

One-Year Outcomes of a Metabolic Health Employee Wellness Program

BACKGROUND

National health expenditure was \$4.5 trillion and prescription drug costs were \$405.9 billion in 2022.¹ T2DM has an annual cost of \$412.9 billion, including \$106.3 billion in indirect costs from lost productivity at work, unemployment from chronic disability, and premature mortality.² This poster presents a retrospective review of one-year data from an ongoing metabolic health employee wellness program conducted as a partnership between a self-insured manufacturing company and a medical weight loss and metabolic health clinic.

METHODS

The program was advertised through internal posters and emails. 49 patients were selected based on clinical judgement of overall medical need as determined by the lead clinician. Blood tests were obtained at baseline, 12-weeks, 24-weeks, and 52-weeks. Patients were provided with Freestyle Libre 2 or 3 continuous glucose monitors (CGMs), body weight scales, and blood pressure monitors. The care team consisted of TK (physician), LB (physician), two medical assistants, three health coaches, and one personal trainer. A personalized ketogenic diet was recommended. Patients were able to message their healthcare team in real time and had access to the clinic's app for asynchronous virtual support and education.

Medication Deprescription				
T2DM / PreDM	15			
GERD	7			
Hypertension	21			
Other	25			
Medications Added	5			

PATIENT FEEDBACK

"I had no idea the impact this program would have! I am now off a ton of meds, but more than that, I am loving life again. I can travel without worrying about not fitting into an airplane seat, I can ride a bike again! This program has given me my life back and more time with my family. I am forever grateful!"

RESULTS

	Baseline	1 year	Change from baseline	P (two tailed)
Fasting BS (mg/dL)	121	100	-21	0.0001
HbA1c (%)	6.3	5.6	-0.7	< 0.0001
CRP (mg/L)	7	4.5	-2.5	0.0039
TC (mg/dL)	182	183	1	0.86
HDL-C (mg/dL)	47	51	4	0.0014
LDL-C (mg/dL)	110	113	3	0.66
Triglycerides (mg/dL)	135	99	-36	< 0.0001
ALT (IU/L)	29	21	-8	0.0001
AST(IU/L)	25	20	-5	< 0.0001
Insulin (uIU/mL)	22	12	-10	< 0.0001
Systolic (mmHg)	140	127	-13	< 0.0001
Diastolic (mmHg)	87	80	-7	0.0002

Year 1 Weight Loss for Cohorts 1, 2, 3





Year 1 Weight Loss for Cohorts 1, 2, 3

Total Weight Loss at 1 Year Among 49 Patients: 2,141.6 lbs

DISCUSSION

Healthcare costs are rising. Anti-obesity medications can not currently be the answer to our metabolic health crisis; if every person who had an indication was placed on a GLP-1 then the cost would be \$1.9 trillion annually. In this telemedicine metabolic health program that prescribed a ketogenic diet, patients lost an average of 15.8% of their total body weight, while 68 medications were deprescribed and only 5 medications were added. Patients also had significant improvements in their fasting glucose, A1c, triglycerides, LFTs, CRP, HDL-C, fasting insulin, blood pressure, and no significant change in their TC or LDL-C. Other clinics focusing on TCR have also shown significant cost savings through less medication while having improvements in metabolic health markers.

CONCLUSION

Through patient empowerment, a ketogenic diet, and a dedicated care team, a metabolic health program resulted in significant weight loss and improvement in metabolic markers, while deprescribing numerous medications. The wellness program is ongoing and two-year data will be collected to see if the lifestyle changes and metabolic health improvements are sustainable. Additionally, given the significant financial burden of medications, future studies will include analyzing the cost savings from deprescription.

REFERENCES

¹ NHE Fact Sheet. CMS.gov. December 13, 2023.

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