



**FINI  
GROCERY STORE  
Rx PROGRAM**

ASSESSMENT OF PROGRAM  
REACH, EFFECTIVENESS,  
ADOPTION, IMPLEMENTATION,  
& MAINTENANCE

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WINTER 2019

# Objectives

- Project Goals
- Background
- Fruit and Vegetable Incentive Programs
- Methods - RE-AIM Framework
- Results
- Discussion
- Recommendations
- Conclusions



# Project Goals

- Review existing FV Incentive programs
- Evaluate *Grocery Store Rx* using the RE-AIM framework:
  - Assess participant experience, perceptions, & behavior change
  - Assess provider experience
- Provide recommendations for future success



# Background





# Food Insecurity & Chronic Disease

- Prevalence of Food Insecurity
  - Food insecurity impacts 11% of households in Washington
  - Disproportionately impacts low-income households, households with children, and minority populations
- Food Insecurity and Health
  - Food insecurity is associated with chronic disease
  - Evidence suggests moderate-to-high FV intake mitigates chronic disease risk





# Food Assistance Programs

- Supplemental Nutrition Assistance Program (SNAP)
  - Provides federal funds to low-income households for monthly food purchases
  - Evidence suggests that SNAP participants have lower FV intake compared to income eligible non-SNAP participants

Washington State	Fiscal Year 2017
Average monthly SNAP benefit for each household member:	<b>\$122</b>
Average SNAP benefit per person per meal:	<b>\$1.34</b>





# Food Insecurity Nutrition Incentive Grant

- FINI Grant Authorization:

- Established in 2014 Farm Bill; granted permanent funding in 2018
- Four-year \$5.68 million FINI grant awarded to WA DOH in 2015

- FINI Goals

1. To use point-of-sale incentives to help SNAP participants increase FV purchases
2. To test varying incentive distribution & redemption methods

## Farmers Market Incentives



## Grocery Store Incentives



## FV Prescription Programs



# Fruit and Vegetable Incentives



Bonus Model



Rebate Model



Cash Value Voucher





# Evidence of Program Success

Harnack et al, 2016. *Effects of Subsidies and Prohibitions on Nutrition in a Food Benefit Program.*

<b>Study Design</b>	Randomized Control Trial
<b>Population</b>	SNAP participants in Minneapolis, MN
<b>Intervention</b>	1) 30% FV rebate 2) Restrictions on SSBs and sweets 3) Combined 30% FV rebate and restrictions 4) Control
<b>Outcomes</b>	↑ Healthy Eating Index score in combined group ↓ SSB intake in FV rebate and combined groups



# Potential Positive Outcomes: Simulation Models

## Choi et al, 2017

- 30% subsidy on FV consumption
  - Reduction in healthcare costs: ↓ \$3600 per person
  - Reduction in incidence of:
    - Type II Diabetes
    - Obesity
    - Myocardial Infarction
    - Stroke

## Mozaffarian et al, 2018

- Healthcare cost savings:
  - FV Incentive → \$7 billion
  - FV Incentive/SSB Restriction → \$39 billion
  - SNAP-plus → \$429 billion



# Grocery Store Rx Program, WA

Participants	SNAP eligible
Prescription Type	\$10 paper voucher
Distribution	Participating health care providers
Redemption	Participating Safeway stores

**Fruit and Vegetable Prescription**

With this prescription, you can get \$10 off of the price of fruits and vegetables at any Safeway store.

You can buy any variety of fruits and vegetables that are:

- FRESH - All Fresh Produce
- CANNED - No Added Sugar or Salt
- FROZEN - With no added sauces or Fried Potatoes



No purchase required, but you must have a valid Basic Food/SNAP/EBT card.

**SAFeway** Rx Voucher Expires \_\_\_\_\_

**\$10 OFF**



**Fruit and Vegetable Prescription**  
valid for purchase of fruits and vegetables\*  
with a valid Basic Food/SNAP/EBT card.

- \* Any variety of fresh fruits and vegetables.
- \* Canned vegetables with "NO SUGAR," "NO SALT ADDED"
- \* Frozen fruit and vegetables (plain), no added fats, sugars or salts. No "Seasoned," "in Sauce," Fried Potatoes.



# Provider Sites

Sea Mar Community Health Centers

Verdant Health Commission

Harborview Medical Center

Nisqually Tribe Health Services

Odessa Brown Children's Clinic

Virginia Mason Memorial Hospital

Grant County Health Department

Spokane Regional Health District

MultiCare Health System

Yakima Neighborhood Health Services

Yakima Valley Farm Workers Clinic



# Methods





# Data Collection

## Redemption Data

- Quarterly Report Data
  - July 2016 to September 2018

## Participant Surveys

- 3 qualitative question responses from participant online survey

## Interviews

- Provider Interviews
- WA DOH Stakeholder Interview





# How RE-AIM Informed Data Analysis

<b>REACH</b>	Who participates in the <i>Grocery Store Rx</i> program?	<ul style="list-style-type: none"><li>● Demographic Data</li><li>● Provider Interviews</li></ul>
<b>EFFECTIVENESS</b>	Are program goals accomplished?	<ul style="list-style-type: none"><li>● Participant Survey</li><li>● Redemption Data</li><li>● Provider Interviews</li></ul>
<b>ADOPTION</b>	Who initiates the program?	<ul style="list-style-type: none"><li>● DOH Stakeholder Interview</li></ul>
<b>IMPLEMENTATION</b>	How is the program executed?	<ul style="list-style-type: none"><li>● Participant Surveys</li><li>● Provider Interviews</li></ul>
<b>MAINTENANCE</b>	How is the program integrated into organizational practices long term?	<ul style="list-style-type: none"><li>● Provider Interviews</li></ul>

# Results





# Reach: Survey Respondent Demographics

- 3,600 participants statewide (September 2018)

Survey Respondents	Adults		Children	
	Male	Female	Male	Female
(n = 169)				
Gender	21%	79%	57%	43%
English-Language	84%		77%	
Spanish-Language	15%		17%	
Housing	71% Private	28% Public	1% Homeless	
Highest Education	85% some college or beyond		n/a	



# Reach: Provider Interviews

## Eligibility Criteria by Providers:

- SNAP or WIC enrollment
- Verbal confirmation of enrollment in SNAP or WIC
- Prior understand of individual's enrollment in SNAP or WIC

## Estimated distribution:

- 2000 in 6 months
- 400-600 annually

## Target distribution:

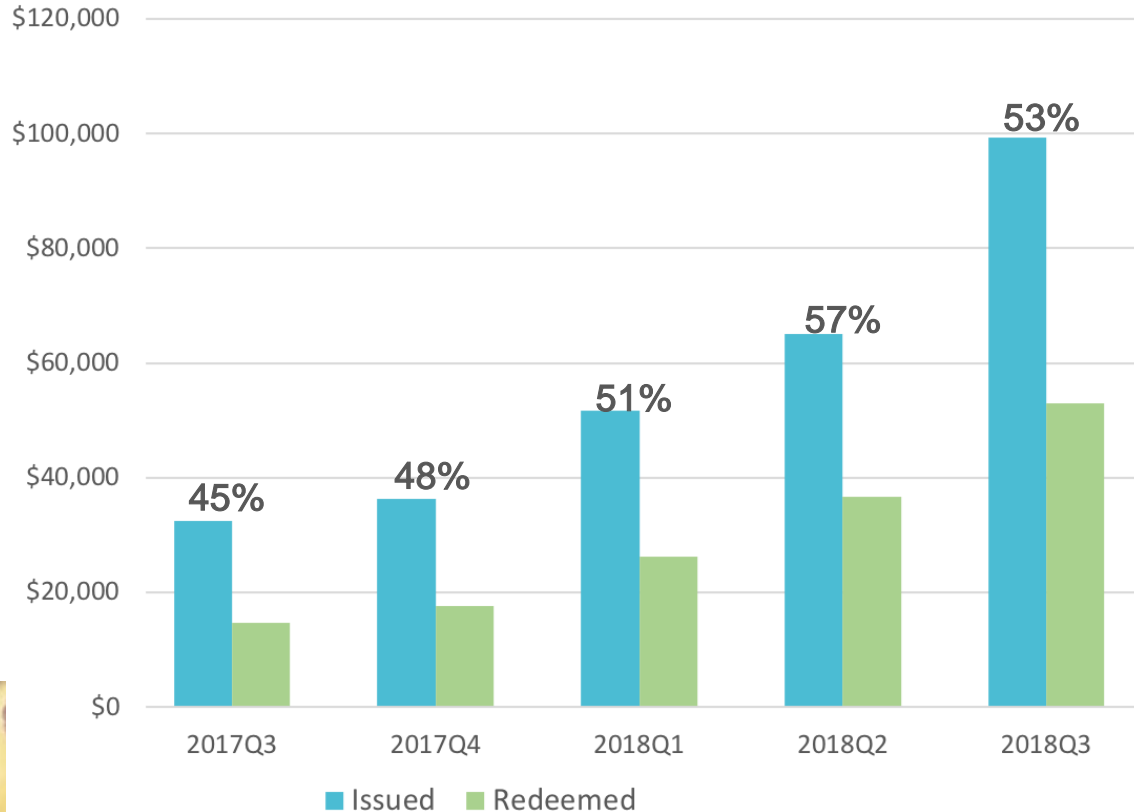
- 500 - 1200 annually
- As many as possible





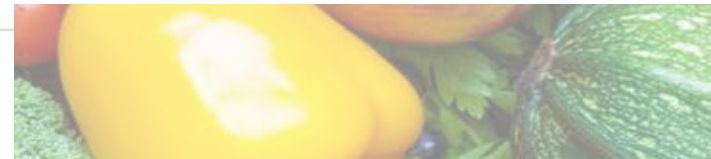
# Effectiveness: Redemption Data

## Value of issued versus redeemed vouchers (Q3'16-Q3'18)



\$382,000 total issued

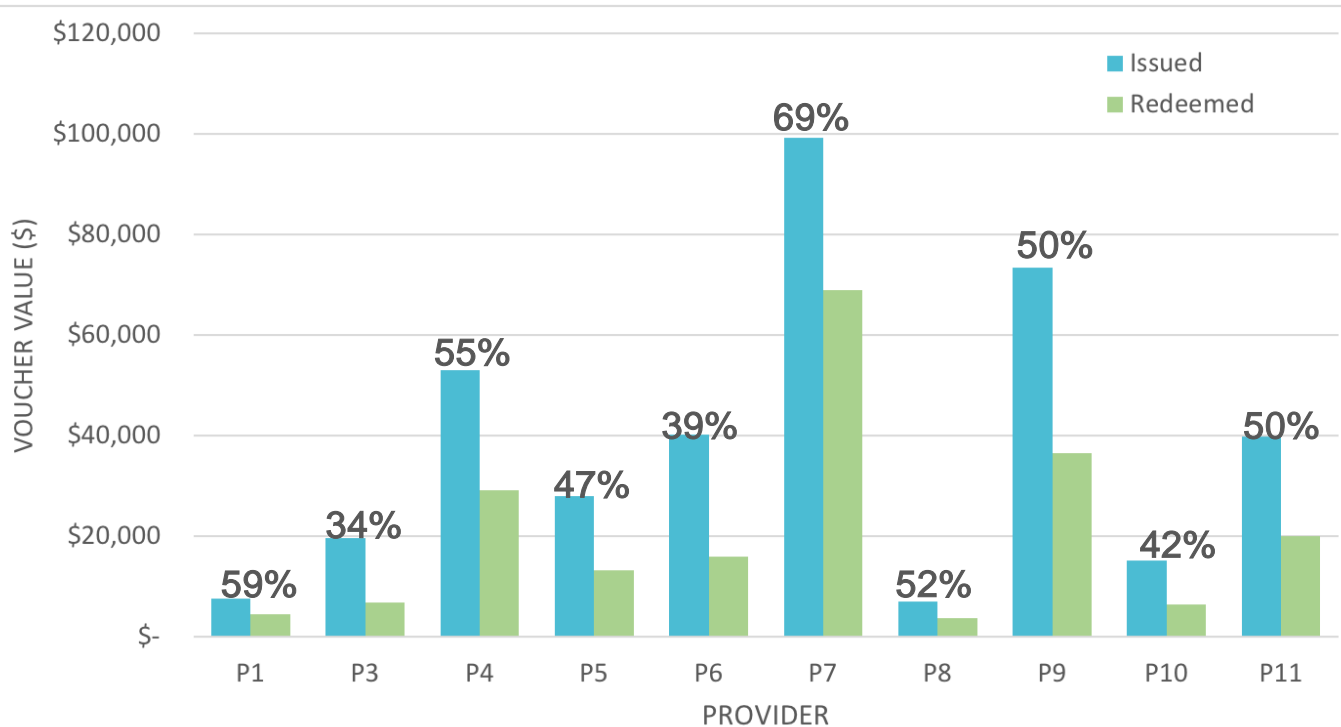
54% redeemed





# Effectiveness: Redemption Data

Value of issued versus redeemed vouchers by provider (Q3'16-Q3'18)



Variation by provider

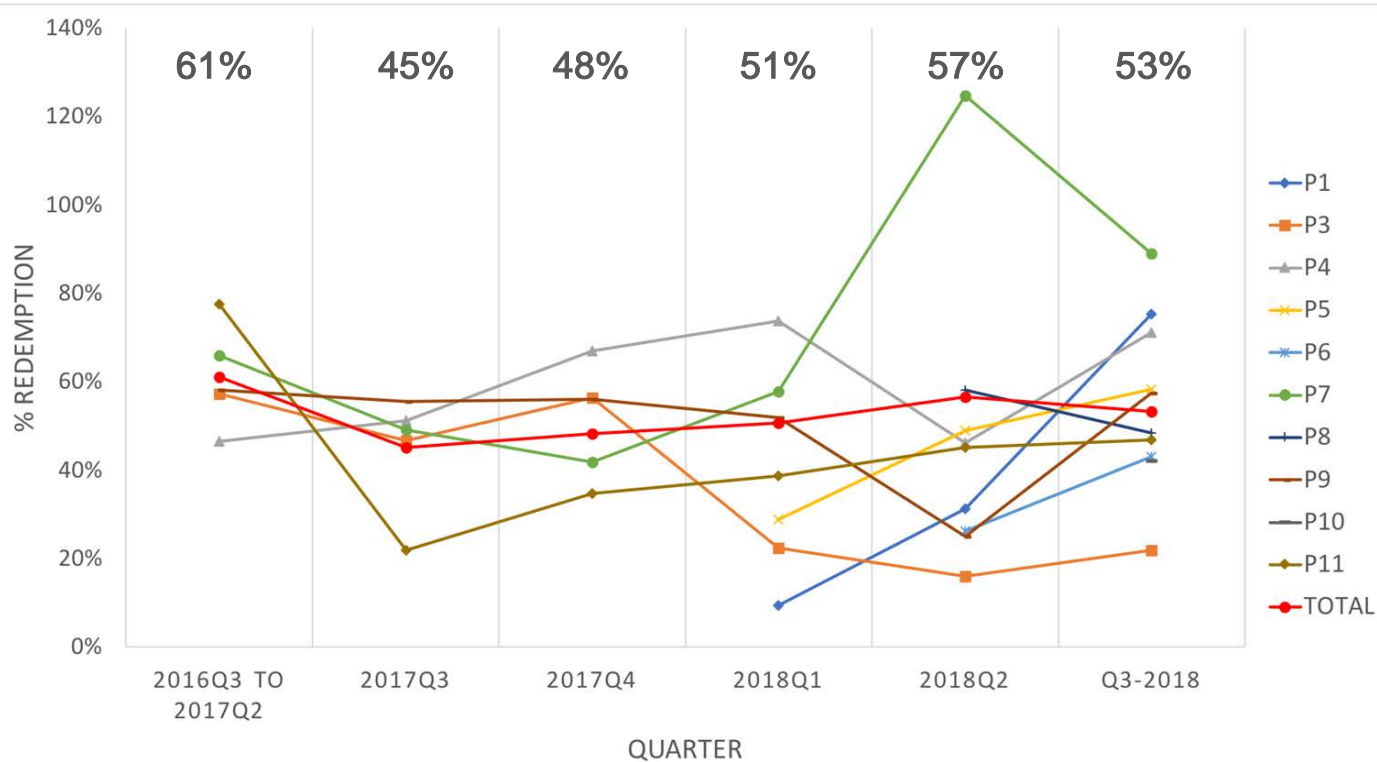
P4, P7 and P9 account for 65% of redemption





# Effectiveness: Redemption Data

Quarterly redemption rates by provider (Q3'16-Q3'18)



No clear seasonal pattern

Outlier skews Q2-Q3'18

Future data will inform





# Effectiveness: Participant Survey

Open-ended Survey Question	# Responded
<b>Q5</b> Is there anything you would like to tell us about your experience using the Fruit and Vegetable Prescription?	n = 102
<b>Q45</b> What, if any, health benefits did you have as a result of the Fruit and Vegetable Prescription?	n = 107
<b>Q46</b> What, if any, lifestyle changes did you make as a result of the Fruit and Vegetable Prescription?	n = 102

Five themes identified from survey responses





# Effectiveness: Five Themes

1. Fruit and Vegetable Access
2. Eating Behavior Changes
3. Health Outcomes
4. Psychosocial and Lifestyle Changes
5. Ease of Use





# Participant Surveys - Increased Fruit and Vegetable Access (151 mentions)

- Those who already purchased FV could purchase more FV
- Those who typically did not purchase FV purchased FV

*"The program is a great opportunity for me to eat fresh fruit and veggies, It was absolutely a blessing, They are great. It really helps to ensure that I can choose the healthier food. Otherwise I cannot."  
-Participant response*





# Participant Surveys - Positive Eating Behavior Changes (123 mentions)

- Eating healthier
- Increased purchasing of fresh FV
- Increased consumption of FV
- Replace less nutritious snacks with FV
- Add variety to diet
- Increased opportunity to try new FV
- Enhanced cooking experience
- Positive changes in nutrient intake





# Participant Surveys - Positive Psychosocial and Lifestyle Changes

(54 mentions)

- Overall improvement in health
- Feeling better about self
- Newfound appreciation for the role of FV in health
- Increased physical activity
- Extension of benefits to family
  - More frequent cooking
  - Improved children's diets
  - Improved familial nutrition







# Participant Surveys - Ease of Use

<b>Program Easy to Use</b> (25 mentions)	<b>Program Difficult to Use</b> (25 mentions)
<ul style="list-style-type: none"><li>➤ Vouchers easy to redeem</li><li>➤ Practical to use</li><li>➤ Effective</li><li>➤ Safeway staff helpful</li></ul>	<ul style="list-style-type: none"><li>➤ Negative experience with Safeway staff</li><li>➤ Safeway too expensive</li><li>➤ One voucher permitted per transaction</li><li>➤ Difficult to determine FV subtotals</li></ul>





# Participant Surveys - Positive Health Outcomes (54 mentions)

- Weight loss
  - Increased confidence
  - Increased mobility
- Decrease in blood pressure
- Hope for future improved health

*“I am feeling better.  
I am losing some weight,  
maybe I can get off  
some of my medications  
in the future.”*

*- Participant response*





# Effectiveness: Provider Interviews

## Effects in participants noted by providers

- Behavioral changes
  - Increased fruit and vegetable intake
  - Increased class attendance
  - Better chronic disease management
  
- Stress relief





# Effectiveness: Provider Interviews

*"I've had older adults come up to me and say 'Thank you so much for providing the FINI voucher I've always loved eating berries but they're so expensive, but now that gets to be my treat at night. I haven't had berries in 20 years because I couldn't afford them'."*

*-Provider*





# Effectiveness: Provider Interviews

Who is <u>more</u> likely to experience these effects?	Who is <u>less</u> likely to experience these effects?
<ul style="list-style-type: none"><li>● Health-promoting behavior classes</li><li>● Supported by providers</li><li>● Comfortable preparing fruits and vegetables</li></ul>	<ul style="list-style-type: none"><li>● Discomfort and concern with redemption process</li><li>● Lack of access to transportation and refrigeration</li></ul>



# Adoption: Department of Health Stakeholder Interview

Program adoption varied and expanded over time

Strategies to Increase Reach:

- Media Advertising
- Systematic strategies to identify providers
  - Eg. Partnerships with healthcare authorities
- Additional funding







# Implementation: Provider Interviews

Challenges for reaching maximum number of participants:

- Eligibility criteria for SNAP
- Inability to expand voucher distribution
- Would like to expand reach to:
  - Children, residents in low-income housing, homeless population, undocumented population





# Implementation: Provider Interviews

Strategies for reaching maximum number of participants:

- Working with other community organizations
- Announcements in newsletters
- Providing pamphlets at community events
- Paired distribution with classes





# Implementation: Provider Interviews

Organizational Challenges	Organizational Strategies
Resources and logistics	Continually optimizing procedures
Staffing and communication	Flexibility in roles, responsibilities, and staffing More and continuous Training
Tracking and Reporting	<i>Provider suggestion:</i> electronic interface





# Implementation: Provider Interviews

Provider Perceived Participant Challenges	Provider Suggestions
Transportation and Safeway access	Accept vouchers at more locations
Difficulties with voucher redemption at Safeway	Electronic vouchers, longer expiration dates, varying amount
Successes	
Filled a need to help individuals make healthy changes Advertised by word of mouth	





# Maintenance: Provider Interviews

Overall, providers were excited about the Grocery Store Rx program and want to see it continue.

## Needs of the Providers

- Ongoing funding
- Improved tracking
- Improved data collection

## Desire to expand

- Beyond SNAP-eligible
- More populations
- Other programs
- More grocery stores



# Discussion





# What have we learned so far?

- Goal 1: Review existing FV Incentive program ✓
- Goal 2: Evaluate *Grocery Store Rx* using the RE-AIM framework ✓
- Goal 3: Provide recommendations for future success





# Limitations of Study / Direction of Future Evaluation

- Collect data that could establish stronger associations
  - Quantitative data
- Better understand point-of-sale experience
  - More data from participant and cashier perspective







# Limitations of Study / Direction of Future Evaluation

- Generalizability
  - High education level of survey respondents
- Research other populations that would benefit from program
  - Homeless population
  - SNAP in-eligible individuals





# Recommendations

(Goal 3: Provide recommendations for future success ✓ )





# Recommendation #1: Introduce Electronic Voucher System

- Vouchers on an EBT or similar debit-style card could address:
  - perceived stigma
  - need for multiple transactions
  - time-intensive and error-prone data collection





# Recommendation #2: Offer Vouchers of Different Values

- If electronic system not feasible, offer vouchers of different values
  - \$5, \$10, \$20, etc.
  - Could resolve voucher use issues





# Recommendation #3: Increase Store Participation and Reduce Transportation Barriers

- Expand program to lower price-point supermarkets
- Provide information for reduced fare programs (Orca Lift, etc.)





# Recommendation #4: Increase Store Staff Training

- Improve staff training
- Create visual printout for registers
- Enhance shelf signage





# Recommendation #5: Increase Store-to-Provider Communication

- Introduce WA DOH-monitored platform for direct provider-to-store communication





# Conclusions

- Additional evaluation necessary to assess impacts of prescription programs (in WA and nationwide)
- Potential improvements (electronic voucher system, grocery store trainings, grocery store partnership expansion)
- Participant surveys & provider interviews indicate that *Grocery Store Rx*:
  - Increases FV purchase and consumption
  - Helps address overall food security
  - Fosters positive health behaviors & outcomes





# Acknowledgements

We would like to thank:

- Alyssa Auvinen and Jessica Marcinkevage of the WA DOH
- Lina Pintero Walkinshaw and Emilee Quinn of the Center for Public Health Nutrition (CPHN)
- Jessica Jones-Smith and Mary Podrabsky of CPHN
- All the staff at the provider organizations who participated in interviews
- The many members of communities throughout Washington State who utilized the Grocery Store Rx program and participated in surveys



# Acknowledgements

Thank you to the University of Washington Nutritional Sciences graduate student authors:

Laura Blasi

Meredith Blumenthal

Emahlea Jackson

Kelsey Kinderknecht

Veronica Lenoski

Ivory Loh

Erin McDonnell

Anna Mowell

Merideth Murray

Divya Pahwa

Sophia Riemer

Shira Stern

Laura Tripp

Kelly Wolfe

Sara Woolcock



# Questions?



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