The Lifestyle Initiative: An Innovative Coaching-Based Quality Improvement Study to Improve the Health of Aurora Health Care Caregivers and Family Members

Tiffany Mullen, DO,1,2; Jessica J. F. Kram, MPH,3,4; Dennis J. Baumgardner, MD,3,4,5
1Department of Integrative Medicine, Milwaukee, WI; 2Aurora Health Care, Milwaukee, WI; 3Center for Urban Population Health, Milwaukee, WI; 4Aurora University of Wisconsin Medical Group, Milwaukee, WI; 5Department of Family Medicine, Milwaukee, WI

PROBLEM
Obesity and lifestyle-related diseases such as Type 2 diabetes and hypertension are on the rise. Efforts to create a highly engaging innovative approach to improve outcomes in these common clinical problems.

BACKGROUND
Self-management support has shown to improve clinical outcomes.1

Health coaching, one form of self-management support, empowers patients within the health care system by helping them develop their personal wellness goals, stay on track, and make incremental, lasting lifestyle changes to help improve or reverse disease.1,4

By providing web and app-based connectivity, health coaches and patients can interact in real-time increasing patient engagement in a program.

OBJECTIVE
The objective of this quality improvement initiative was to assess the impact of the Lifestyle Initiative, a coaching-based, web- and app-enabled (Noom Health, Inc.) health program utilized by Aurora Health Care caregivers or family members.

METHODS
The Lifestyle Initiative is a coaching-based approach for Aurora caregivers or family members enrolled in The Aurora Network health plan.

Individuals were recruited from our care management database, and all participants had a primary care provider at Aurora Health Care.

Participation was limited to patients:
- ≥18 years of age
- With a diagnosis of Type 2 diabetes and/or hypertension
- A1c ≤ 8.0
- Not on insulin

The Lifestyle Initiative was rolled out in three phases.

Phase I:
- Health coaching sessions
- Standard web- and app-based platform (Noom Health, Inc.)

Phase II:
- Hardware plug in’s: wireless Bluetooth glucometer and blood pressure cuff
- Step tracking device
- Health coaching sessions
- Customized web- and app-based platform co-created by Aurora Health Care Integrative Medicine and Noom Health

Phase III:
- Hardware plug in’s: wireless Bluetooth glucometer, blood pressure cuff, and scale
- Health coaching sessions
- Customized web- and app-based platform

Statistics:
- Minitab Statistical Software package was used.
- Participants enrolled in each phase acted as their own controls.
- Paired T-tests were used to compare pre- and post-intervention results of each phase.

RESULTS

Phase 1 (n=23):
- Mean age 54.6 years
- 91.3% female
- 52.2% White
- Pre- vs. post-BMI and weight statistically improved (p=0.007 and p=0.006, respectively).

Phase 2 (n=63):
- Mean age 54.8 years
- 81.0% female
- 88.9% White
- Pre- vs. post-BMI, weight, and A1c statistically improved (all p≤0.05).

Phase 3 (n=53):
- Mean age 54.8 years
- 83.0% female
- 50.6% White
- Pre- vs. post-BMI, weight, and diastolic blood pressure (BP) statistically improved (all p≤0.05).
- Mean arterial pressure (95.6 vs. 92.1; p=0.034) also statistically improved.

CONCLUSIONS
The Lifestyle Initiative health coaching program significantly improves certain health metrics when applied to health system employees and family members with diabetes or hypertension. Further study is needed to explore sustainability and the effects of more robust programs.

ACKNOWLEDGEMENTS
We would like to acknowledge Andy Anderson, MD, Peter Schmidt, Nancy Conway, MS, Vince Stocke, Scott Feist, Michael Rodgers, Pamela Voelkers, MS, RD, CD, and Kathy Engles, PA for their contributions to the success of this program.

The Lifestyle Initiative was made possible through a generous donation from Nannette Gardette.

REFERENCES

© Aurora Health Care, Inc.