

# Innovative Approaches to Strengthen Employment Outcomes

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# Acknowledgments

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- Co-authors Robert Gilmore & Pamela McCall
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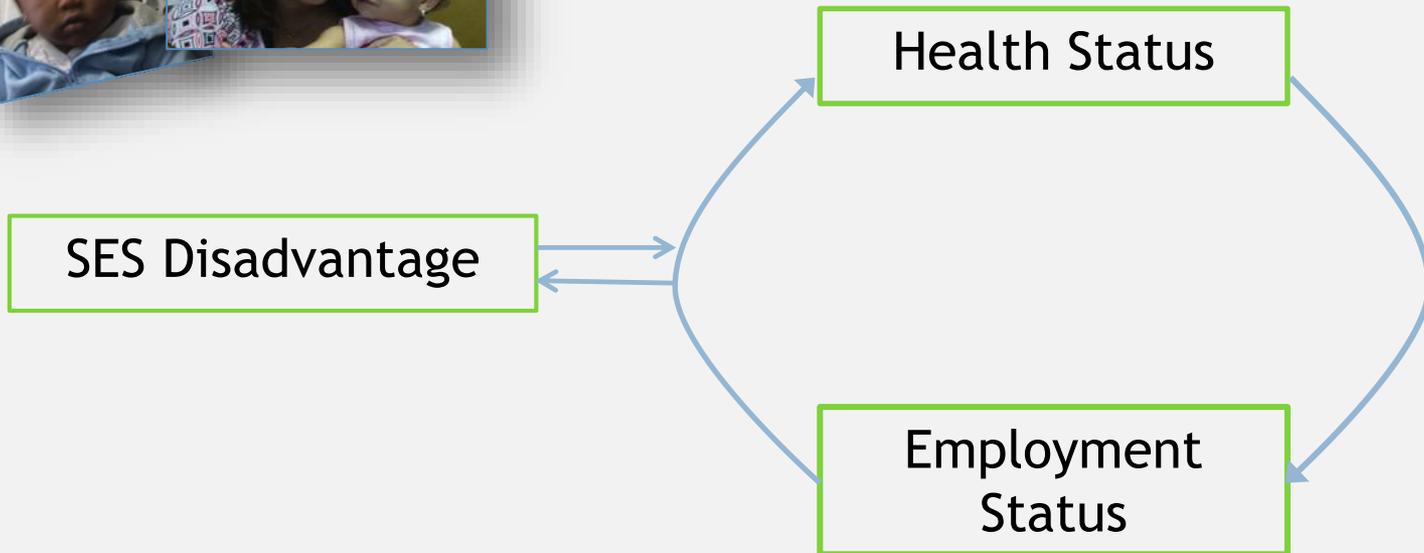


# Presentation Overview

- Background
  - *Health, employment, chronic disease burden*
- Evidence-Based Intervention (EBI) Findings to Improve Employment
- Implementing EBI with Students, Expanding to All Unemployed/Lower-wage Populations
- Survey of North Carolina PHN & Work First Managers - EBI Implementation Interest



# Inter-Dependencies of SES, Health, & Employment



# Programmatically Operated as Silos

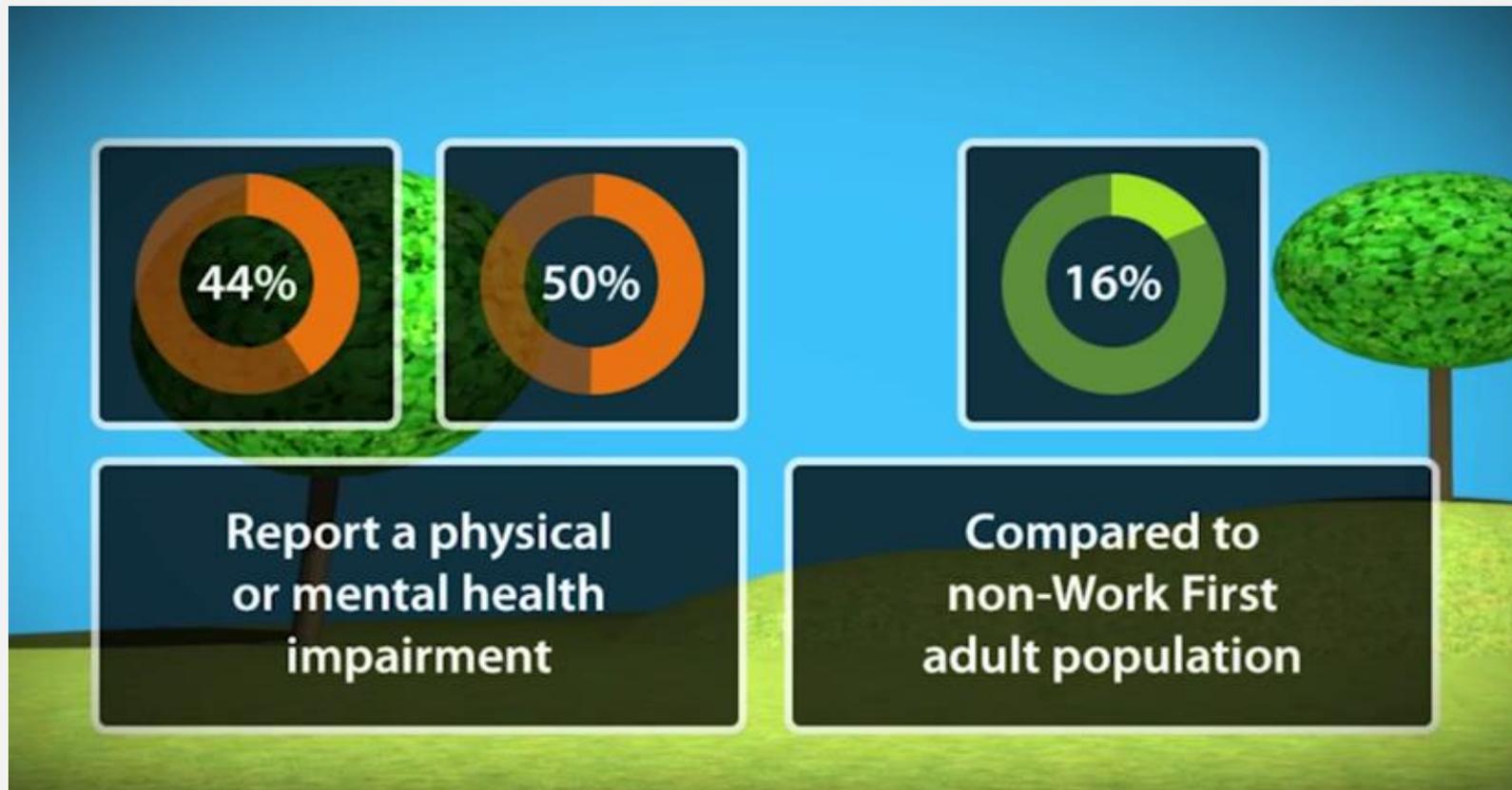


# Populations Served: More Similar or Different?



# Chronic Disease Burden

- SES-disadvantaged populations - including Work First/DSS clients and lower-wage workers - bear the brunt of chronic disease burden and account for greatest costs.



# Chronic Disease Burden

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- Chronic Disease = many conditions
- \$1.3 trillion spent on chronic disease in U.S./year.
- Cost reflects suboptimal management; symptom exacerbation; reduced functioning.
- Health-related presenteeism & absenteeism cost U.S. employers:
  - \$1,685 *per employee, per year*
  - **\$225.8 billion** annually



# Work First/Unemployed Populations

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- Poor health a greater obstacle to both obtaining and maintaining employment than education, lack of work experience, or having very young children.
- Relevant to all unemployed individuals.
- Studies have found that any episode of unemployment -- *regardless of SES* - increases behavioral health risks and negatively impacts health.



# Addressing Chronic Disease Self-Management Needs

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- Limited research in relation to interventions to improve employment via health in disadvantaged groups.
- Kneipp et al., = improved health & employment outcomes for women receiving TANF.
- Less in the area of lower-wage workers at risk for job loss, recurrent unemployment.



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**Service Delivery Innovation Profile**

## Public Health Nurses Provide Case Management to Low-Income Women With Chronic Conditions, Leading to Improved Mental Health and Functional Status

Innovation Back Story

### Snapshot

#### Summary

As part of a 9-month study, women receiving support from the Temporary Assistance for Needy Families program who had one or more chronic health conditions and were also enrolled in a local welfare transition program received case management services from public health nurses to address mental and physical health needs. Nurses conducted health screenings, provided in-person and telephone support and education, and made referrals to mental and physical health providers. The women also received training on Medicaid benefits and how to access them. The program enhanced access to mental health care and knowledge and skills related to accessing Medicaid services, reduced depressive symptoms, and improved functional status.

#### Evidence Rating [\(What is this?\)](#)

Strong: The evidence consists of a 9-month randomized, controlled trial involving 432 women from 1 rural and 1 urban county in north central Florida, including 214 who participated in the program and 218 who served as a control group. The trial compared access to mental health services, depressive symptoms, functional status, and knowledge and skills related to Medicaid benefits, using self-reported questionnaires administered at baseline and 3, 6, and 9 months.

#### [Contact the Innovator](#)



#### [Look for Similar Items by Subject](#)

- [Assessment](#)
- [Chronic-disease management](#)
- [Coordination of care](#)
- [Disparities reduction](#)
- [Improving access to care](#)
- [Female](#)
- [Medicaid](#)
- [Impoverished](#)
- [Women](#)
- [Equity](#)
- [Referrals](#)

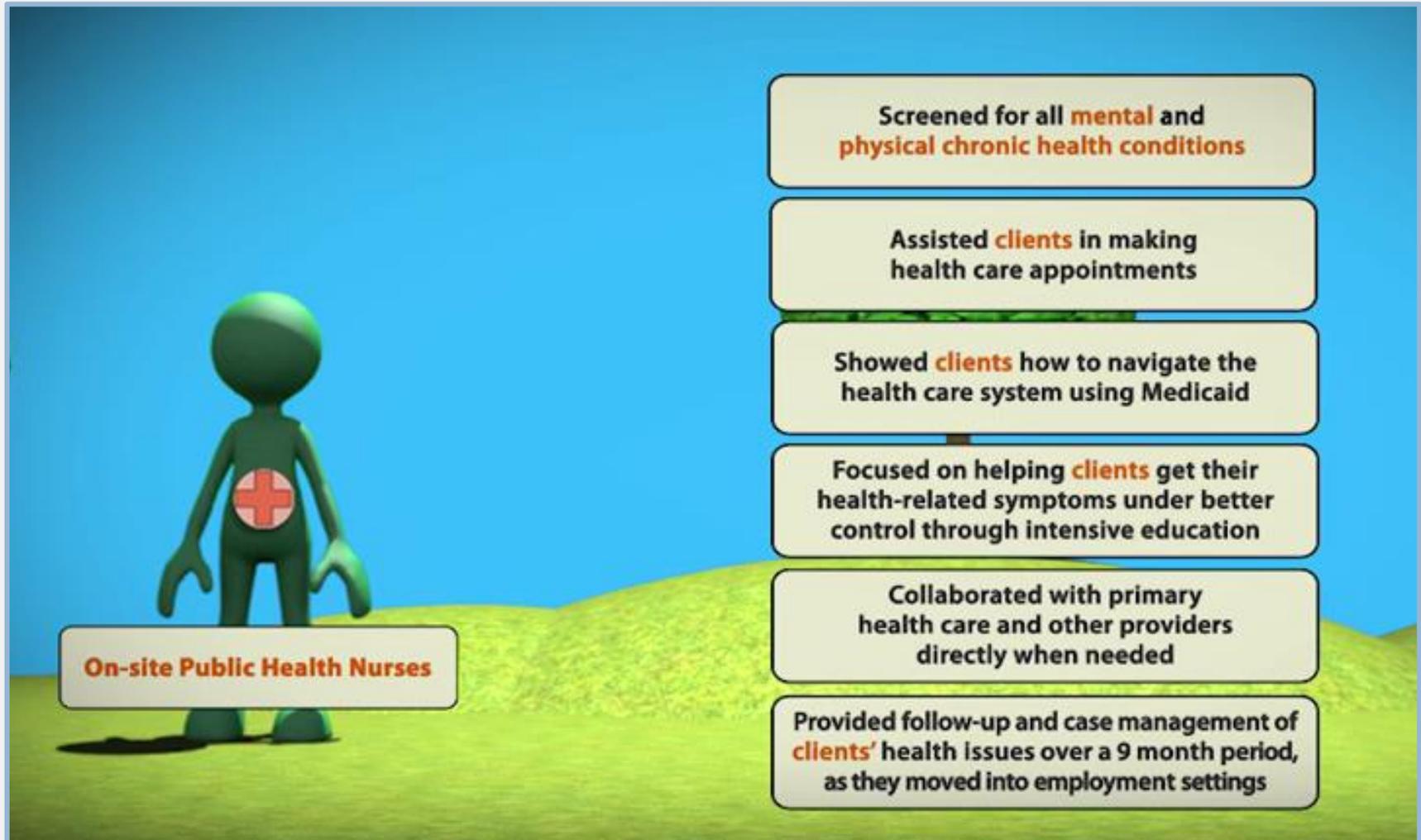
#### [Funding Sources](#)

National Institute of Nursing Research

AHRQ Health Care Innovations Exchange: <https://innovations.ahrq.gov/profiles/public-health-nurses-provide-case-management-low-income-women-chronic-conditions-leading>



# PHN Role in WF Program



# PHN Intervention for Work First Participants: Findings

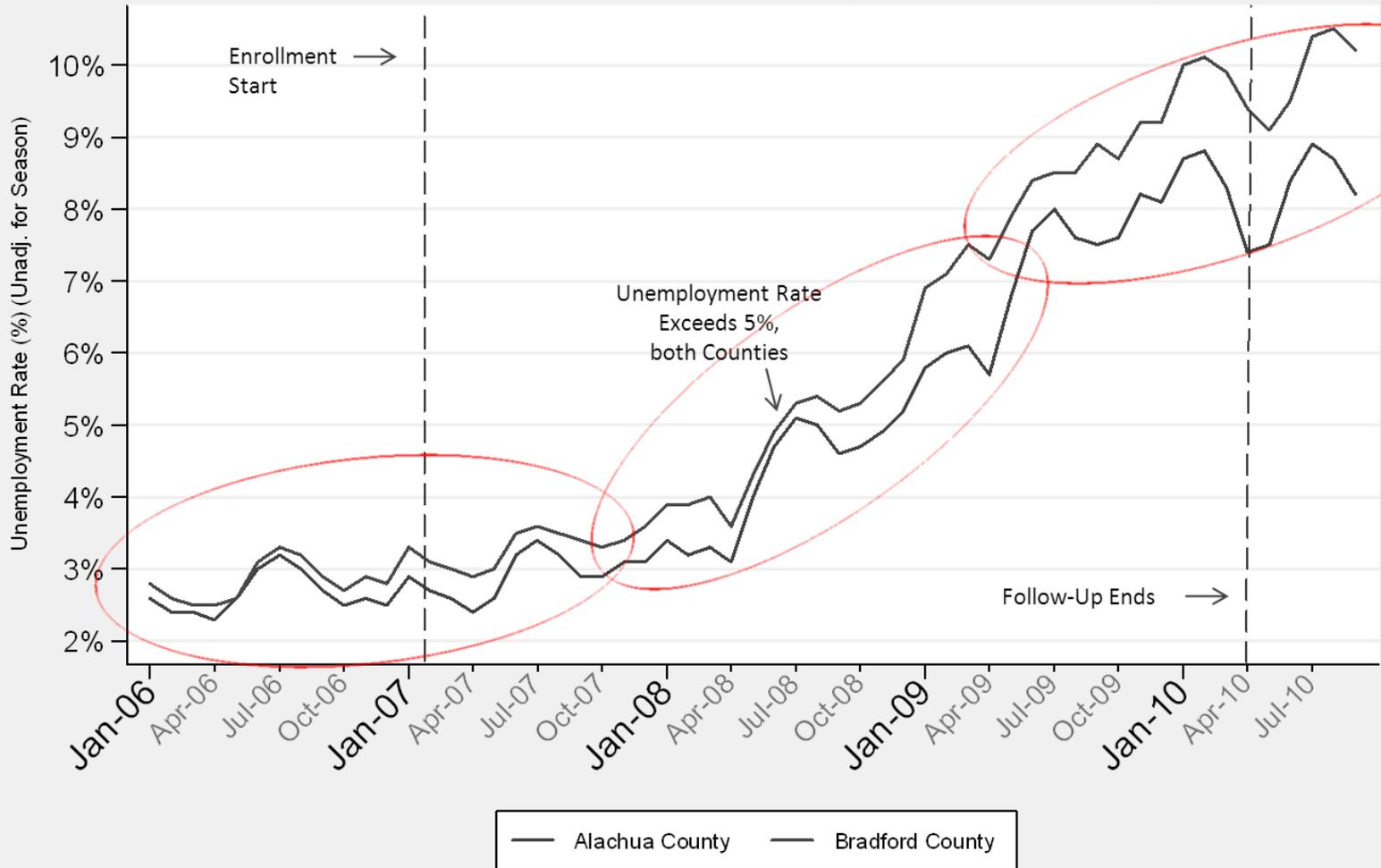
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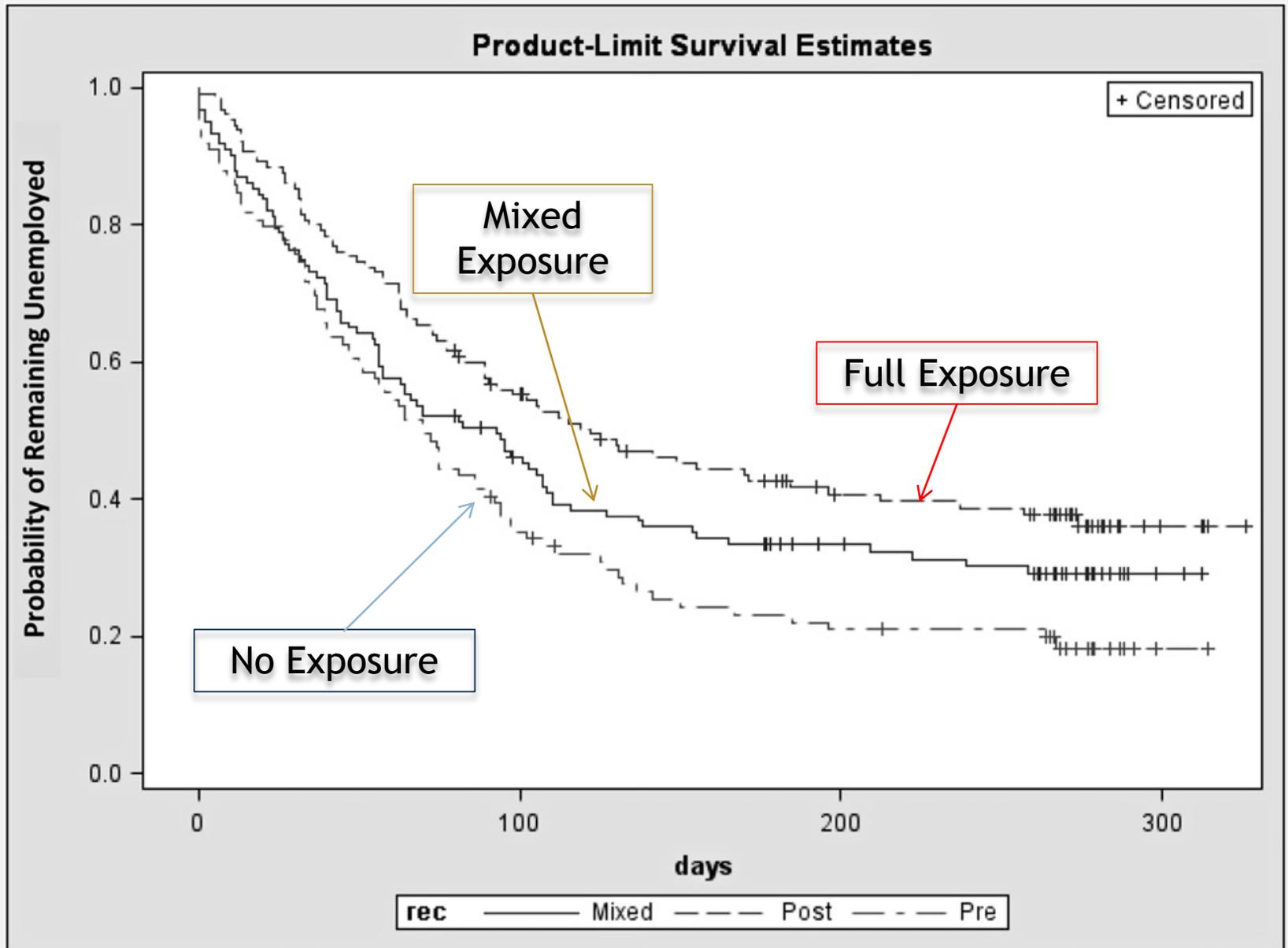
- Nearly 2x as likely to have first-time mental health visit.
- Significant reduction in depression.
- 73.4% Intervention Group became employed; 64.4% of Control Group.
- Women in Intervention Group employed **35 days earlier** than those in the Control Group.



# Unemployment Rates by County During Study Period

CBPR to Reduce Women's Health Disparities thru TANF Study





**Fig. 4.** Survival estimates for remaining unemployed, by recession exposure group.



# Recession Effects on PHN Intervention

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- In the control group, median days to employment:
  - 93 days in the ‘no recession exposure’ group,
  - 155 days in the ‘full recession exposure’ group.
- In the intervention group median days to employment:
  - 47 days with ‘no recession exposure’
  - 115 days with ‘full recession exposure’



# Putting What Works Into Practice

- DOH + UNC + DSS
- Students + Faculty Member
- Served >150 clients: case examples



**ORANGE COUNTY  
HEALTH DEPARTMENT**  
*Improving health. Inspiring change.*



**UNC**  
SCHOOL OF NURSING

## The Health Support Services Project

### Health Screening Questionnaire

Strengthening Orange County's Families and Workforce through Public Health Nursing Outreach\*

*\*A partnership between the UNC-Chapel Hill School of Nursing Public Health Nursing Faculty & Students, the Orange County Health Department, and the Orange County Department of Social Services. Services focus on health promotion, disease prevention, and chronic health condition case-management using an evidence-based model of care.*



# Best Practice – Key Factors

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- Based on scientific evidence / NIH study / randomized controlled trial (RCT)
- Students/faculty onsite at DSS
- Confidentiality
- One-to-one assessment, follow-up
- Resource for employment, WF manager and social workers / staff to remove barriers
- More efficient



# How to Adopt PHN Intervention to Improve Employment

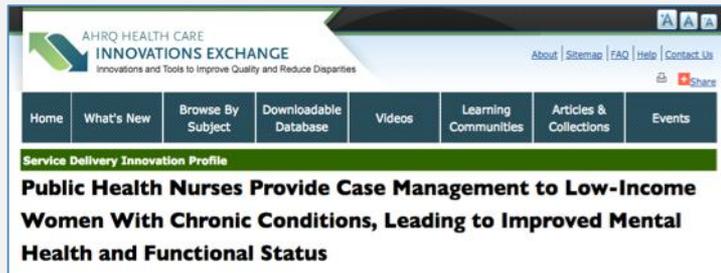
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- Several approaches could work
- Partnering where local resources available (clinical site for nursing students, etc., volunteer RNs through health dept.)
- Matching skills & abilities (including health) to job requirements for all unemployed
- Cost savings from WF cash benefit alone to 9 of 50 NC counties = \$25,205-\$69,280 over 2y
- Further savings through DSS/Work First staff efficiencies



# How to Increase PHN EBI Adoption in NC Counties

- Surveyed PHN & WF managers in 50 of 100 NC counties



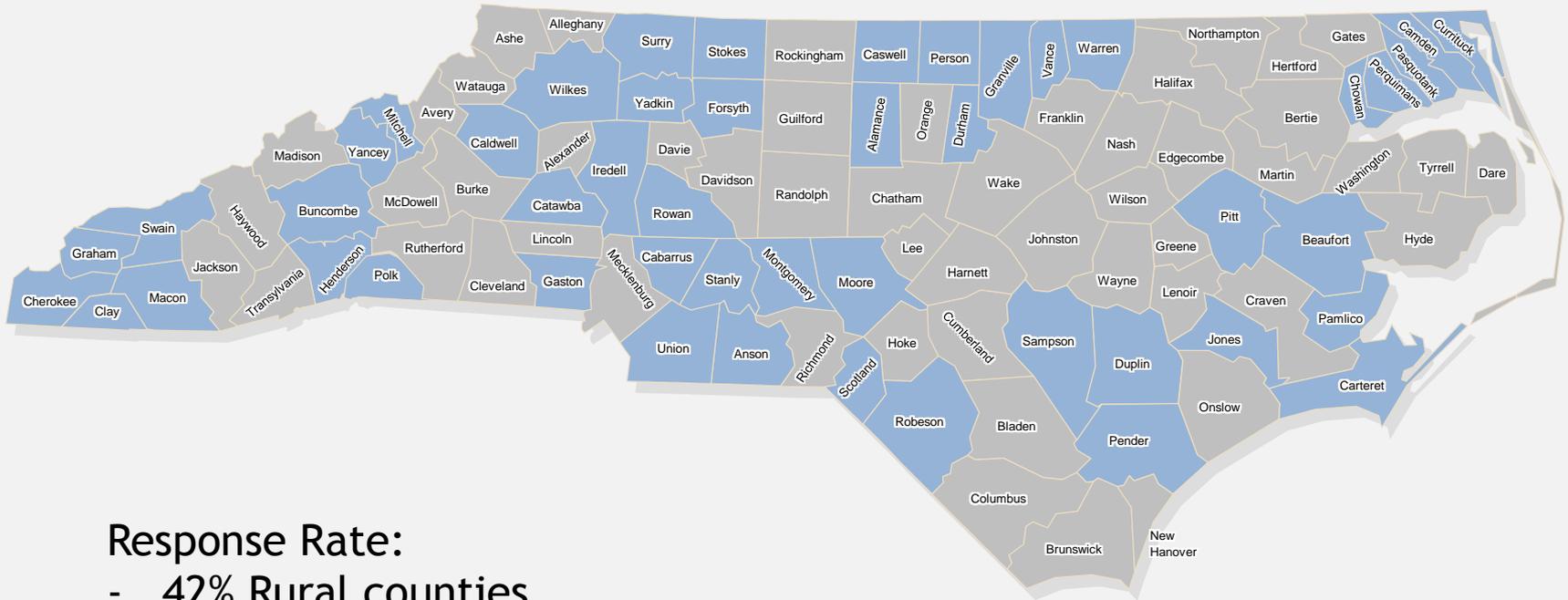
vs.



- Video tailored information to county level
- Examined demographic, innovation, evidence-based practice use characteristics, and EBI format on adoption interest.
- Forsyth County: [https://youtu.be/HS\\_MSZJVrTs](https://youtu.be/HS_MSZJVrTs)



# North Carolina Counties Surveyed NCTraCS D&I Study



## Response Rate:

- 42% Rural counties
- 40% Urban counties

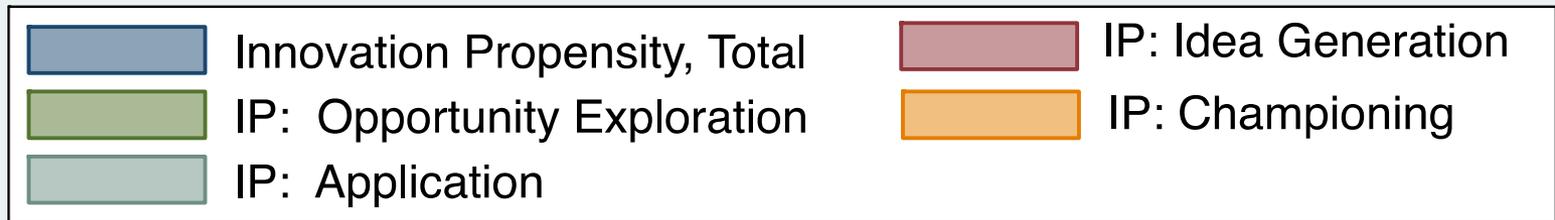
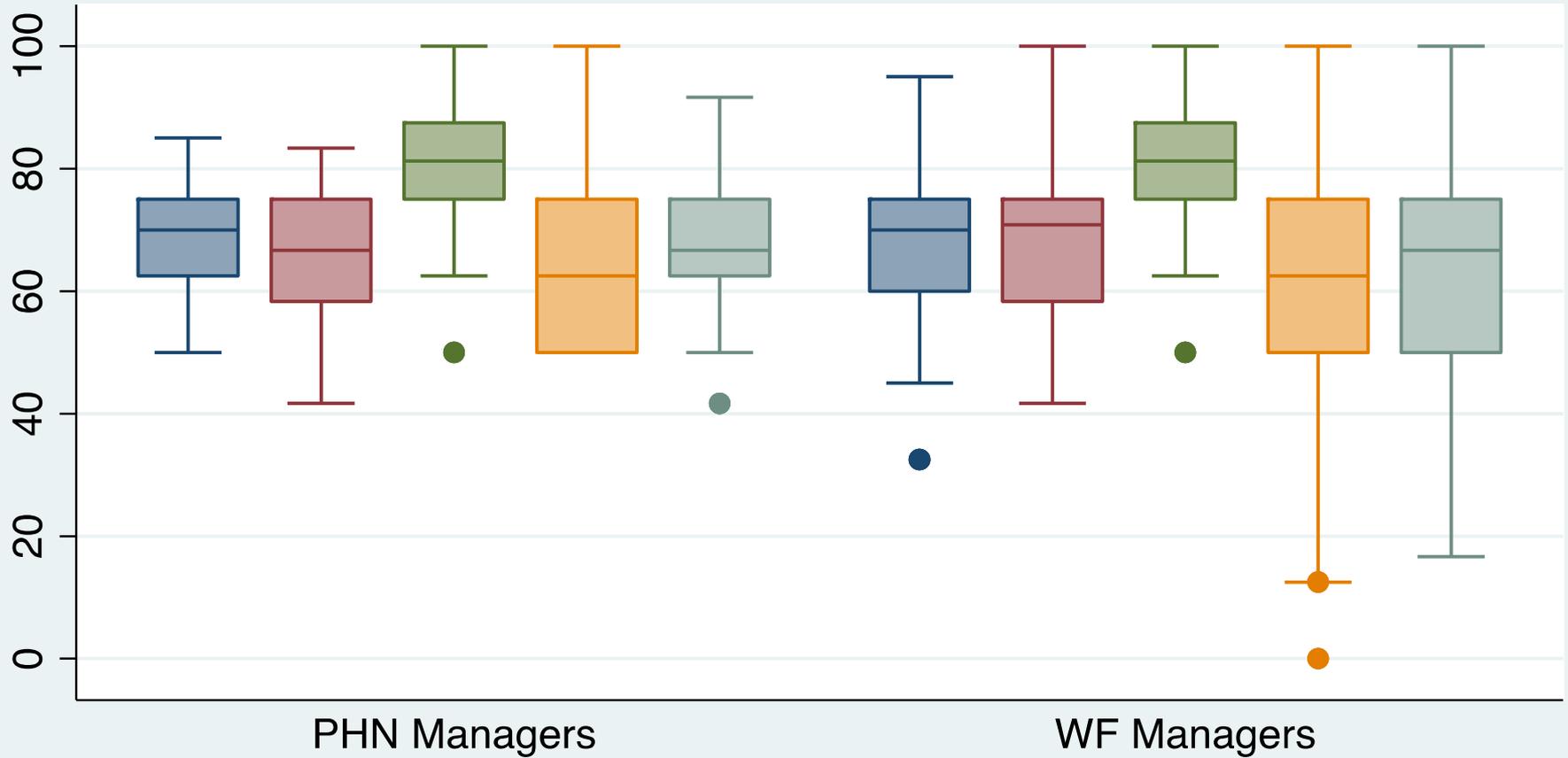


# Sample Demographics

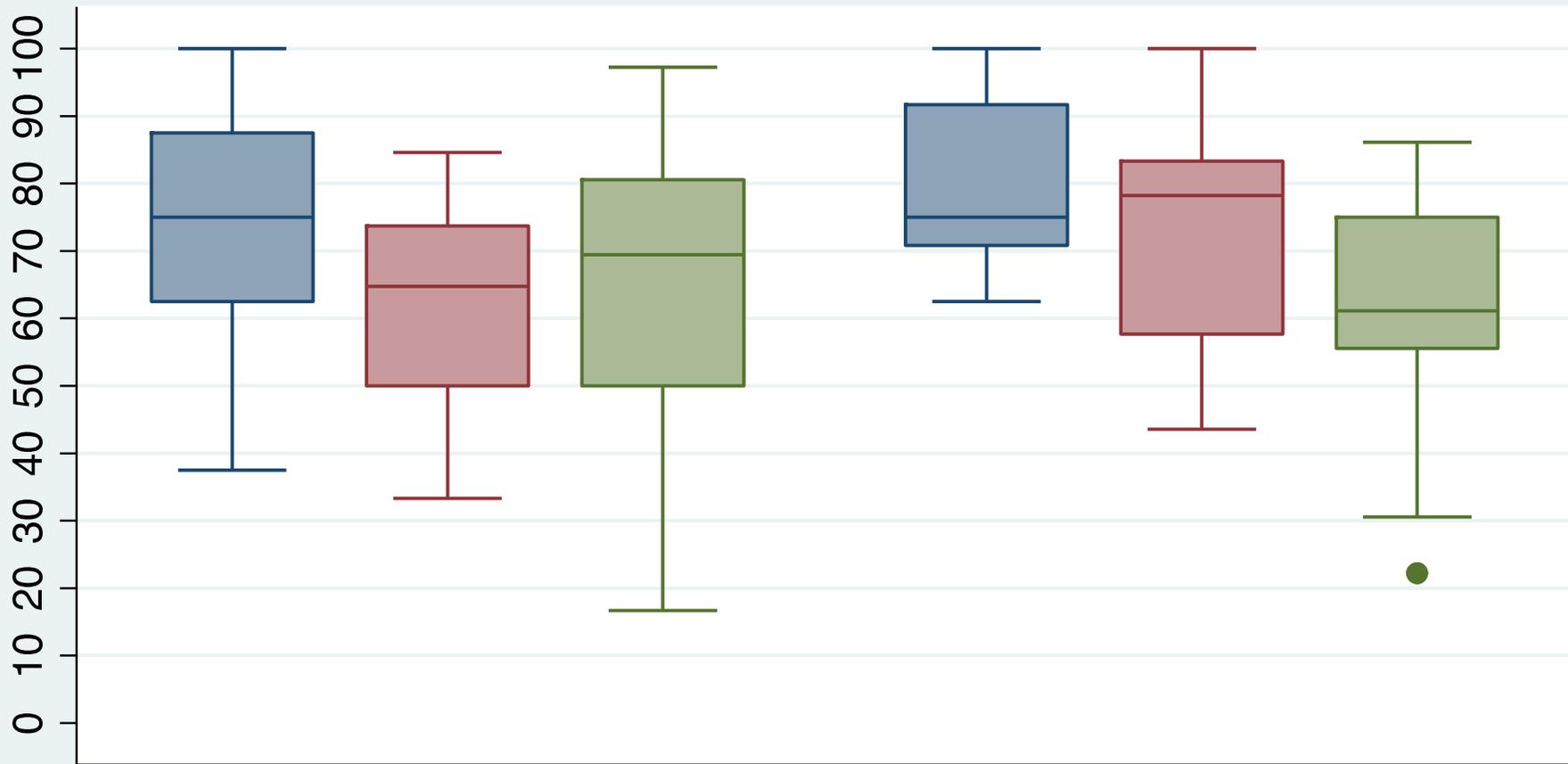
Characteristic	PHN Managers (n=20)	WF Managers (n=18)	Total (n=38)
<b>Race</b>			
Black/African American	0%	33%	16%
White	95%	61%	79%
Other	5%	6%	5%
<b>Education Level</b>			
Some college/Associate degree	40%	39%	39.5%
Bachelor's degree	50%	56%	52.6%
Master's degree or higher	10%	5%	7.9%
<b>County Designation</b>			
Urban	10%	17%	13%
Rural	90%	83%	87%
<b>Years in Current Position (mean)</b>	7.75	8.5	8.1
<b>Years as PHN/in SS Agency, Current County (mean)</b>	5.2	19.0	12.8



# Innovation Propensity Characteristics by Manager Type

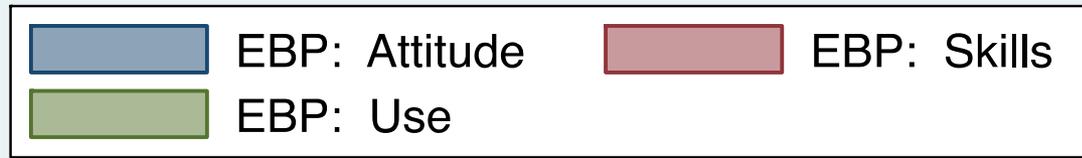


# Evidence-Based Practice Characteristics by Manager Type



PHN Managers

WF Managers



# What Predicts Innovation/EBP Characteristics Among PHN / WF Managers?

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- Regression Model Predictors:
  - Age
  - Years in Current Position
  - Education Level
  - IP



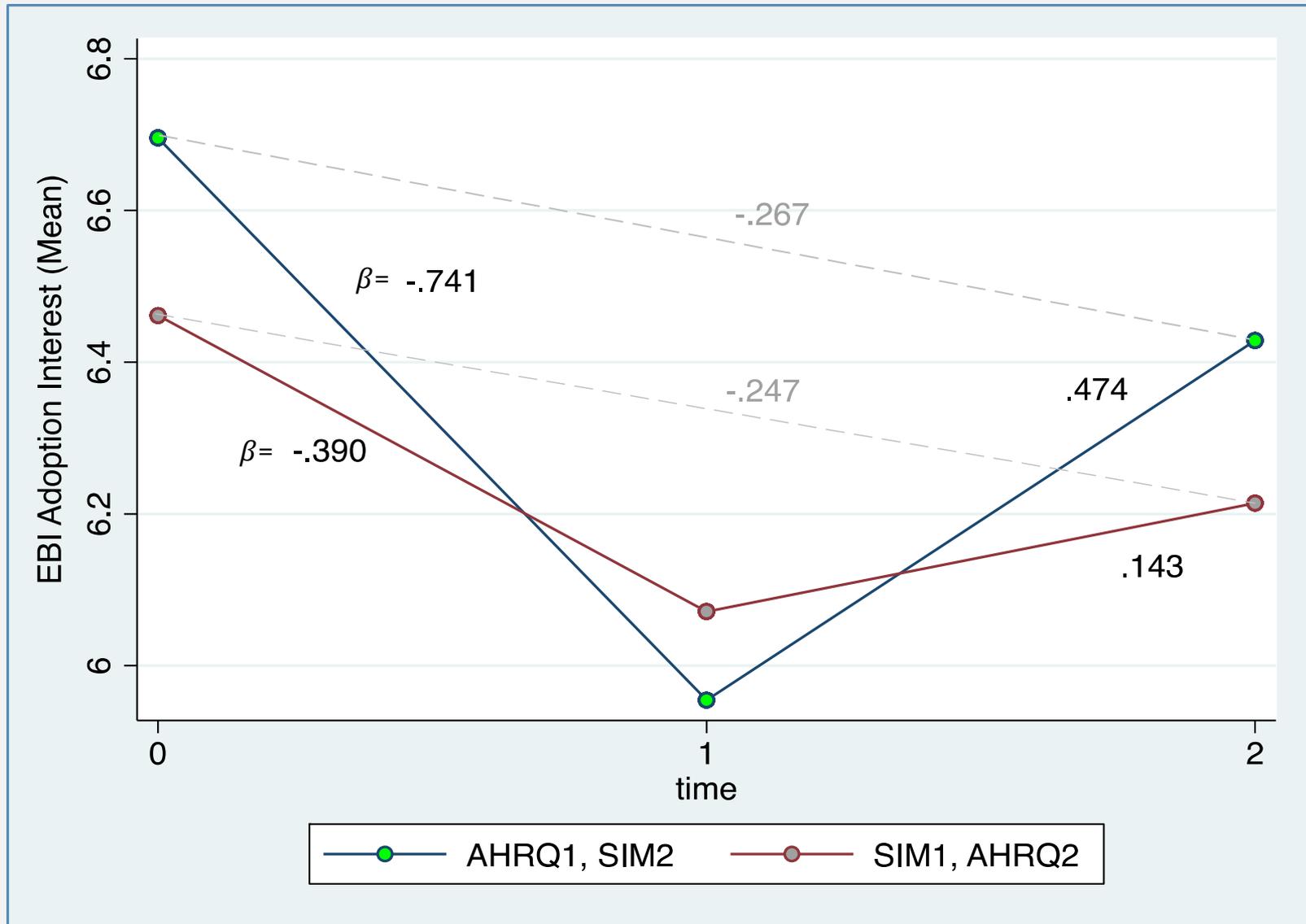
# What Predicts Innovation, EBP, Adoption Interest Among PHN / WF Managers?

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- All Managers
  - Demographic characteristics  predict IP
  - IP  EBP Attitude
  - IP + Education  EBP Skills
  - IP  EBP Use
- Yrs in Position, Education, IP, EBP Use   
Adoption Interest @ T0



# EBI Adoption Interest Change, by Format Presentation Sequence and Time



# Manager Comments

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- *“Would be very beneficial to Work First clients . . . Potential to be a great initiative.”*
- *“Improving the health of [WF] clients will garner benefits for the whole community.”*
- *“This was an aspect I had never considered but feel it would make a positive impact.”*
- *“My concern lies with program funding.”*
- *“If adequate funding was provided, I feel this program fits well with my agency’s mission and vision.”*



# Take Home Messages

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- Cannot separate health-related limitations from employment likelihood.
- Can apply to clients at NCWorks Career Center, DSS, other employment agencies.
- Adopting innovative EBI's such as this can = better health, cost savings, employment.
- Managers/Attendees
  - Experts in building partnerships for implementation
  - Allocate funds as activity to support employment
  - Advocate at local/state level for funding





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# Thank You!

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