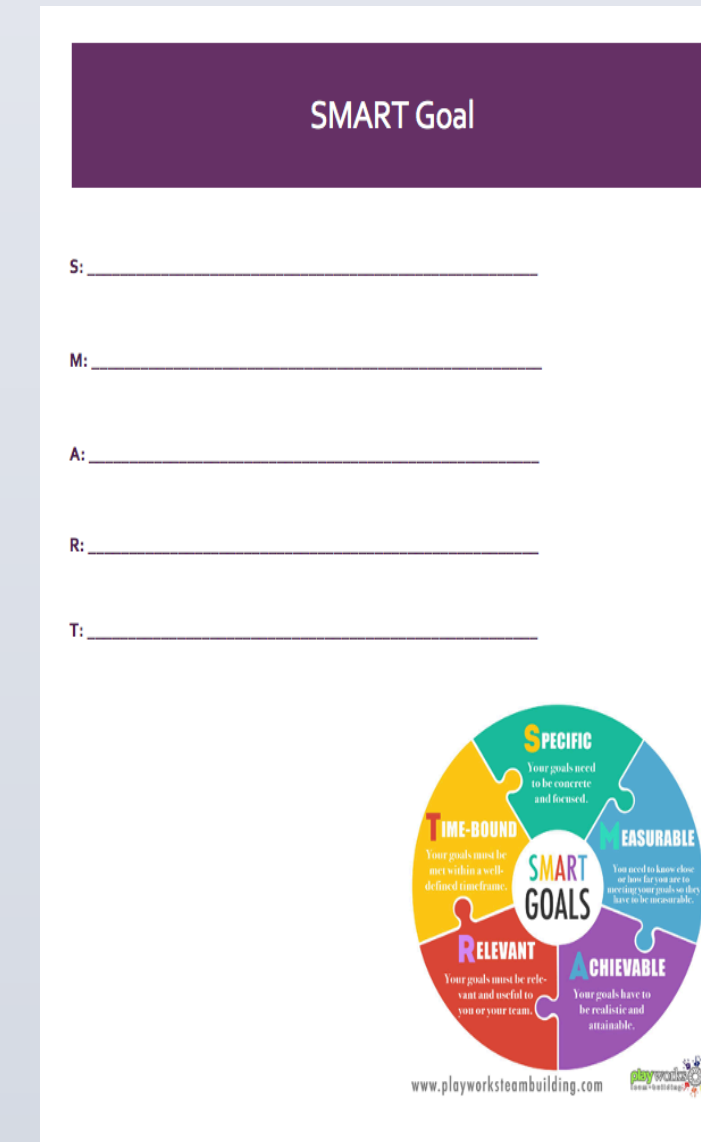
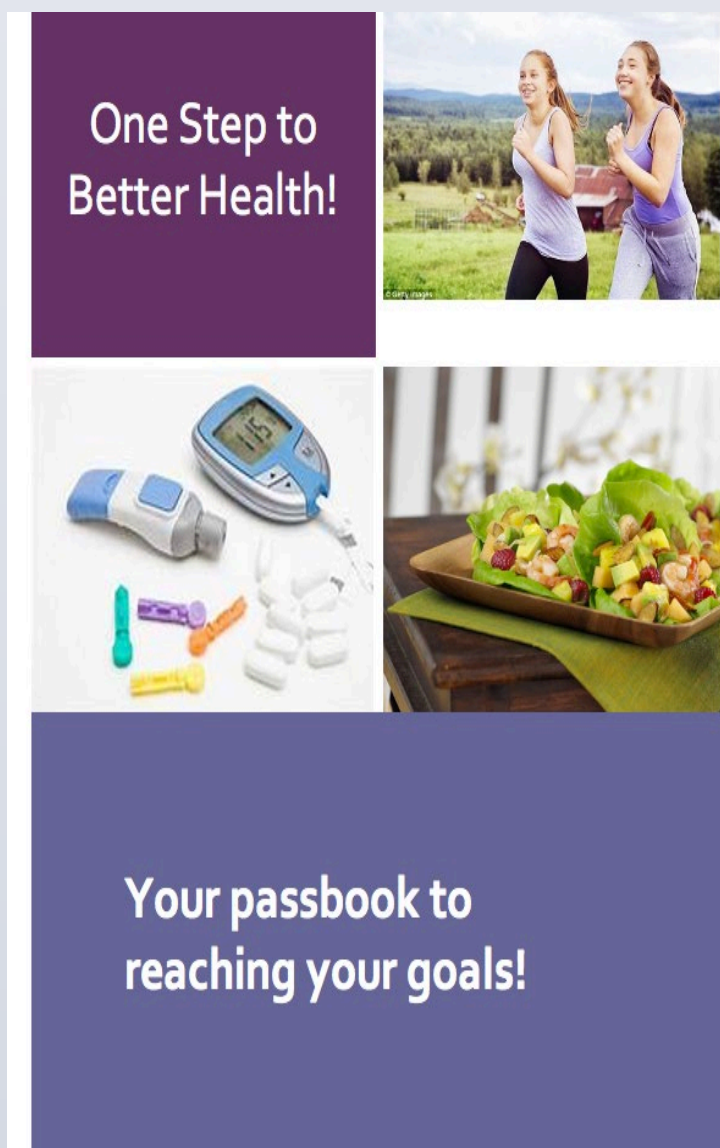


# Video-Led Behavioral Goal Setting for Pediatric Patients with Type 2 Diabetes Mellitus

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## BACKGROUND

- There is a rise of type 2 diabetes in the pediatric population that is largely related to modifiable risk factors.
- For children and adolescents, finding ways to modify weight and incorporate behavioral change interventions is key to helping this vulnerable population manage their obesity and type 2 diabetes.
- Encouraging patients to create behavioral goals that focus on adherence to healthy meal planning, daily exercise, and taking medication as prescribed is critical for the management of diabetes.
- The American Diabetes Association (ADA) “Standards of Medical Care in Diabetes” encourage person-centered collaborative care where agreed upon regimens and behavioral goals are facilitated.



## INTRODUCTION

- **The problem:** A Pediatric Diabetes Center in San Bernardino County aims to meet the American Diabetes Association’s (ADA) recommended best practice standards for Patients with type 2 diabetes.
- **The current state:** Currently, behavior change goals have recently been implemented with only new-onset type 1 and 2 diabetes patients. This leaves a gap in education for current patients diagnosed with type 2 diabetes.
- **The desired state:** To provide easy-to-understand instruction on Specific, Measurable, Attainable, and Time-based (SMART) goal setting to aid in behavioral change interventions for patients with type 2 diabetes, and improve health outcomes. A quality improvement project was initiated to aim to achieve this with use of an education video utilizing the American Diabetes Association guidelines

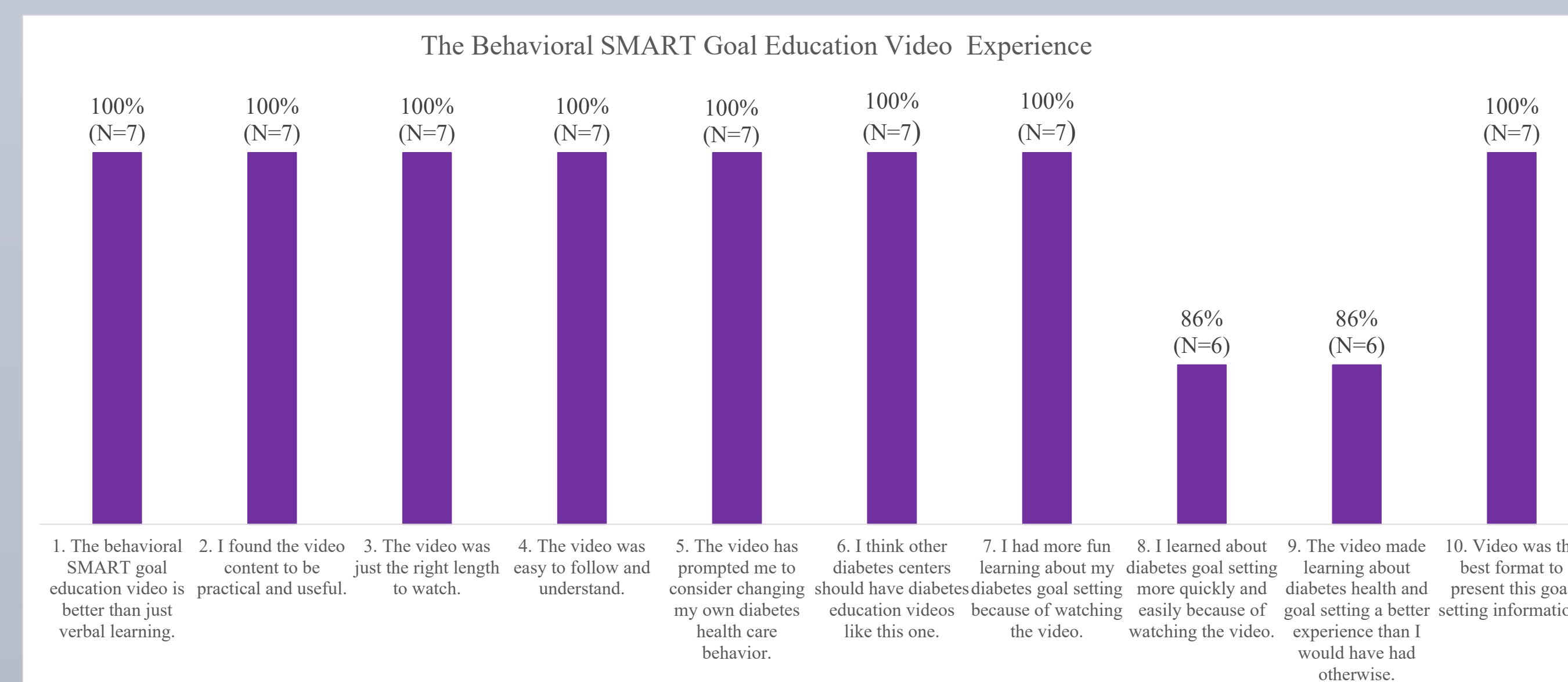
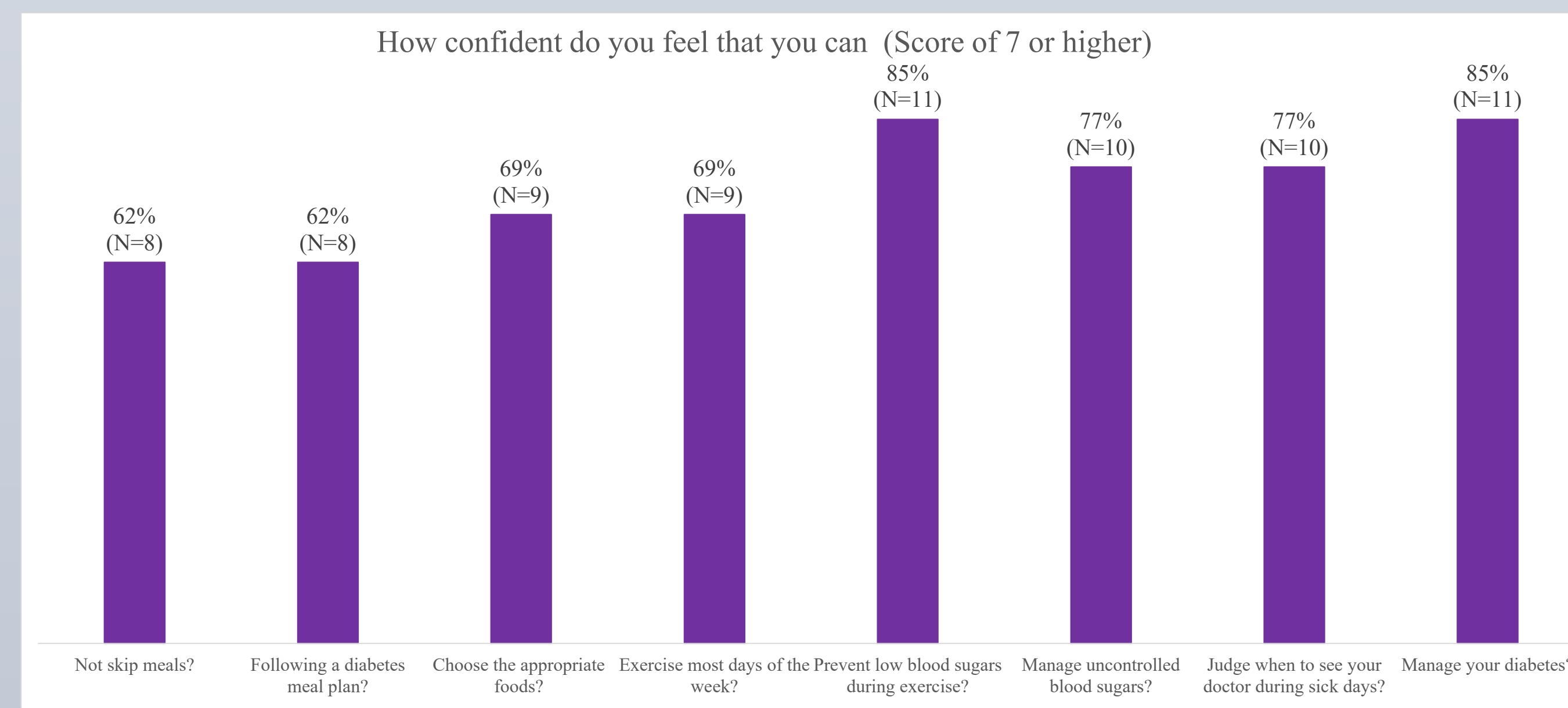


## METHODS

- A convenience sample of 38 patients from an outpatient pediatric diabetes center affiliated with a large academic center in San Bernardino County during January 2022 – May 2022.
  - **Inclusion factors:** Patients age 12 to 20 years with diabetes mellitus 2 for three months or longer who follow up at the outpatient pediatric diabetes center with a hemoglobin (Hb) A1c of 7.6% or higher.
  - **Exclusion factors:** Type 1 Diabetes, New-Onset Type 2 Diabetes after August 31, 2021, Age less than 12, HbA1c less than 7.6%
- A Plan-Do-Study-Act model framework was utilized to guide the implementation process of this project. Recruited participants were asked to watch an approximately 8-minute education video on understanding type 2 diabetes and how to make a SMART goal.
  - A “passbook” was provided to each participant to help track goals.
  - The behavioral goal was documented in the "snapshot" section of the electronic health record for follow up and long-term monitoring.
- Follow-up phone calls to monitor intervention implementation.
- A Pre/Post Self-Efficacy for Diabetes survey, Post-Assessment of Care for Chronic Conditions and a general survey on the impact of the behavioral goal-setting video was conducted to better understand patients' perception of their diabetes management.
- Data collection is currently on-going and involves obtaining post-survey results and reviewing medical records of participants to determine adherence and health outcomes.

## RESULTS

- Total participants N=38 with a mean age of 17.21 years and mean HbA1c of 10.44 %.
- Initial findings suggest that 43% of participants who completed the Pre Self-Efficacy survey have a perceived higher self-efficacy and 18% of participants watched and found the education video content to be practical and useful.



## NURSING IMPLICATIONS

- Nursing can provide support and diabetes education that empowers the patient to live well and optimize their health.
- Nursing has the skillset to build rapport and develop trust that may improve patient engagement in their diabetes care.
- Nursing can utilize video education as a meaningful resource for patient learning to enhance diabetes management.

## STRENGTHS/AREAS FOR IMPROVEMENT

### Strengths:

- Doximity telehealth allowed for ease in dissemination of surveys and video education link thru text message option during the COVID-19 pandemic.
- Use of a control group helps to better understand the impact of the change project impact on patient outcomes.

### Challenges:

- Convenience sampling and small sample size due to poor compliance of patients not being seen in-person.
- Difficult to reach patients at home without a scheduled in-person clinic appointment.
- Reduced scheduling of clinic appointments for patients diagnosed with type 2 diabetes between January 2022-March 2022.

## NEXT STEPS

- Dissemination of project results to all key stakeholders at the Pediatric Diabetes Center.
- Recommend the clinic maintain compliance with the designated Type 2 Diabetes clinic on the first Monday of every month.
- Encourage patients with increased HbA1c over 8% to be seen more frequently than every 6-12 months along with monthly check-in to ensure successful SMART goal achievement.
- Understanding the perception of nurses on the impact of the COVID-19 pandemic may have had on healthcare professionals and the delivery of diabetes care.

## REFERENCES

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Additional references available upon request

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