



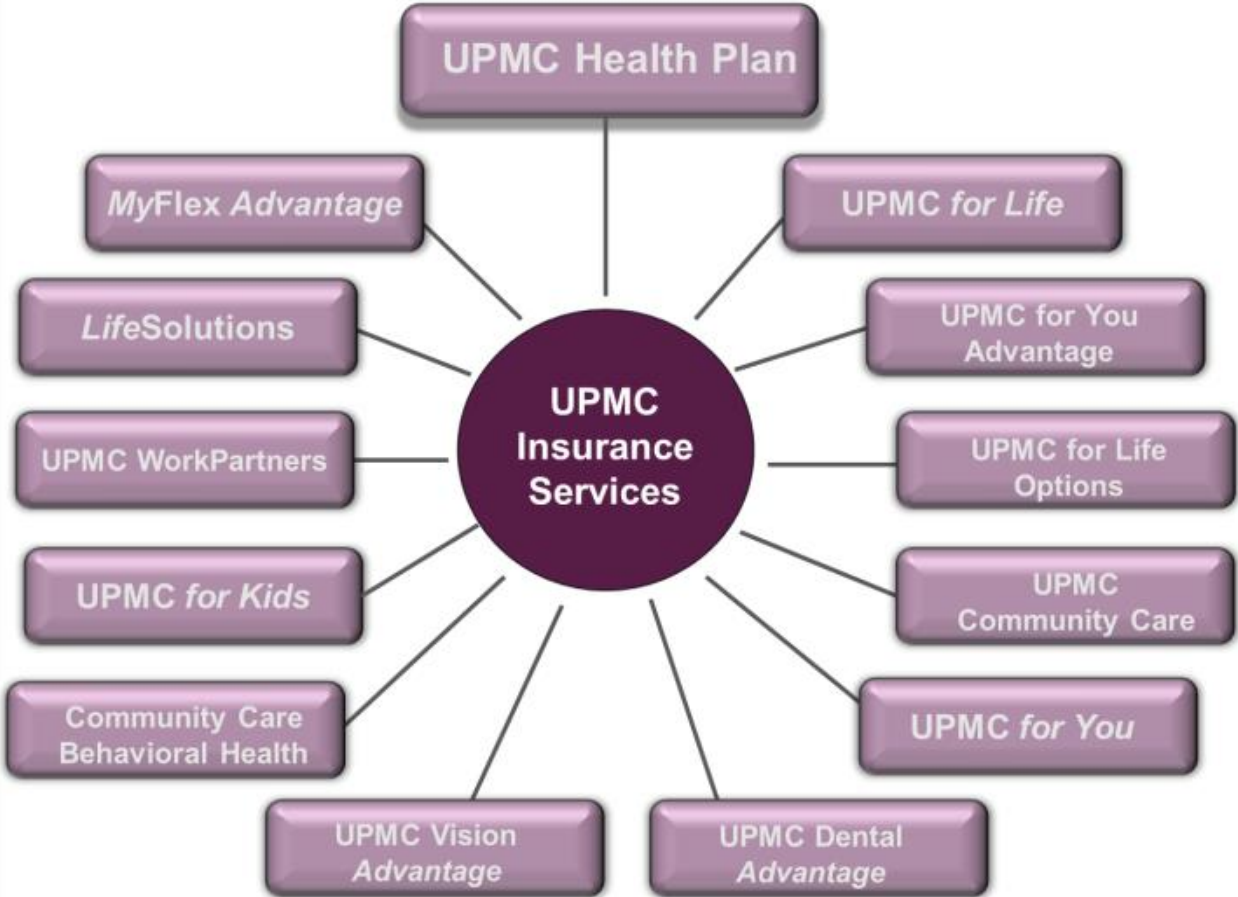
Improving the Health of a Population with Serious Mental Illness: Study Findings & Program Cost Evaluation

James Schuster, MD, MBA | CMO, Medicaid and Behavioral Services, UPMC Insurance Services Division
June 8, 2017

UPMC Insurance Services Division

- 3.0 million members
- 2nd largest provider-owned insurer
- \$7.0B annual revenues
- Integrated population health & productivity products
- 10% average annual growth YOY
- 10,000+ employer group
- #1 ranked commercial HMO in WPA (2016 U.S. News & World Report)
- Fastest growing Medicaid & CHIP plans in PA
- One of 3 companies awarded PA MLTSS contract
- Highest provider satisfaction
- J.D. Power certified call center
- National Business Group on Health Platinum Winner (x5)
- ICMI Global Call Center Award Best Customer Experience Program

UPMC Insurance Services Division



About Community Care

- Incorporated in 1996 primarily to support Pennsylvania
- Part of the UPMC Insurance Services Division
- 501(c)(3) nonprofit behavioral health managed care organization
- Licensed as risk-bearing PPO
- Currently managing behavioral health HealthChoices in 39 counties in Pennsylvania
- Experience with full-risk, shared-risk, and Administrative Services Only (ASO) contracts
- Variety of contracts in New York State since 2009; currently providing care management for SMI members for CDPHP

A Multi-Stakeholder Collaboration

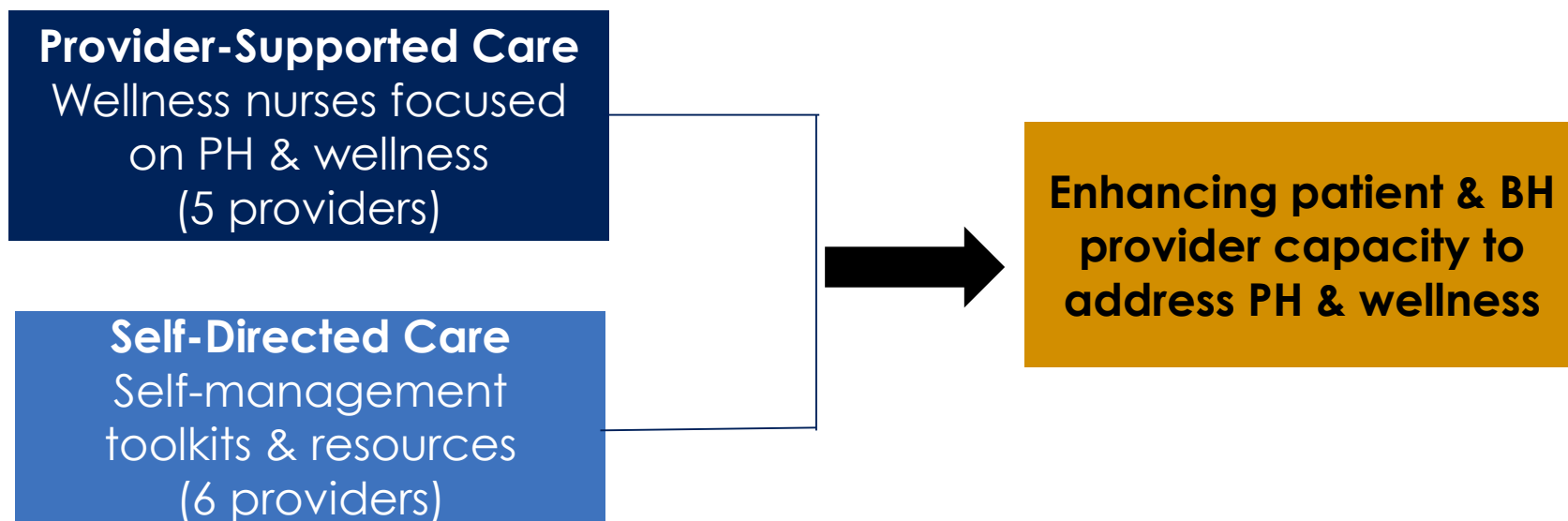
- Collaboration built on:
 - UPMC/Community Care commitment to overall health & recovery-based programs
 - Successful early collaboration with Community Care & BH providers in North Central region of PA to address wellness
 - Belief that BH providers are uniquely positioned to assist adults with SMI in addressing whole health and wellness
- Main partners include:
 - Community Care
 - UPMC Center for High-Value Health Care
 - University of Pittsburgh
 - Stakeholder Advisory Board
 - BHARP, NC and Chester Counties and Providers
- Principal investigators:
 - James Schuster, MD, MBA, Community Care
 - Charles (Chip) Reynolds III, MD, University of Pittsburgh
 - Tracy Carney, CPRP, CSP, Community Care
- Supported by the Patient-Centered Outcomes Research Institute (PCORI)

Key Interventions to Help Individuals with Serious Mental Illness

- Train case managers and peer specialists as wellness coaches/health navigators
- Support of a nurse focused on PH in MH settings
- Create a high-risk disease registry with key indicators of PH and BH needs
- Develop self-management toolkits to support common challenges such as obesity, smoking, exercise, and medication adherence

Study & Interventions

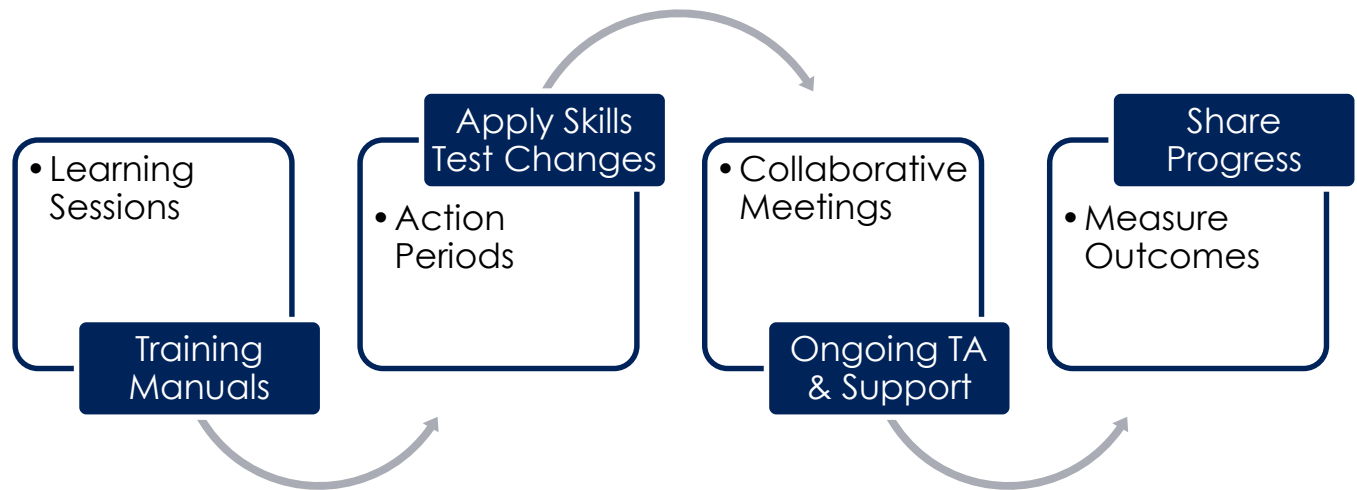
- Comparative effectiveness study of two behavioral health home model approaches to **improve the health status of individuals with serious mental illness, increase patient activation in care, and improve engagement with primary/specialty physical health care**. Both approaches train BH staff as wellness coaches and utilize high risk registries.



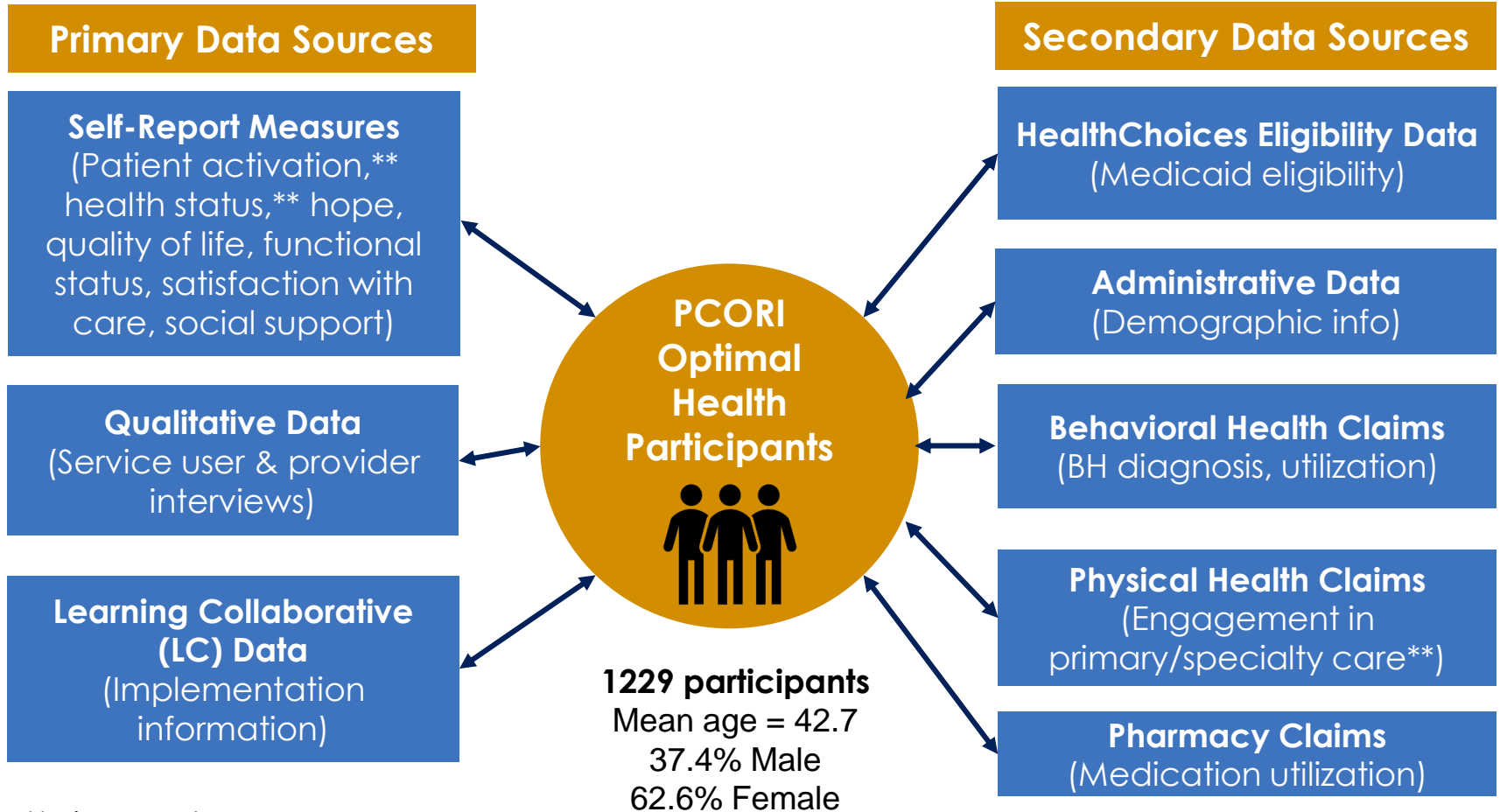
Learning Collaborative



A learning collaborative supports implementation



Study Data & Data Sources



**Primary outcome

Findings Executive Summary

- Learning Collaborative/Implementation Findings:
 - **Performance on all process/outcome goals improved over time**
 - Provider-supported arm reported higher degree of achievement on all process goals after one year of implementation
- Qualitative Interview Findings:
 - Little difference in findings between intervention arms
 - **Overall positive experiences participating in (service users) or implementing (providers) interventions**

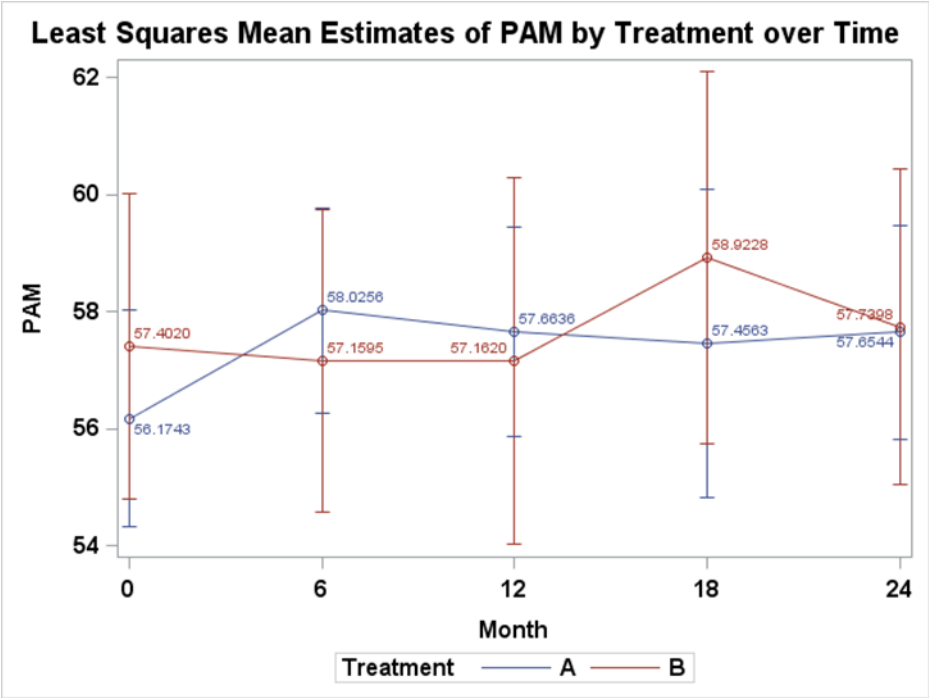
Findings: Executive Summary

- Quantitative Findings:
 - Intervention type (Provider-Supported vs. Self-Directed) has a differential impact on some patient-centered outcomes (treatment X time interaction effect)
 - **Both interventions positively impact several of our outcomes over time (change over time)**
- Financial Findings:
 - **Indicative of long-term cost reductions in Provider-Supported (Wellness Nurse) sites, with some evidence of long-term decreases in Self-Directed (Self-management Navigator) sites.**
 - **Suggestive of increased short-term PH use at both sites, but more ambulatory and lower inpatient.**

Qualitative Interview Data

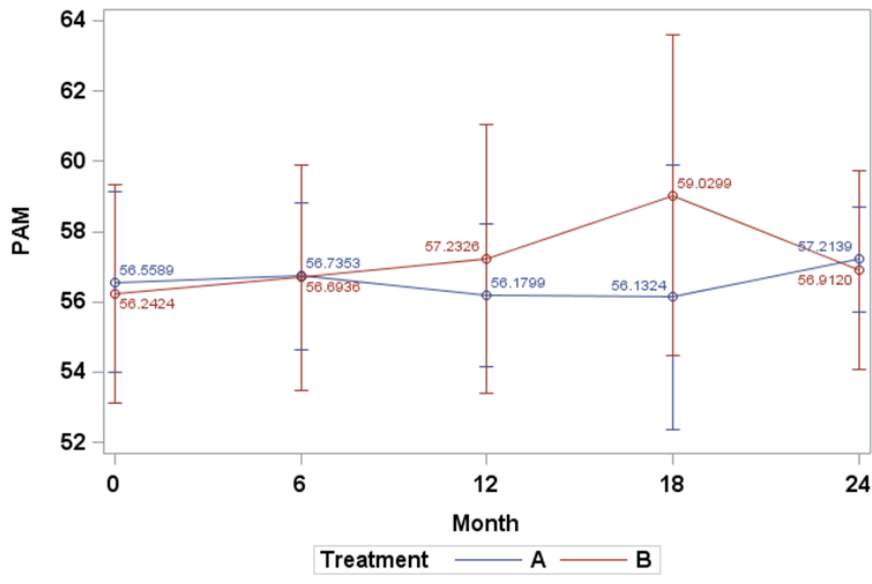
- Service users:
 - Shift in definition of health and wellness, away from vague/impersonal towards more personalized
 - Increased awareness of interconnectedness of mental and physical health
 - No major distinctions between arms; overall favorable intervention experiences
 - Most important factor leading to intervention participation was relationship with wellness coach
- Provider perception of impact on service users:
 - Robustly positive impact on health and wellness
- Agency response:
 - High degree of agency support for wellness coaching
 - Establishment of culture of wellness
 - Worry about service user “relapse” when discharged from CMHC
- Provider response:
 - Providers simplified wellness coaching to increase engagement
 - Nurses often mentioned as most beneficial component of the model
 - Providers often established their own wellness goal(s)

Quantitative: Patient Activation

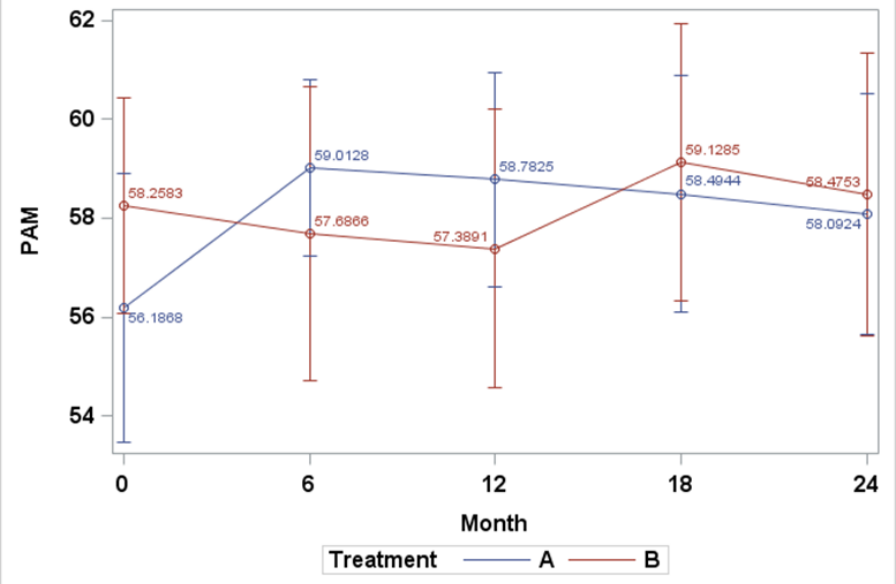


Quantitative: Patient Activation

Least Squares Mean Estimates of PAM by Treatment over Time: Male

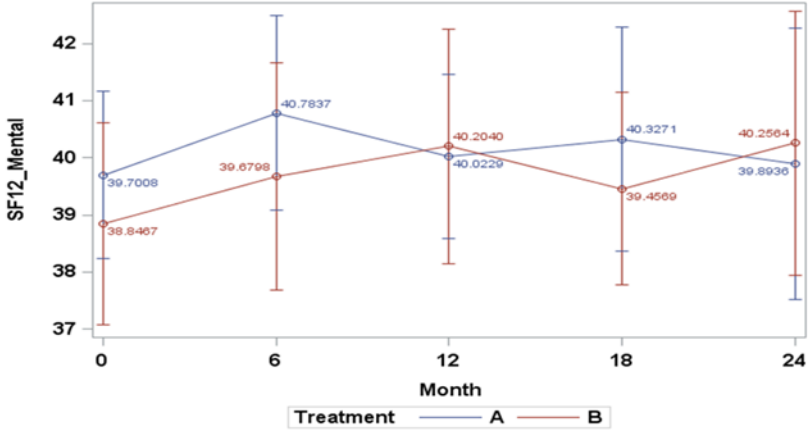


Least Squares Mean Estimates of PAM by Treatment over Time: Female

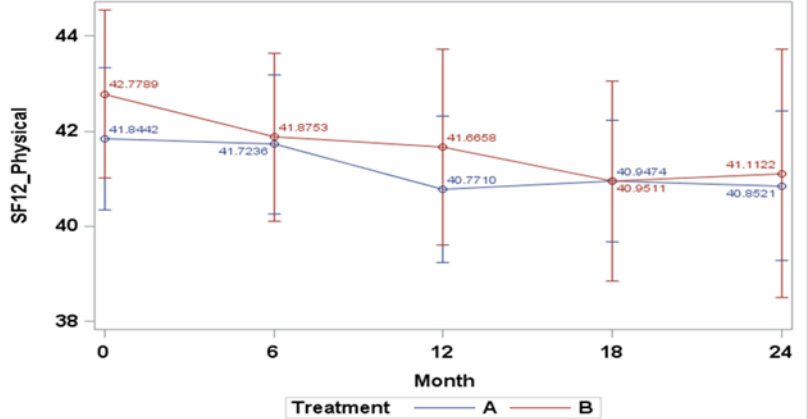


Quantitative Results

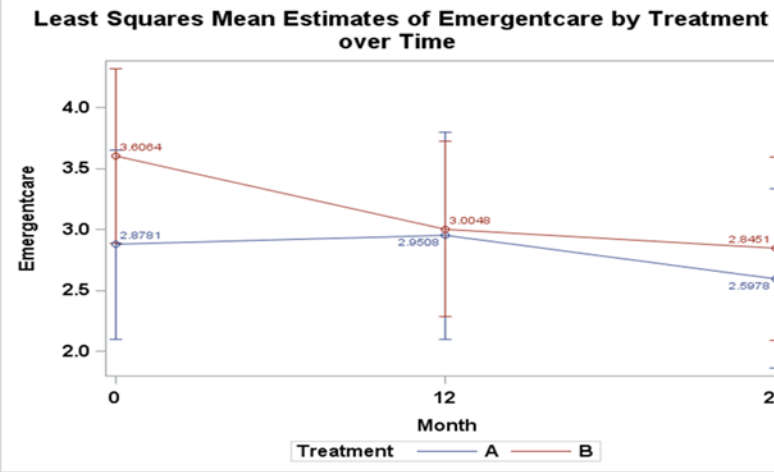
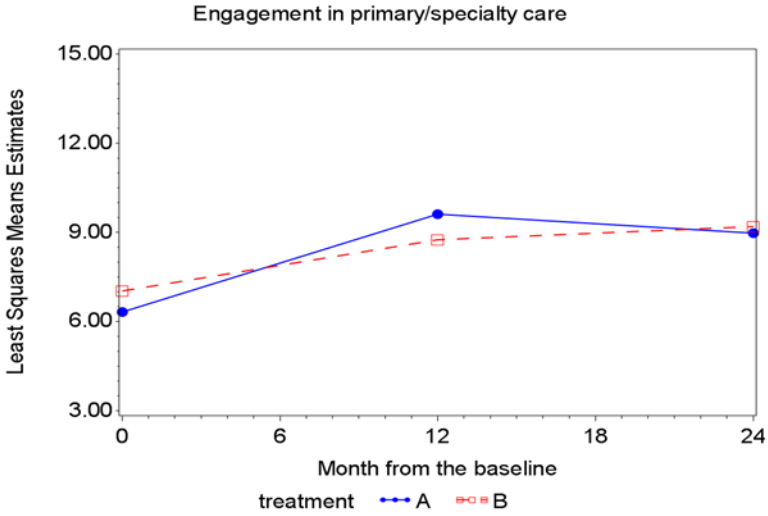
Least Squares Mean Estimates of SF12_Mental by Treatment over Time



Least Squares Mean Estimates of SF12_Physical by Treatment over Time



Qualitative Results

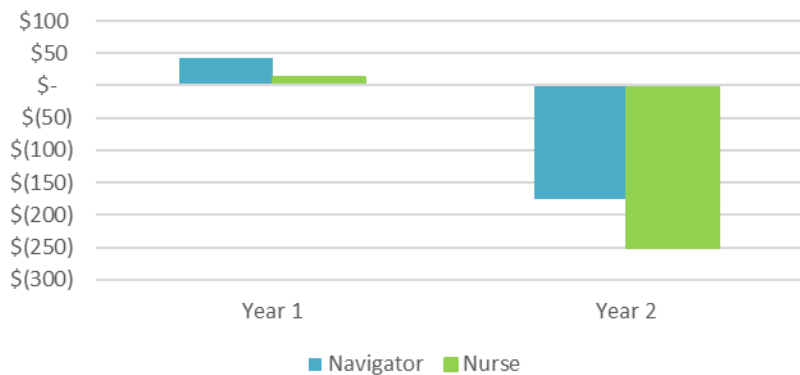


Treatment: A: PS

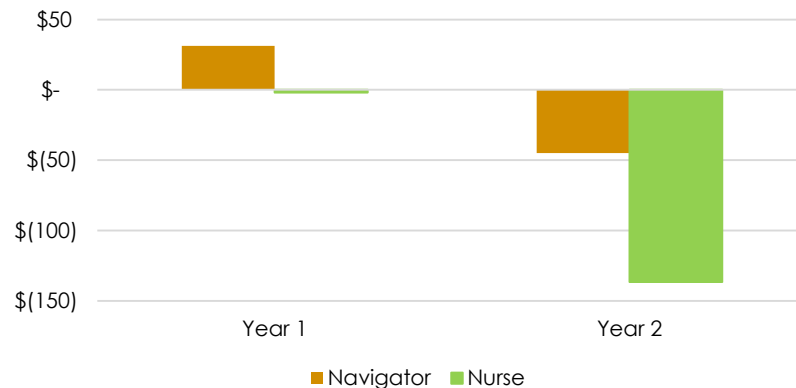
Treatment: B: SD

Trial Data Only: Results

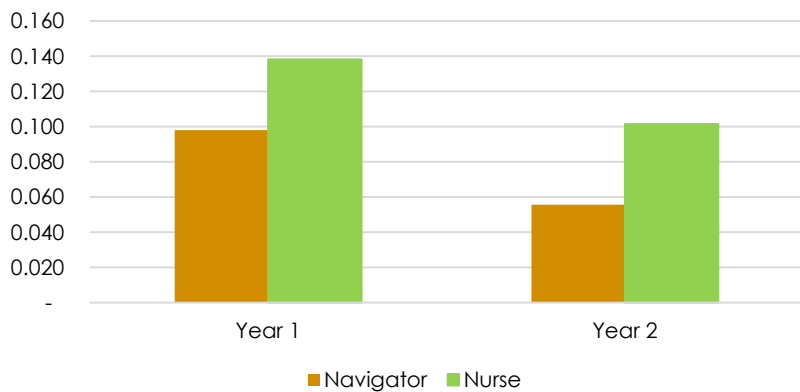
Total PMPM change vs. Year 0



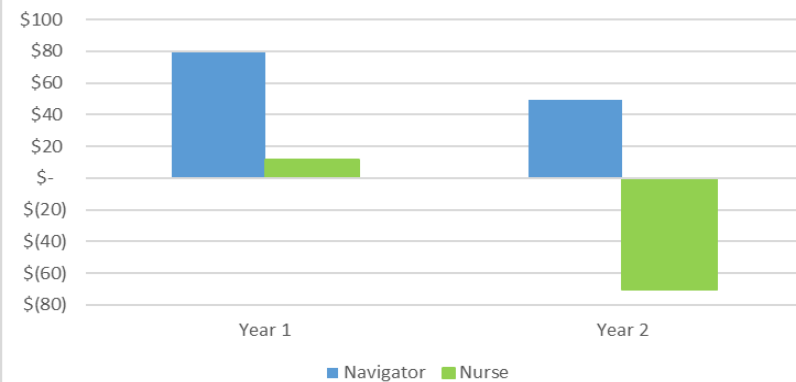
BH PMPM change vs. Year 0



PH penetration change vs. Year 0



TCM PMPM change vs. Year 0



Post-Trial Comparison Group: Results

Nurse + Nav

VS.

Comparison

✦ Statistically significant (<0.05)

✧ Suggestive; not quite statistically significant (<0.2)

Total

Year 2: PMPM
15% lower✦

Years 1 and 2:
PH use (40-50%)
higher✦

Year 2: BH
PMPM 20-30%
lower✦

IP

Year 2: Use 30-
40% lower✦
and cost 20-
25% lower✦

Year 2: PH Use
30-35% lower✧

Rx

Years 1 and 2:
Use 25-30%
lower✦; Year 1:
PMPM 15-20%
higher✦

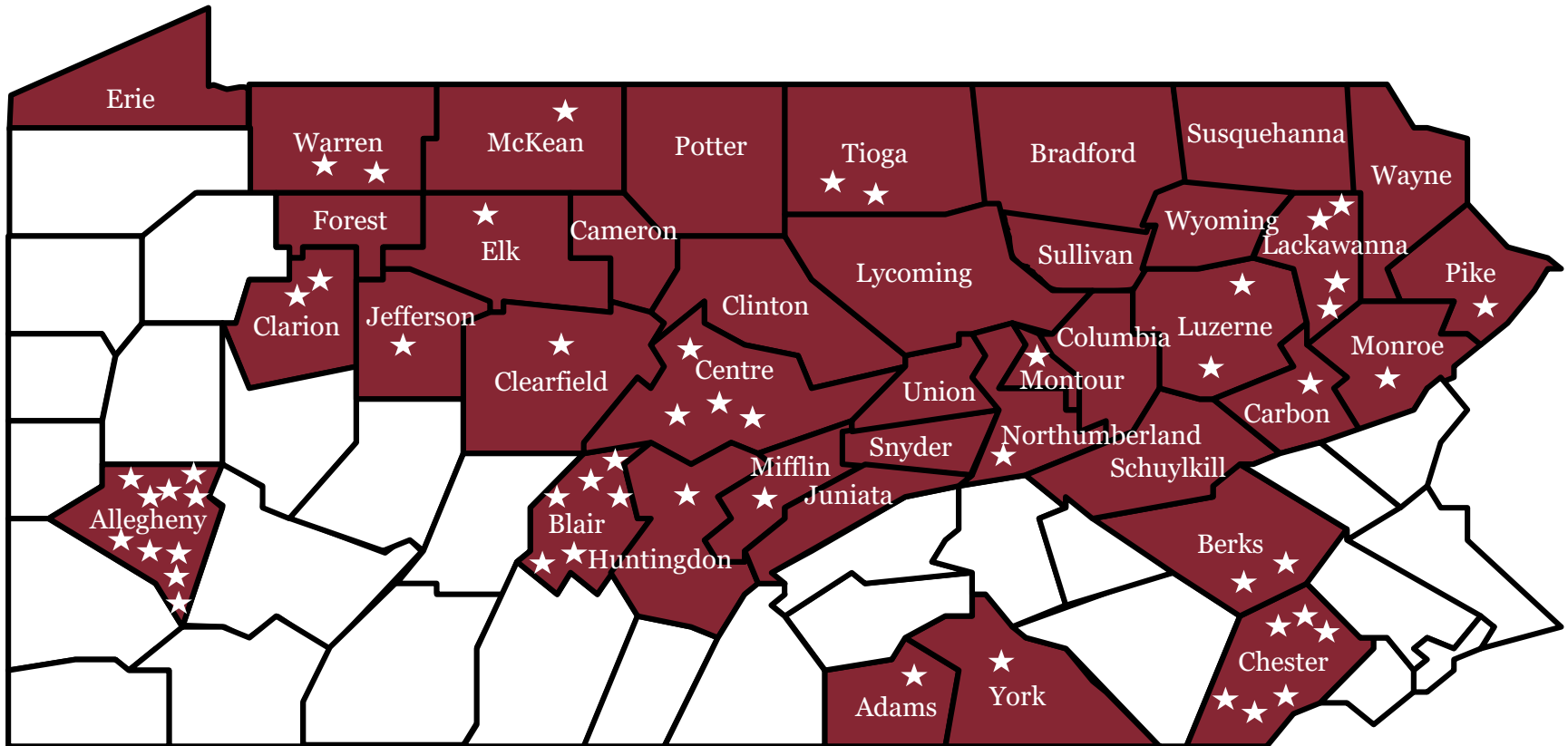
TCM

Year 2: PMPM
17% lower✦

ER

Matched
cohort not
comparable for
ER analysis

Behavioral Health Home Expansion



- Additional populations served: adolescents, opioid treatment programs
- Population Health LC for mature providers focused on hypertension & smoking cessation: 19 BHHs participating in first cohort, second cohort beginning this spring