



Virta Reversal Services

OPEH&W Health Plan

August 22, 2025

What is Virta?

Reversal care: Virta is a virtual clinic for reversing:

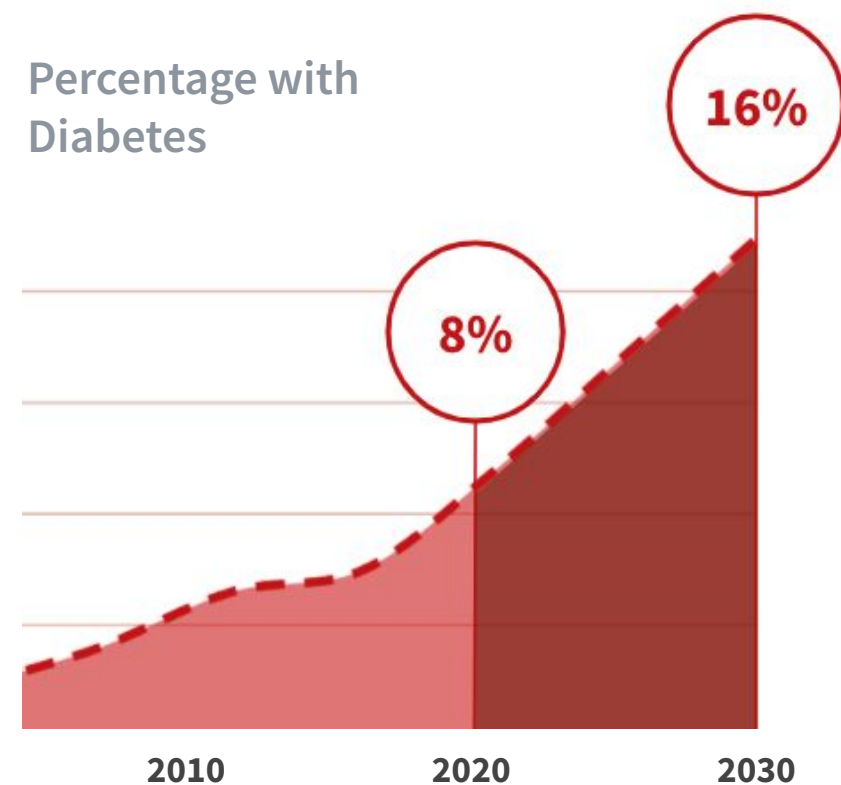
- Obesity & overweight
- Type 2 diabetes
- Prediabetes

We address the root cause of these conditions through nutrition & clinician-led care.

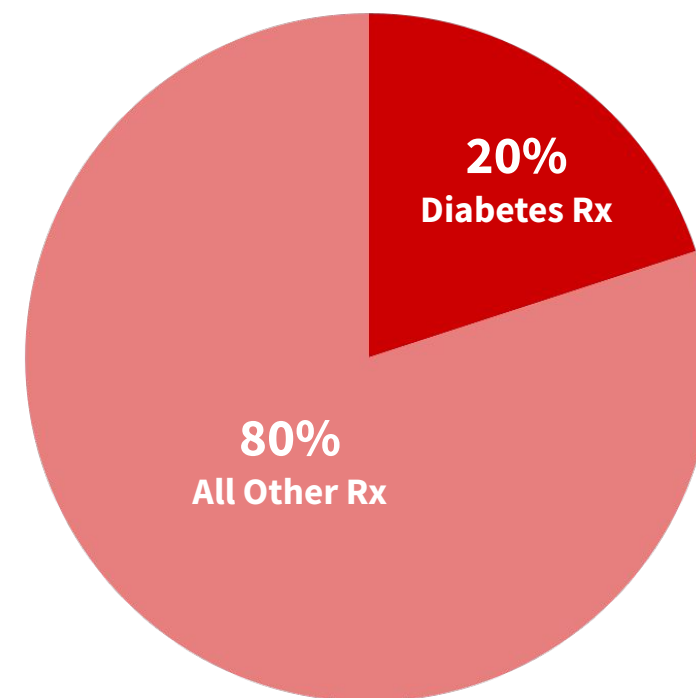
Outcomes for all: Virta addresses each member's unique biochemistry and SDOH, making behavior change rapid and sustainable. 100% at risk for meaningful results.



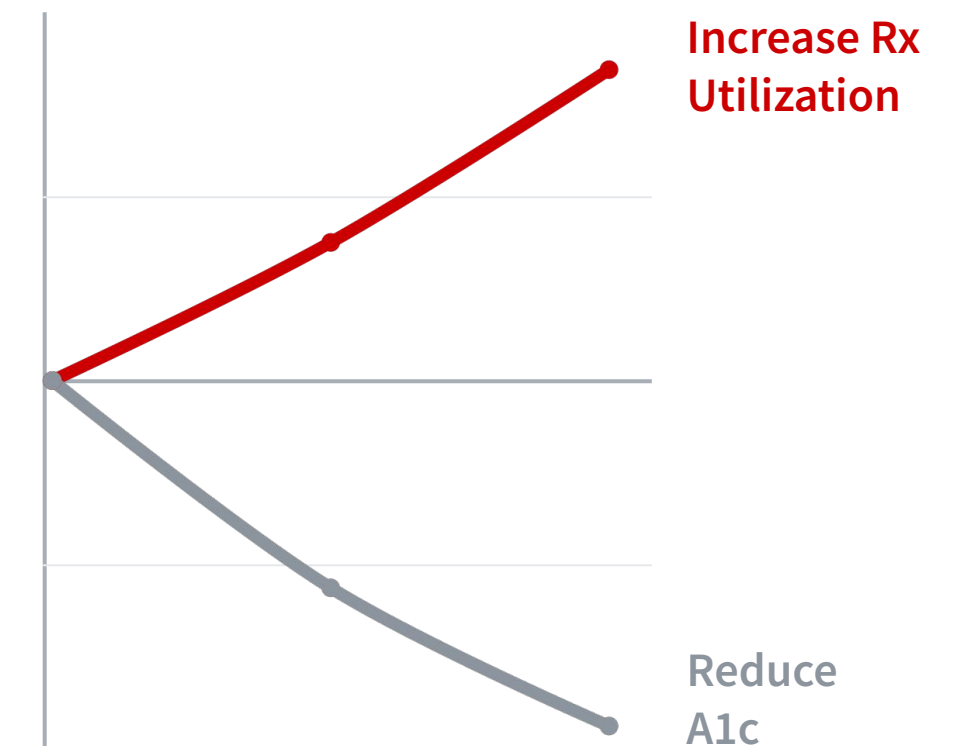
The Diabetes Epidemic is growing and cost is increasing



Diabetes prevalence is doubling nearly every decade ¹



Diabetes drugs are a top 3 Rx cost driver in the US ²



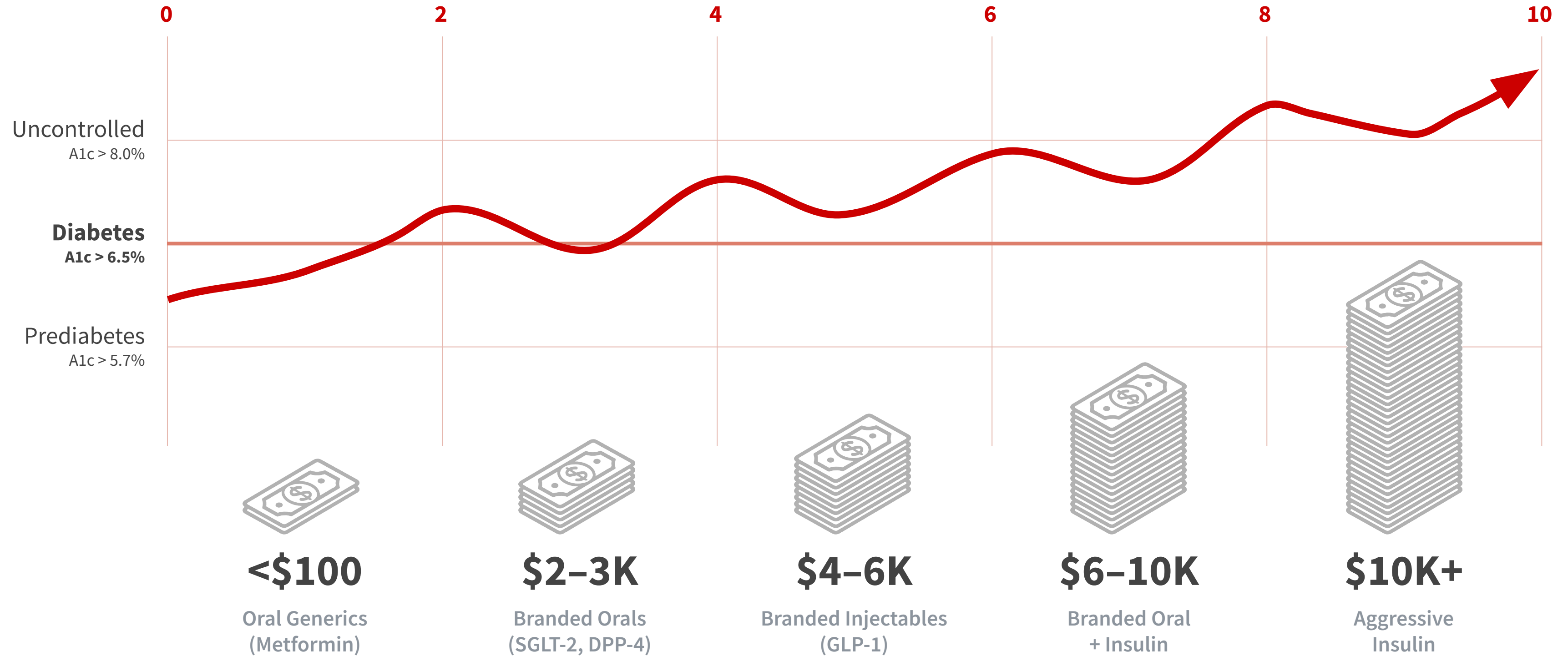
Diabetes management does nothing to address prevalence or Rx cost ³

1. CDC. Long Term Trends in Diabetes. April 2017; Rowley, WR et al, Diabetes 2030: Insights from Yesterday, Today, and Future Trends. Population Health Management. 2017 Feb 1; 20(1): 6-12.

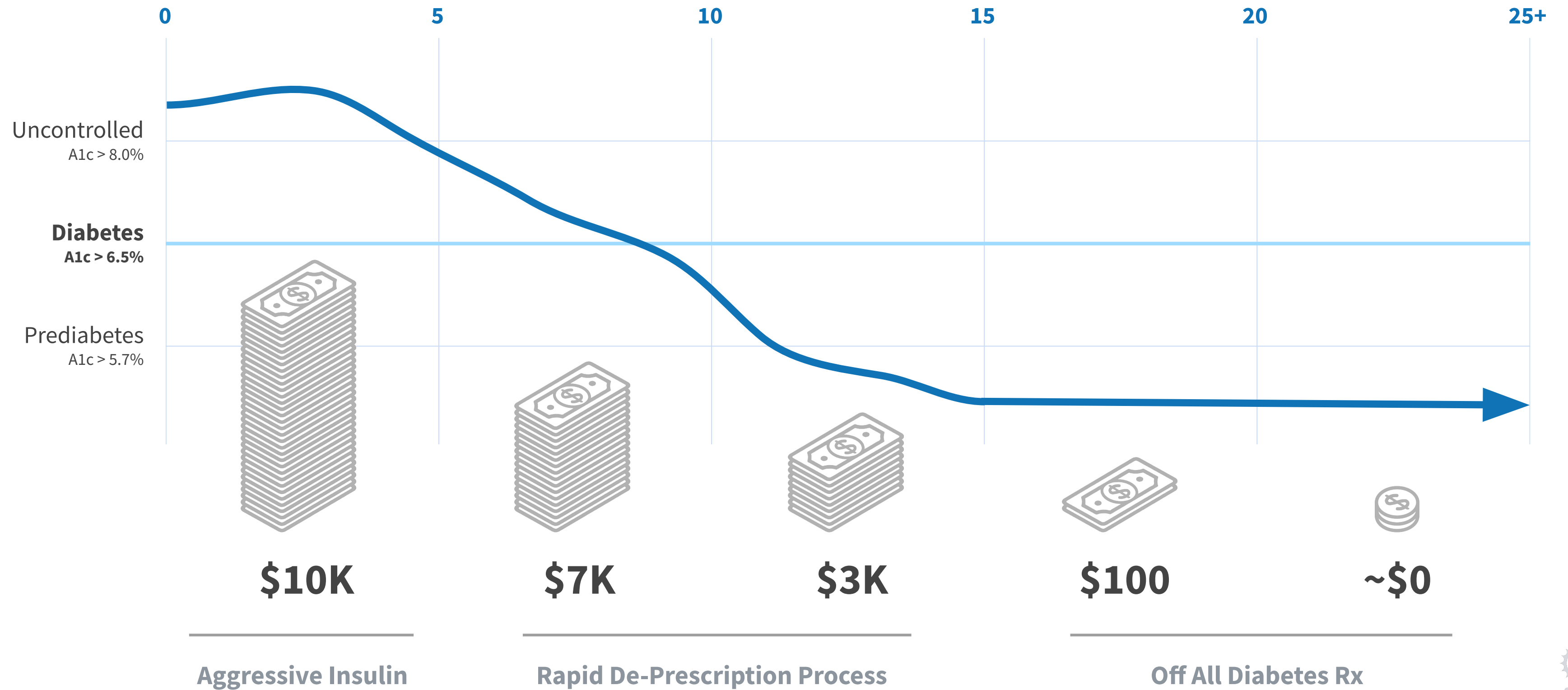
2. Taylor, S. Diabetes Care 2020;43(10):2330-2332

3. National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases. Managing Diabetes. December 2016

Years in Diabetes Management



Weeks in Diabetes Reversal



Virta's impact on 100% of diabetes patients at 1 year



Hallberg SJ et al. Diabetes Therapy. 2018;9(2):583-612. For patients completing 1 year of treatment.

The difference between diabetes reversal vs. management

	Standard Care ¹ One Year Completers	Diabetes Management	Virta ¹ One Year Completers
A1c	↑ 0.2	↓ 0.6 ² One year completers	↓ 1.3
Rx	↑ 7%	↑ 30% ³ Increase in medication utilization	↓ 59%
Weight Loss	0 lbs	↓ 1 lb ⁴ 12 week completers	↓ 31 lbs

1. Hallberg SJ et al. Diabetes Ther. 2018; 9(2): 583-612. Outcomes among one year completers (83% retention in Virta Treatment; 90% retention in Standard Care). Rx refers to the net change in diabetes-specific prescription volume at one year (which excludes metformin) compared to baseline and multiple insulins prescribed to a patient were counted as one rx.

2. Bollyky JB et al. JMIR Diabetes. 2019; 4, e14799 (Outcomes among one year completers (44% retention in Livongo).

3. Diabetes-related prescription utilization according to five-client, two-year DiD analysis (slide 34). Livongo presentation at EBPA 2018.

https://www.ebpa.org/resources/presentations/2018/Livongo_EBPA_20SEP2018.pdf

4. Bollyky JB et al. J Diabetes Res. 2018; 3961730. (Outcomes at 12 weeks for Livongo + scale group).

Virta is additive to the patient's existing care team, reporting progress

Virta doesn't require any additional work from PCP

Focused on metabolic disease reversal, elimination of Rx

- Virta manages diabetes-specific medications
- PCP maintains relationship, managing comorbidities
- Provider to Provider consultation (*as requested*)

Virta Reporting to PCPs

Virta faxes PCP when patient milestones are reached:

- Patient enrollment
- 14 days post-enrollment
- Rx deprescriptions
- Patient release



Member experience: Enrollment



Marketing & Enrollment

Virta and customer align on plan for multi-channel marketing campaign, eligibility checking, and enrollment

Intro to Clinical Team

Virta clinical team runs a clinical intake call to take patients medical history and ensure readiness for care

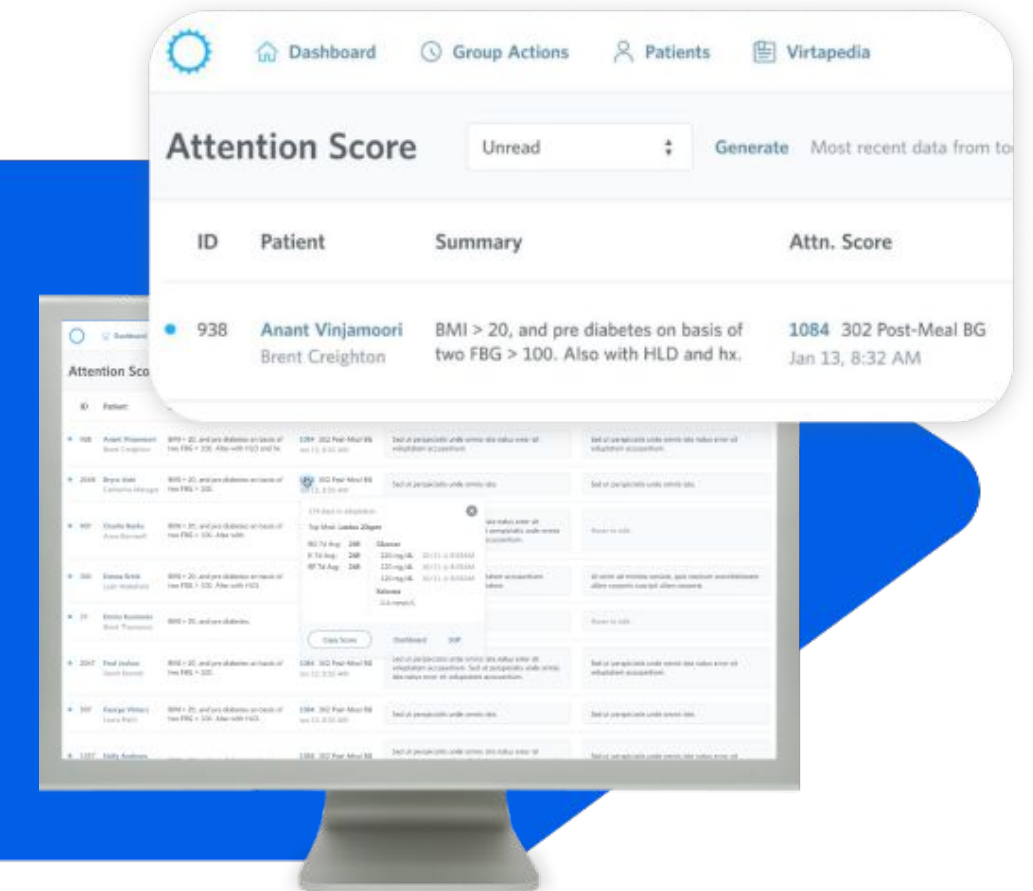
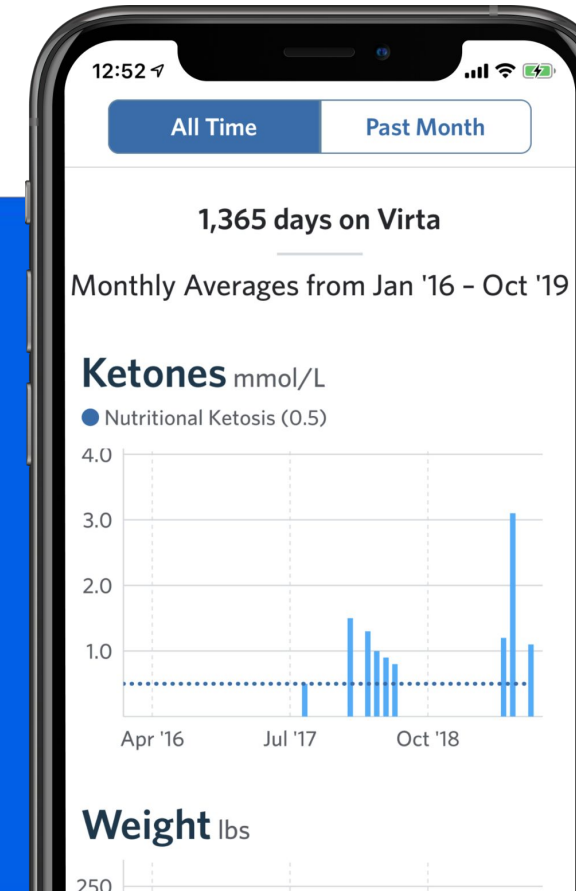
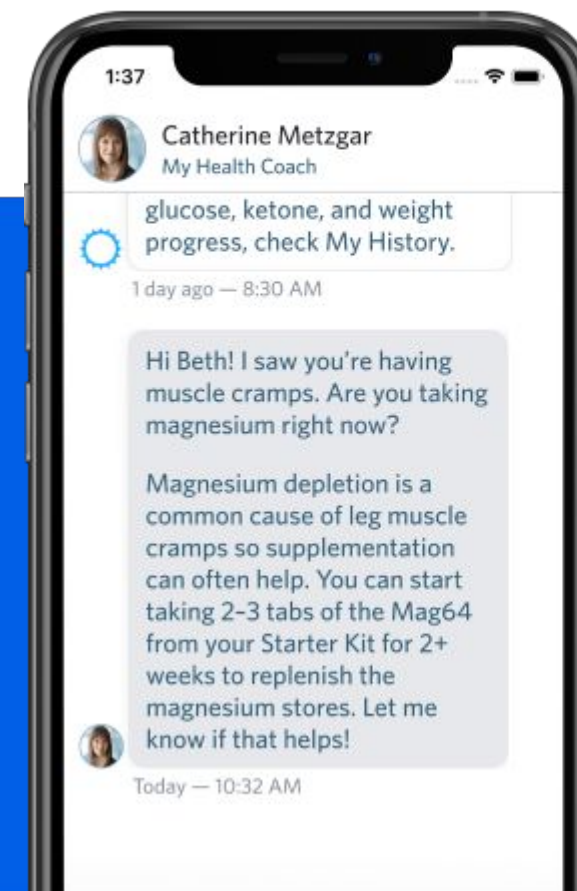
Medical Equipment and Supplies

Virta delivers remote monitoring equipment, including connected scale, testing strips, and reading materials

Guided Education Curriculum

Patients review easy-to-understand video and written e-learning resources that prepare them for care

Member experience: Clinical care



Nutritional changes

Patients engage in personalized carbohydrate restriction. Encouraged to eat until full; no calorie counting

Health Coaching

Patients engage in frequent chats with dedicated health coach team, with near daily interactions, tailored to the patient's preferences

Biomarker Logging

Patients track ketones, weight, and subjective factors such as mood and hunger

Provider-led Deprescription

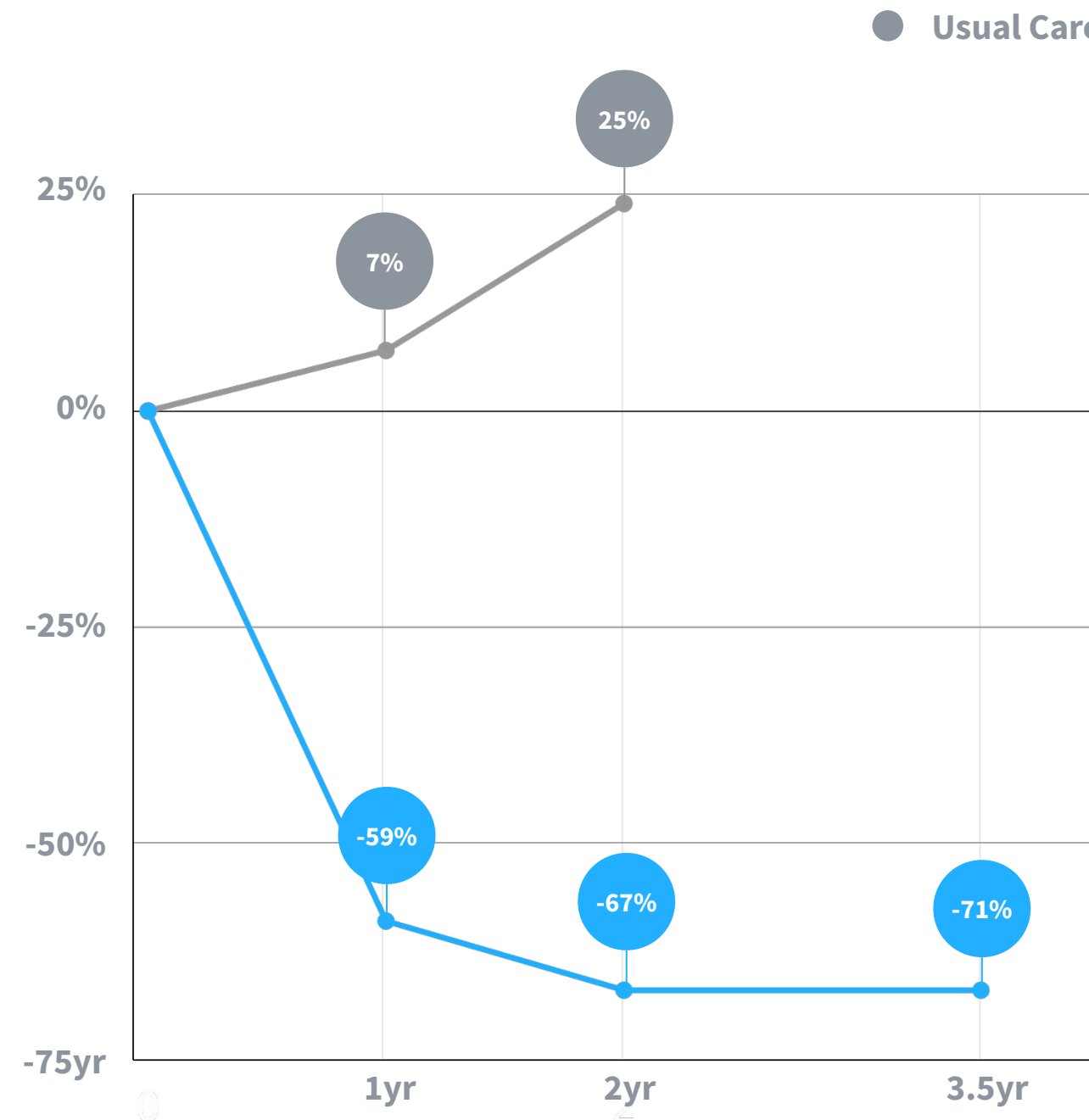
Providers monitor patient biomarkers and focus on safe medication deprescription – getting people off of costly drugs like insulin or GLP-1s

* Providers = physicians & nurse practitioners



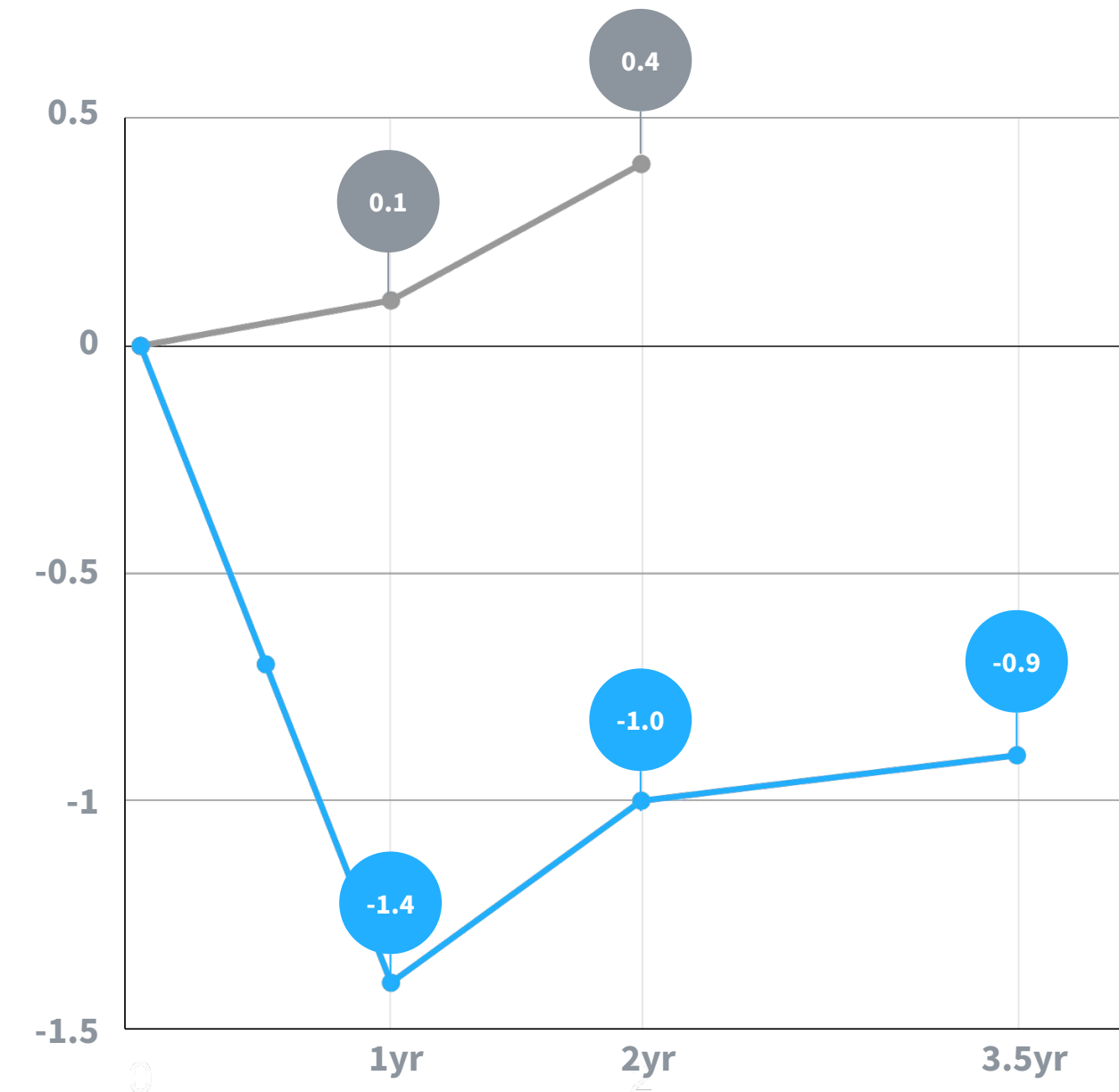
Sustained outcomes at 3.5 years

Note: Year 0-2 data came from clinical trial with control group. Year 2+ data came from follow-up study without control group.



Diabetes Prescriptions

Percent Change from Baseline



HbA1c

Point Change from Baseline

Outcomes from a 2-year clinical trial were previously reported in Hallberg SJ et al. Diabetes Therapy. 2018; 9:583-612 and Athinarayanan SJ et al. Frontiers in Endocrinology. 2019; 10:348 where 262 participants selected the Virta Treatment and 87 participants selected to receive usual care. At the end of the 2-year trial, 169 of 194 Virta group participants consented to participate in a 3-year follow up study. Outcomes 1.5 years into follow up (3.5 years since initial trial enrollment) were presented at ENDO 2020 (McKenzie AL et al. Journal of the Endocrine Society. 2020; 4(Supplement 1):SUN-LB113). "Diabetes-Specific Prescriptions" is defined as the total number of diabetes medications prescribed to the group, excluding metformin.

Virta’s published results show rapid and sustained improvement

	10 Weeks	1 Year	2 Years	3.5 Years
A1c Reduction (Points)	1.0	1.3	0.9	0.6
Diabetes-specific medications eliminated (%)	57%	63%	67%	71%
Weight Loss (%)	7%	12%	12%	9%

Completers analyses from: 1. McKenzie AL et al. JMIR Diabetes. 2017;2(1):e5. 2. Hallberg SJ et al. Diab Ther. 2018;9:583-612. 3. Athinarayanan SJ et al. Frontiers in Endocrinol. 2019;10:348.
Diabetes-specific medications exclude metformin as it is recommended for use in prediabetes and other conditions.



Virta improves metabolic health beyond T2D over 2 years

		Standard Care	Virta
Metabolic Disease	A1c (%)	↑ 0.5	↓ 0.9
	Weight	↑ 5%	↓ 12%
	HOMA-IR	↑ 49%	↓ 32%
Inflammation	hsCRP	↓ 13%	↓ 35%
Cardiovascular	Systolic Blood Pressure	0%	↓ 5%
	Diastolic Blood Pressure	0%	↓ 4%
	Triglycerides	↓ 12%	↓ 22%
Liver	NAFLD: Liver Fat Score	↑ 20%	↓ 74%
	NAFLD: Fibrosis Score	↑ 75%	↓ 71%
Kidney Function	Annual Rate of eGFR change	-0.68	0.84
Medication Changes	Patients on Diabetes-Specific Meds	↑ 18%	↓ 52%
	Patients on Insulin	↑ 18%	↓ 62%
	Patients on Blood Pressure Meds	↑ 11%	↓ 14%

Two year outcomes. Athinarayanan SJ, Adams RN, Hallberg SJ, et al. Long-Term Effects of a Novel Continuous Remote Care Intervention Including Nutritional Ketosis for the Management of Type 2 Diabetes: A 2-year Non-randomized Clinical Trial. *Frontiers in Endocrinology*. 2019; 10:348. doi: 10.3389/fendo.2019.00348



State members see sustained clinical improvements at 90 days on Virta



Average eA1c change



Medication Change



Weight Change

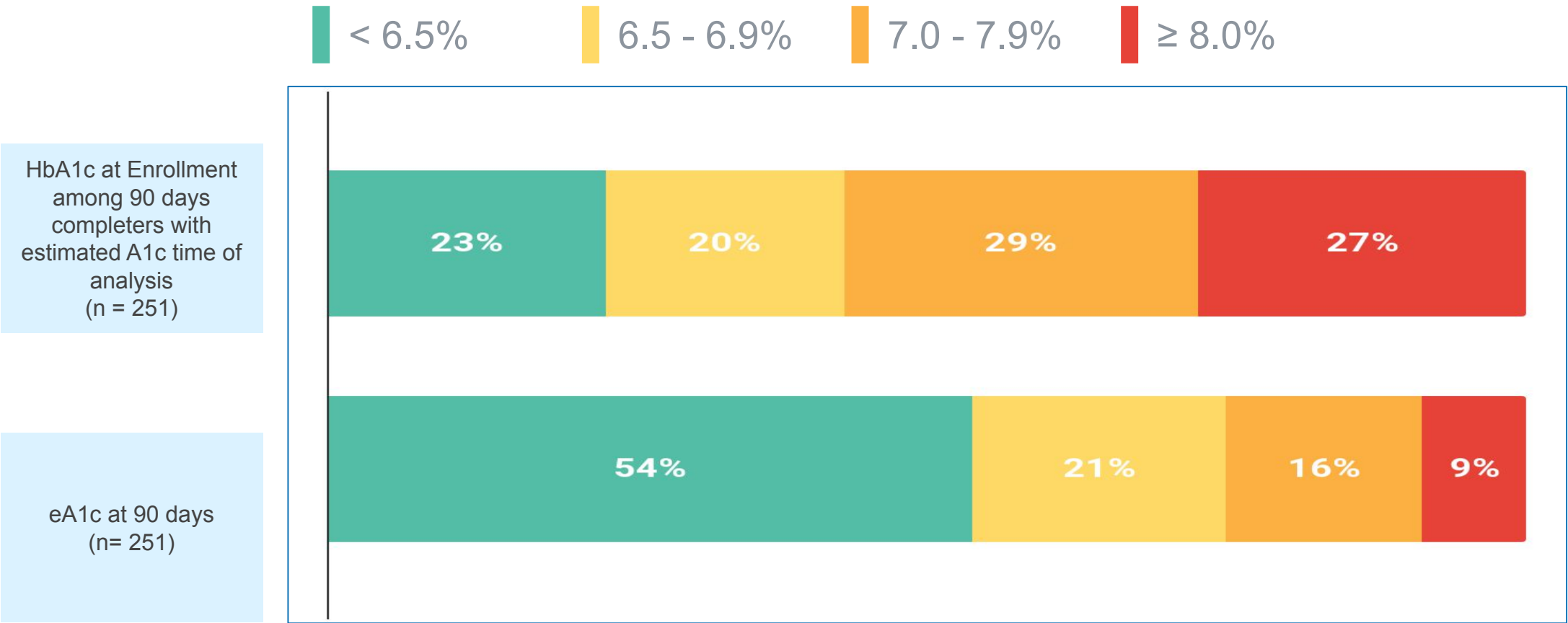
Virta ¹ (n=306)		
<div></div> <div>-0.8</div> <div>from 7.4 to 6.6% ¹</div>	<div></div> <div>-36%</div> <div>119 of 329 eliminated</div>	<div></div> <div>-5.1%</div> <div>from 228.6 lbs to 216.9 lbs</div>
Usual Care ²		
<div></div> <div>+0.2</div> <div></div>	<div></div> <div>+7%</div> <div></div>	<div></div> <div>+0.6%</div> <div></div>

1. Virta internal EMR data for State patient population with type 2 diabetes enrolled ≥90 days at time of analysis (n=306). Results as of 6/21/2023. Baseline HbA1c was laboratory measured. In the absence of follow up laboratory data, eA1c is derived from a proprietary model which estimates A1c on each day based on baseline information and actual biomarker data recorded on each patient in the last 120 days. The median absolute error is 0.23. 26 patients do not have a calculated estimated A1c on the given day of measurement. Medication data includes all diabetes-related medication other than metformin. Patients prescribed multiple drugs within the same class are counted as one prescription and only considered eliminated when both drugs are de-prescribed.

2. Hallberg et al. Diabetes Ther. 2018; 9(2): 583-612. Outcomes among one year completers. Metformin is excluded from diabetes-specific medications.



State patients are improving their blood sugar and eliminating diabetes-specific medications



Medication Change

-36%

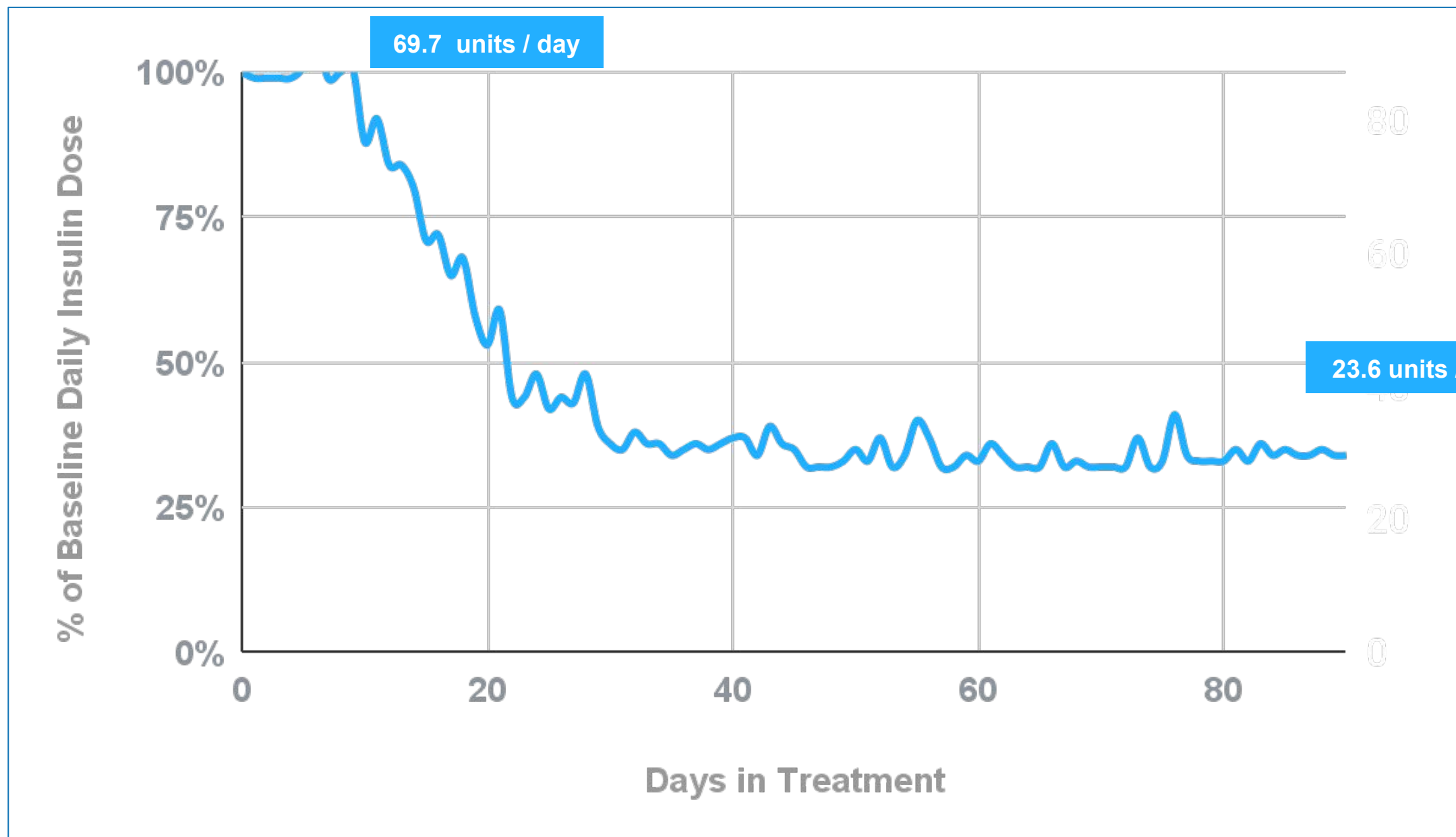
119 of 329 of diabetes-specific medications eliminated

Usual Care: 7% increase in T2D meds₃

Virta internal EMR data for State patient population with type 2 diabetes enrolled ≥90 days at time of analysis (n=306). Results as of 6/21/2023. Baseline HbA1c was laboratory measured. In the absence of follow up laboratory data, eA1c is derived from a proprietary model which estimates A1c on each day based on baseline information and actual biomarker data recorded on each patient in the last 120 days. The median absolute error is 0.23. 26 patients do not have a calculated estimated A1c on the given day of measurement. Medication data includes all diabetes-related medication other than metformin. Patients prescribed multiple drugs within the same class are counted as one prescription and only considered eliminated when both drugs are de-prescribed.

State patients have reduced their insulin dosages by 66%, or 46 units/day

Usual Care: 16% increase in insulin ²



Reducing insulin improves quality of life for patients

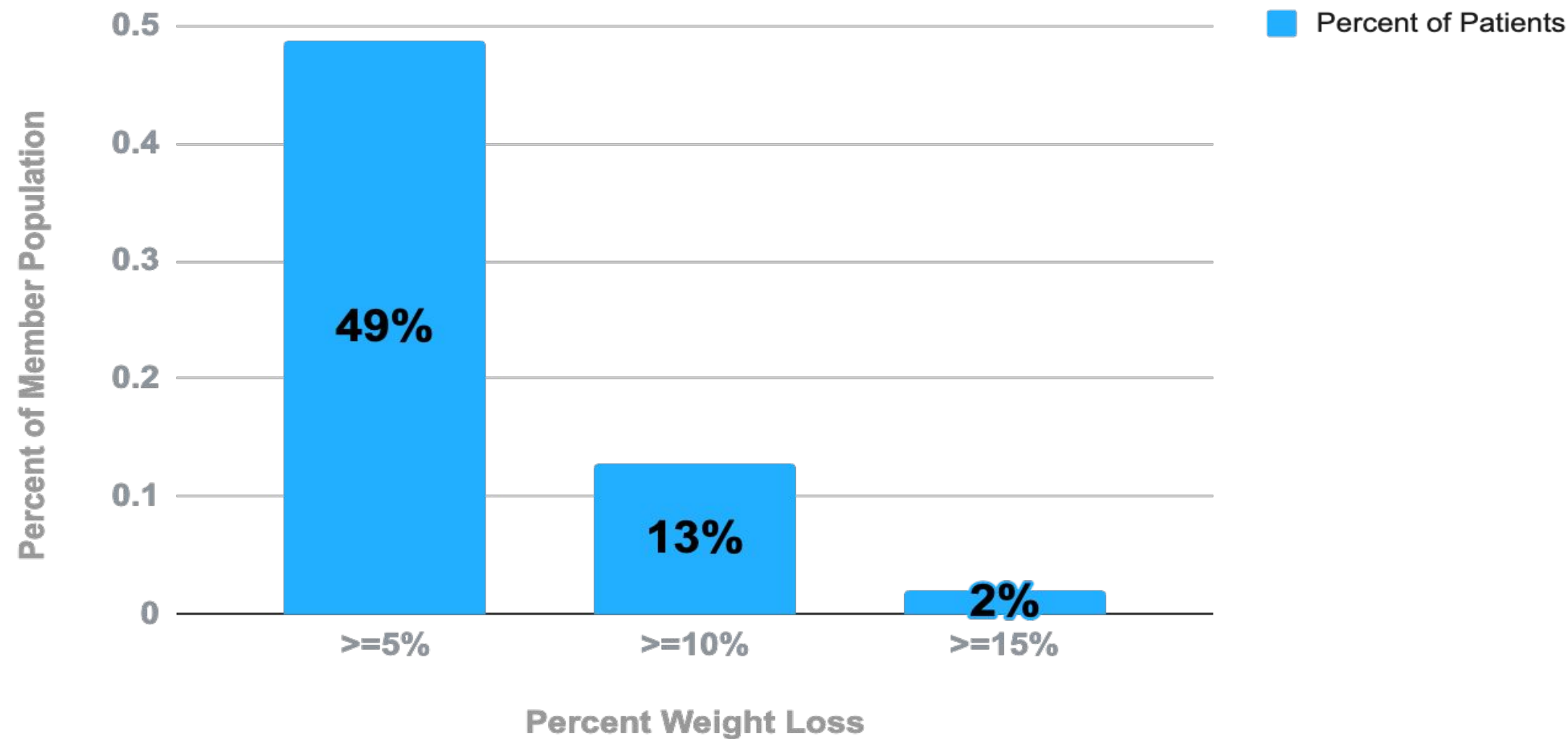
Such a blessing to have this program! In just a couple of weeks my average glucose levels have dropped into a range that I haven't seen in years. I'm down to 20 units of insulin a day and no longer taking any other diabetic medications. Thank you for supporting me and this program!!

- Virta Patient

1. Virta internal EMR data for State patient population with type 2 diabetes enrolled ≥ 90 days at time of analysis (n=306). Results as of 6/21/2023.
2. Hallberg et al. Diabetes Ther. 2018; 9(2): 583-612. Outcomes among one year completers.

49% of State patients with type 2 diabetes have achieved clinically significant weight loss

Usual Care: 2 lbs Weight Gain ²



1. Virta internal EMR data for State patient population with type 2 diabetes enrolled ≥90 days at time of analysis (n=306). Results as of 6/21/2023. In the case of missing weight data, a 3-day average was carried forward until the next weight was logged.

2. Hallberg SJ et al. Diabetes Ther. 2018; 9(2): 583-612. Outcomes among one year completers.

Patients who lose clinically significant amount of weight (5%) typically experience:

- ✓ Better sleep
- ✓ Reduced inflammation
- ✓ Improved blood pressure
- ✓ Reduced risk of heart disease and other chronic conditions
- ✓ Positive impacts on arthritis and fatty liver disease

Virta is the only diabetes program in the market that saves more than it costs:

Peterson Health Technology Institute identifies Virta as the only solution recommended for adoption



“Evidence supports broader adoption with ongoing evidence generation”

- ✓ Achieves statistically significant diabetes reductions (1.3% pt HbA1c)
- ✓ Superior results in secondary health effects (weight loss, cholesterol, liver profiles)
- ✓ Initial net increase in spend with potential for long term savings due to lower Rx spending

Omada Glooko Dario Health Perry Health

Vida Teladoc (Livongo) Verily (Onduo)

“Current evidence does not support broader adoption”

- ✗ Does not achieve statistically significant diabetes reductions (<0.5% pt HbA1c)
- ✗ No significant changes in secondary health effects
- ✗ Net increase in spending but no potential for long term savings - current solutions pricing exceeds cost savings from avoided care

Source: Peterson Health Technology Institute [“Digital Diabetes Management Solutions Health Technology Assessment”](#)

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2026 Pricing**



Diabetes Reversal

Safely deprescribe diabetes medications and return blood sugar to subdiabetic levels

\$290 PPM

Compared to \$601 costs avoided per month per participant

100% fees at risk for A1c reduction, Rx cost reduction, & weight loss for the obese population in 1st year of contract

Add On: Diabetes Management

Log blood sugar and provide app-based educational content

\$93 PPM



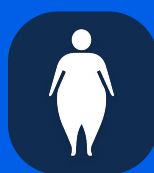
Prediabetes Reversal

Return blood sugar to sub-prediabetic levels and deliver clinically significant weight loss

\$180 PPM

Compared to \$364 costs avoided per month per participant

100% fees at risk for weight loss for obese population in 1st year of contract



Obesity Reversal

Deliver clinically significant weight loss for patients struggling with obesity

\$180 PPM

Compared to \$334 costs avoided per month per participant

100% fees at risk for weight loss for obese population in 1st year of contract

Diabetes reversal available a la carte. Diabetes Management only available with the purchase of all reversal services.
Note: All PGs require minimum of 50 attributed members (enrolled for 6 month). Obese population is attributed members with BMI >30

Virta Cost Savings Analysis: OPEH&W

Projections based on 8,000 total covered lives and State prevalence rates

	T2D Reversal		Diabetes Management		Sustainable Weight Loss	
Eligible Condition	Type 2 Diabetes		Type 1 and Type 2 Diabetes		Obesity / Overweight / Prediabetes (Excludes Type 2 Diabetes)	
Prevalence (% Eligible)	12%		12%		75%	
Projected Virta Enrollment	15%		15%		5%	
Number Enrolled	149		149		300	
	Year 1	Year 2	Year 1	Year 2	Year 1	Year 2
Total Gross Savings	\$885,000	\$1,262,000	\$177,000	\$177,000	\$925,000	\$1,005,000
Cost of Virta	\$518,000	\$518,000	\$166,000	\$166,000	\$647,000	\$647,000
Net Savings	\$367,000	\$744,000	\$11,000	\$11,000	\$278,000	\$358,000
ROI	1.7	2.4	1.1	1.1	1.4	1.6
Net Savings at 2 years	\$1,111,000		\$22,000		\$636,000	
ROI at 2 years	2.1		1.1		1.5	
	Virta					
	Year 1		Year 2			
Total Gross Savings	\$1,987,000		\$2,444,000			
Cost of Virta	\$1,331,000		\$1,331,000			
Net Savings	\$656,000		\$1,113,000			
ROI	1.5		1.8			
Net Savings at 2 years	\$1,769,000					
ROI at 2 years	1.7					

**Virta delivers
incremental
\$10,000+ pp in
“soft savings” over
2 years**

\$1,150

Estimated Patient Out of Pocket Savings

Average estimated savings for Virta patients starting on Rx other than metformin and T2D medication deprescription over 2 years.¹ Actual savings will vary depending on baseline medication usage.

\$5,500

Estimated Value of Services Included with Virta

Two-year estimate based on annualized payor cost for services that Virta provides, such as remote monitoring and provider interaction²

\$3,650

Estimated Value of Reduction in Absenteeism

Calculated from productivity gains over 2 years, associated with improved HbA1c³

Virta Health Actuarial Model available upon request

1. Savings estimated for patients who start on T2D medication other than metformin.

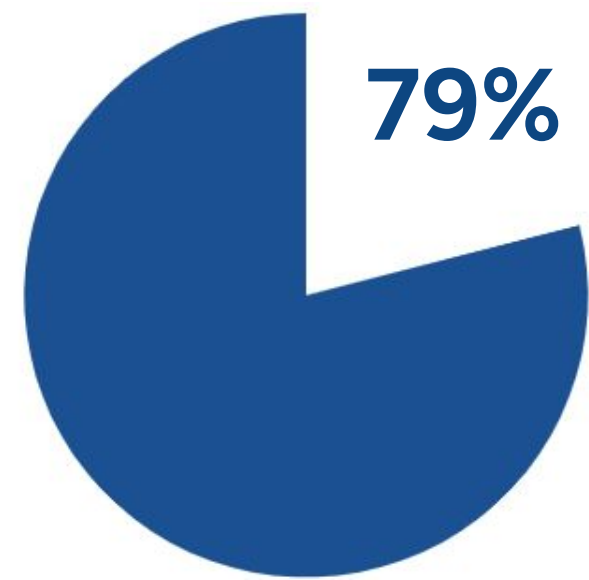
2. Internal estimates used for illustrative purposes. Actual services provided vary by patient depending on level of care needed.

3. Baseline HbA1c was laboratory measured. In the absence of follow up laboratory data, eA1c is derived from a proprietary model which estimates A1c on each day based on baseline information and actual biomarker data recorded on each patient in the last 120 days. The median absolute error is 0.23. 2017-18 NHANES data is used to for linkage between A1c and limitation to work.

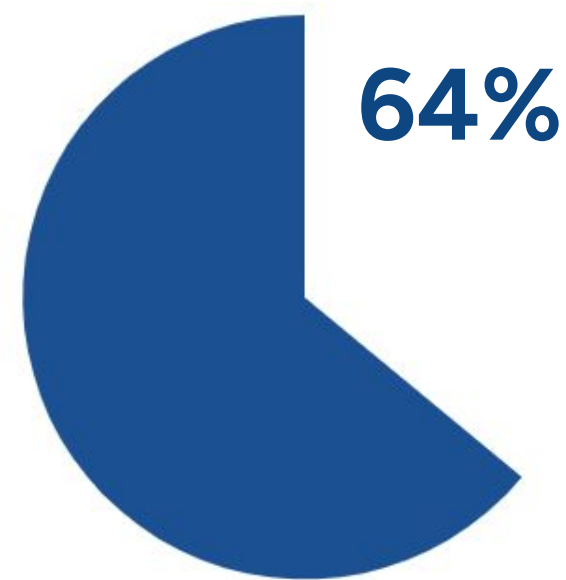


Virta members report improved energy and reduced absenteeism as side benefits of Virta

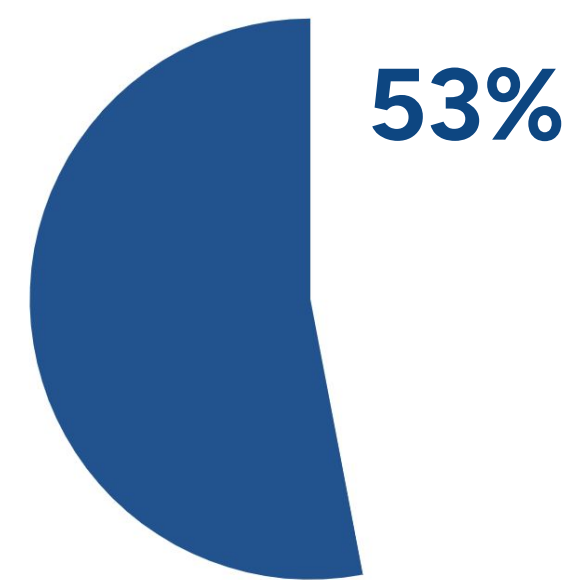
From a survey of Virta members with over 1200 respondents:



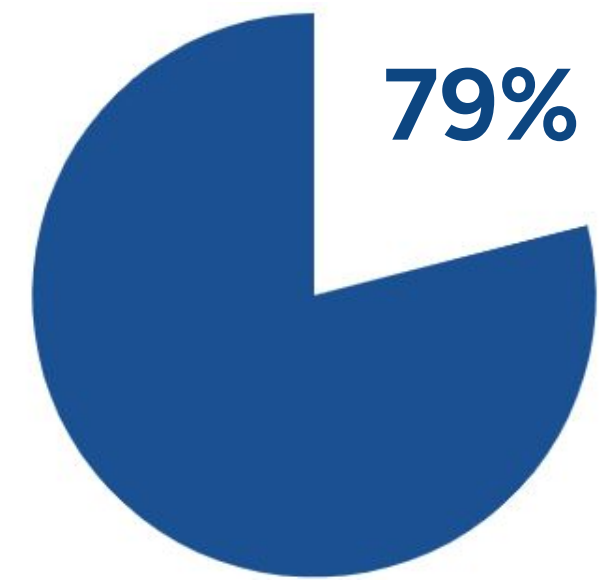
Report having **more energy** on Virta



Report feeling **more productive** at work



Take **fewer days off** due to health reasons



Feel valued as an employee because their company offers Virta

Virta delivers estimated \$1.5+ million in “soft savings” over 2 years for your population

\$10,300

per person “soft savings”
estimated over 2 years

x

149

members

estimated members
enrolled in Virta over 2 years*

=

\$1.5+ million

estimated gross “soft savings”
generated over 2 years

*“My focus and energy toward my work have also increased my productivity; I
am able to accomplish more each day.”* - Current Virta Patient

*Does not include patients only on metformin

