PUBLIC HEALTH | SERVICES & SYSTEMS RESEARCH
PRACTICE-BASED RESEARCH NETWORKS
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71685GPmeeting Cover Sheet

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Recipient & Affiliation:	Jonathan Purtle, DrPH, MSc, Drexel University School of Public Health
Presentation Title:	Do local health departments engage in population-based mental illness prevention activities?
Meeting:	2015 APHA Annual Meeting, Oral Presentation Abstract Accepted
Meeting Sponsor:	American Public Health Association
Date & Place of Presentation:	November 4, 2015, Chicago

321422 Do local health departments engage in population-based mental illness prevention activities?

Wednesday, November 4, 2015: 12:50 p.m. - 1:10 p.m.

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Background/Purpose: Preventing mental illness (MI) is widely acknowledged as a public health priority. Little is known, however, about the extent to which local health departments (LHDs) engage in activities to prevent mental illness. The purpose of this study was to estimate the past-year prevalence and correlates of LHDs that engaged in mental illness prevention activities.

Methods: Data: nationally representative, weighted sample of 505 LHDs that completed Module 2 of the 2013 National Profile of Local Health Departments Study survey (response rate 82%). *Dependent variable*: past-year provision/contracting of population-based MI prevention activities. *Independent variables:* Local Health Department population size, geographic region, workforce characteristics, performance of eight other mental health activities.*Analysis*: Descriptive statistics, multivariate logistic regression

Findings: Only 16.2% of Local Health Departments, serving 24.4% of the U.S. population, reported engaging in population-based MI prevention activities. LHDs were significantly ($p < .05$) more likely to engage in population-based MI prevention activities if located in the west (31.1%), had a population size 100,000-499,999 (27.0%), 1-5 behavioral health providers per 100,000 population (35.1%), or provided/contracted substance abuse services (53.6%). After adjusting for covariates, LHDs that engaged in population-based MI prevention activities were significantly more likely to provide/contract mental health services (AOR: 7.21, 95% CI: 4.30, 12.10) and engage in mental health policy advocacy activities (AOR: 3.23, 95% CI: 2.02, 5.17).

Implications: The vast majority of Local Health Departments in the U.S. do not engage in population-based MI prevention activities. Future research is needed to understand how structural factors and inter-organizational relationships with other government/non-government agencies influence LHDs' MI prevention activities.

Learning Areas:

Public health administration or related administration
Public health or related organizational policy, standards, or other guidelines

Learning Objectives:

Describe proportion of local health departments in the US that engage population-based in mental illness prevention activities
Discuss factors that are associated with local health departments engaging population-based in mental illness prevention activities

Keyword(s): Mental Health, Public Health Administration

Presenting author's disclosure statement:

Qualified on the content I am responsible for because: I am the PI on a RWJF-funded research project exploring the role of local health departments in addressing population mental health. I have a DrPH, MPH and am Assistant Professor at an accredited school of public health.

Any relevant financial relationships? No

I agree to comply with the American Public Health Association Conflict of Interest and Commercial Support Guidelines, and to disclose to the participants any off-label or experimental uses of a commercial product or service discussed in my presentation.

Back to: **5169.0:** Elevating Behavioral Health Within Public Health Departments and Programs: The Ball is in our Court

DO LOCAL HEALTH DEPARTMENTS ENGAGE IN POPULATION-BASED MENTAL ILLNESS PREVENTION ACTIVITIES?

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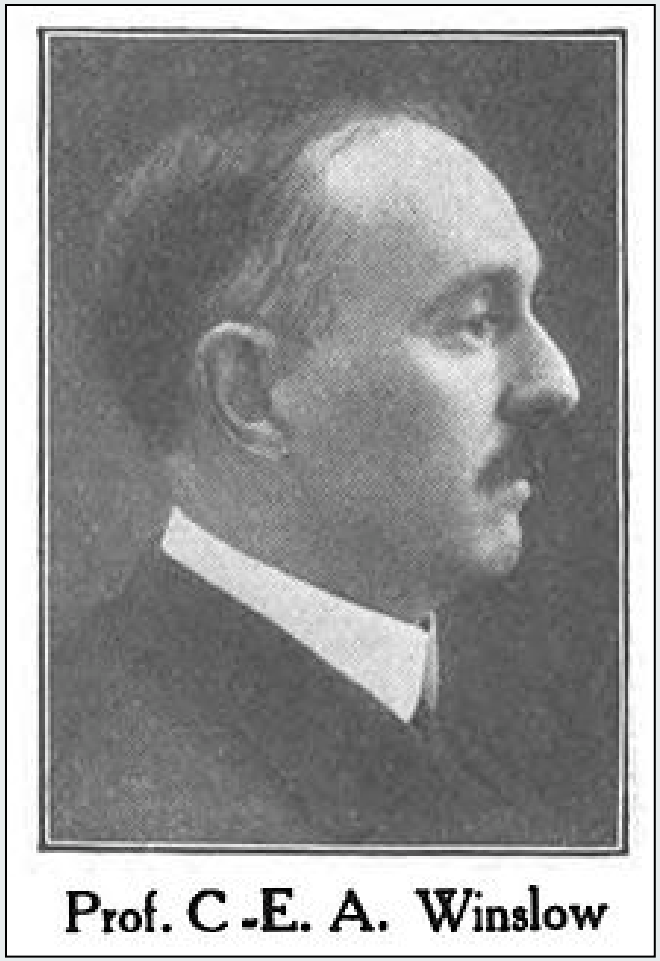
MENTAL HEALTH AS PUBLIC HEALTH: A BRIEF HISTORY

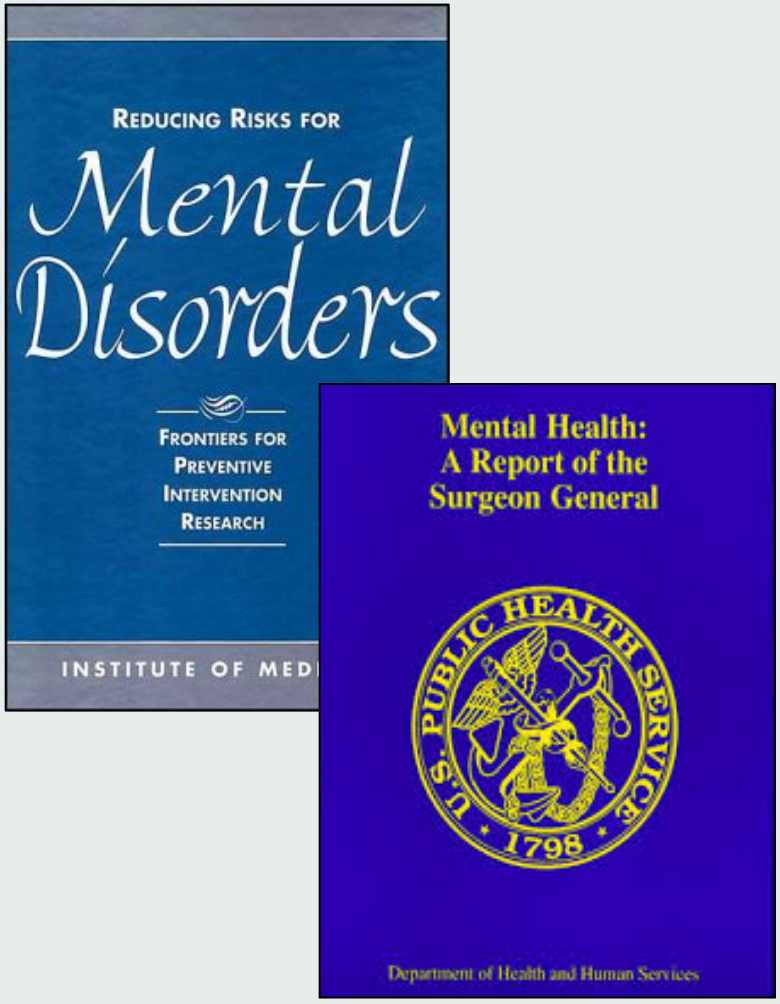


- 1926: APHA President declares
  - "It is impossible to consider, even in the briefest summary, the future program of the public health movement without at least some reference to the vast and fertile fields of mental hygiene. Today, the attention devoted to this problem by municipal health departments is so slight… but in the not-distant future I am inclined to believe that the care of mental health will occupy a share of our energies perhaps as large as that devoted to the whole range of disorders affecting other organs of the body."

MENTAL HEALTH AS PUBLIC HEALTH: A BRIEF HISTORY

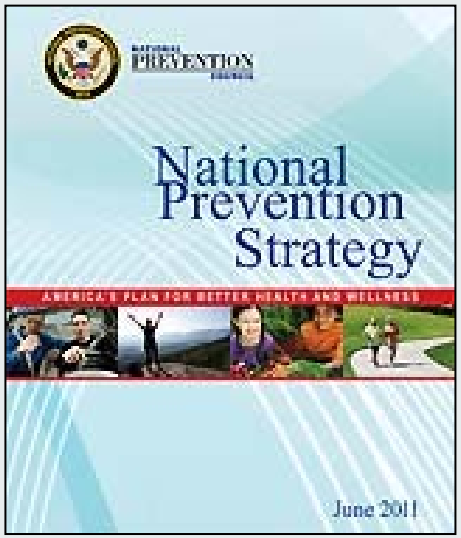
- 1963:
  - President John F. Kennedy addresses Congress and calls for more attention to mental illness prevention

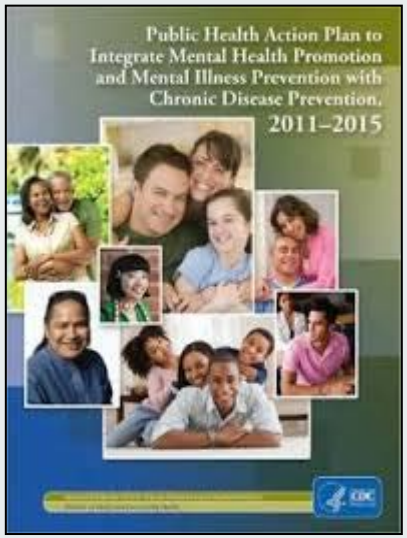
MENTAL HEALTH AS PUBLIC HEALTH: A BRIEF HISTORY



- 1994:
  - Two Institute of Medicine Reports call for public health approach to mental health
- 1999:
  - Surgeon General's Report calls for the integration of mental health into core public health functions

MENTAL HEALTH AS PUBLIC HEALTH: A BRIEF HISTORY





- Today:
  - Mental health is the focus of 12 Healthy People 2020 objectives
  - "Mental and Emotional Well-Being" is 1-of-7 priority areas in the National Prevention Strategy
  - "Develop[ing] strategies for integrating mental health and mental illness into public health systems" is an objective of the Centers for Disease Control and Prevention's chronic disease action plan

GAP IN KNOWLEDGE

- Little is known about what local health departments (LHDs) do to address population mental health
- LHDs have great potential to improve population mental health
  - LHDs' orientation toward populations provides opportunity to improve mental health through the 10 Essential Public Health Services
    - E.g., mental health surveillance, policy advocacy to address the social determinants of mental health, stigma reduction
    - Compliment clinical efforts of local departments of behavioral health

STUDY AIMS

- Quantitative Study
  - Describe the prevalence and correlates of LHD activities to address mental health in the United States
  - Estimate the proportion of the U.S. population covered by LHD activities to address mental health
  - Identity associations between mental health activities performed by LHDs and LHD characteristics
- Qualitative Study
  - Explore LHD officials' perceptions of mental health as a public health issue, the activities LHDs perform to address mental health, and barriers and facilitators to these activities

METHODS

- Data:
  - 2013 National Profile of Local Health Departments (Profile Study)
    - Core survey sent to 2,532 LHDs (response rate 78%)
    - Analysis limited to 505 LHDs that completed Module 2
- Measures: Dependent variables
  - 8 Profile Study variables focused on LHD mental health activities
    - 1 assessing the provision of clinical mental health services
    - 5 assessing activities to ensure access to clinical mental health services
    - 1 assessing the provision of population-based activities to prevent mental illness
    - 1 assessing policy/advocacy activities in the area of mental health
  - Every mental health variable was dichotomous (0/1)
  - Cumulative measure of LHD mental health activity (e.g., 0, ≥1, ≥2)

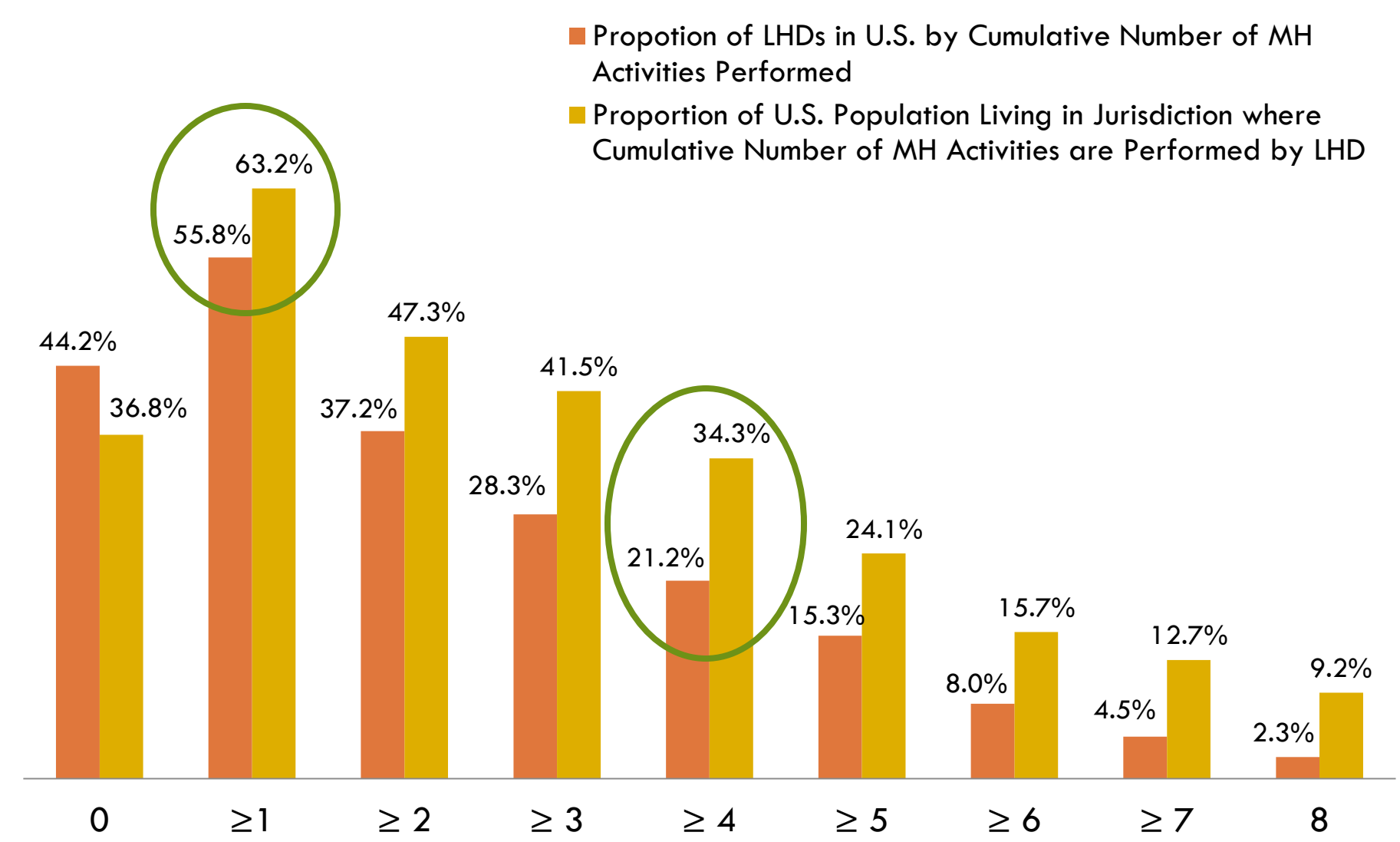
METHODS

- Measures: Independent variables (LHD characteristics)
  - Selection informed by Handler et al.'s framework for the measurement of public health system performance
  - Macro environmental factors:
    - Population size
    - U.S. Census region
  - Structural capacity:
    - Number of full-time equivalent staff per 10,000 population
      - Each LHD classified according to staffing quartile rank
  - Process factors:
    - Direct provision/contracting of:
      - Primary care services
      - Substance abuse services

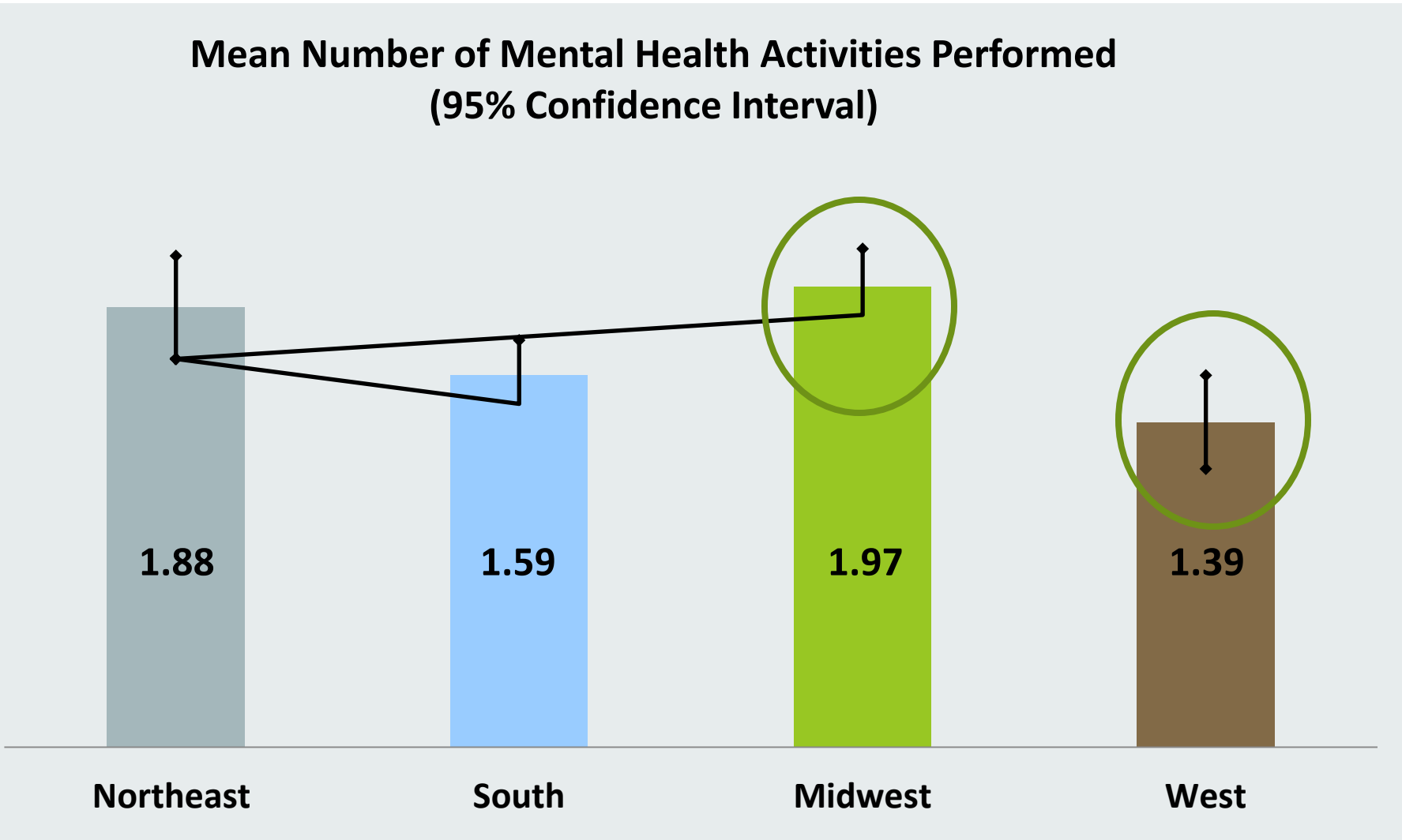
METHODS

- Analysis:
  - Profile Study Module 2 sampling weights applied
  - Univariate descriptive statistics
  - Bivariate analyses
    - Produced unadjusted odds ratios (ORs) with 95% CIs
    - Conducted chi-square tests to identify associations between each measure of mental health activity and LHD characteristics
  - Multivariate logistic regression:
    - Produced adjusted odds ratios (AORs) to estimate the likelihood that a LHD would perform one mental health activity given the performance of another mental health activity, after adjusting for covariates identified as significant ($p \leq .05$) in bivariate analyses

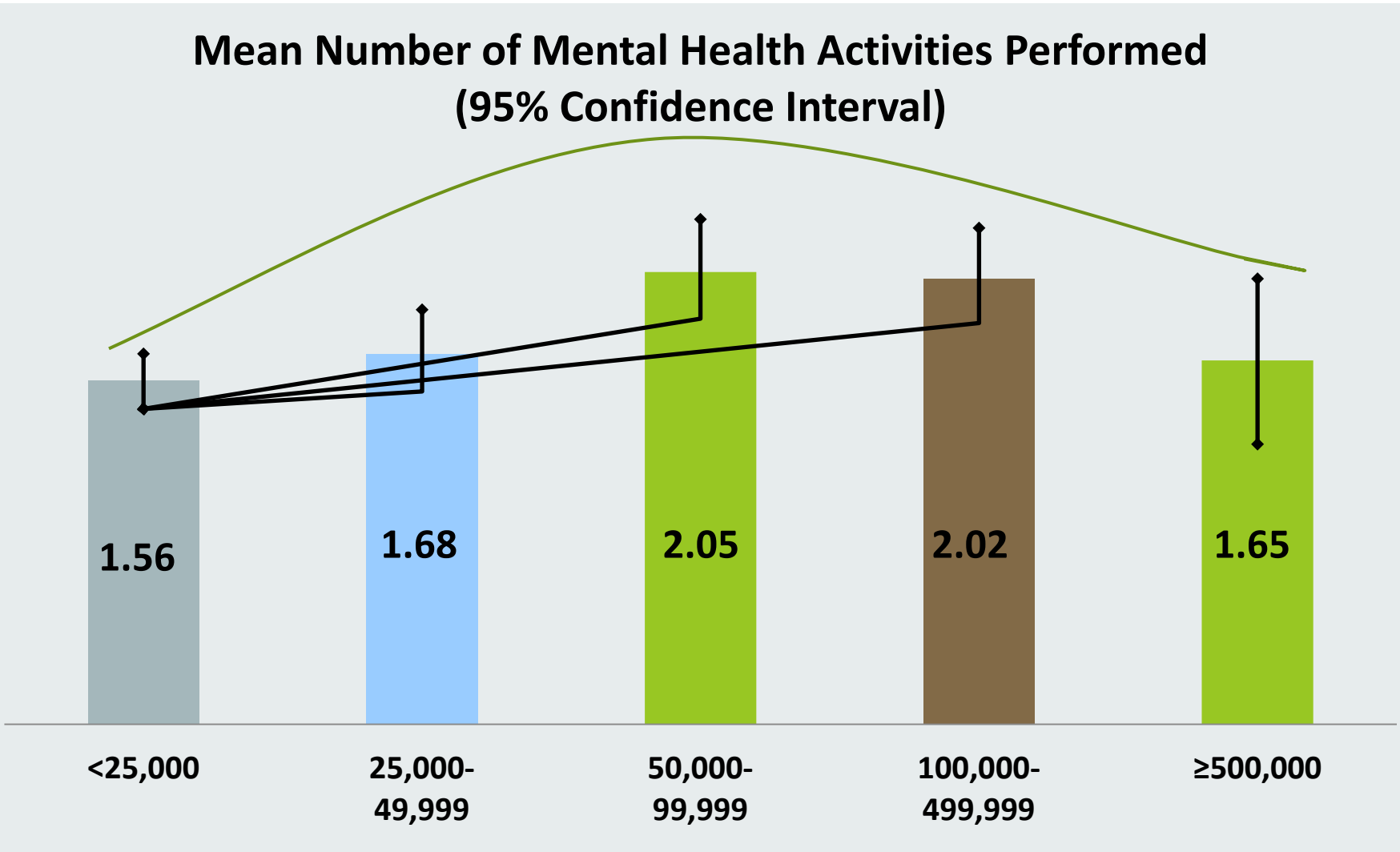
RESULTS:


Propotion of LHDs in U.S. by Cumulative Number of MH Activities Performed
Proportion of U.S. Population Living in Jurisdiction where Cumulative Number of MH Activities are Performed by LHD
44.2%
36.8%
55.8%
63.2%
37.2%
47.3%
28.3%
41.5%
21.2%
34.3%
15.3%
24.1%
8.0%
15.7%
4.5%
12.7%
2.3%
9.2%
0
≥1
≥ 2
≥ 3
≥ 4
≥ 5
≥ 6
≥ 7
8

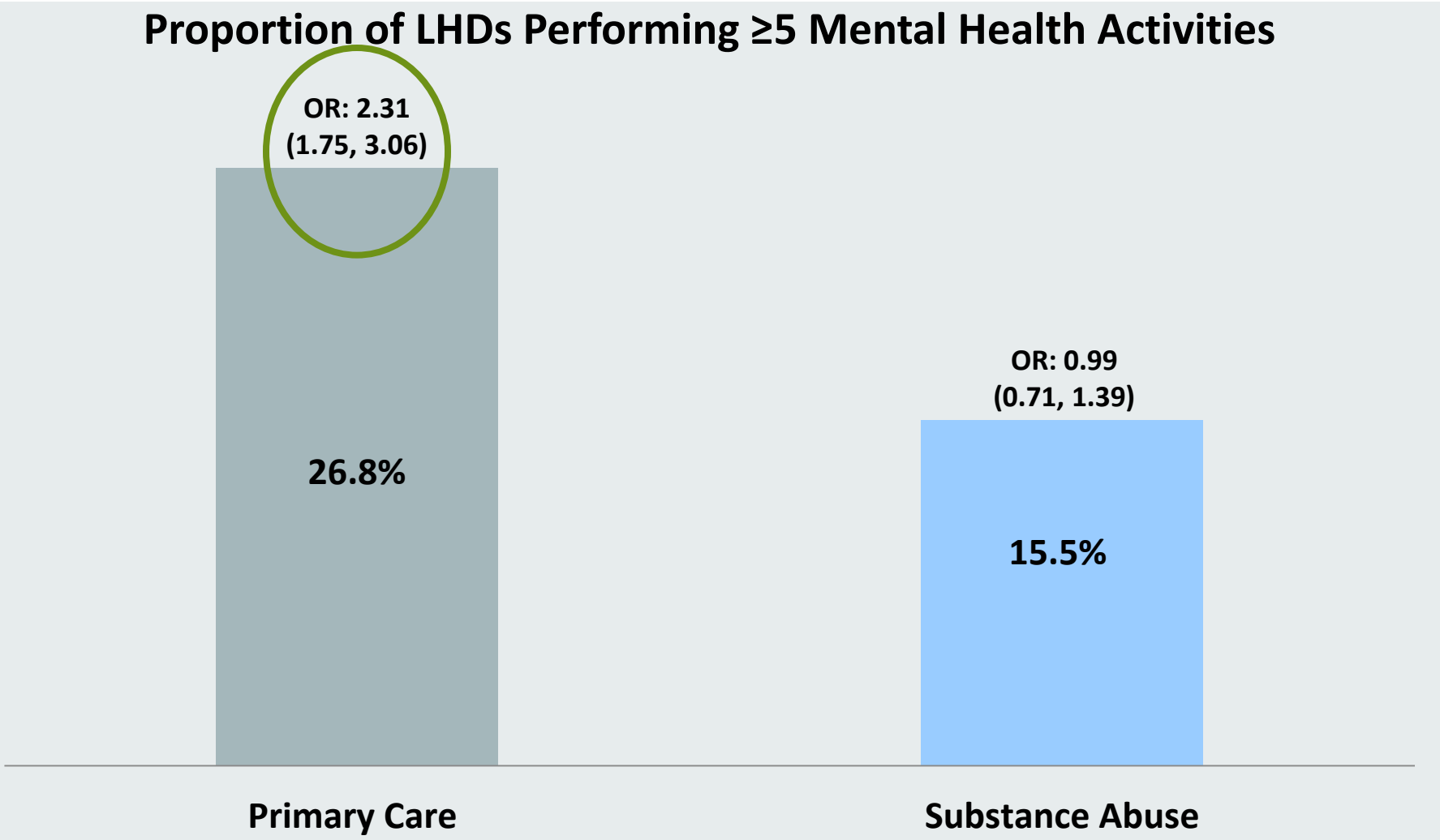
RESULTS:


Mean Number of Mental Health Activities Performed
(95% Confidence Interval)
1.88
1.59
1.97
1.39
Northeast
South
Midwest
West

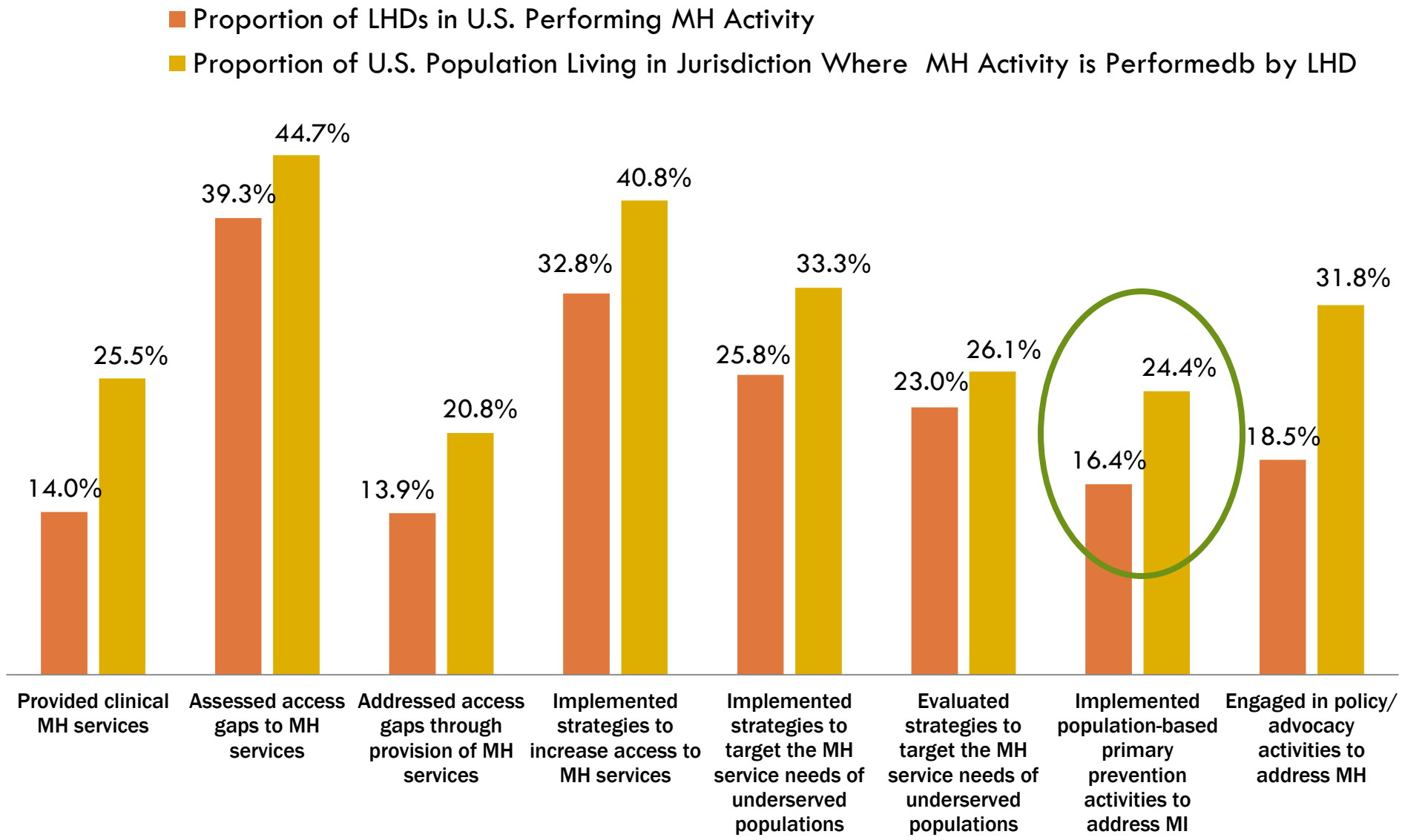
RESULTS:


Mean Number of Mental Health Activities Performed
(95% Confidence Interval)
1.56
1.68
2.05
2.02
1.65
<25,000
25,000-49,999
50,000-99,999
100,000-499,999
≥500,000

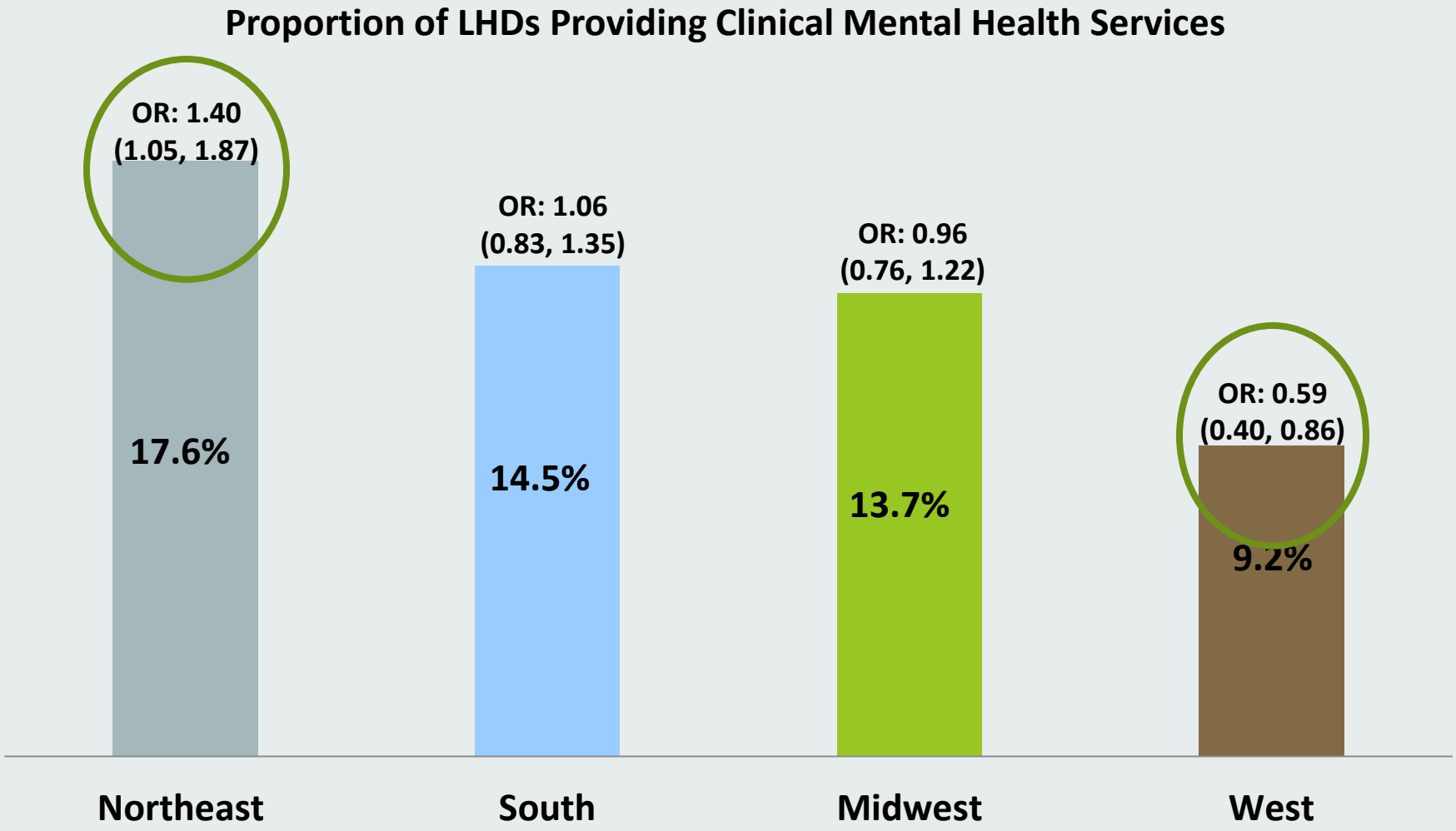
RESULTS:


Proportion of LHDs Performing ≥5 Mental Health Activities
OR: 2.31
(1.75, 3.06)
26.8%
OR: 0.99
(0.71, 1.39)
15.5%
Primary Care
Substance Abuse

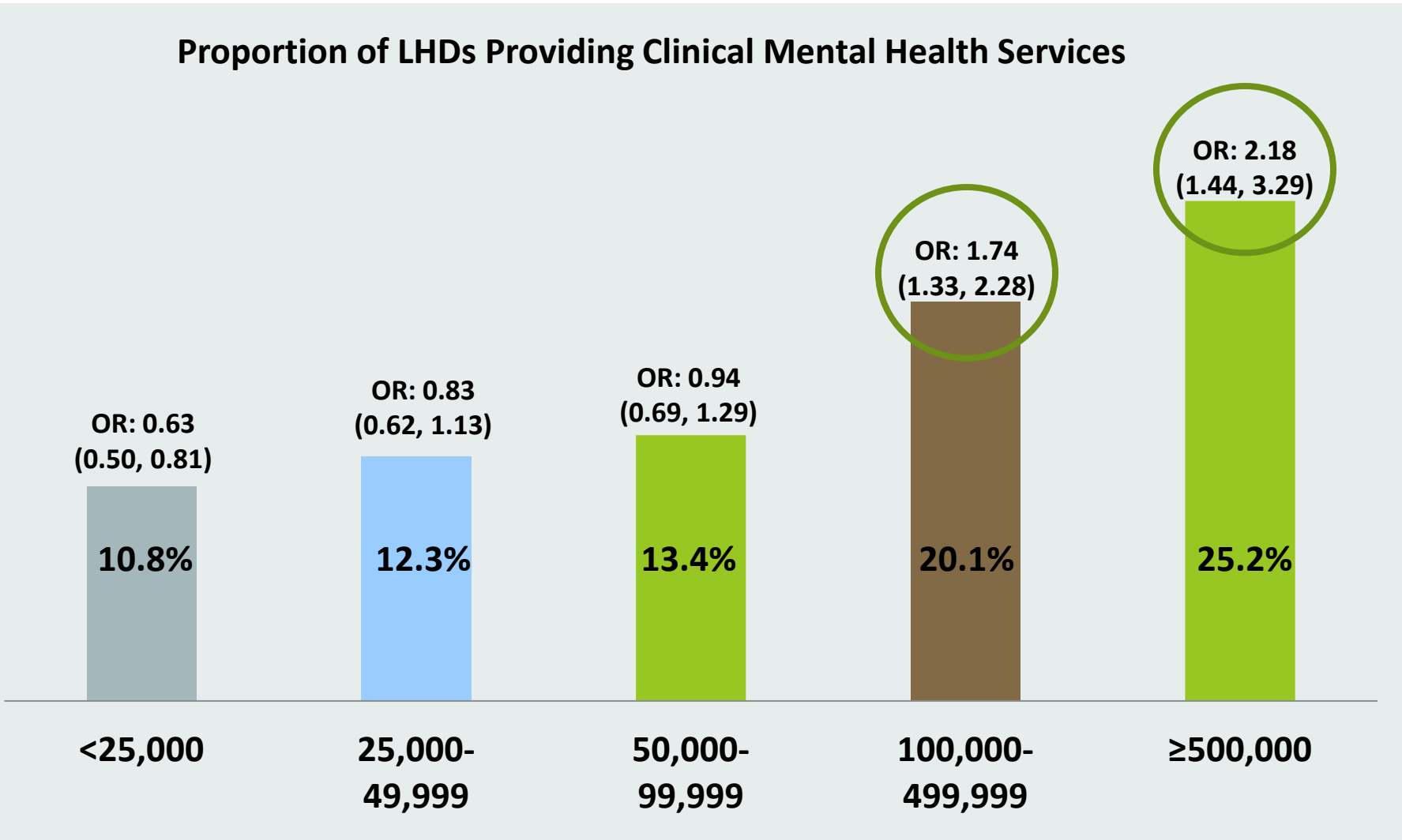
RESULTS:


Proportion of LHDs in U.S. Performing MH Activity
Proportion of U.S. Population Living in Jurisdiction Where MH Activity is Performedb by LHD
14.0%
25.5%
39.3%
44.7%
13.9%
20.8%
32.8%
40.8%
25.8%
33.3%
23.0%
26.1%
16.4%
24.4%
18.5%
31.8%
Provided clinical MH services
Assessed access gaps to MH services
Addressed access gaps through provision of MH services
Implemented strategies to increase access to MH services
Implemented strategies to target the MH service needs of underserved populations
Evaluated strategies to target the MH service needs of underserved populations
Implemented population-based primary prevention activities to address MI
Engaged in policy/ advocacy activities to address MH

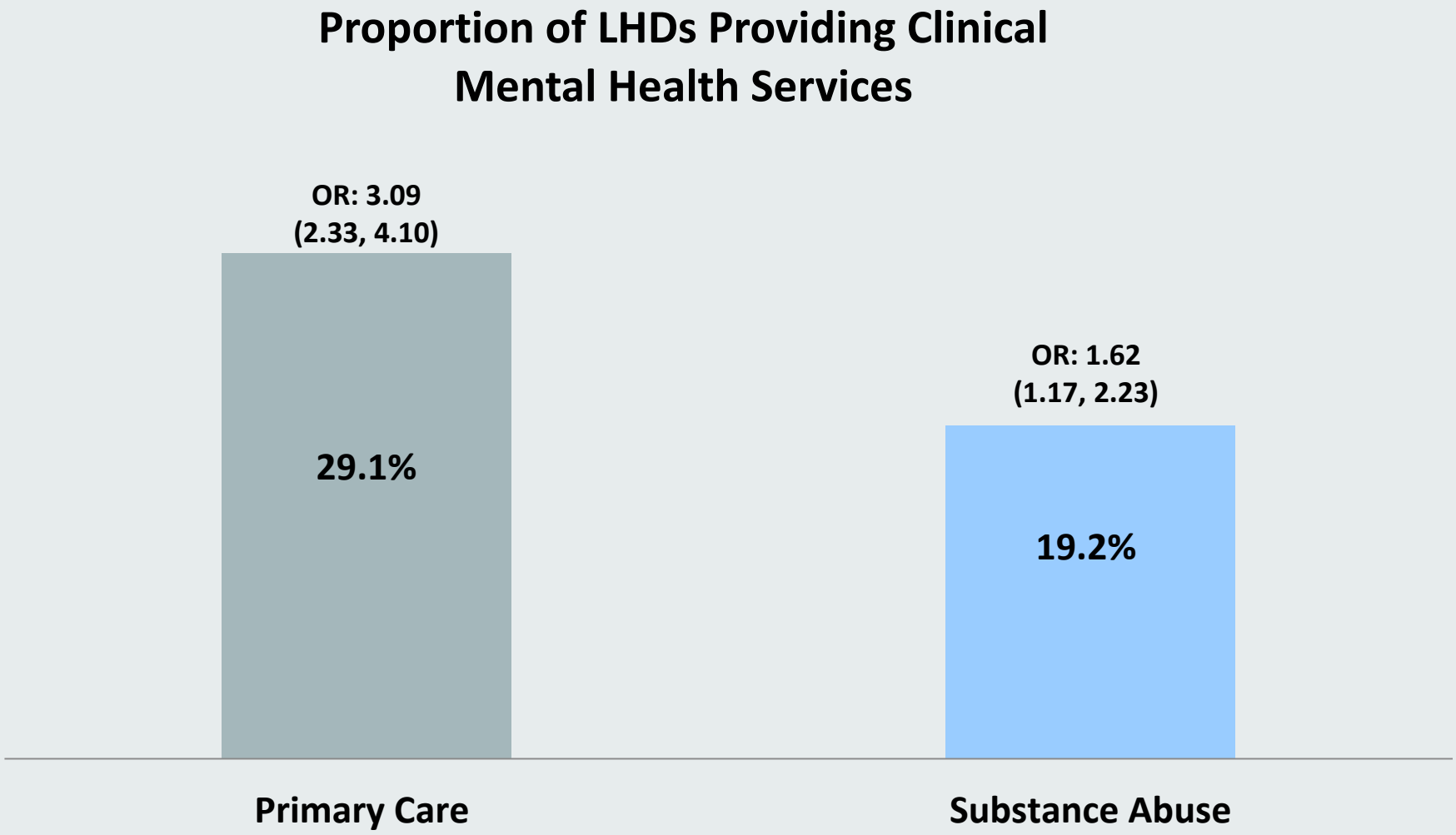
RESULTS:


Proportion of LHDs Providing Clinical Mental Health Services
OR: 1.40
(1.05, 1.87)
17.6%
OR: 1.06
(0.83, 1.35)
14.5%
OR: 0.96
(0.76, 1.22)
13.7%
OR: 0.59
(0.40, 0.86)
9.2%
Northeast
South
Midwest
West

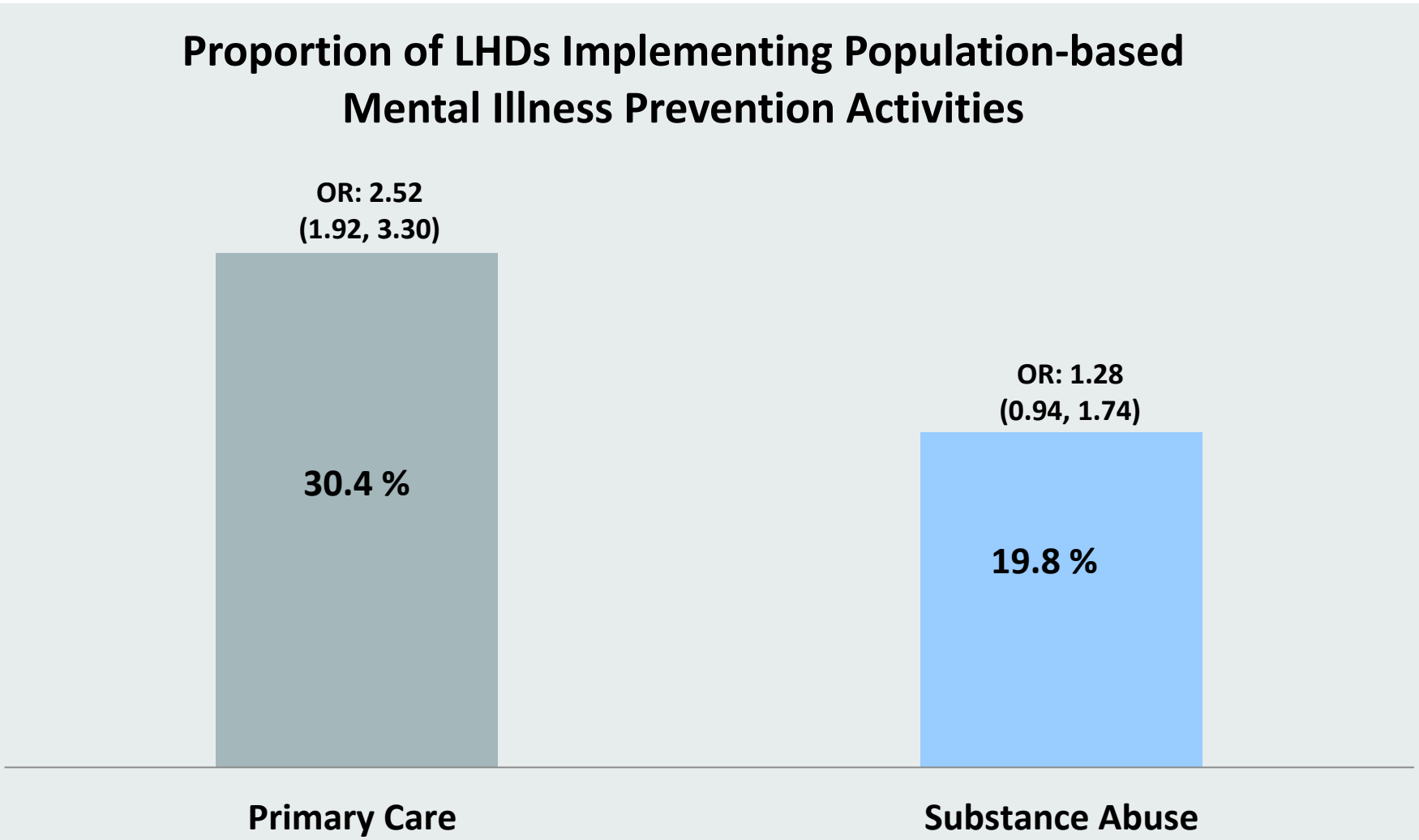
RESULTS:


Proportion of LHDs Providing Clinical Mental Health Services
OR: 0.63
(0.50, 0.81)
10.8%
OR: 0.83
(0.62, 1.13)
12.3%
OR: 0.94
(0.69, 1.29)
13.4%
OR: 1.74
(1.33, 2.28)
20.1%
OR: 2.18
(1.44, 3.29)
25.2%
<25,000
25,000-49,999
50,000-99,999
100,000-499,999
≥500,000

RESULTS:


Proportion of LHDs Providing Clinical Mental Health Services
OR: 3.09
(2.33, 4.10)
29.1%
OR: 1.62
(1.17, 2.23)
19.2%
Primary Care
Substance Abuse

RESULTS:


Proportion of LHDs Implementing Population-based Mental Illness Prevention Activities
OR: 2.52
(1.92, 3.30)
30.4 %
OR: 1.28
(0.94, 1.74)
19.8 %
Primary Care
Substance Abuse

RESULTS:

- Multivariate logistic regression to identify associations between mental health activities
  - A LHD's performance of any one mental health activity significantly increased the likelihood of it performing every other mental health activity
- After adjusting for covariates:
  - Among LHDs that provided clinical mental health services:
    - 61.6% implemented population-based primary prevention activities to address mental illness
      - AOR: 7.26 (5.13, 10.27)
    - 56.8% engaged in policy/advocacy activities to address mental health
      - AOR: 3.08 (2.10, 4.52)

DISCUSSION

- Many LHDs are actively engaged in activities to address mental health
  - Need for research that explores impact of LHD mental health activities on population mental health outcomes
  - Need for evidence-based, population-based mental health interventions
- LHDs that provided clinical services were most engaged in mental health activities—especially population-based activities (e.g., prevention, policy/advocacy)
  - Need for research that explores inter-relationships between clinical and population-based mental health services

LIMITATIONS

- The Profile Study survey variables did not…
  - Capture specific details about types of mental health activities performed or provide operational definitions for terms
    - E.g., What does “population-based mental illness prevention” mean to a LHD official?
  - Did not capture information about the frequency with which LHDs performed mental health activities (e.g., annually, daily)

- We did not access…
  - The presence or absence of a local behavioral health department serving the same population as the LHD
  - State-level administrative and financing arrangements related to mental health
  - Associations between LHD mental health activities and the mental health status of the population it serves

QUESTIONS

- Acknowledgments
  - Robert Wood Johnson Foundation
  - University of Kentucky PHSSR Coordinating Center

- Jonathan Purtle
  - JPP46@Drexel.edu

PRELIMINARY QUALITATIVE FINDINGS: DISCUSSION

- LHD accreditation movement might be resulting in more LHDs conducting rigorous community health needs assessments
  - Mental health may be emerging as a new priority
- Using 2010 Profile Study data, Luo* and colleagues found that 32.0% of LHDs performed at least one-of-three activities to ensure access to mental health care services
  - Compared with 45.9% for dental care and 66.0% for medical care
- Using 2013 Profile Study data, we found that 46.2%of LHDs performed at least one-of-three activities to ensure access to mental health care services
  - Compared with 48.2 % for dental care and 66.8% for medical care

*Luo, H., Sotnikov, S., & Shah, G. (2013). Local health department activities to ensure access to care. *American Journal of Preventive Medicine*, 45(6), 720-727

QUALITATIVE STUDY

- Telephone-based, semi-structured, in-depth interviews with LHD officials
  - 19 interviews with 26 individuals from 19 LHDs
    - Plan to interview respondents from +/- 5 more LHDs
  - Each interview approximately 30 minutes n duration
- LHDs purposively selected on basis of geographic region, population size, and number of mental health activities performed
- Interviews audio-recorded, transcribed, imported into NVivo 10
- Thematic content analysis
  - In progress
- Approved by Drexel University IRB

PRELIMINARY QUALITATIVE FINDINGS: MENTAL HEALTH AS PUBLIC HEALTH

- Mental health perceived as public health issue:
  - "I just want to say that mental health is on our mind all the time. So we're trying to figure out where we fit. We've figured out some ways, but it's there, like we think about it a lot."-6
  - "I think there has been a huge shift. I mean even within the field of public health, people see mental illness as part of overall health and treating the whole person and it's not just something… that's just geared towards crazy people, which is how they used to phrase it back in the day."-5
- Mental health identified in community health needs assessments:
  - "But when it all whittles down in the community health improvement plan, one of them was mental health, and that included both the mental health and the chemical dependency piece… And the second priority was access to quality care and the third is chronic disease."-10
  - "In our CHIP plan, there were three areas that emerged as a priority. And one of those areas for our city was mental health and wellness."-1
- Community pressure for LHDs to address mental health:
  - "And the community also is starting to demand more too, because the community is saying, 'It's unacceptable for you to just wait until we collapse in the street. This is not okay.'-2

PRELIMINARY QUALITATIVE FINDINGS: IMPACTS OF THE ACA

- Benefits:
  - "I would say one of the key things that we've noticed is a lot of clients have become enrolled and that's a huge benefit in that not only are they insured and they're able to access our mental health direct services but it also opens them up to be able to receive intensive primary care services, which we see as being a huge piece when it comes to mental health."-5
- Challenges:
  - "Then, along comes the Affordable Care Act, and now we have this expanded Medicaid population, which doesn't really qualify, technically, for local funds. But we found we have such a shortage of Medicaid providers in our community, that all those people who were getting care through the local dollars, didn't qualify."-14
- Mixed results:
  - "I think it's had both positive and negative. We have had some additional funds come to the state… that have gone to community-based prevention. We've also seen other programs that have been successful long-term programs that public health has done where the shift has gone from a community population-based or focus, to a clinical collaboration focus…. So a positive with additional dollars, a negative with a clinical focus rather than a population focus."-15

PRELIMINARY QUALITATIVE FINDINGS: BARRIERS TO ACCESSING SERVICES

- Insufficient number of mental health providers:
  - "There's not enough providers for the amount of mental disease in the region"-11
  - "We refer them to a community provider, which there's very little of."-1
- Administrative challenges to mental health providers receiving Medicaid reimbursement :
  - "We have a lot of mental health therapists in the community, but only a handful of them are willing or able to accept Medicaid, because it doesn't reimburse well, and it's a real pain. You have to have electronic health records."-14
- Lack of services for people without severe mental illness:
  - "There is no well care system in mental health. That's basic."-12
  - "We have been witnessing what we call in public health the walking wounded for quite some time, those people who are not sick enough to really light up on the switchboard, but they're not really functional. They're really just a step away from having a total collapse."–2

PRELIMINARY QUALITATIVE FINDINGS: CHALLENGES TO COLLABORATING WITH LOCAL BEHAVIORAL HEALTH AGENCIES

- Individual/clinical-focus of behavioral health agencies:
  - "You've gotta have a person in front of you… And unless behavioral health care actually has access to general fund money that's discretionary, it's gonna be hard for them to do what I would consider primary prevention population-based care.-2
  - "Well here's one that has been a pet peeve of mine… [behavioral health] really do zero local population data anything.-3"
- Divergent perspectives of LHDs and behavioral health agencies:
  - "So the disconnect between us and mental health is they're not doing any of that upstream work at all, or that policy systems change at all. Their bread and butter is really serving people who walk through the door."-12
  - "I think [the behavioral health agency's] shift to research and data and different culture and looking at things through a public health lens, as opposed to just let's get the services out there and count them, was probably more of an adjustment."-18

PRELIMINARY QUALITATIVE FINDINGS: IMPEDIMENTS TO LHD INVOLVEMENT IN MENTAL HEALTH

- Competing priorities:
  - "So that is why we don't have the population or the structure or the support to really focus on mental health and we know that that is over there… And we had to move our clinics to dilapidated buildings, so we just have a whole host of things that we are doing, so taking on another portion that's not required as an essential local public health service is not where we're at now-19
  - "Right, someone else's job.-16
- Professional boundaries/turf issues:
  - "But short of that, given that mental health is part of another agency, and wanting to respect that, and I'm not looking to build a – I'm not looking to take mental health from another agency-15
  - "We don't get as deeply into it because for political reasons, we never wanted it to be seen like we're stepping on their toes, per se."–2