

Providing Self-Sufficiency Services to Vulnerable Populations





David Wingard, Ph.D.

Director of Research and Strategic Development

TrueNorth Community Services

Co-Director Michigan Practice Based Research Network

Diane Fleser MSA, Ph.D. Student

Self Sufficiency and Community Health Director

TrueNorth Community Services

Doctoral Associate WMU College of Health and Human Services

Workshop Overview

- ◆ Background: TrueNorth and low income energy assistance in Michigan
- ◆ TrueNorth's service delivery system innovations
- ◆ Summary of Research findings and outcome measures
- ◆ Discussion

Background: TrueNorth Community Services

TrueNorth Community Services

- ◆ **MISSION**: We empower people and strengthen community to inspire hope and build a brighter future.
- ◆ **VISION**: We envision a world where all people have the opportunity to create permanent positive change.
- ◆ 42 Years of history in Michigan 60 plus programs and services
- ◆ Budget: \$30,000,000
- ◆ Employees: 270

TrueNorth
Community
Services Building in
Fremont, MI



Camp Newaygo



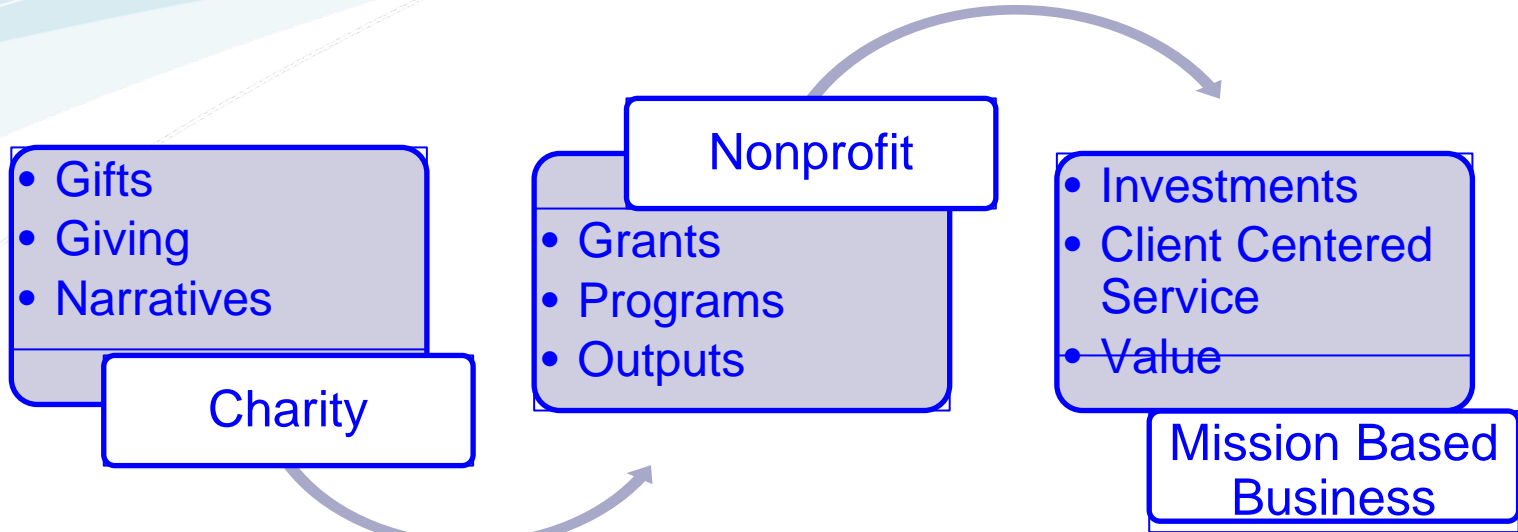
Food Pantry



TrueNorth Community Services

- 43 Years of service to Michigan
- Currently serving 64 of Michigan's 83 counties
 - Goal of going Statewide in October 2016
- Cross Sector Initiatives, Rural Expertise, Policy and Advocacy, Research and Business Analytics

TrueNorth's Business Model Evolved



TrueNorth's Approach

- ◆ TrueNorth's multi-service approach has been refined and focused on the unique needs of rural communities
- ◆ A service model that includes screening and assessment designed to guide eligible clients into services that target their individual need(s)
- ◆ Fluid service delivery approach supported by informatics and outcome measures
- ◆ Cross-sector development and deployment

Background: Low Income Energy Assistance in Michigan

Michigan Low Income Energy Assistance Program

- ◆ Michigan Energy Assistance Program (MEAP)
- ◆ \$90,000,000 Statewide
- ◆ Federal (LIHEAP) and State Dollars
- ◆ Administered by DHHS and MAE
- ◆ 13 Grants Recipients
- ◆ Client eligibility: below 150 % FPL
 - 1 person household: \$17,505
 - 4 person household: \$35,775

TrueNorth MEAP Grant

- ◆ \$13 million dollar project
- ◆ 64 Counties growing to Statewide in 2016
- ◆ 19,665 assists in 2015-2016 grant cycle
- ◆ Ensure safety, quality of life
- ◆ Move households off assistance
- ◆ In legislation: grantees must “move assistance applicants toward self-sufficiency”

Self-Sufficiency Definition Issues

- ▲ No consensus on definition
 - Energy or holistic?
- ▲ TrueNorth's definition:
 - *A condition in which a household is able to meet all their basic needs without external assistance*
- ▲ Self-Sufficiency is a process; not an event

TrueNorth's Service Delivery Innovations

TrueNorth Innovations Overview

- ▲ Screening Process
- ▲ Three Track Service Delivery
- ▲ Self Sufficiency
- ▲ Research and Data Methods

TrueNorth Services Screening Instrument

- ▲ Screening is quick, efficient and low cost
- ▲ No existing solution which lead to creation of the SSI
- ▲ Tested independently for validity and reliability
- ▲ Nine questions built into every application

Service Screening Instrument Research Findings Summary

- ▲ Findings of the Factor Analysis and Comparison to an established instrument suggest robust levels of validity
- ▲ Reliability levels related to administration method appears to be strong
- ▲ Education, Employment and Health Care Access were the three strongest predictors of Self-Sufficiency
- ▲ Higher than expected percentages of screened applicants have the potential for self-sufficiency

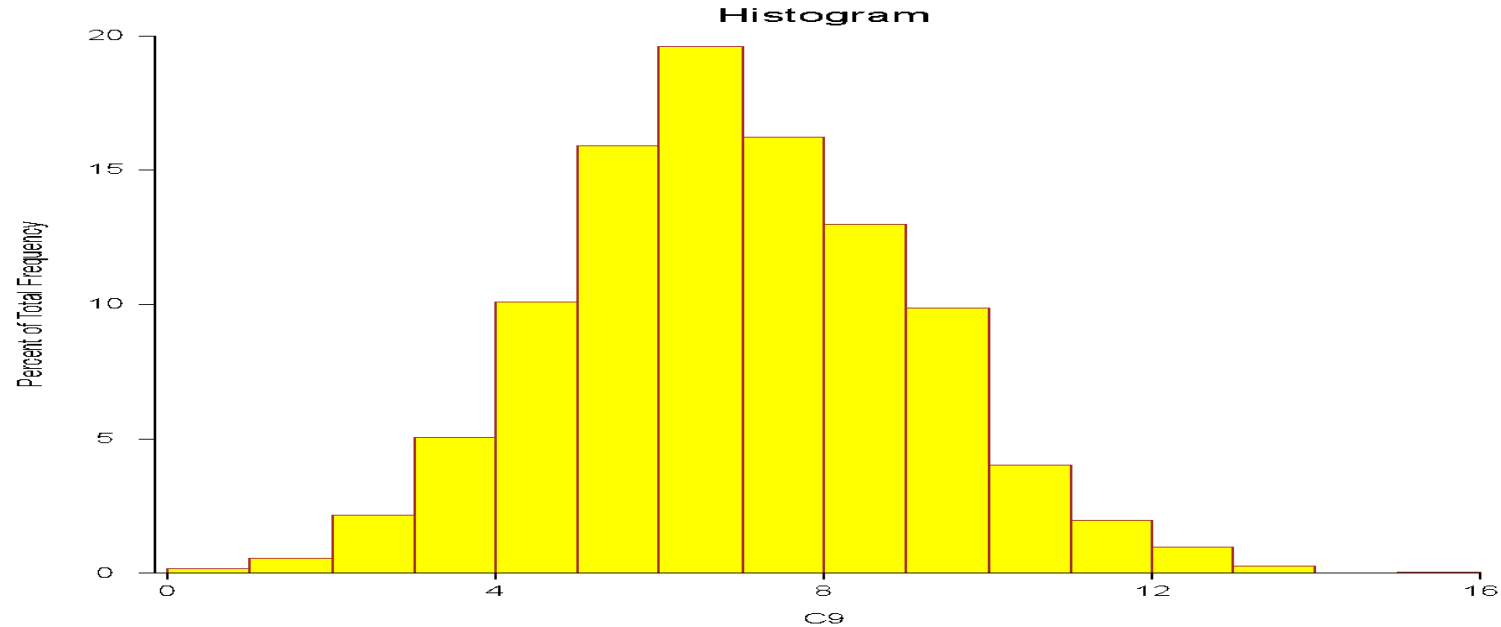
Screening Findings: Track Population Estimates

- ▲ Higher than expected percentages of screened applicants have the potential for self-sufficiency
- ▲ Little evidence in literature
- ▲ Hypothesis: 65% Extended, 15% Self-Sufficiency, 20% Crisis
- ▲ Data analysis indicates 60% or more in Self-Sufficiency, 15% Extended and 25% in Crisis
- ▲ Suggests greater potential economic benefit from SS

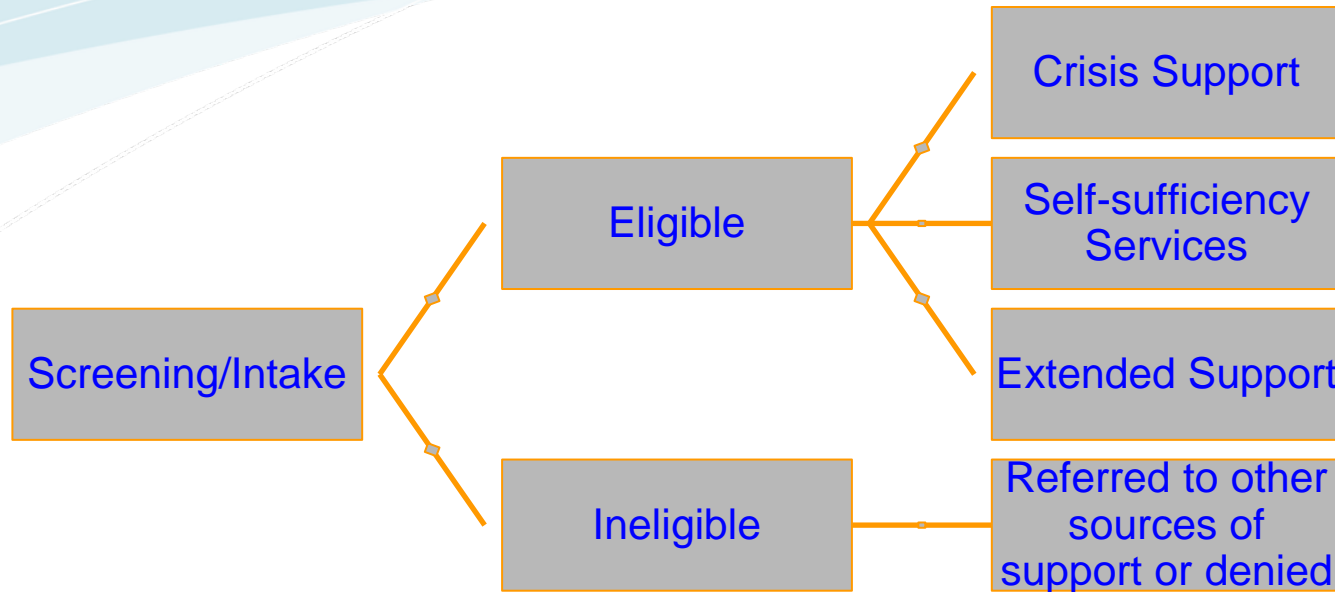
Count	Mean	Deviation	Error	Minimum	Maximum	Range
2021	7.425532	2.151909	0.04786751	0	16	

Screening Data Distribution

SSI Histogram $n=2021$



TrueNorth Service Delivery Approach



Service Delivery Tracks

▲ **Crisis Track**: Strong client asset base and one time assistance

▲ **Extended Track**: Enduring vulnerability, not impacted by human service intervention, efficiently ensure safety and quality of life

Self-Sufficiency Service Delivery Track

- ◆ Self Sufficiency delivered by Bachelor level cased managers
- ◆ Service provided in home or community
- ◆ Average caseload size is 35
- ◆ Average length of intervention is 180 days
- ◆ Observed intervention improvements at 90 days

Self Sufficiency Track Continued

- ◆ Assessment drives fluid service delivery
- ◆ Self Sufficiency Matrix
- ◆ Barriers to Employment Success Inventory
- ◆ EQ5D
- ◆ Integrated research and data system
- ◆ Independent evaluation

Service Delivery Process

- ▲ Budgeting Education
- ▲ Connection with Community Resources
- ▲ Energy Optimization kits
- ▲ Job skills
- ▲ Education and employment resources
- ▲ Health Care
- ▲ Bill payment contribution

Innovations Summary

	Heat & Energy Assistance	Self Sufficiency
Model	Extended assistance for vulnerable households at risk for shutoff of energy	Temporary assistance to promote payment of energy bills independently
Primary Intervention	Financial assistance and basic case management	Intensive Case Management
Intake Process	Financial qualifications assessed	Screening leads to identification of appropriate service delivery track
Outcomes	Avoid shutoffs and crisis resolution	Self Sufficiency
Approach	Reactive to a client crisis	Proactive to promote independence
Evaluation	Outputs measured and reported in HMIS	Research model to measure Costs, Self Sufficiency, Family Environment and Percent of Bills paid independently
Business Approach	Grant contract	Quality Management Business Model

TrueNorth Research: Summary of Findings Related to Low Income Heat and Energy Assistance

Research Overview

- ◆ Quantitative Research
- ◆ Cloud Based Data System
- ◆ Observational Research Designs
- ◆ Independent Evaluation

Research Questions

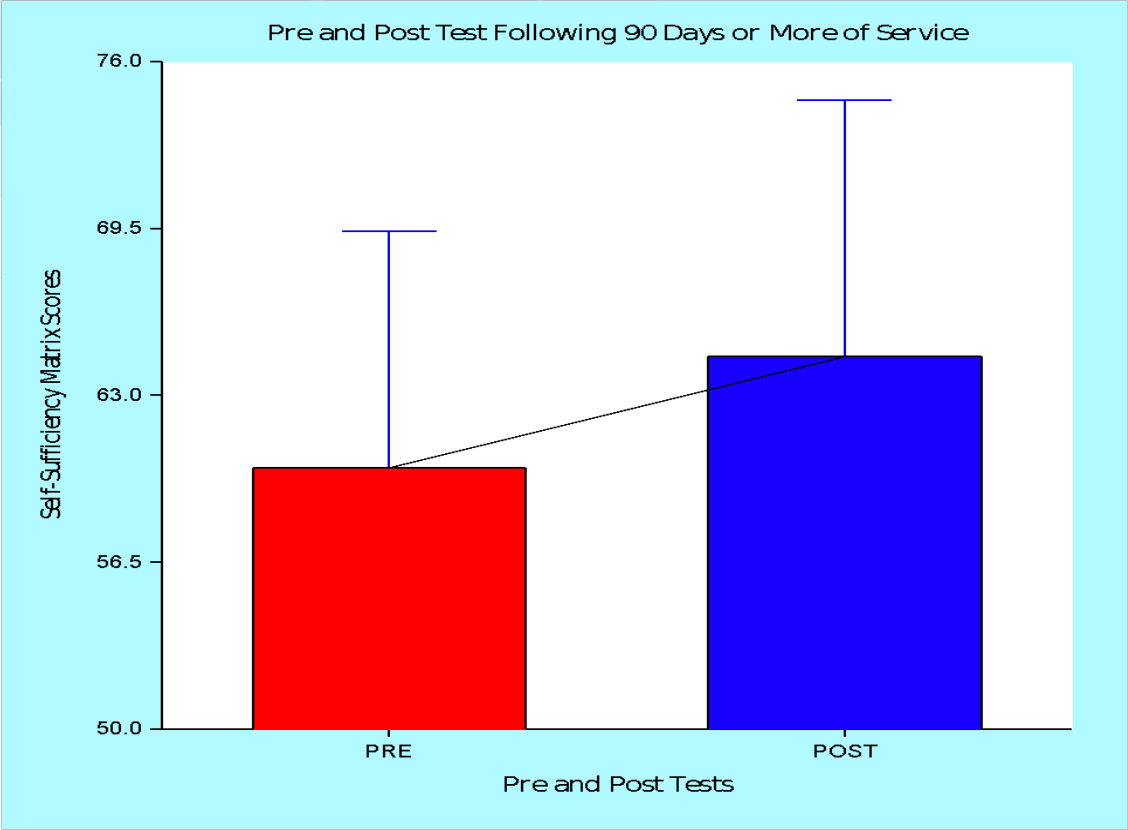
1. Do MEAP applicants receiving SS services improve their general self sufficiency?
2. Do MEAP applicants receiving SS services reduce their need for public assistance?
3. Do MEAP applicants receiving SS services reduce their barriers to employment?
4. Do MEAP applicants receiving SS services improve their health status?

Self Sufficiency Outcomes

Self Sufficiency Outcomes

- ◆ Do recipients screened into SS service delivery improve their general self-sufficiency?
- ◆ Self Sufficiency Matrix Pre Post Scores
- ◆ Regression analysis
- ◆ Sample of 90 days or more of service delivery

Self Sufficiency Matrix Results



Self Sufficiency Summary Findings

- ◆ A regression analysis of pre and post test scores was also conducted. Using Cohen's d as an effect size calculator indicated the result of .41 or a moderate effect. This is a positive statistical indicator of the effectiveness of the program.
- ◆ Cohen's d is a statistic that reports differences from pre to post mean and standard deviation within a group.

Conditions for Consideration

- ▲ New area

- ▲ Experience level of staff

- ▲ Dosage? (60 - 90 days at post)

Reduced Need for Public Assistance Outcomes

Reduced Need for Public Assistance

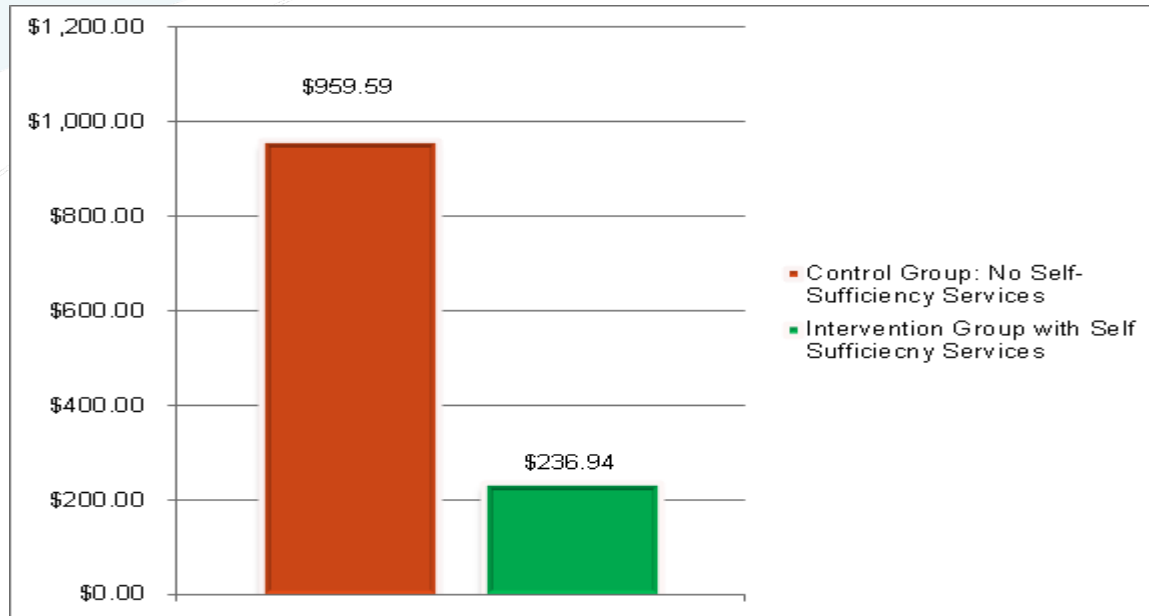
- ◆ An important objective of the 2015 research was to investigate the effectiveness of interventions designed to reduce the need for public assistance.
- ◆ In theory, MEAP eligible residents with the potential for self-sufficiency should be able to use less publicly supported energy assistance and, pay more of their utility bills independently.

Research Question:

Will households receiving Self-Sufficiency services from TrueNorth reduce their average need for MEAP assistance when compared to a control group of households not receiving Self-Sufficiency?

Reduced Need For Public Assistance Findings

Average Assistance Dollars per Household 2015 MEAP Grant Self-Sufficiency Services Compared to Control Group



Barriers To Employment Success Inventory Outcomes

BESI Objectives

▲ BESI measures barriers in 5 profiles

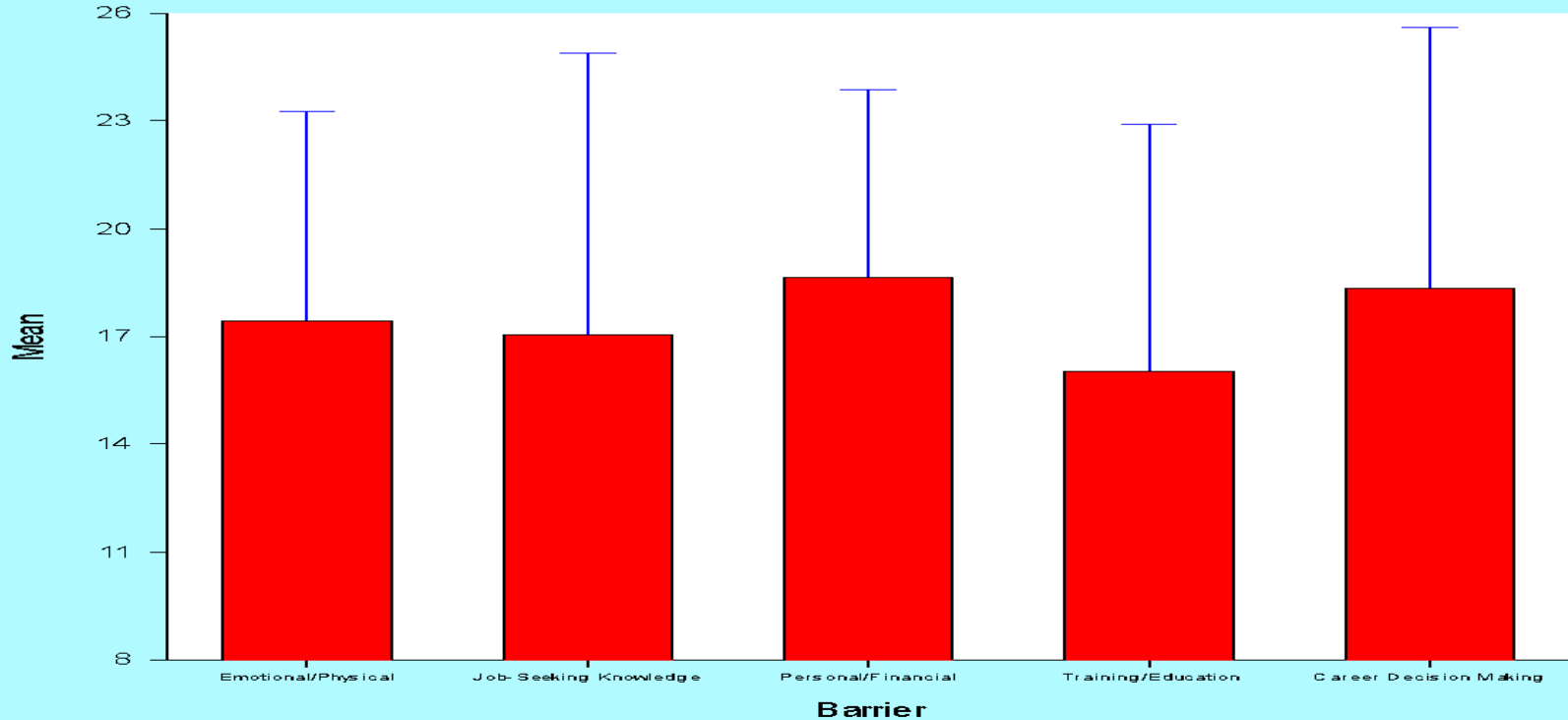
- Personal and Financial
- Emotional and Physical
- Career Decision Making and Planning
- Job Seeking Knowledge
- Education and Training

▲ Gain knowledge related to the barriers experienced by service recipients

▲ Can barriers be effectively reduced with Self Sufficiency Services

BESI Profile Findings

Barriers to Employment



BESI Findings

- ▲ Observational Research Design
- ▲ Pre and Post data $n = 136$
- ▲ In our Northwest region, “Job Seeking Knowledge” was the most frequently reported barrier

BESI Effectiveness

- A regression analysis of pre and post test scores was also conducted. Using Cohen's d as an effect size calculator indicated the result of .23 or a moderate effect. This is a positive statistical indicator of the effectiveness of the program.
- Cohen's d is a statistic that reports differences from pre to post mean and standard deviation within a group.

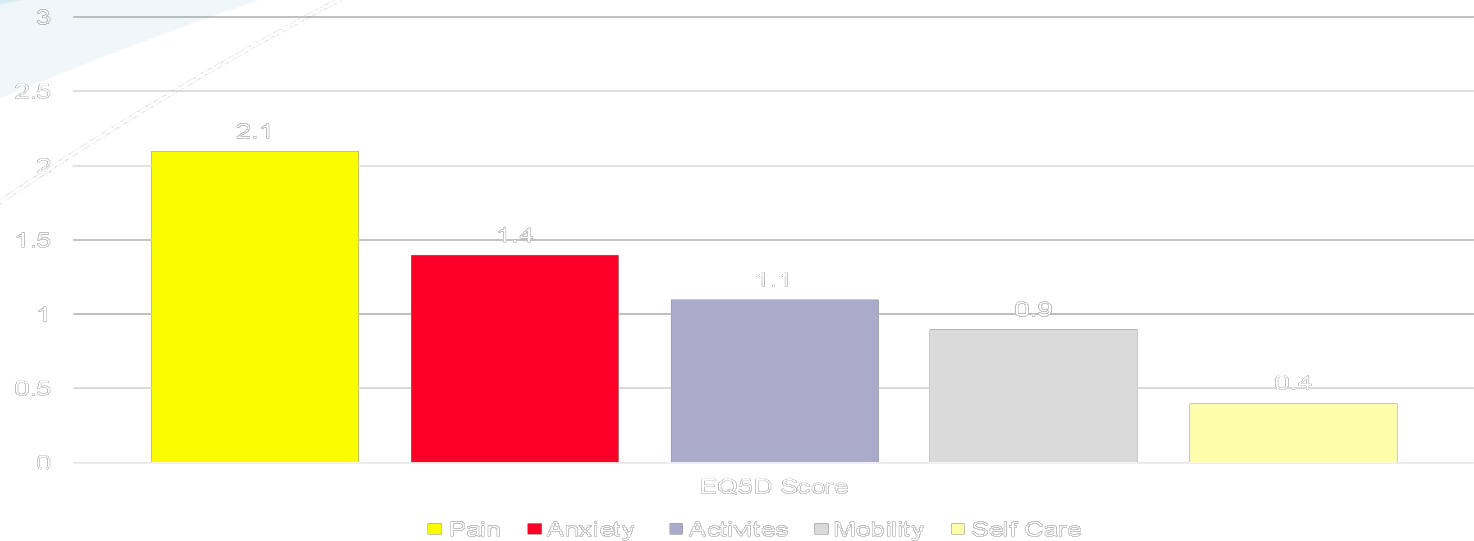
Health Status Outcomes

EQ5D Findings

- ▲ N = 271
- ▲ Pretest Mean = 5.54, SD = 3.95
- ▲ Posttest Mean = 5.21, SD = 3.94
- ▲ Effect Size (Cohen's d) = .008
- ▲ Effect Size 0.0 – 1.0

EQ5D Profile

EQ5D Health Profiles
Self Sufficiency Population Sample



Discussion: Health Outcomes

- ▲ Findings of 90 day or greater service delivery indicate no statistically significant improvement in health status
- ▲ This suggests that case work by human service providers in isolation is not an effective method to improve health status
- ▲ Future integration with health care providers is necessary to investigate the potential for improved health outcomes
- ▲ New knowledge gained includes reported high levels of pain and anxiety in the population

Summary 2014 Research

- ▲ Screening instrument is accurately identifying a larger than expected sample
- ▲ Self Sufficiency services are effective
- ▲ Health Status issues are not being effectively addressed
- ▲ Barriers to employment were reduced

Predictive Models for Population Health Risk Stratification

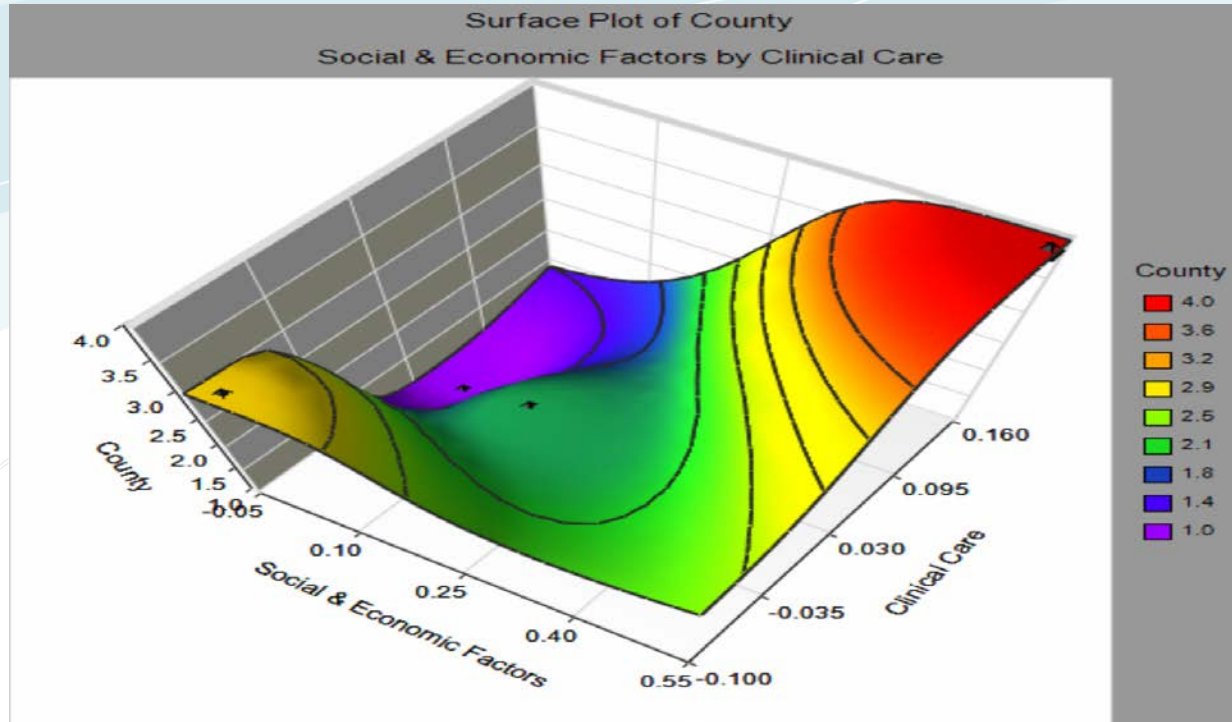
Methodology

- ◆ Analytic approach employs the same methods as the previous example
- ◆ Parameter estimation, nonlinear regression and simulations
- ◆ However, data sets are different and multivariate

Risk Definition

- ◆ Risk: population health
- ◆ Risk: high cost to the health care system
- ◆ Risk to individual health quality of life status
 - Quality Adjusted Life Years

Results: Predictive Risk Model



Discussion: Practice Implications

- ◆ Methods can be used by Human Service managers to improve the efficiency and effectiveness of their services
 - Managers can clearly monitor performance
 - Expertise in research/statistics is not necessary
- ◆ Dashboards can be shared with funders for transparent monitoring and oversight
- ◆ Improved efficiency and effectiveness of human services benefits vulnerable service recipients

Average Assistance Dollars - Self-Sufficiency Services



TrueNorth Current Initiatives

Institute For Healthcare Improvement Triple Aim

- ▲ Reducing per capita costs, improving patient experience with care, meeting complex needs
- ▲ Spectrum Health Care System and TrueNorth Community Services
- ▲ 2015 pilot scaling up
- ▲ <http://www.ihl.org/Engage/Initiatives/TripleAim/Pages/default.aspx>

Summary TrueNorth Strengths

- ◆ Advanced business model
- ◆ Relatively strong capacities
- ◆ Complex data and analytics systems
- ◆ Diversity
- ◆ Cross sector partnerships

Summary TrueNorth Challenges

- ▲ Insufficient indirect cost rate
- ▲ Vast geographic area
- ▲ Complex needs of those served
- ▲ Capacity to sustain growth especially in new sectors