

# Smart Phrase Impact on Weight Loss Discussion for Adults with Concurrent Down Syndrome and Obesity

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## Introduction

- Obesity
  - energy imbalance leading to the accumulation of adipocytes
  - chronic inflammation and development of insulin resistance and type 2 diabetes mellitus (T2DM)<sup>1</sup>
  - can lead to a reduction in life expectancy<sup>2</sup>
- Individuals with Down Syndrome (DS):
  - increased rates of obesity and T2DM
- Retrospective cohort study of U.K. electronic health records (EHR)
  - mean BMI for patients with DS was higher than control at younger ages<sup>3</sup>
  - median age of T2DM diagnosis was 38 years in patients with DS compared to 53 years in the control group<sup>3</sup>
- Goal: Implement EHR smart phrase to encourage discussion of ways patients with concurrent DS and obesity can incorporate dietary modification and physical activity into their lives

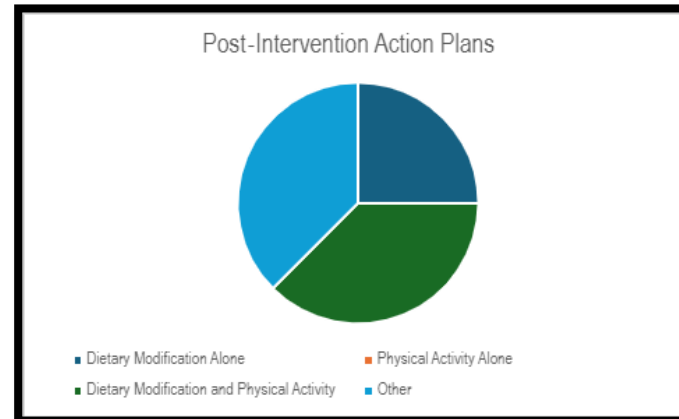
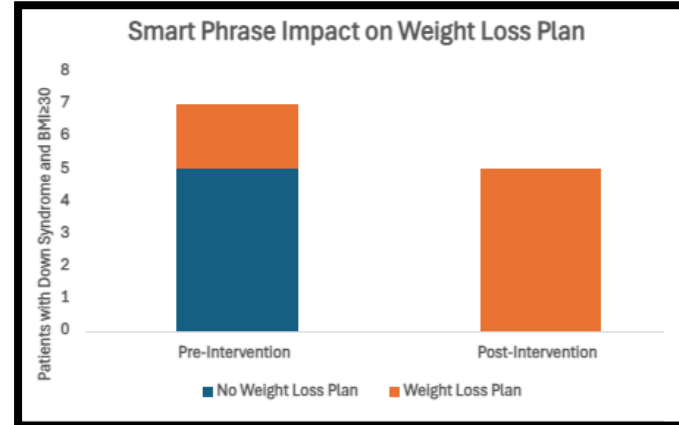
## AIM

Increase weight loss discussion in adults with Down Syndrome and obesity by 50% by August 1st, 2024 using a new smart phrase based on GLOBAL Down Syndrome Guidelines.

## Methods

Adult patients with concurrent Down Syndrome and obesity were reviewed through chart review for outpatient clinic over 4 months with dietary modification and/or physical activity discussion between provider and patient being monitored. Following implementation of the electronic health record smart phrase for this clinic we reviewed dietary modification and/or physical activity discussion prevalence over 4 months.

## Results



## Discussion

Following the implementation of the smart phrase there was an over 70% increase in the prevalence of weight loss discussion between providers and adults with concurrent Down Syndrome and obesity, with an increase in the proportion of patients having a discussion about dietary modifications in addition to physical activity. This smart phrase is a useful tool for reminding healthcare providers to discuss weight loss plans.

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