



Better data, better outcomes: Weight management

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Agenda



What are you currently missing?



Weight Management Experience Survey

- Overview of survey
 - Insights & use cases
-



The Evidation Platform



Questions



Most real-world data is episodic and fragmented, revealing only a small fraction of individuals' health experiences



A physician recommends that a patient starts taking weight loss medication at annual physical



A year later, the patient returns for an annual physical. They report they stopped taking their medication due to side effects.

Real-world data collected directly from individuals, provides context, and illuminates a more complete picture of health



A physician recommends that a patient starts taking weight loss medication at annual physical



Changes in sleep



Changes in mood



Impact of side effects



Changes in activity



A year later, the patient returns for an annual physical. They report they stopped taking their medication due to side effects.

Evidation uses a layered approach to create novel real-world datasets

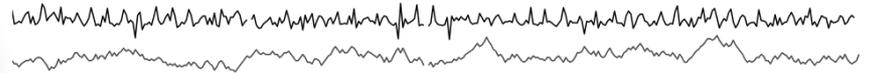
Data collected by Evidation is collected directly from individuals, through active and passive means, to create a more complete and nuanced picture of health.



Layer 1: Expert-designed in-depth surveys.



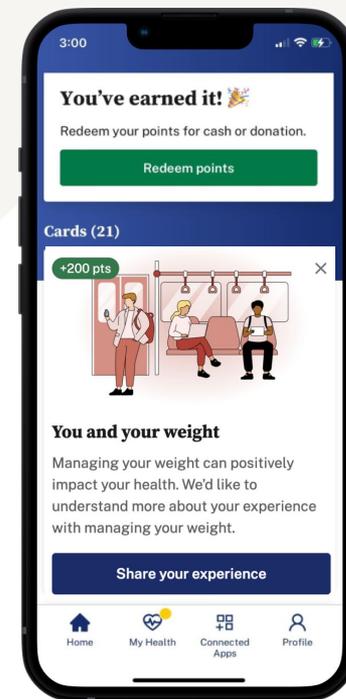
Layer 2: Repeated historical measures of experience, behaviors, and outcomes.



Layer 3: Dense objective measures of behavior and physiological functioning from consumer devices.

Weight Management Experience Survey Overview

- **Objective:** Better understand weight management perceptions, behaviors, experiences with prescription medications, and quality of life
- **Setting:** Open to any member of the Evidation Community — the largest, most diverse virtual research cohort in the U.S. with nearly 5 million people
- **Scale:** 100,000+ Evidation Members enrolled in the survey so far
- **Timing:** Data collection is ongoing - the dataset will continue to grow. Findings presented are from June through August 2024
- **Privacy and trust:** Participants explicitly opted in to share their survey responses along with retrospective data collected from digital devices



Who has participated in the program?

- **111,000+** participants to date*
- **74%** White
- **76%** Female
- **71%** College educated +
- **34%** Household income > \$100,000/yr



Participant Groups

Current Weight Status

- **32%** Overweight
- **34%** Obese

Current Weight Goal

- **77,063 (69%)** trying to lose weight

Prescription Medication Use

- **11,625** have used an Rx for weight management

Injectable GLP-1 Use

- **3,732** currently using an injectable GLP-1

* Data has been filtered and cleaned to represent participants with demographic data and reflect trustworthy responses



Layer 1: Expert-designed in-depth surveys



Layer 2: Repeated historical measures of experience, behaviors, and outcomes



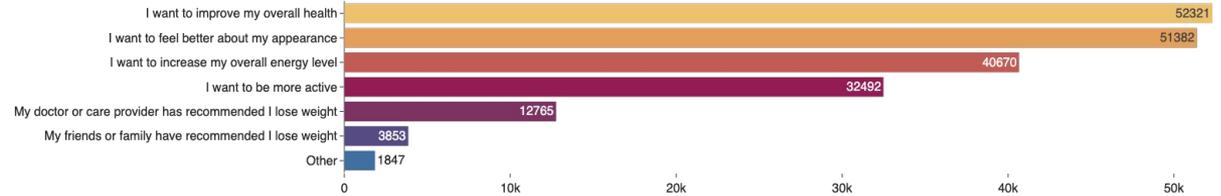
Layer 3: Dense objective measures of behavior and physiological functioning from consumer devices

N= 60,206 participants who are trying to lose weight and are overweight or obese (BMI > 25)

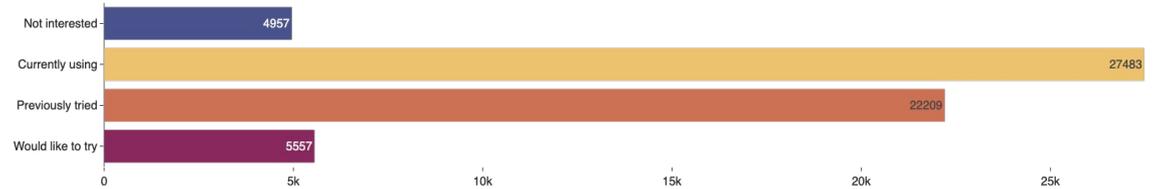
LAYER 1: SURVEY FINDINGS

Weight loss experience

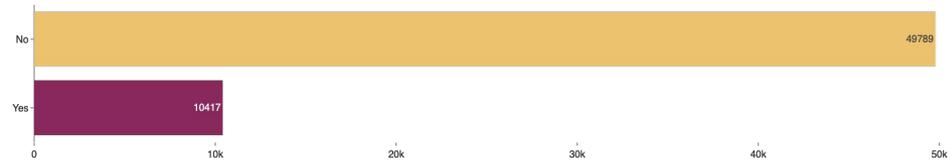
Most are motivated to lose weight to improve their health and/or their appearance



46% are currently using a diet or exercise app



Only 17% have used at least one type of Rx medication for weight management

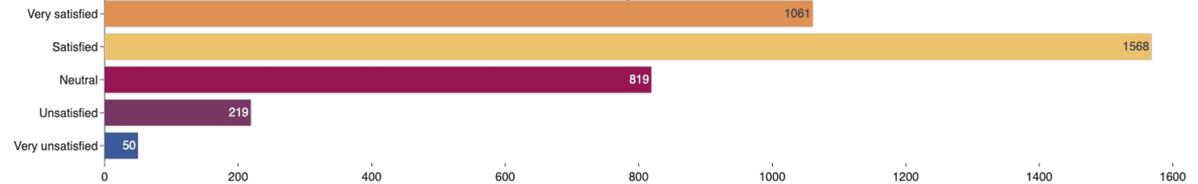


N= 3,732 participants who are currently on an injectable GLP-1 treatment

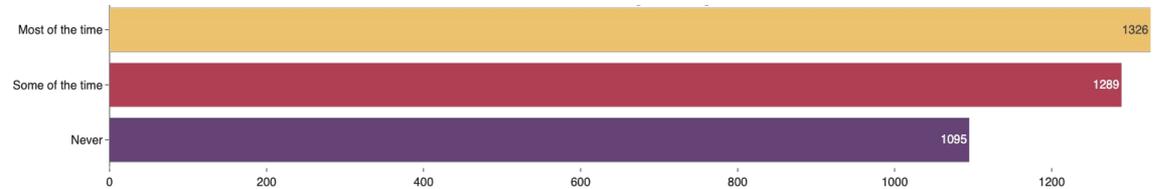
LAYER 1: SURVEY FINDINGS

GLP-1 use: satisfaction and perceptions

70% are satisfied or very satisfied with the treatment, while 7% are unsatisfied or very unsatisfied with their treatment



70% are hesitant to share that they are using a prescription treatment for weight management some of the time, or most of the time



N= 2,243 participants who have stopped taking an injectable GLP-1 treatment

LAYER 1: SURVEY FINDINGS

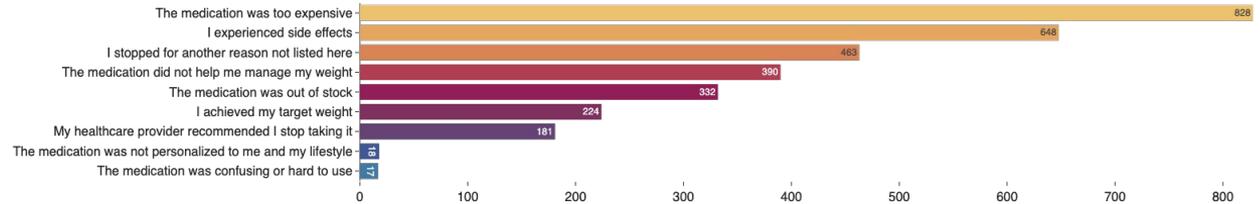
GLP-1 use: discontinuation

The most common reason for treatment discontinuation was cost:

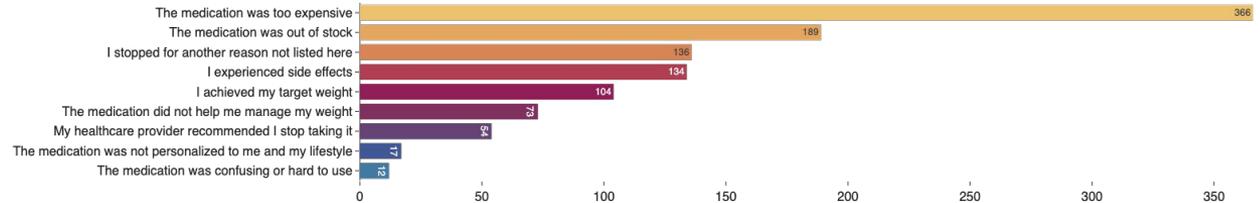
- 46% for Semaglutide
- 64% for Tirzepatide

Stock issues seem to impact Tirzepatide users (33%) more than Semaglutide users (19%)

Reasons for stopping injectable semaglutide (Wegovy or Ozempic)



Reasons for stopping injectable tirzepatide (Zepbound or Mounjaro)





Layer 1: Expert-designed in-depth surveys



Layer 2: Repeated historical measures of experience, behaviors, and outcomes



Layer 3: Dense objective measures of behavior and physiological functioning from consumer devices

Layering longitudinal mental health data

We explored the relationship between injectable GLP-1 use and changes in mental health by taking advantage of our longitudinal Well-Being Survey, which is fielded every 60 days and includes the PHQ-8 and GAD-7.



5,000+ participants

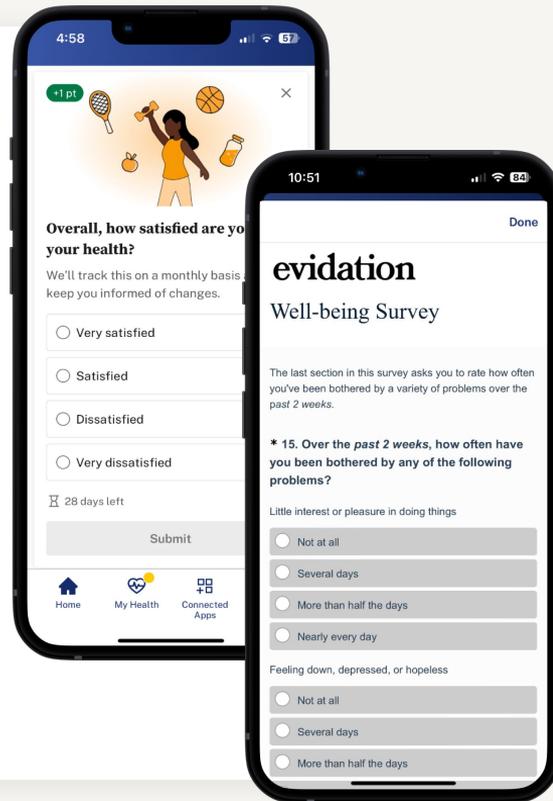


28,000 total Well-Being Surveys

→ **11,500** observations before starting treatment

→ **12,100** observations while on treatment

→ **4,400** observations after stopping treatment



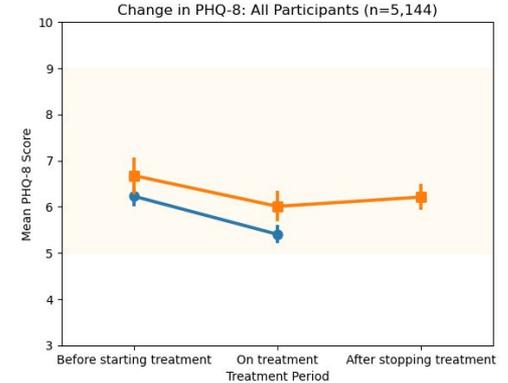
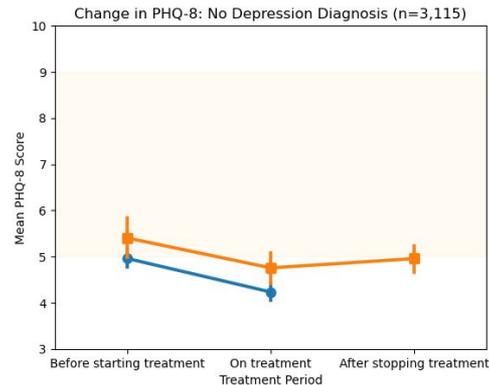
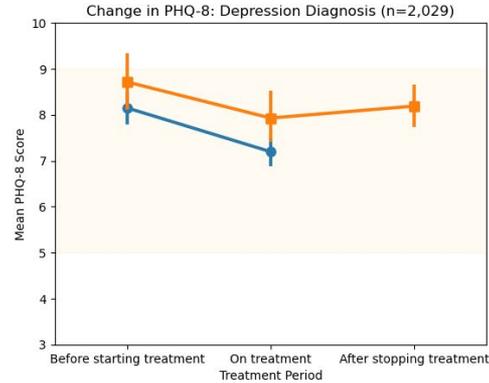
N= 5,144 participants who are on, or have stopped, a single injectable GLP-1 medication

LAYER 2: REPEATED MEASURES

GLP-1 use: depression

On average across all participants, depression level, as measured by the PHQ-8, decreases from pre-treatment levels. However, there is a slight bounce back after treatment is stopped.

This same relationship is observed for participants who self-report a depression diagnosis and those who do not have a diagnosis.



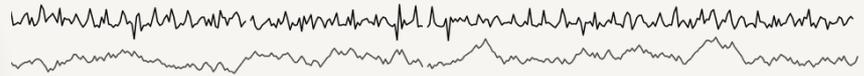
Has stopped treatment (n=3,525)
Currently on treatment (n=1,619)



Layer 1: Expert-designed in-depth surveys



Layer 2: Repeated historical measures of experience, behaviors, and outcomes



Layer 3: Dense objective measures of behavior and physiological functioning from consumer devices

A look at the everyday functional impact

We explored how treatment with GLP-1s impact objective longitudinal measures on behavior and physiology as captured by connected devices such as scales and smartwatches.



2,200+ participants

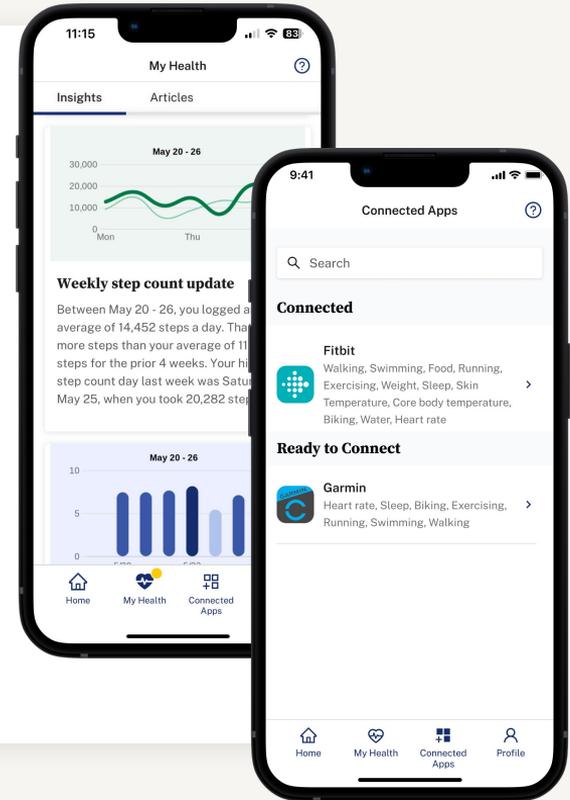


1.5M+ observations from connected devices

→ **751,000+** days with steps data

→ **310,000+** days with sleep data

→ **452,000+** days with resting heart rate data

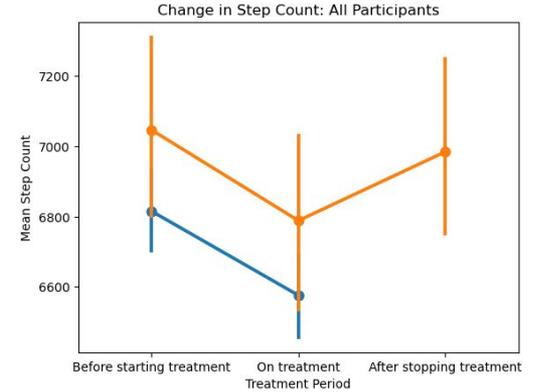
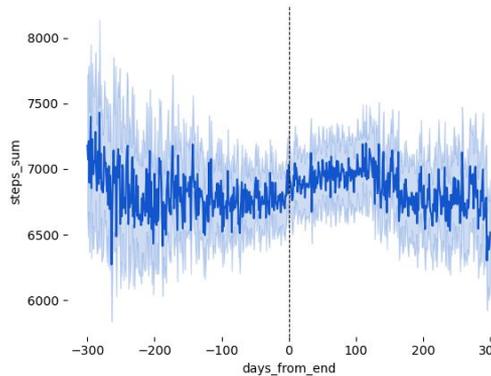
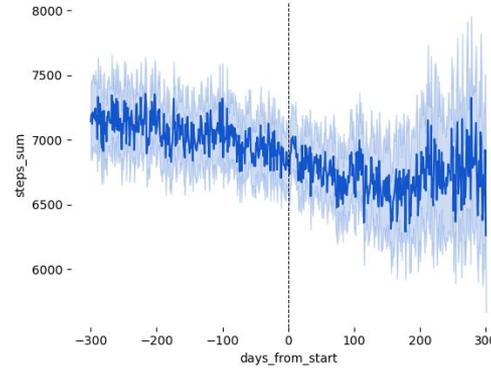


N= 2269 participants who have at least 200 days of steps data per period (before, during, or after treatment)

LAYER 3: EVERYDAY FUNCTIONAL IMPACT

GLP-1 use: daily step count

Somewhat counterintuitively, we observe **an inverse relationship between mean daily step count and medication use.**



Has stopped treatment (n=130)
Currently on treatment (n=1139)

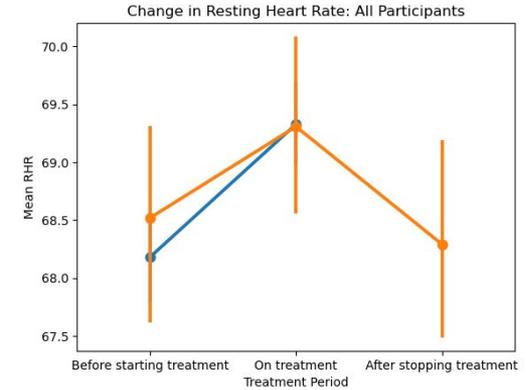
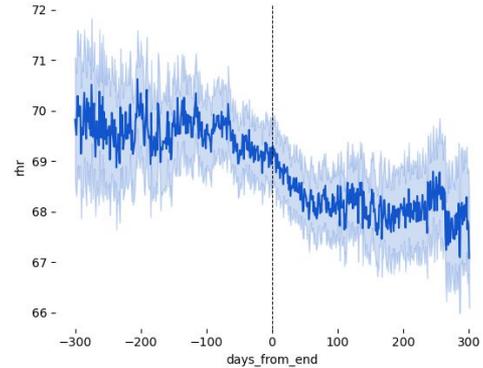
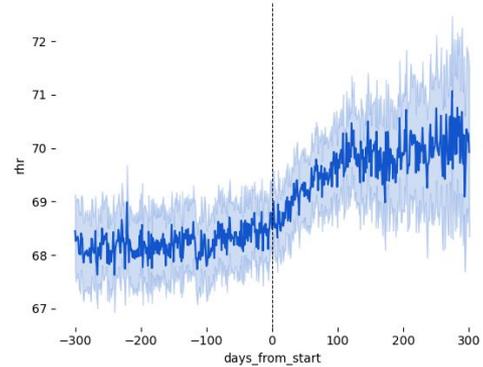
N= 807 participants who have at least 200 days of heart rate data per period (before, during, or after treatment)

LAYER 3: EVERYDAY FUNCTIONAL IMPACT

GLP-1 use: resting heart rate

Somewhat counterintuitively again, we observe an **increase in resting heart rate** during medication use.

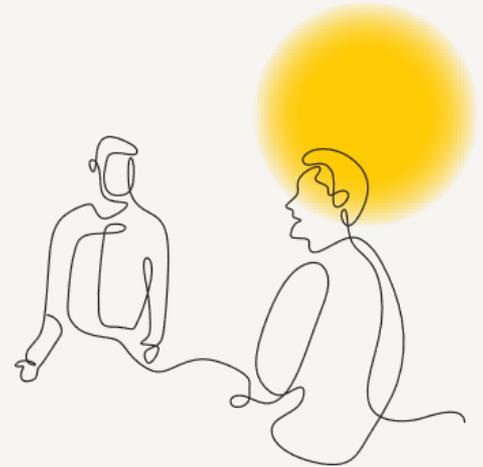
This effect on resting heart rate is also observed in the literature, albeit the exact mechanism is unknown.



Has stopped treatment (n=732)
Currently on treatment (n=75)

Key takeaways

- Surveys deployed **directly to individuals** are necessary to accurately capture experiences and perceptions
 - Ex: 70% of respondents are hesitant to share that they are using a prescription treatment for weight management
- A direct connection to individuals allows for **re-engagement** and the ability to capture **longitudinal insights**
 - Ex: Depression and anxiety levels bounce back after stopping treatment with GLP-1s
- **Passively collected data** from digital devices tells a story not possible with traditional data collection tactics
 - Ex: Observed reduction in mean daily step count for individuals actively using GLP-1s



Where can we go next?

Deeper analysis of the current dataset

- Demographics, SDoH, symptoms, etc.

Continued growth of the current dataset

- Ongoing data collection

Custom surveys

- Use of virtual care, compounding pharmacies, diet, etc.

Data linkage

- Claims, EHR, genomics, etc.



Evidation's provides an ongoing connection to individuals and their day-to-day health, symptoms, influences, and experiences

Patient Experience Datasets



- Integrate one time survey and retrospective wearable data with claims or EHR to better understand healthcare utilization and build detailed patient journeys

[Learn more →](#)

Patient Insights



- Ask individuals (one time, or recurring) about their weight management experiences -including healthcare utilization, medication experiences, and perceptions

[Learn more →](#)

Real-World Studies



- Launch prospective studies with higher frequency data collection to better understand day to day dynamics of weight management

[Learn more →](#)

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