NATIONAL COUNCIL
FOR BEHAVIORAL HEALTH

Supporting Those with Serious Mental Illness through Enhanced Primary Care

Thursday, March 25, 2021

2:00-3:00pm EST

CoE

Center of Excellence for Integrated Health Solutions

Funded by Substance Abuse and Mental Health Services Administration
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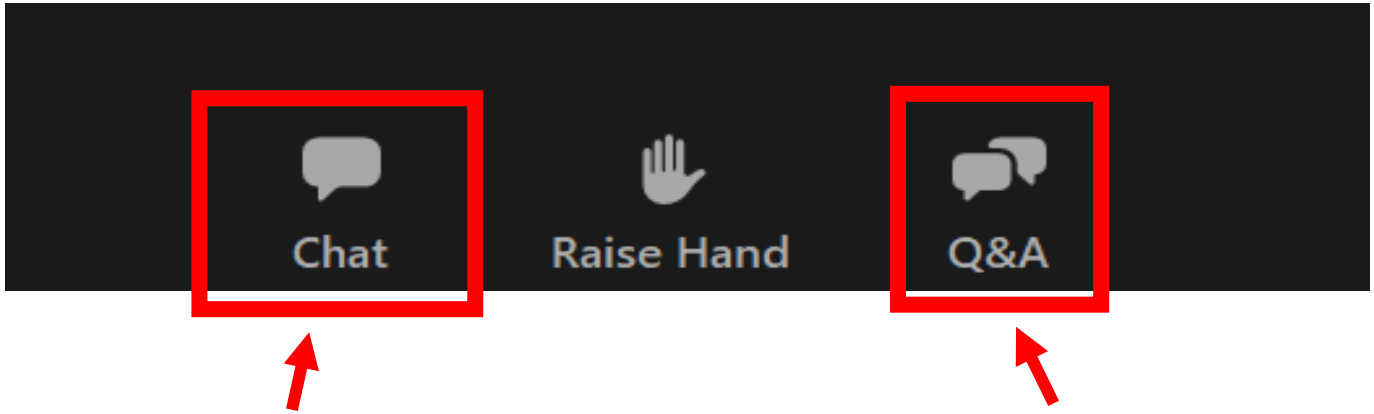
How to Ask a Question/Make a Comment



Type in a **comment** in the **chat box**

Type in a **question** in the **Q&A box**

Both are located at the bottom of your screen.

We'll answer as many questions as we can at the end of the presentation.

Disclaimer

The views, opinions, and content expressed in this presentation do not necessarily reflect the views, opinions, or policies of the Center for Mental Health Services (CMHS), the Substance Abuse and Mental Health Services Administration (SAMHSA), or the U.S. Department of Health and Human Services (HHS).

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Poll #1: What best describes your role?

- Clinician
- Administrator
- Policy Maker
- Payer
- Other (specify in chat box)

Poll #2: What best describes your organization? (check all that apply)

- Behavioral Health Provider
- Primary Care Provider
- Mental Health Provider
- Substance Use Disorder Provider
- Other (specify in chat box)

Poll #3: Where is your organization in the process of integration?

- Learning/Exploring
- Beginning Implementation
- Advanced/Full Implementation
- Ongoing Quality Improvement
- Other (specify in chat box)

Today's Presenters

Jack Todd Wahrenberger, MD, MPH
Chief Medical Officer
Pittsburgh Mercy

Jessica Waters Davis, MD
Co-Medical Director of Primary Care Services
UNC WakeBrook

Beat Steiner, MD, MPH
Co-Medical Director of Primary Care Services,
UNC WakeBrook

Learning Objectives

After this webinar, participants will be able to:

- **Define Serious Mental Illness** and demonstrate limitations of currently available holistic care models for people with these illnesses.

- **Review and understand two innovative models** of enhanced primary care and associated quality measures for people with serious mental illness.

- **Discuss methods for expanding** and further assessing these innovative models.

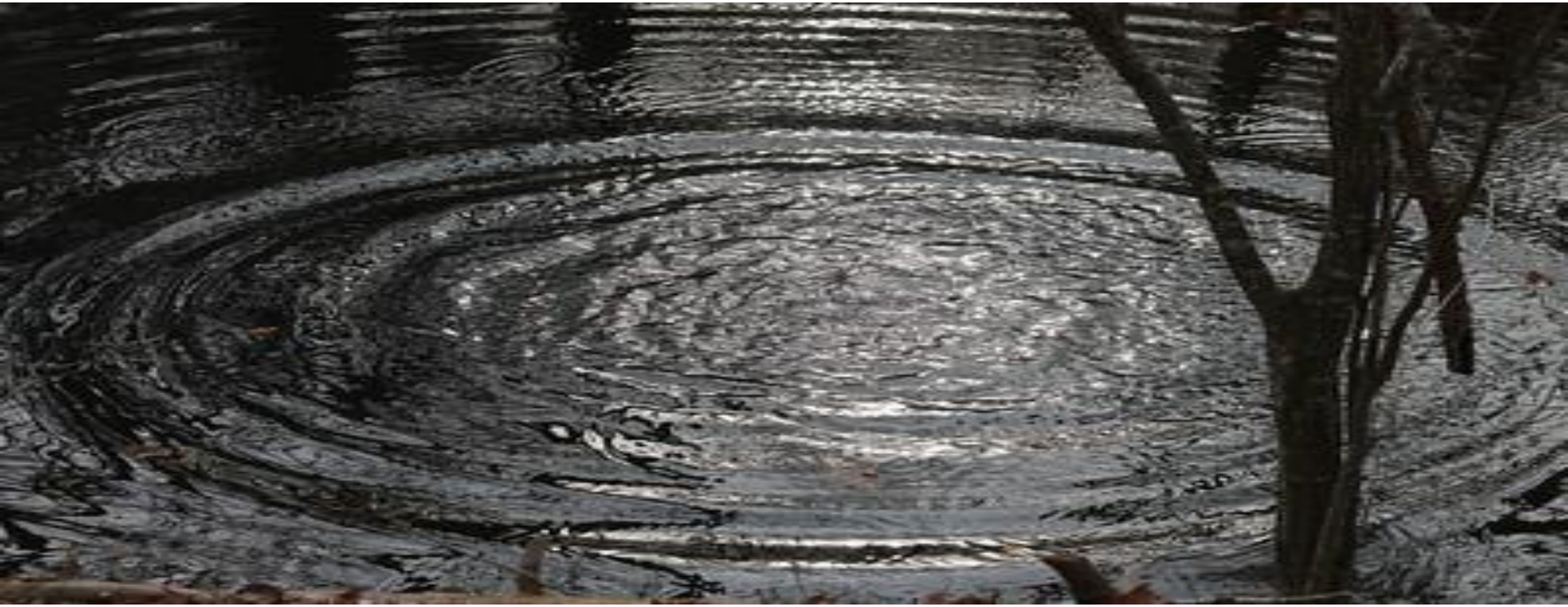
Definition: Serious Mental Illness (SMI)

- 1 in 20 individuals of general US population has an SMI (vs. 1 in 5 for all mental illnesses).
- A **mental, behavioral, or emotional disorder** (excluding substance use and developmental disorders).
- **Functional disability** in areas of social and occupational functioning.
- **Functional impairment** that substantially interferes with or limits one or more major life activities; Global Assessment of Functioning (GAF) ≤ 50.
- Includes schizophrenia, schizoaffective disorders, bipolar disorder, autism, and severe forms of depression, panic disorder, and obsessive-compulsive disorder.

Source: Fuller Torrey, MD

Patients with SMI die 25 years younger than general population

…and the gap is worsening



Source: World Health Organization; Chesney, Goodwin, & Fazel, 2014

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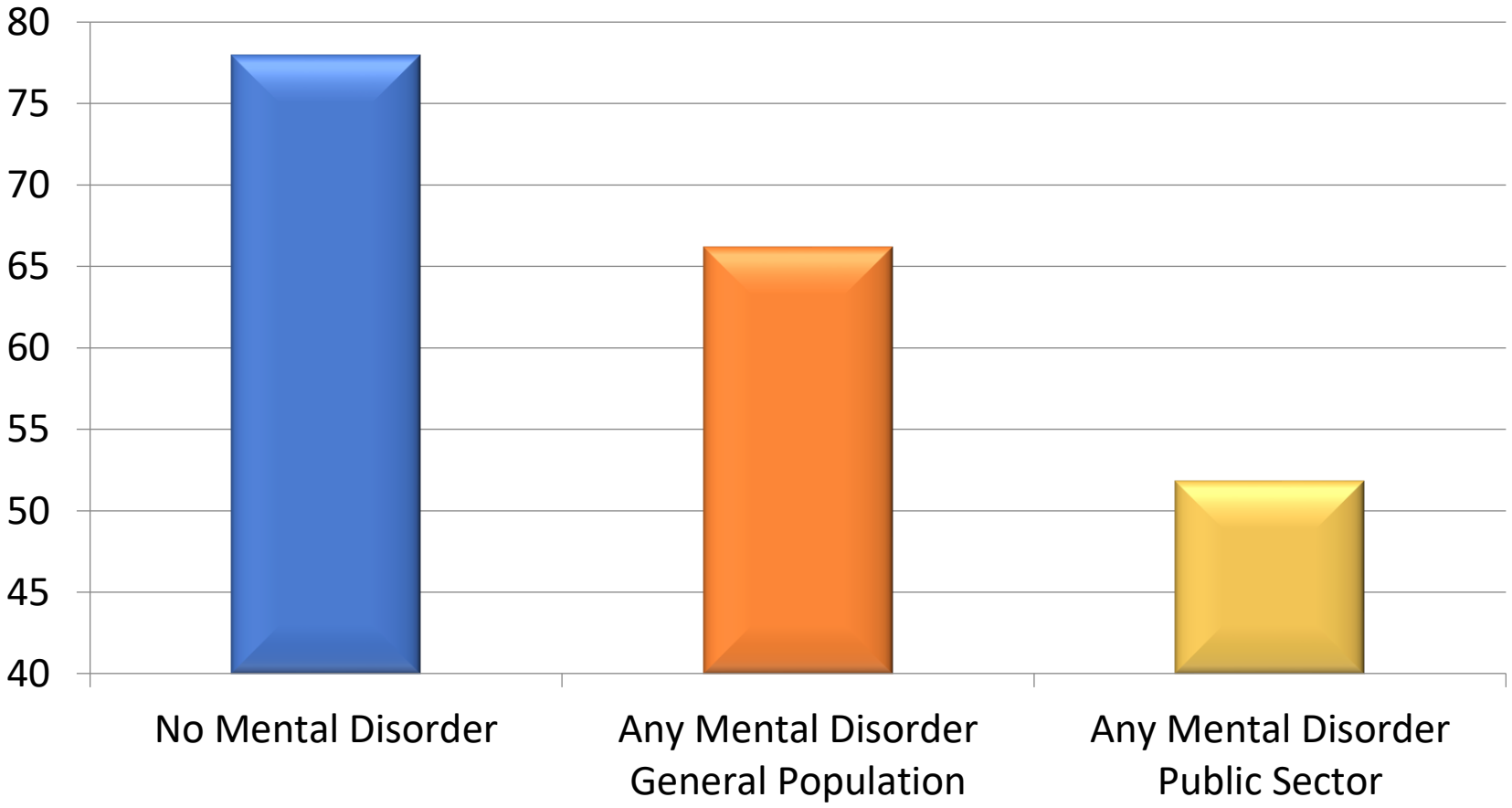
Lifespan With and Without Mental Disorders



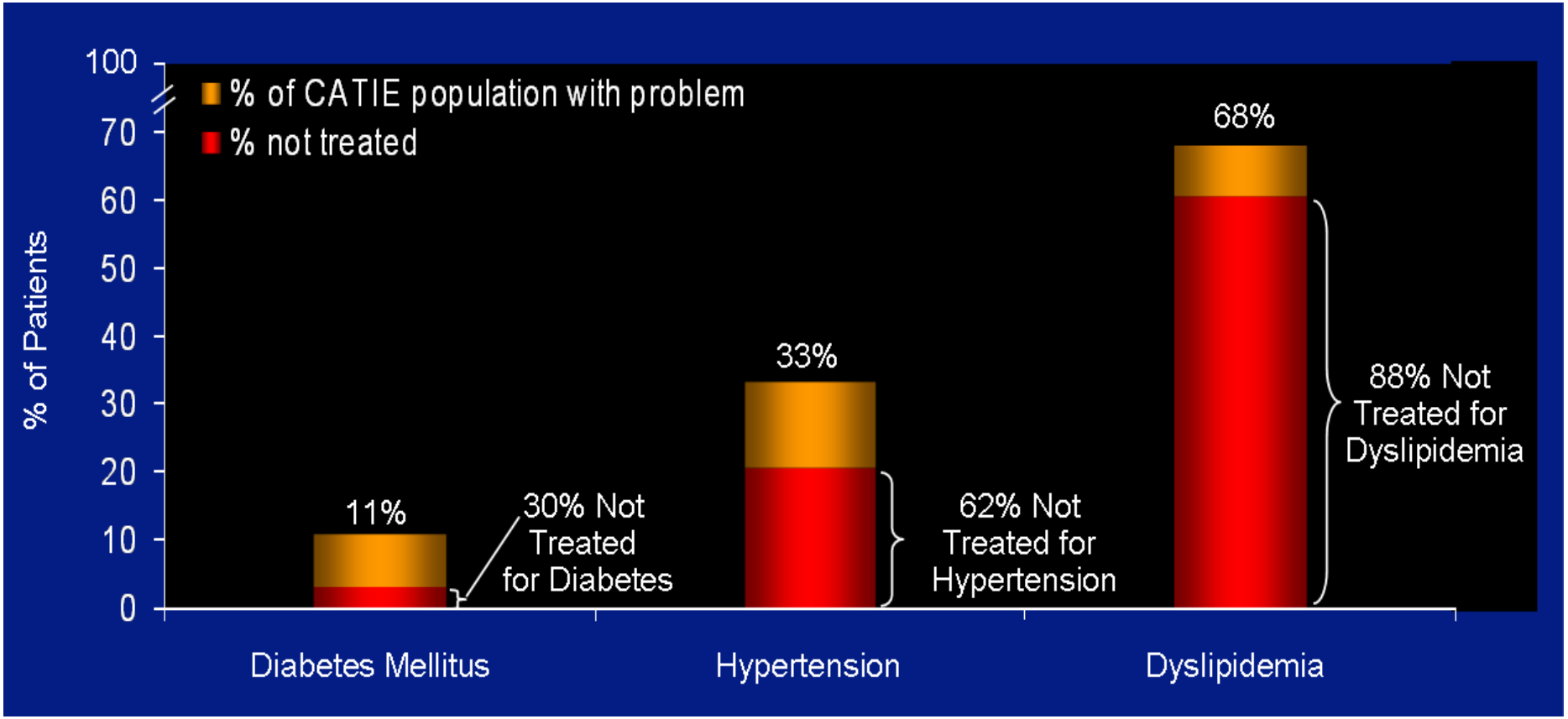
Source: Walker, McGee, & Druss, 2015

Physical Health Contributes Significantly to Gap in Mortality

Modifiable Risk Factors	Estimated Prevalence and Relative Risk (RR)	
	Schizophrenia	*Bipolar Disorder*
Obesity	45–55%, 1.5-2X RR[1]	26%[5]
Smoking	50–80%, 2-3X RR[2]	55%[6]
Diabetes	10–14%, 2X RR[3]	10%[7]
Hypertension	≥18%[4]	15%[5]
Dyslipidemia	Up to 5X RR[8]	42%
Metabolic syndrome	43%	37%

Source: Davidson et al., 2001; Allison et al., 1999; Dixon et al., 1999; Herrán et al., 2000; McElroy et al.; 2002; Ucok et al., 2004; Cassidy et al., 1999; Allebeck, 1999; VanCampfort et al., 2013

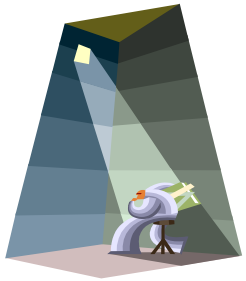
Rates of Non-treatment SMI Population



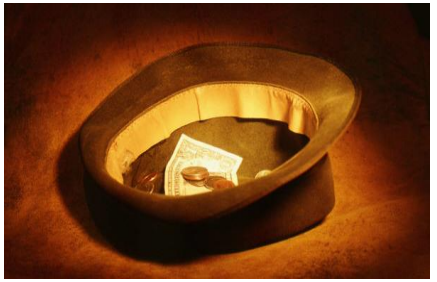
Source: Nasralla, et al., 2006

Cumulative Effect of Many Problems

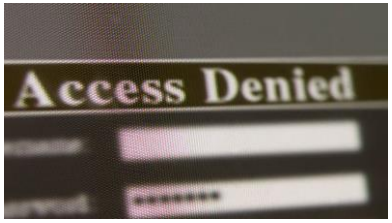
Stigma and Marginalization



Social isolation/ Vulnerability to Violence

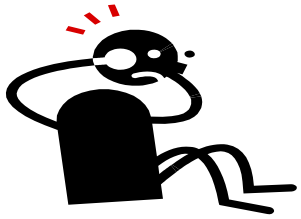


Unemployment/ Poverty



Lack of Access to Care

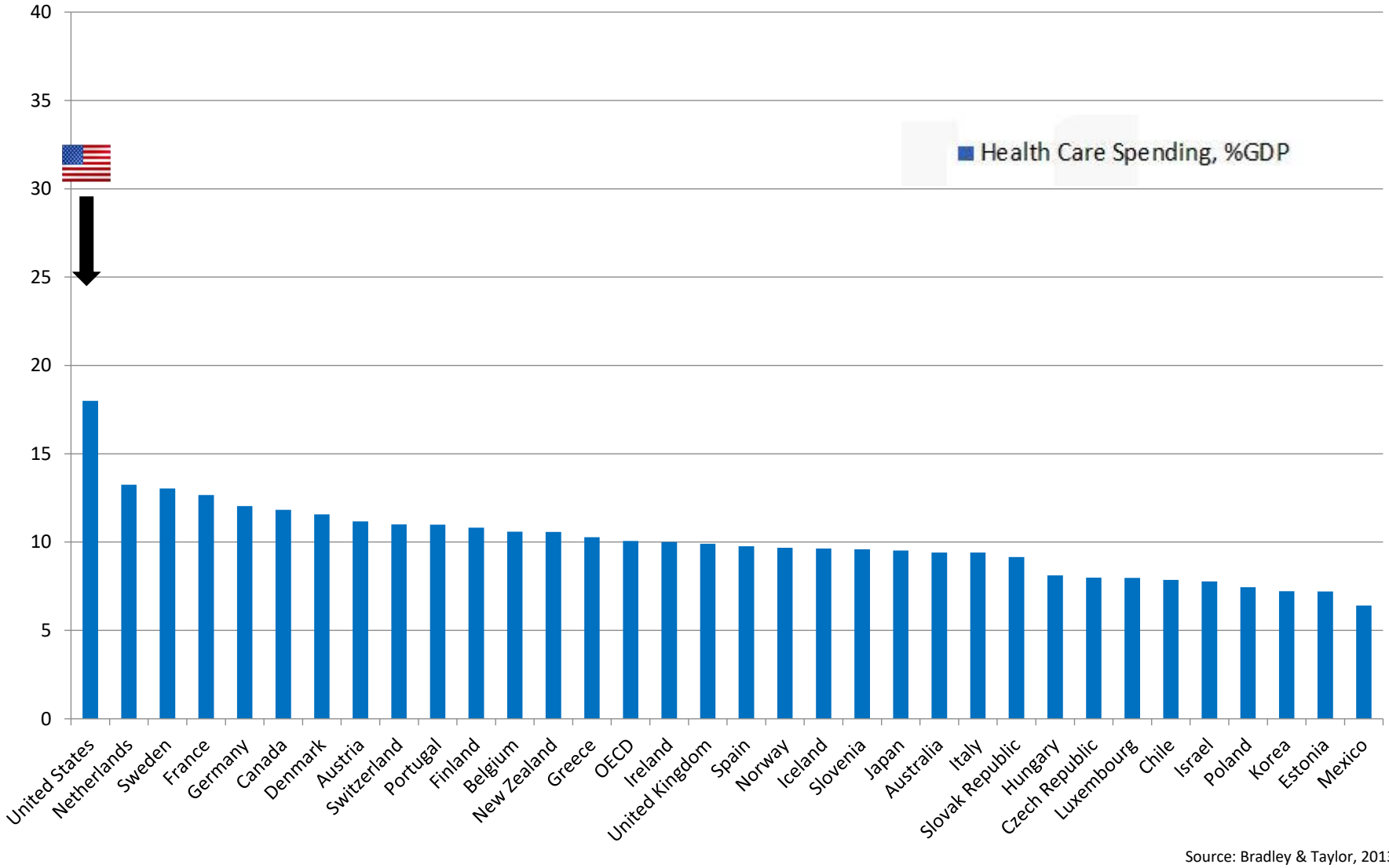
Medication/ Polypharmacy



Fragmented Care

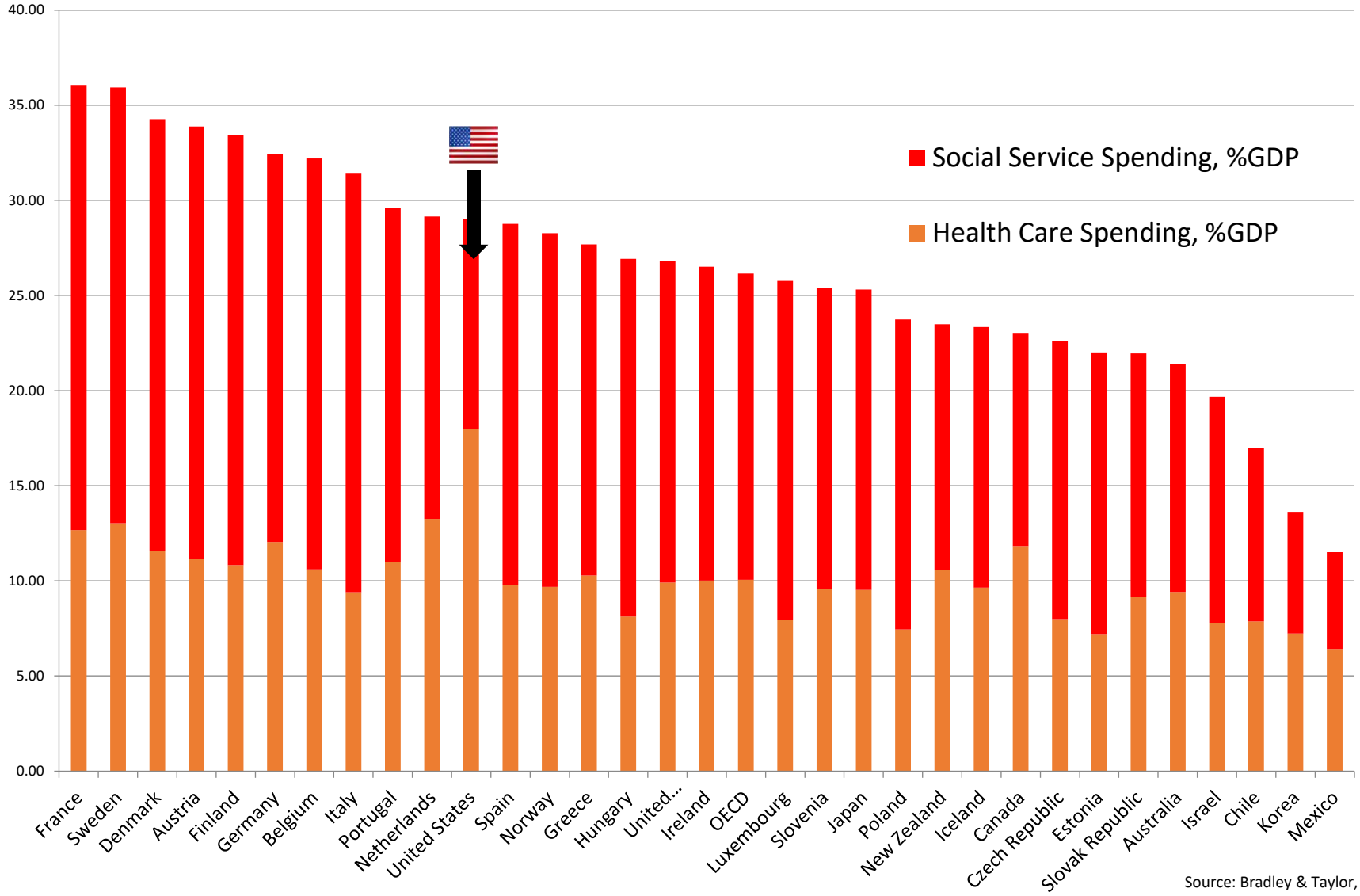
Health Expenditure as % of GDP

(Gross Domestic Product), 2009*



Source: Bradley & Taylor, 2013

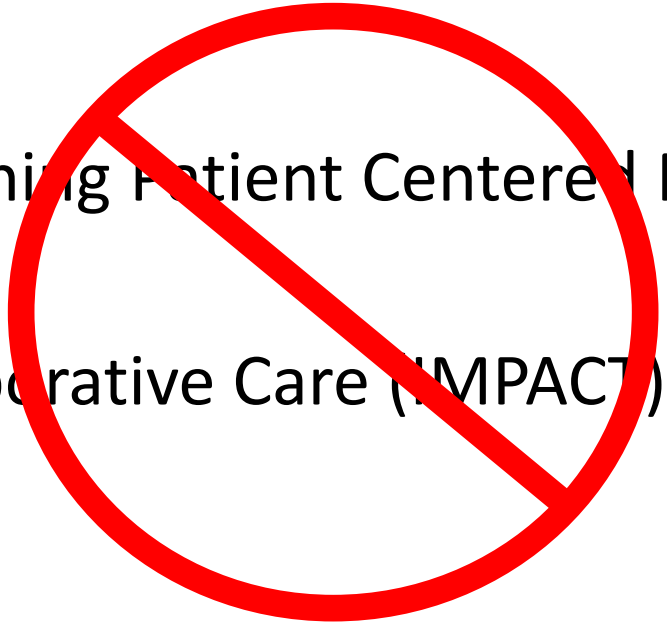
Total Investment as % of GDP



Source: Bradley & Taylor, 2013

Current Models of Care

High Functioning Patient Centered Medical Home



Collaborative Care (IMPACT) Model

Insufficient for Patients with SMI

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Solutions?

WakeBrook: Enhanced Primary Care Model

Patient Centered and Continuous

Accessible

Comprehensive

Coordinated

High Value

+

Additional Time and Care
(Smaller panel size 750 vs 2000)

Specialized Training for Team
(Care for physical & behavioral health)

Structured and Planned Communication
(Between primary care & psychiatry)

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WakeBrook Primary Care

Insurance:

- Medicaid 28%, Medicare 26%, Dual 16%, Uninsured 22%

Chronic Illnesses:

- HTN: 45%
- DM: 21%
- COPD: 12%

- Tobacco: 65%
- BMI>30: 45%

Staff in Primary Care

For 600-750 Patients

- 1 FTE physician
- 1 registered nurse
- 2 medical assistants
- 2 licensed clinical social workers
- 2 peer support specialists
- 1 office manager

- **Must be seeing a psychiatric provider**

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Enhanced Primary Care Improves Care and Saves Money

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Quality Metrics UNC WakeBrook

Below goal | Close to goal | Above goal

Prevention	Spring 2016	Fall 2016	Spring 2017	Fall 2017	Spring 2018	Fall 2018	Spring 2019	Fall 2019	Spring 2020*	Fall 2020	PCIC Goal**
Breast Cancer Screen >50 yo	30	45	56	53	57	65	66	66	63	64	80
Cervical Cancer Screen 21-65 yo	25	38	54	58	62	70	78	78	75	76	82
Colorectal Cancer Screen >50 yo	30	36	41	48	53	57	62	59	59	59	80
ASA use in DM***	83	83	94	96	93	na	na	na	na	na	92
ASA use in ASCVD	na	na	na	na	na	na	na	na	75	77	90
Statin use in DM	79	76	86	86	86	89	86	84	84	79	79
A1c <8 in DM	61	59	86	86	66	62	68	65	64	61	68
Diabetic Eye Exam	na	na	na	21	27	36	63	66	62	58	63
Fall Screen 65+	90	90	96	90	85	90	85	72	66	59	71
Pneum Vaccine 65+	55	66	89	90	67	70	71	68	72	71	83
Pneumo Vaccine High Risk	45	52	66	71	72	78	78	78	80	79	67

* Quality measures impacted by COVID-19 pandemic including telehealth

** UNC Health Care Primary Care Improvement Collaborative goals

*** Aspirin prescribing guidelines changed in 2018

Analysis of Cost and Utilization

Population: Individuals with schizophrenia newly entering WB primary care vs newly entering other primary care settings between April 2015 and March 2017

- Definition of newly entered: Primary care visit after not having a primary care visit for 6 months.
- Both sets of analyses controlled for baseline differences between WB and non-WB patients
- **Two comparison groups:**
    1. All North Carolina counties
    2. Mecklenburg County (urban comparator)

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Significant Decrease in Medical Inpatient Use

Over an 18-month follow-up period, we found for every 100 patients newly entering WB primary care:

- 41 fewer non-psychiatric hospitalizations
- 391 fewer non-psychiatric inpatient days
- More primary care visits
- Trend toward decreased ED utilization
- No increase in psychiatric inpatient stays

Grove et al J Gen Int Med 2021

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WakeBrook Decreases Inpatient Use Significantly

For every 100 patients followed by us over 18 months, we save over $800,000 in inpatient care for physical health conditions

Grove et al J Gen Int Med 2021

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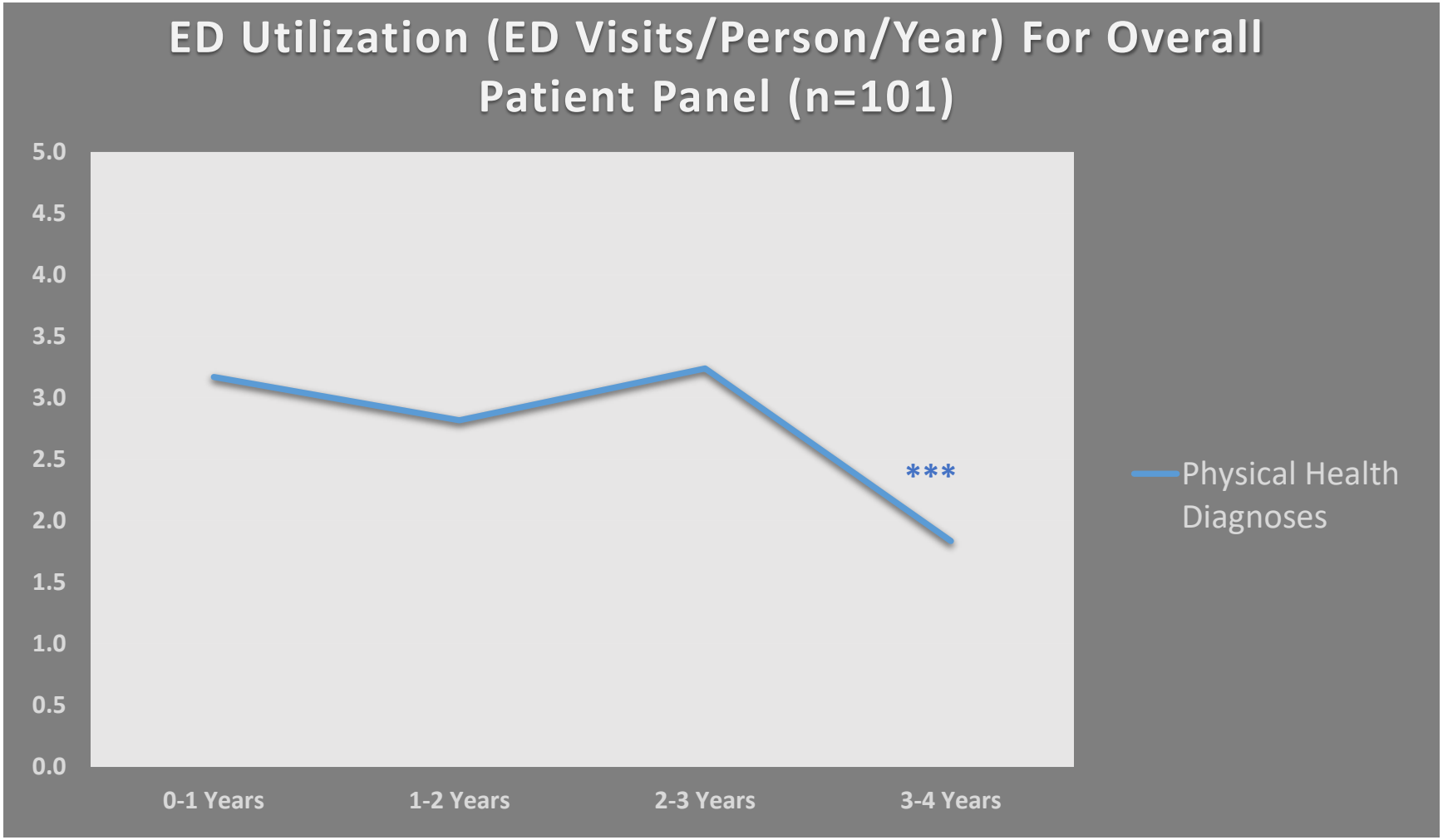
Decreased ED Visits in Longer Follow-Up



*** *Indicates a statistically significant change in ED utilization from prior year ($p<0.05$)*

Source: Belson, Sheitman & Steiner, 2020

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Pittsburgh Mercy

Pittsburgh Mercy Family Health Center is an integrated primary care medical home for individuals in the Pittsburgh community with serious mental illness (SMI), especially those served by services at Pittsburgh Mercy's Behavioral Health, Intellectual Disabilities and Community Health Service lines.

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Pittsburgh Mercy (cont'd)

Services Provided to approximately 20,000 individuals:

- Outpatient Adult and Child Mental Health
- Crisis Center, Child and Adult Diversion and Acute Stabilization units for adults and children
- 4 Assertive Community Treatment teams, 2 Integrated Dual Diagnosis Treatment teams, Enhanced Service Coordination teams
- 3 personal care homes and 2 residential treatment facilities for SMI population
- 70 group homes for persons with intellectual disability
- Men's and women's low barrier shelter for persons with homelessness
- 29 bed Medical Respite

Pittsburgh Mercy (cont'd)

Western Pennsylvania Health Care Market

- Two large health care systems dominate the market and have been competing for over 25 years; both also own the two largest insurance companies!
- 4 small FQHC's
- PA is a Behavioral Health Carve Out State
- PA has not adopted a CCBHC structure and has modelled a Statewide model for community behavioral health center
- Historically, health care in Western PA has been quick to adopt new health care technologies (transplant, oncology) and slow to adopt APM's and innovative models of care
- Historically health care providers have not shared information as a means of competitive advantage

Pittsburgh Mercy Family Health Center

Insurance:

- Medicaid 70%, Dual 10%, Medicare 20%, Uninsured <1%

Concurrent Chronic Illnesses:

- HTN: 45%
- DM: 30%
- COPD: 15%

- Cigarettes: 65%
- BMI>30: 55%

Staff in Primary Care

For 1200 Patients

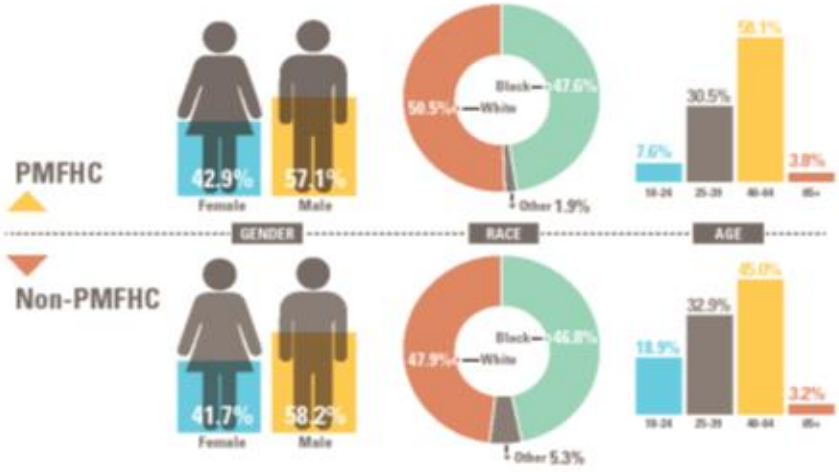
- 1 FTE physician or PA/NP
- 0.5 Care Manager (LCSW, RN, Therapist)
- 1 medical assistants
- 2 licensed clinical social workers
- 0.2 peer support specialist
- 1 office manager

- **<u>May</u> be seeing a psychiatric provider**

Analyzing Outcomes for Pittsburgh Mercy Assertive Community Treatment (ACT) Team Individuals Receiving Integrated Care at Pittsburgh Mercy Family Health Center (PMFHC)

The Sample Populations

The Pittsburgh Mercy Family Health Center Assertive Community Treatment (PMFHC ACT) team population consisted of 212 individuals. A comparison group was constructed that included 821 individuals receiving care from a non-PMFHC ACT located in Allegheny County. Demographically, the two sub-populations were similar in terms of gender, age, and race.



PMFHC participants experienced fewer psychiatric hospitalizations in the past year.

Over the past six years (2013 to 2019), PMFHC program participants experienced fewer psychiatric hospitalizations, on average, than their non-PMFHC counterparts, 1.9 vs. 3.8 average hospitalizations. This difference was statistically significant.

# of Stays	PMFHC	Non-PMFHC
0	65	281
1	37	100
2	13	92
3	9	70
4+	31	278
Average	1.9	3.8

Critical Incidents: PMFHC Participants Only

A critical incident is a highly stressful situation or traumatic event (or perceived life-threatening event) that has sufficient power to overwhelm an individual's ability to cope. Early warning incidents serve as indicators that a possible critical incident may occur for an individual in the future.

Of the 212 total people in the PMFHC program, 77 had critical and/or early warning incidents reported.

After participation in the PMFHC program, the number of incidents and the number of people decreased or remained constant for arrests, police involvement, and refusal to take prescribed medications. The number of incidents increased for ER visits, though the number of people involved decreased.

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0	65	281
1	37	100
2	13	92
3	9	70
4+	31	278
Average	1.9	3.8

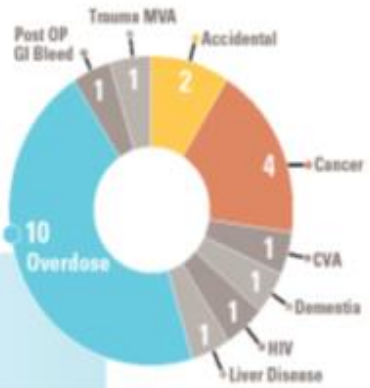
PMFHC participants spent significantly less time in psychiatric hospitals.

For people who had a psychiatric hospitalization, PMFHC participants had an average total length of stay of 55 days. In contrast, non-PMFHC participants had, on average, close to double the average length of stay of 99 days. The difference in the average length of stay was also statistically significant.

Life Expectancy & Mortality Analysis

A number of reviews and studies have demonstrated that the life expectancy for the SMI population is two to three times higher than the general population.

This mortality gap translates to a 15-30 year shortened life expectancy in SMI patients. Approximately 60% of this excess mortality is due to physical illness. The promise of adding integrated primary care to robust mental health care has been that it will improve the morbidity and mortality of patients with SMI. In August of 2019, PMFHC performed a chart review of Pittsburgh Mercy ACT patients that had expired between 2012 and 2019. 22 individuals of the 234 unduplicated ACT team patients had expired in the time interval.



It is notable that the most frequent cause of death in the population was overdose.

The average age at death is 59.9 years for PMFHC ACT patients. Data provided by Allegheny HealthChoices, Inc. (AHCI) shows that the average age of ACT patients over the past 12 years in Allegheny County is 52 years. The average age of all Allegheny County ACT team patients is slightly lower than the Pittsburgh Mercy cohort.

Review & Discussion

Costs:

- **Cost Wake Brook Primary Care**
- Annual budget $1.0 million
- Patient Panel of about 600 can grow to 750
- About $100 per member per month

- **Cost Wake Pittsburgh Mercy**
- Annual budget $ 2.5 million
- Patient Panel over 1000
- About $50 per member per month

Review & Discussion (cont'd)

Lessons to make your case to payers:

- Collect data and stories early
- Build networks
- Be persistent
- Be creative

Questions?

References

- https://www.who.int/mental_health/management/info_sheet.pdf
- Risks of All-Cause and Suicide Mortality in Mental Disordres: A Meta-Review (Chesney, Goodwin & Fazel, 2014)
- Walker ER, McGee RE, Druss BG (2015). Mortality in Mental Disorders and Global Disease Burden Implications: A Systematic Review and Meta-analysis . *JAMA Psychiatry. 72*(4):334–341. doi:10.1001/jamapsychiatry.2014.2502
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Resources

- "A Model of Enhanced Primary Care for Patients with Severe Mental Illness" North Carolina Medical Journal article (Perrin et al., 2018)
- https://www.who.int/mental_health/management/info_sheet.pdf
- Risks of All-Cause and Suicide Mortality in Mental Disordres: A Meta-Review (Chesney, Goodwin & Fazel, 2014)
- Nasrallah, H. A., Meyer, J. M., Goff, D. C., McEvoy, J. P., Davis, S. M., Stroup, T. S., & Lieberman, J. A. (2006). Low rates of treatment for hypertension, dyslipidemia and diabetes in schizophrenia: data from the CATIE schizophrenia trial sample at baseline. *Schizophrenia research*, *86*(1-3), 15-22.

Upcoming CoE Events:

CoE Office Hours: Enhanced Models of Primary Care to Support Those Experiencing SMI

Register here for Office Hour on March 30, 2-3pm ET

Why and How Peer Services Improve Health and Wellness of People with Mental Illness

Register here for Webinar on April 13, 2-3pm ET

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