

#### **PURPOSE**

OgdenCAN commissioned me to research public health interventions that address obesity and food insecurity in demographics similar to those in the East Central neighborhood.

I researched Produce Rx programs to understand their effectiveness in combatting obesity and food insecurity. I determined which implementation methods would be most successful for the target population.

#### **PROBLEM**

Obesity and food insecurity are pressing local health concerns. Food insecurity leads to unhealthy eating habits that perpetuate obesity.

• In 2017, 29% of low-income residents in Weber and Morgan County were obese ("Utah Health")

#### **METHODS**

- Qualitative analysis of nine Produce Rx programs
- Focus on success rates, patient outcomes, community outcomes, and successful implementation methods

#### **INTERVENTIONS**

- OgdenCAN has not implemented a Produce Rx program yet, but the proposal was well received
- There are plans to implement a Produce Rx program in Ogden City by OgdenCAN or Utah State Board of Health



# 

## A Community Health Intervention Program

By Bethany West

## Literature Review

A review of best practices and outcomes

#### **Best Practices**

The most successful programs integrated these elements into their intervention.

#### Cultural Appropriateness

- Used markets that contained familiar produce
- Ensured patients could communicate with staff

#### Market Choice

- Used markets with convenient operating hours
- Used markets within walking distance

#### Provider Training and Education

• Trained physicians to administer nutrition education

#### Preparation for Food Insecure Behaviors

Encouraged patients to try new produce and recipes

#### Patient/provider Surveys

• Distributed surveys to assess produce consumption, program satisfaction, and suggestions for improvement



### **Program Outcomes**

Produce Rx programs were highly successful in addressing food insecurity and obesity in at-risk populations.

#### Patient Outcomes

- Weight loss
- Decreased blood pressure and blood glucose levels
- Improved unhealthy eating behaviors long-term
- High satisfaction rates with the program

#### Provider Outcomes

- Improved provider-patient relationship and communication
- Integrated nutrition counseling into their regular practice

#### **Community Outcomes**

Increased customer traffic to local and farmer's markets





Center for Community Engaged Learning

#### **SUMMARY**

Produce Rx programs are health interventions that address obesity and food insecurity in low-income, at-risk populations.

In the intervention, a physician provides nutrition education to a patient and prescribes them fresh produce. The prescription is a produce voucher that is redeemable at local markets.

Produce Rx programs were successful because they provided low-income patients with the means to purchase fresh produce while simultaneously educating them on proper nutrition. Patients who participated in the programs lost weight and improved food insecure behavior.

#### Implications for the Community

A Produce Rx program may benefit populations in Ogden City's East Central Neighborhood.

 The program would increase nutrition understanding and access to fresh produce

#### **Professional Implications**

As a student researcher, this project contributed to my professional growth.

- I expanded my research and writing skills
- I developed project management skills
- I increased my professional network

#### References

Bryce, R., Guajardo, C., Ilarraza, D., Milgrom, N., Pike, D., Savoie, K.,... Miller-Matero, L. R. (2017). Participation in a farmers' market fruit and vegetable prescription program at a federally qualified health center improves hemoglobin A1C in low income uncontrolled diabetics. *Preventative Medicine Reports*, 7, 176–79. http://dx.doi.org/10.1016/j.pmedr.2017.06.006

Castañeda del Río, C. (n.d.). Produce Rx program manual: A partnership of Adelante Mujeres & Virginia Garcia [PDF file]. Retrieved from https://static1.squarespace.com/static/563beofae4bo678da13938f7/t/5co7191c2b6a28af9b54a5bc/15439

https://static1.squarespace.com/static/563be0fae4b0678da13938f7/t/5c07191c2b6a28af9b54a5bc/15439 69100119/Adelante+Mujeres+Produce+Rx+Manual+FINAL.pdf
Cavanagh, M., Jurkowski, J., Bozlak, C., Hastings, J., & Klein, A. (2017). Veggie Rx: An outcome evaluation

of a healthy food incentive programme. *Public Health Nutrition*, *20*(14). doi:10.1017/S1368980016002081 Forbes, J. M., Forbes, C. R., Lehman, E., & George, D.R. (2019). "Prevention Produce": Integrating medical student mentorship into a fruit and vegetable prescription program for at-risk patients. *The Permanente Journal*, *23*, 18-238. https://doi.org/10.7812/TPP/18-238

Freedman, D. A., Vaudrin, N., Schneider, C., Trapl, E., Ohri-Vachaspati, P., Taggart, M... & Flocke, S. (2016). Systematic review of factors influencing farmers' market use overall and among low-income populations. *Journal of the Academy of Nutrition and Dietetics*, *116*(7), 1136–1155. doi:10.1016/j.jand.2016.02.010

Friedman, D. B., Freedman, D. A., Choi, S. K., Anadu, E. C., Brandt, H. M., Carvalho, N.,...Herbert, J. R. (2014). Provider communication and role modeling related to patients' perceptions and use of a federally qualified health center-based farmers' market. *Health Promotion Practice*, *15*(2), 288–297. https://doi.org/10.1177/1524839913500050

George, D. R., Manglani, M., Minnehan, K., Chacon, A., Gundersen, A., Dellasega, C., & Kraschnewski, J. L. (2016). Examining feasibility of mentoring families at a farmers' market and community garden. *American Journal of Health Education*, *47*(2), 94–98. https://doi.org/10.1080/19325037.2015.1133340

Goddu, A. P., Roberson, T. S., Raffel, K. E., Chin, M. H., & Peek, M. E. (2015). Food Rx: A community-university partnership to prescribe healthy eating on the south side of Chicago. *Journal of Prevention & Intervention in the Community*, *43*(2), 148–162. https://doi.org/10.1080/10852352.2014.973251

Joshi, K., Smith, S., Bolen, S. D., Osborne, A., Benko, M.,& Trapl, E. S. (2019). Implementing a produce prescription program for hypertensive patients in safety net clinics. *Health Promotion Practice*, *20*(1), 94–104. https://doi.org/10.1177/1524839917754090

Pitts, S. B. J., Wu, Q., Demarest, C. L., Dixon, C. E., Dortche, C. J. M., Bullock, S. L.,... Ammerman, A. S. (2014). Farmers' market shopping and dietary behaviours among Supplemental Nutrition Assistance Program participants. *Public Health Nutrition*, *18*(13), 2407–2414. doi:10.1017/S1368980015001111

Produce Rx Preliminary Results Handout—Salt Lake County. (n.d.). [Unpublished Report]
Swartz, H. (2018). Produce Rx programs for diet-based chronic disease prevention. *AMA Journal of Ethics*, *20*, 960–973. doi:10.1001/amajethics.2018.960

Trapl, E. S., Smith, S., Joshi, K., Osborne, A., Benko, M., Matos, A. T., & Bolen, S. (2018). Dietary impact of produce prescriptions for patients with hypertension. *Preventing Chronic Disease*, *15*, https://doi.org/10.5888/pcd15.180301

Utah State Health Assessment 2016 [PDF file]. (n.d.). Retrieved from https://ibis.health.utah.gov/ibisphview/pdf/opha/publication/SHAReport2016.pdf