FINI
GROCERY STORE
Rx PROGRAM

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

PRESENTED BY:
Kelsey Kinderknecht,
Ivory Loh, and Kelly Wolffe

REPORT PREPARED BY
UNIVERSITY OF WASHINGTON MS/MPH STUDENTS
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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

<table>
<thead>
<tr>
<th>Fiscal Year 2017</th>
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</thead>
<tbody>
<tr>
<td>Average monthly SNAP benefit for each household member:</td>
</tr>
<tr>
<td>Average SNAP benefit per person per meal:</td>
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</table>

Zhang et al; 2018
Center on Budget and Policy Priorities, 2018
**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**
- Fresh Bucks

**Grocery Store Incentives**
- Complete Eats

**FV Prescription Programs**
Fruit and Vegetable Incentives

- Bonus Model
- Rebate Model
- Cash Value Voucher
Evidence of Program Success


<table>
<thead>
<tr>
<th>Study Design</th>
<th>Randomized Control Trial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>SNAP participants in Minneapolis, MN</td>
</tr>
</tbody>
</table>
| Intervention          | 1) 30% FV rebate  
                         2) Restrictions on SSBs and sweets  
                         3) Combined 30% FV rebate and restrictions  
                         4) Control |
| Outcomes              | ↑ 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

<table>
<thead>
<tr>
<th>Participants</th>
<th>SNAP eligible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescription Type</td>
<td>$10 paper voucher</td>
</tr>
<tr>
<td>Distribution</td>
<td>Participating health care providers</td>
</tr>
<tr>
<td>Redemption</td>
<td>Participating Safeway stores</td>
</tr>
</tbody>
</table>
# Provider Sites

<table>
<thead>
<tr>
<th>Provider Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sea Mar Community Health Centers</td>
</tr>
<tr>
<td>Verdant Health Commission</td>
</tr>
<tr>
<td>Harborview Medical Center</td>
</tr>
<tr>
<td>Nisqually Tribe Health Services</td>
</tr>
<tr>
<td>Odessa Brown Children’s Clinic</td>
</tr>
<tr>
<td>Virginia Mason Memorial Hospital</td>
</tr>
<tr>
<td>Grant County Health Department</td>
</tr>
<tr>
<td>Spokane Regional Health District</td>
</tr>
<tr>
<td>MultiCare Health System</td>
</tr>
<tr>
<td>Yakima Neighborhood Health Services</td>
</tr>
<tr>
<td>Yakima Valley Farm Workers Clinic</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th></th>
<th>REACH</th>
<th>EFFECTIVENESS</th>
<th>ADOPTION</th>
<th>IMPLEMENTATION</th>
<th>MAINTENANCE</th>
</tr>
</thead>
</table>
| **Who participates in the *Grocery Store Rx* program?** | - Demographic Data  
- Provider Interviews | | | | - Provider Interviews |
| **Are program goals accomplished?** | | - Participant Survey  
- Redemption Data  
- Provider Interviews | | | |
| **Who initiates the program?** | | | - DOH Stakeholder Interview | | |
| **How is the program executed?** | | | - Participant Surveys  
- Provider Interviews | | |
| **How is the program integrated into organizational practices long term?** | | | | - Provider Interviews | |
Results
### Reach: Survey Respondent Demographics

- **3,600 participants statewide (September 2018)**

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

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

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

- 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

(54 mentions)
## Participant Surveys - Ease of Use

<table>
<thead>
<tr>
<th>Program Easy to Use</th>
<th>Program Difficult to Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>(25 mentions)</td>
<td>(25 mentions)</td>
</tr>
<tr>
<td>➢ Vouchers easy to redeem</td>
<td>➢ Negative experience with Safeway staff</td>
</tr>
<tr>
<td>➢ Practical to use</td>
<td>➢ Safeway too expensive</td>
</tr>
<tr>
<td>➢ Effective</td>
<td>➢ One voucher permitted per transaction</td>
</tr>
<tr>
<td>➢ Safeway staff helpful</td>
<td>➢ Difficult to determine FV subtotals</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Who is more likely to experience these effects?</th>
<th>Who is less likely to experience these effects?</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Health-promoting behavior classes</td>
<td>● Discomfort and concern with redemption process</td>
</tr>
<tr>
<td>● Supported by providers</td>
<td>● Lack of access to transportation and refrigeration</td>
</tr>
<tr>
<td>● Comfortable preparing fruits and vegetables</td>
<td></td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Organizational Challenges</th>
<th>Organizational Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources and logistics</td>
<td>Continually optimizing procedures</td>
</tr>
<tr>
<td>Staffing and communication</td>
<td>Flexibility in roles, responsibilities, and staffing</td>
</tr>
<tr>
<td></td>
<td>More and continuous Training</td>
</tr>
<tr>
<td>Tracking and Reporting</td>
<td><em>Provider suggestion:</em> electronic interface</td>
</tr>
</tbody>
</table>
# Implementation: Provider Interviews

<table>
<thead>
<tr>
<th>Provider Perceived Participant Challenges</th>
<th>Provider Suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation and Safeway access</td>
<td>Accept vouchers at more locations</td>
</tr>
<tr>
<td>Difficulties with voucher redemption at Safeway</td>
<td>Electronic vouchers, longer expiration dates, varying amount</td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>Limitation</th>
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<tbody>
<tr>
<td><strong>Generalizability</strong></td>
</tr>
<tr>
<td>○ High education level of survey respondents</td>
</tr>
<tr>
<td><strong>Research other populations that would benefit from program</strong></td>
</tr>
<tr>
<td>○ Homeless population</td>
</tr>
<tr>
<td>○ SNAP in-eligible individuals</td>
</tr>
</tbody>
</table>
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
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Questions?
References


References


