## *PHSSR Research-In-Progress Series:*

*Bridging Health and Health Care*
*Wednesday, June 10, 2015* *12:00 - 1:00 pm ET*

# *Establishing the Empirical Foundation for Mental Health-focused Public Health Services & Systems Research*

*To download today's presentation & speaker bios, see the 'Resources' box in the top right corner of the screen.*

# Agenda

**Welcome: Anna Hoover, PhD,** Assistant Professor, Health Management & Policy, University of Kentucky College of Public Health

***"Establishing the Empirical Foundation for Mental Health-focused Public Health Services & Systems Research"***

**Presenter: Jonathan Purtle, DrPH, MSc,** Assistant Professor, Drexel University School of Public Health *Jonathan.Purtle@Drexel.edu*

**Commentary:**

**Ann Carroll Klassen, PhD,** Associate Dean for Research *ack57@drexel.edu*
**Jennifer Kolker, MPH,** Associate Dean for Public Health Practice *jak682@drexel.edu*
Drexel University School of Public Health,

**Questions and Discussion**

# Presenter

**Jonathan Purtle, DrPH, MSc**
Assistant Professor
Health Management & Policy
Drexel University School of Public Health
*Jonathan.Purtle@Drexel.edu*

Post-doctoral Scholar in Public Health Delivery, 2014 PHSSR Award

# EXAMINING PUBLIC HEALTH SYSTEM ROLES IN MENTAL HEALTH SERVICE DELIVERY

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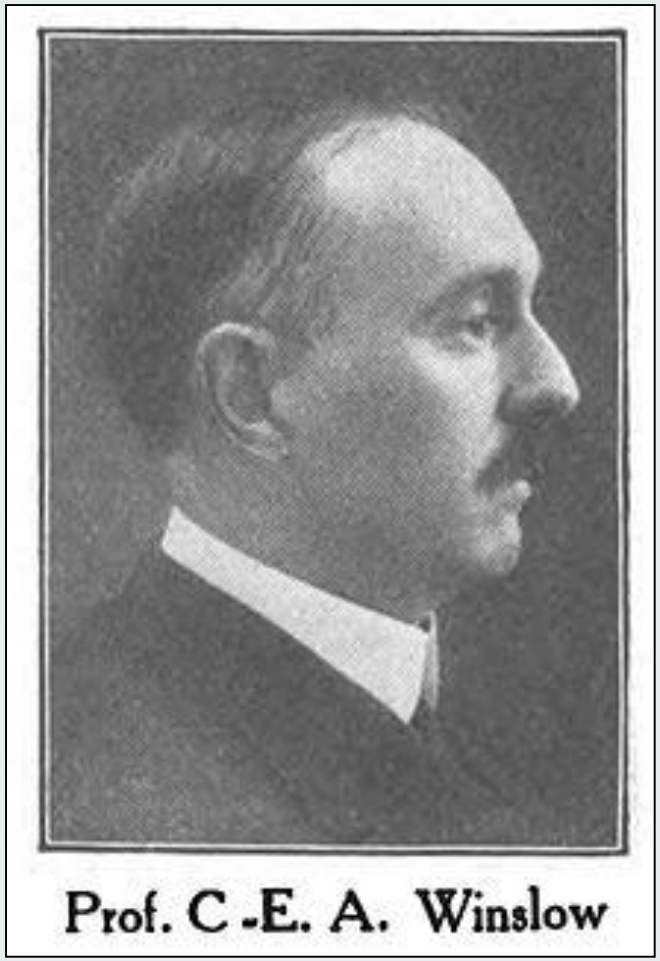
# MENTAL HEALTH AS PUBLIC HEALTH: A BRIEF HISTORY

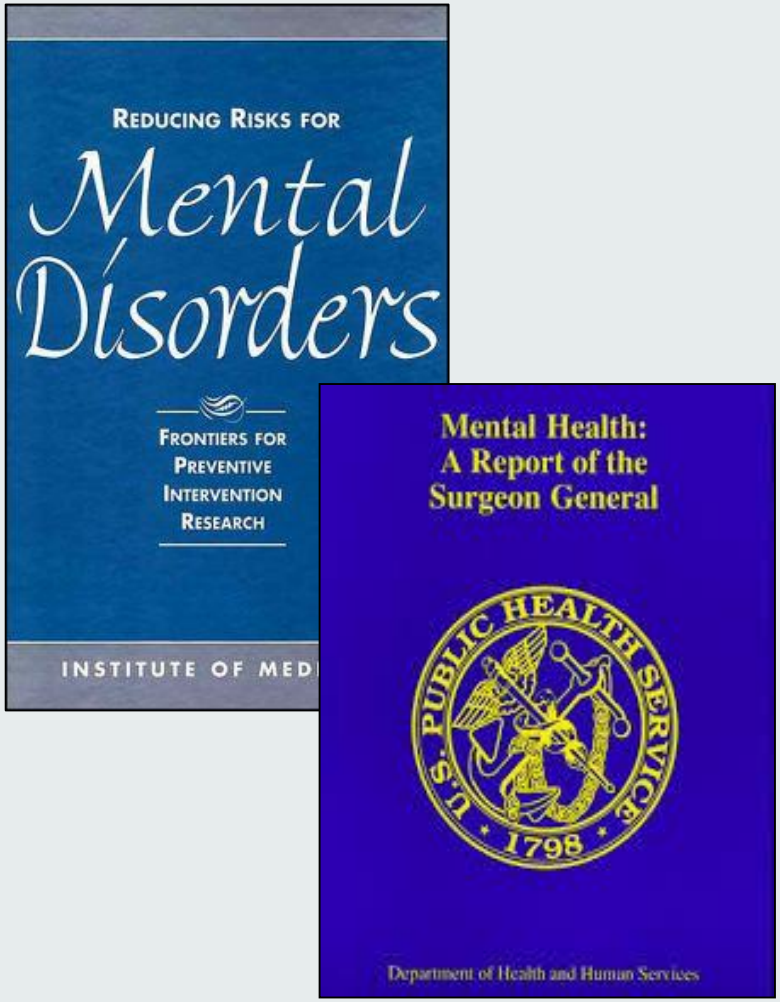



- 1926: APHA President declares
  - "It is impossible to consider, even in the briefest summary, the future program of the public health movement without at least some reference to the vast and fertile fields of mental hygiene. Today, the attention devoted to this problem by municipal health departments 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

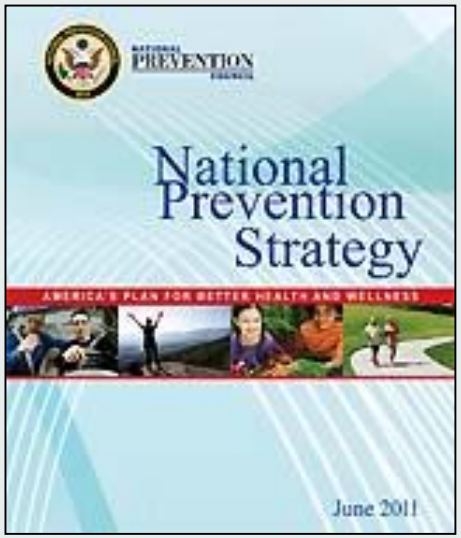
- 1963:
  - President John F. Kennedy addresses Congress and calls for more attention to mental illness prevention

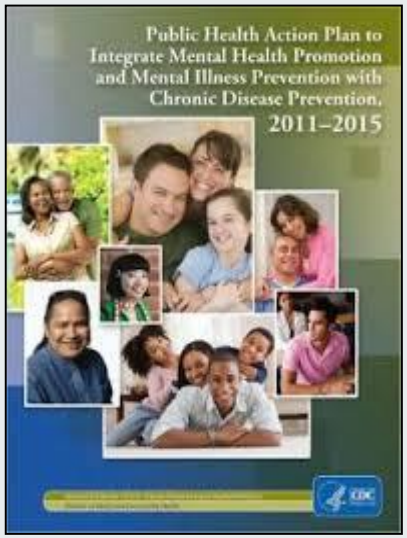
# MENTAL HEALTH AS PUBLIC HEALTH: A BRIEF HISTORY




- 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
  - A review of 1,166 publications in the Public Health Services and Systems Research Reference Library reveals only five relevant results assigned the keywords “mental health” and/or “behavioral health” and/or “psychological
- 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
  - Now is an opportune time to consider LHDs’ role in population mental health
    - LHD accreditation
    - Patient Protection and Affordable Care Act (ACA)

# 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

# QUANTITATIVE STUDY: METHODS

- Data:
  - 2013 National Profile of Local Health Departments (Profile Study)
    - Core survey sent to 2,532 LHDs (response rate 78%)
    - Module 2 sent to representative sample of 596 LHDs (response rate 82%)
    - 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/contracting of direct mental health services
    - 5 assessing activities to ensure access to mental health services
    - 1 assessing the provision/contracting of population-based activities to prevent mental illness
    - 1 assessing policy/advocacy activities in the area of mental health
  - Cumulative measure of LHD mental health activity (e.g., 0, ≥1, ≥2)
  - Every mental health variable was dichotomous (0/1).

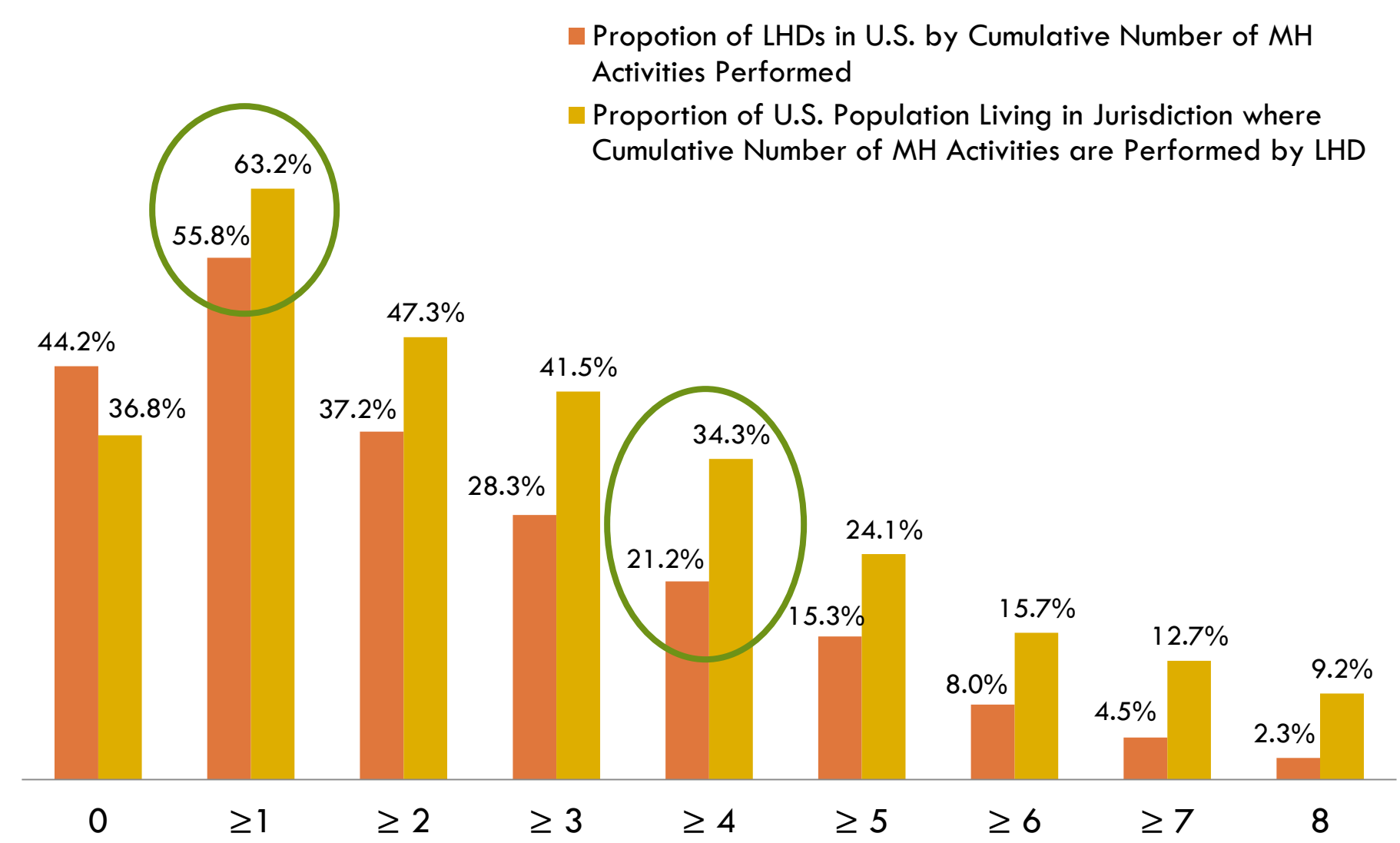
# QUANTITATIVE STUDY: METHODS

- 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

# QUANTITATIVE STUDY: METHODS

- Analysis:
  - Profile Study Module 2 sampling weights applied
  - Univariate descriptive statistics:
    - Estimated the proportion of LHDs performing each measure of mental health activity, stratified by LHD characteristics
    - Calculated the mean number of mental health activities performed with 95% confidence intervals (CIs), stratified by LHD characteristics
    - Summed the jurisdiction population sizes to estimate the proportion of the U.S. population covered by each mental health activity
  - Bivariate analyses:
    - Produced unadjusted odds ratios (ORs) with 95% CIs
    - Conducted $X^2$ 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
  - All analyses were conducted in SPSS 22.0

# RESULTS:
# LHD INVOLVEMENT IN MENTAL HEALTH ACTIVITIES



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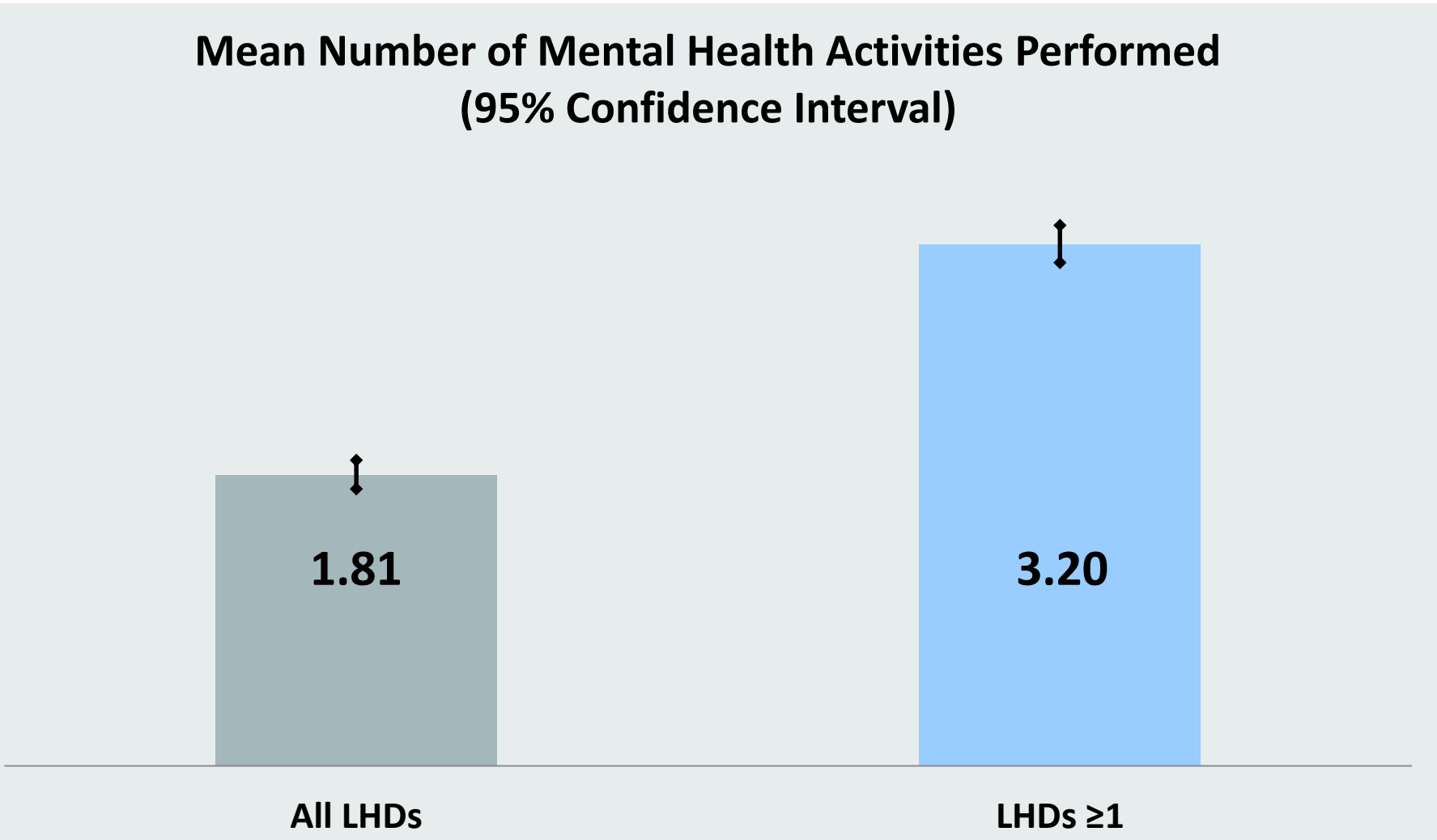

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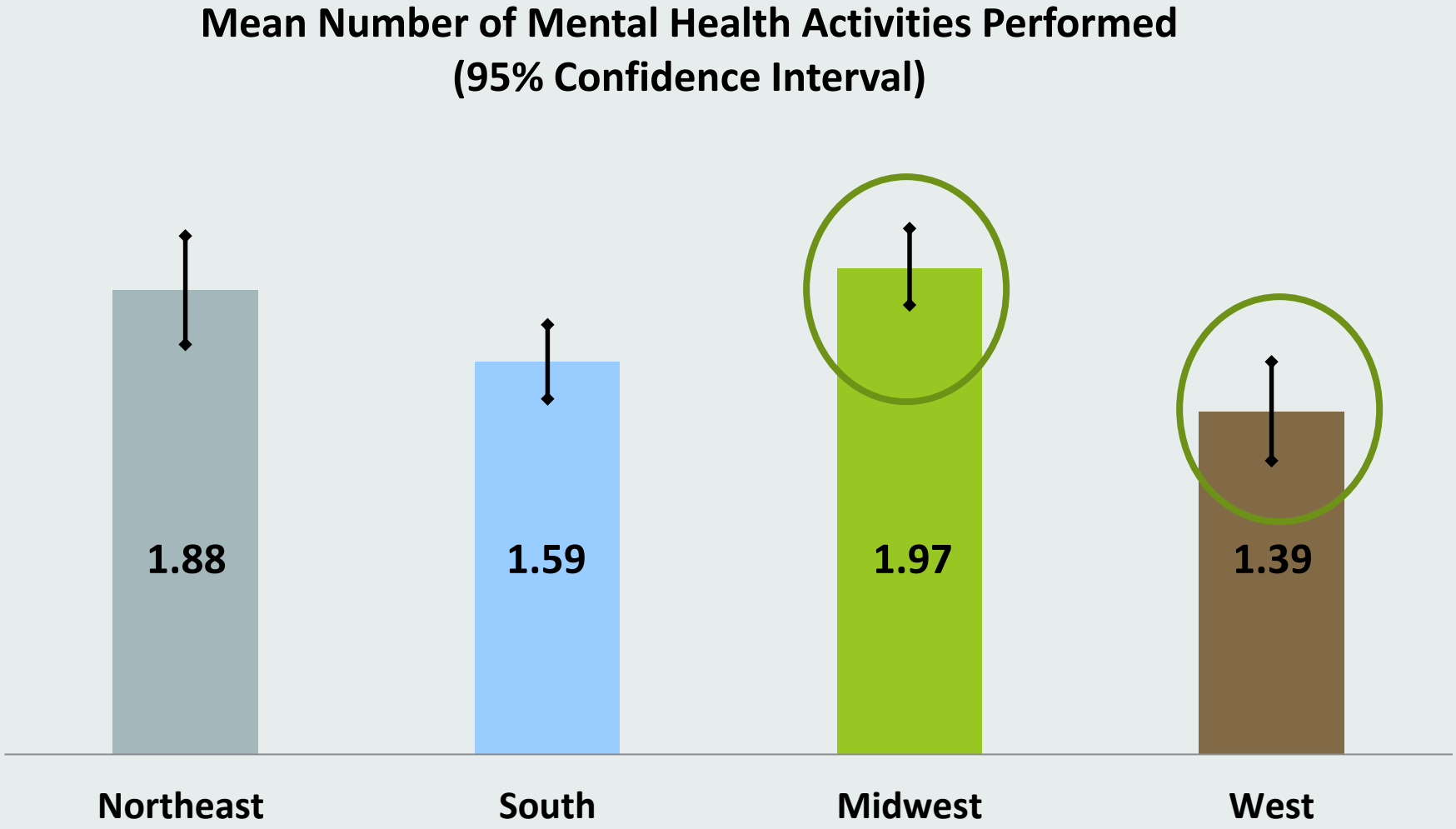

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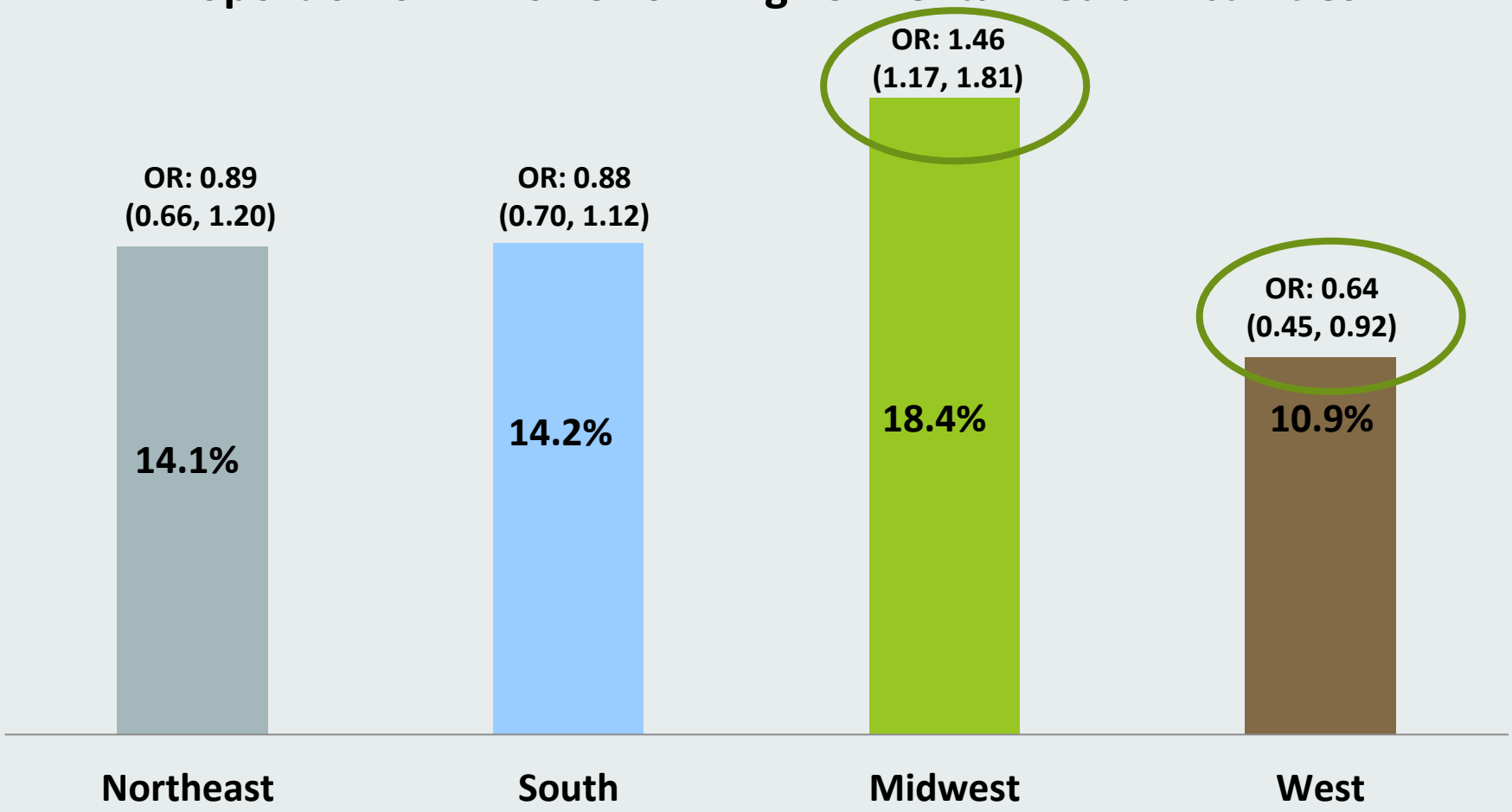

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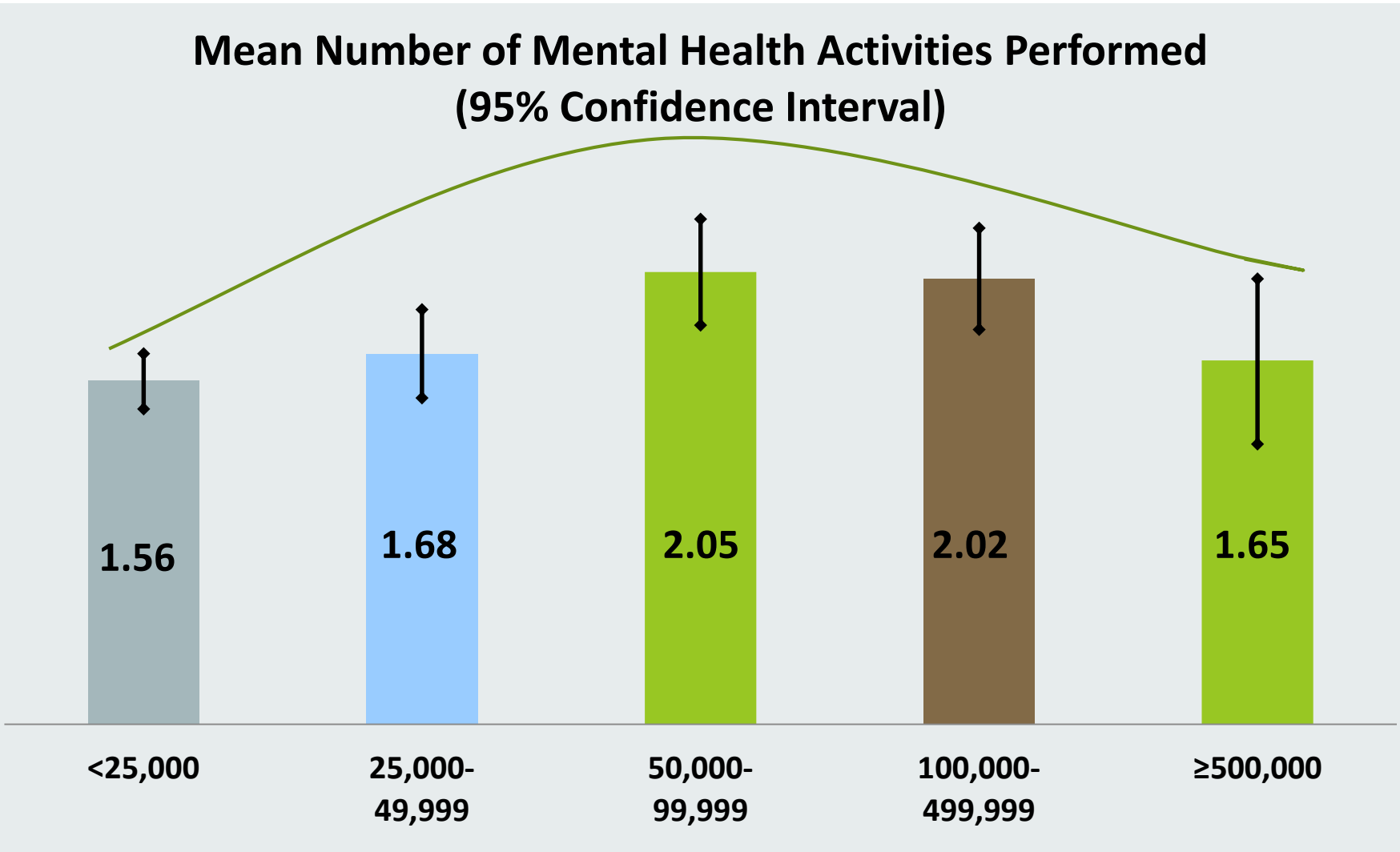
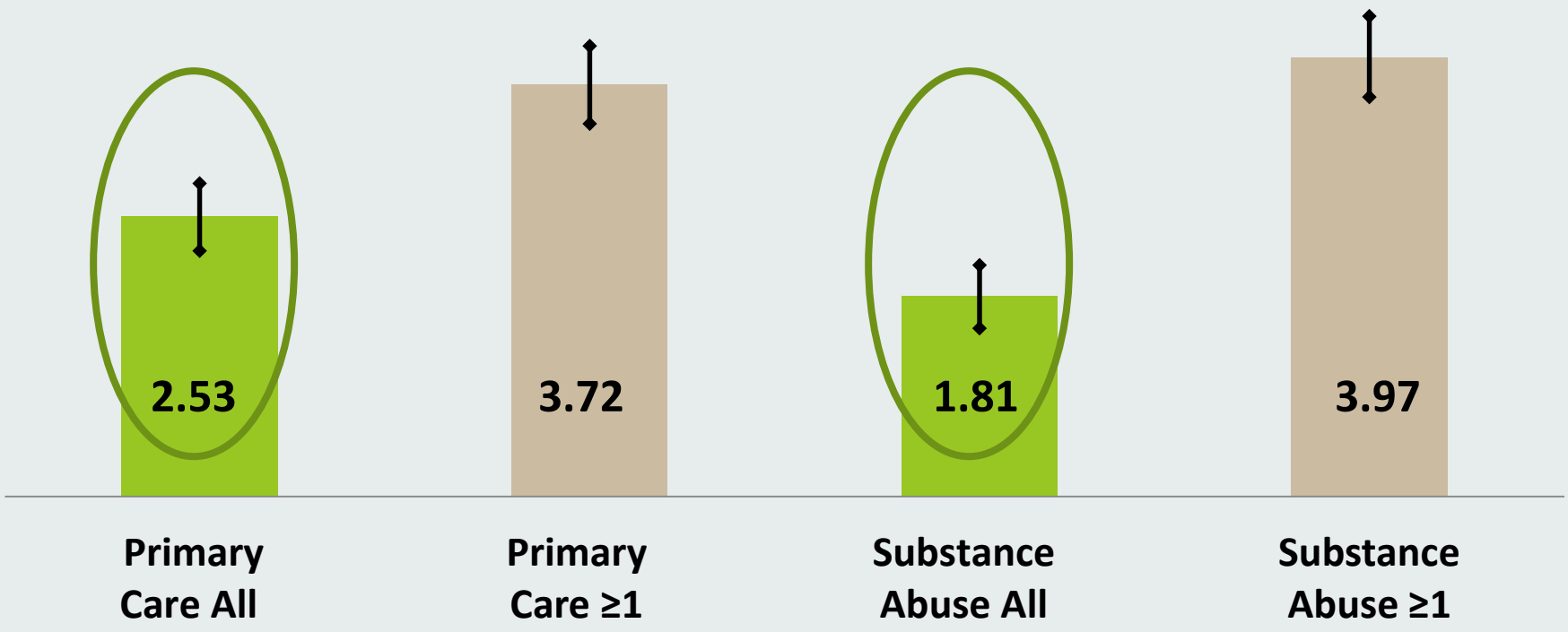
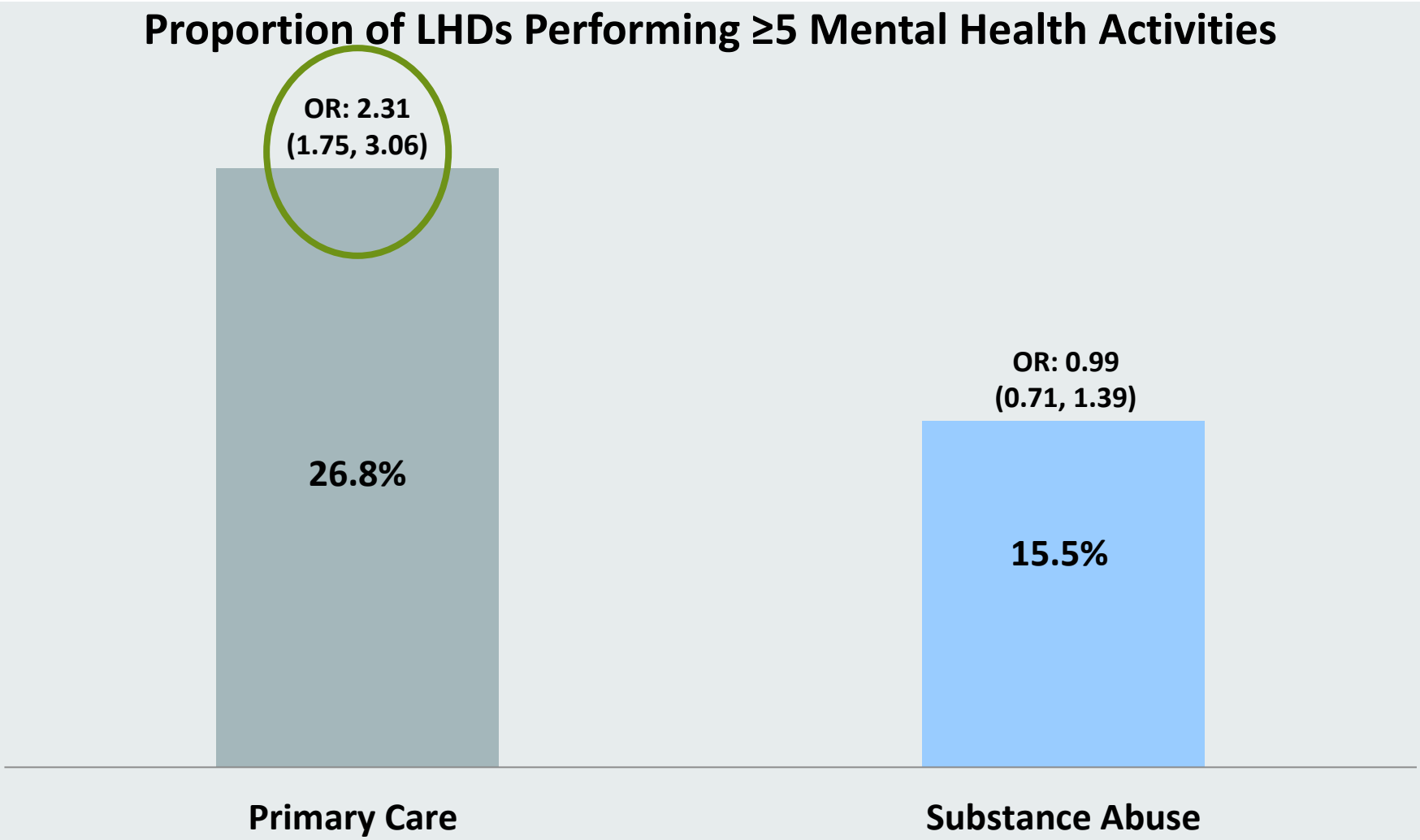


# RESULTS:
# LHD INVOLVEMENT IN MENTAL HEALTH ACTIVITIES

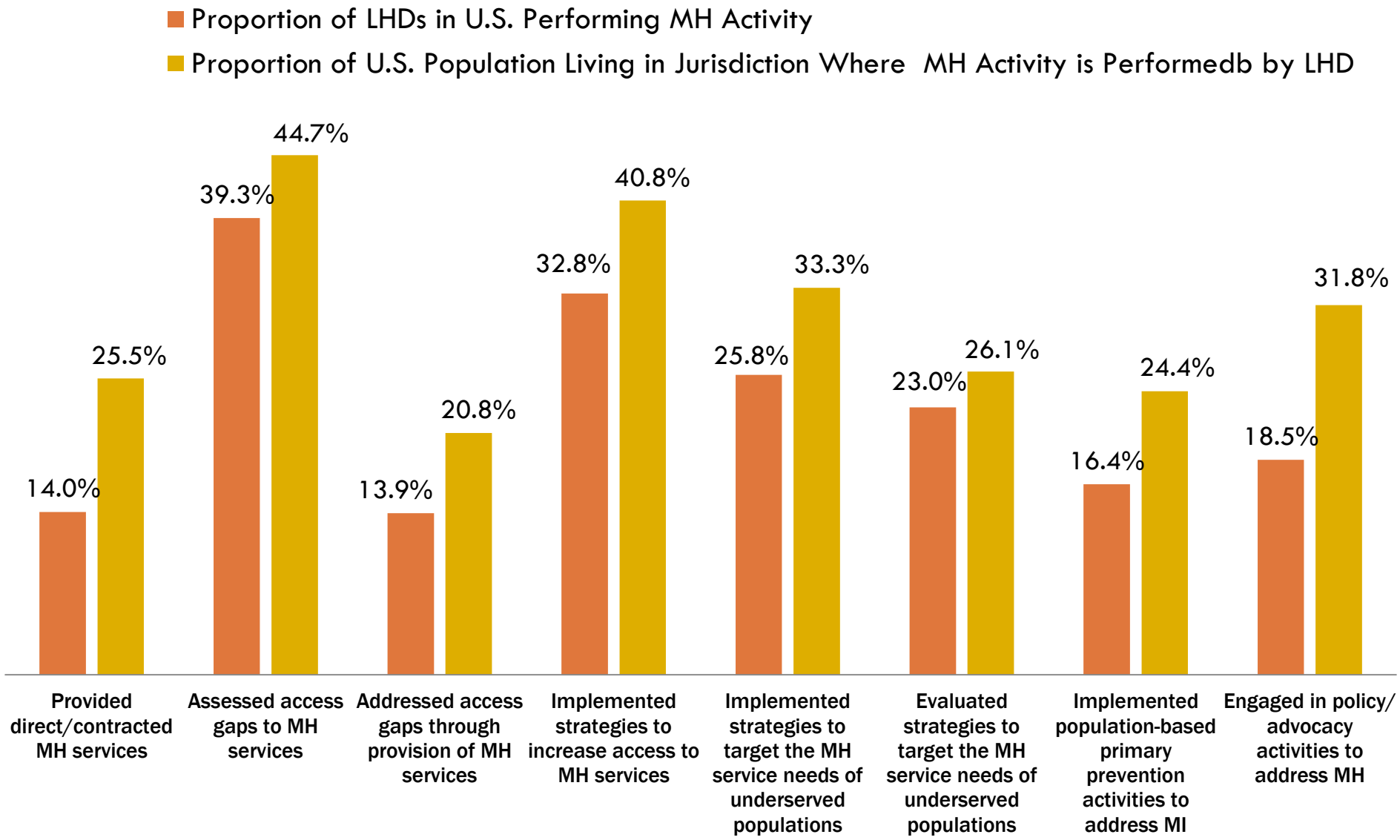
**Mean Number of Mental Health Activities Performed, by Provision/Contracting of Clinical Services (95% Confidence Interval)**



# RESULTS:
# LHD INVOLVEMENT IN MENTAL HEALTH ACTIVITIES



# RESULTS:
# MENTAL HEALTH ACTIVITIES PERFORMED BY LHDs



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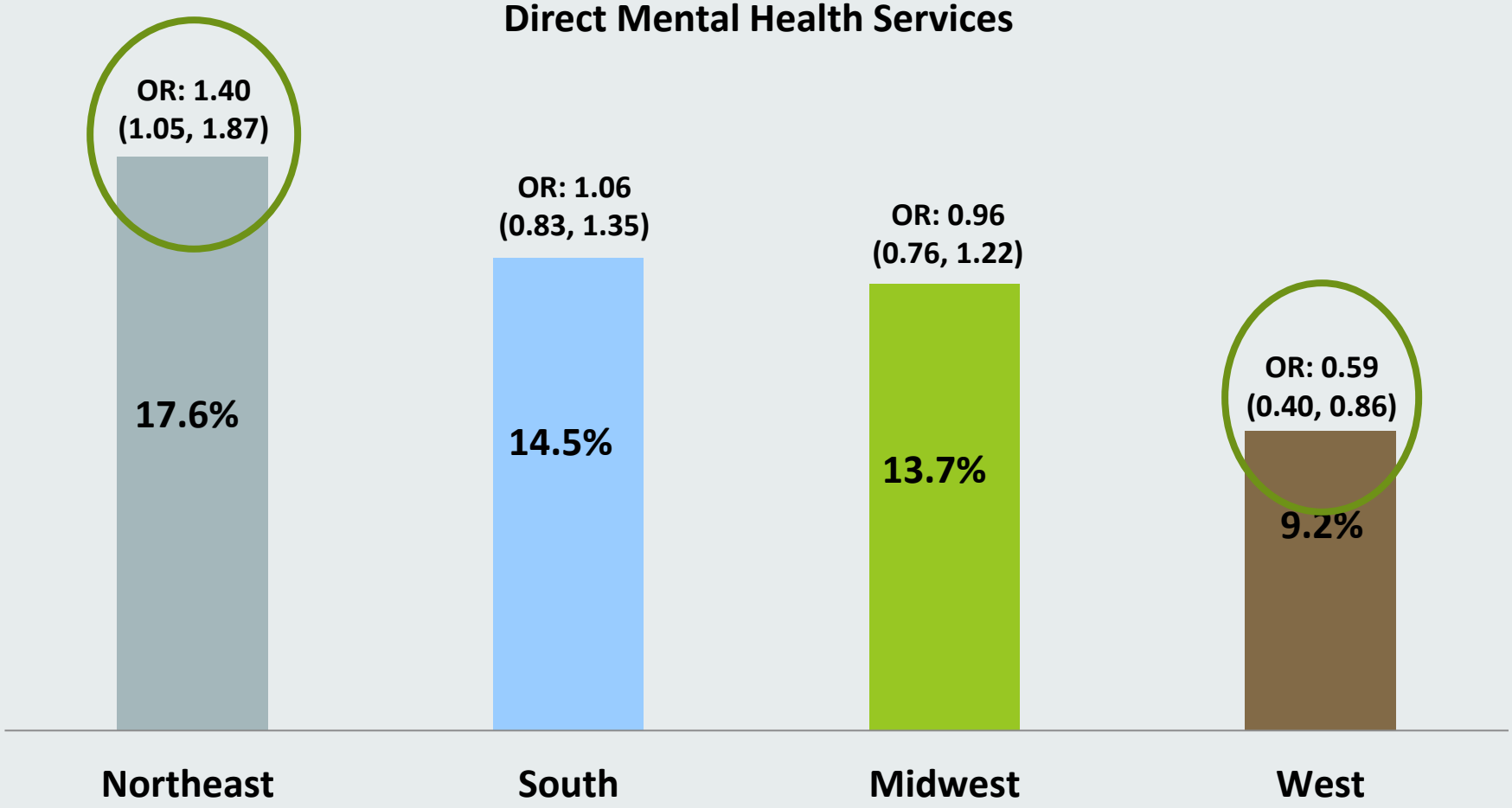

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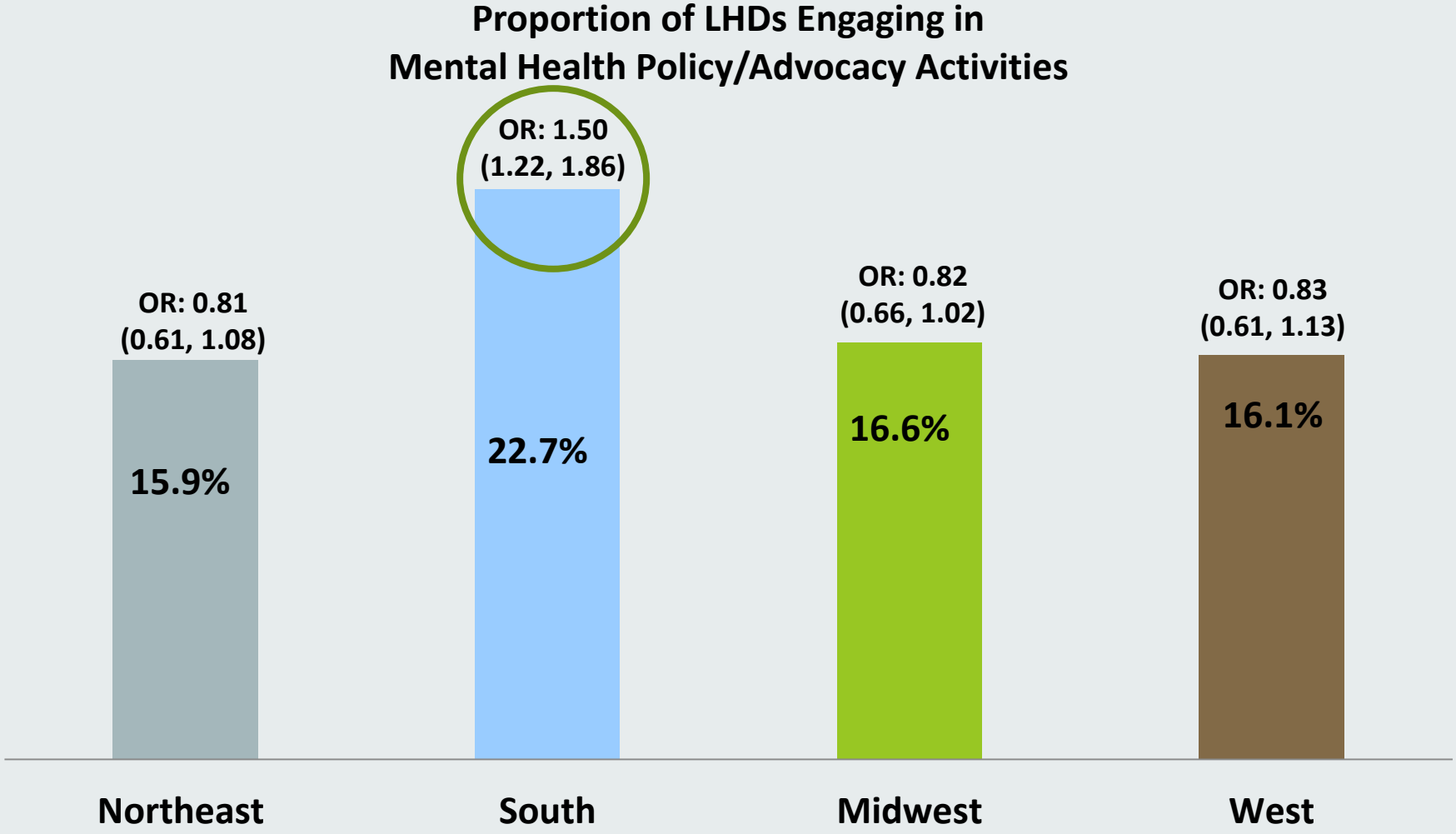

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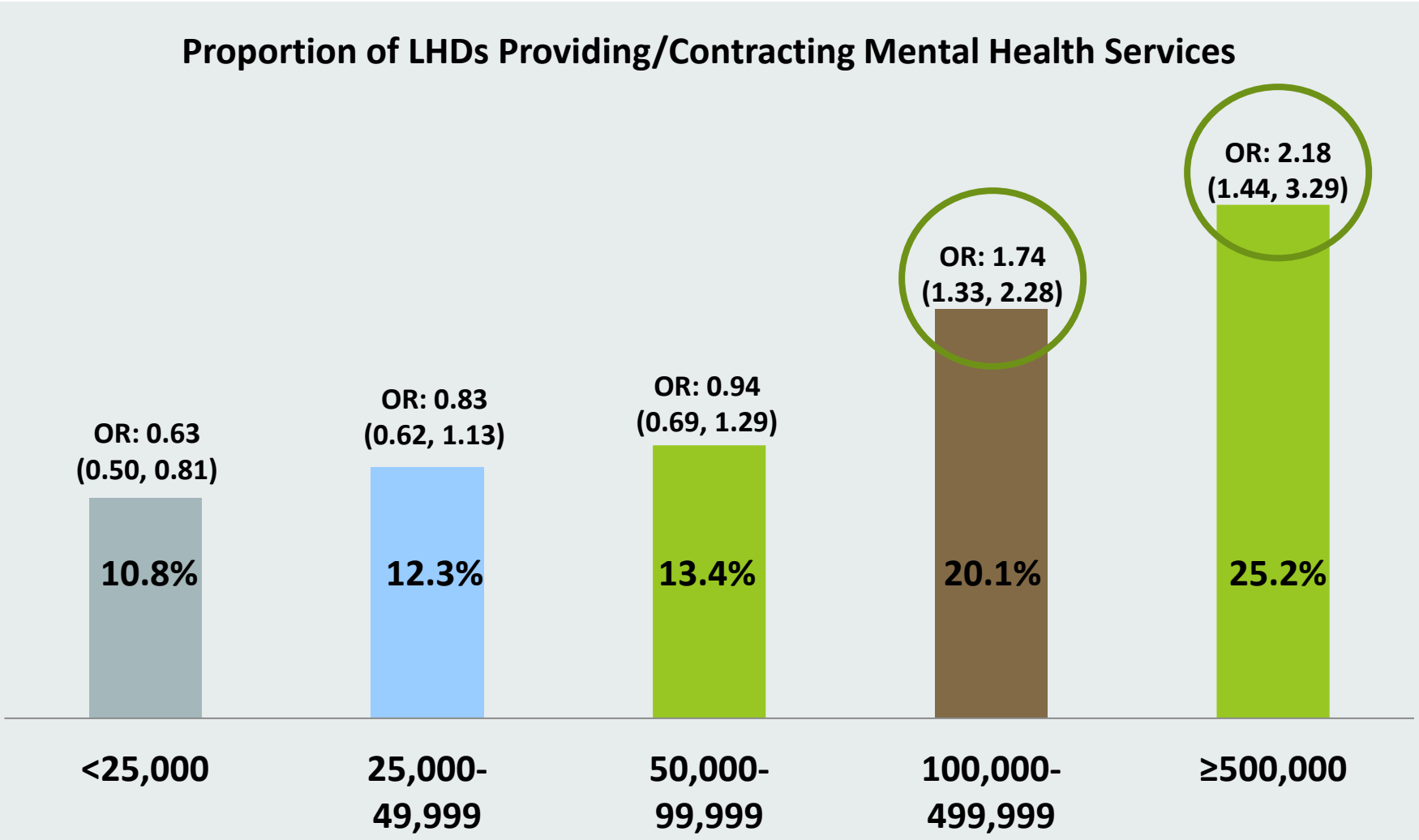

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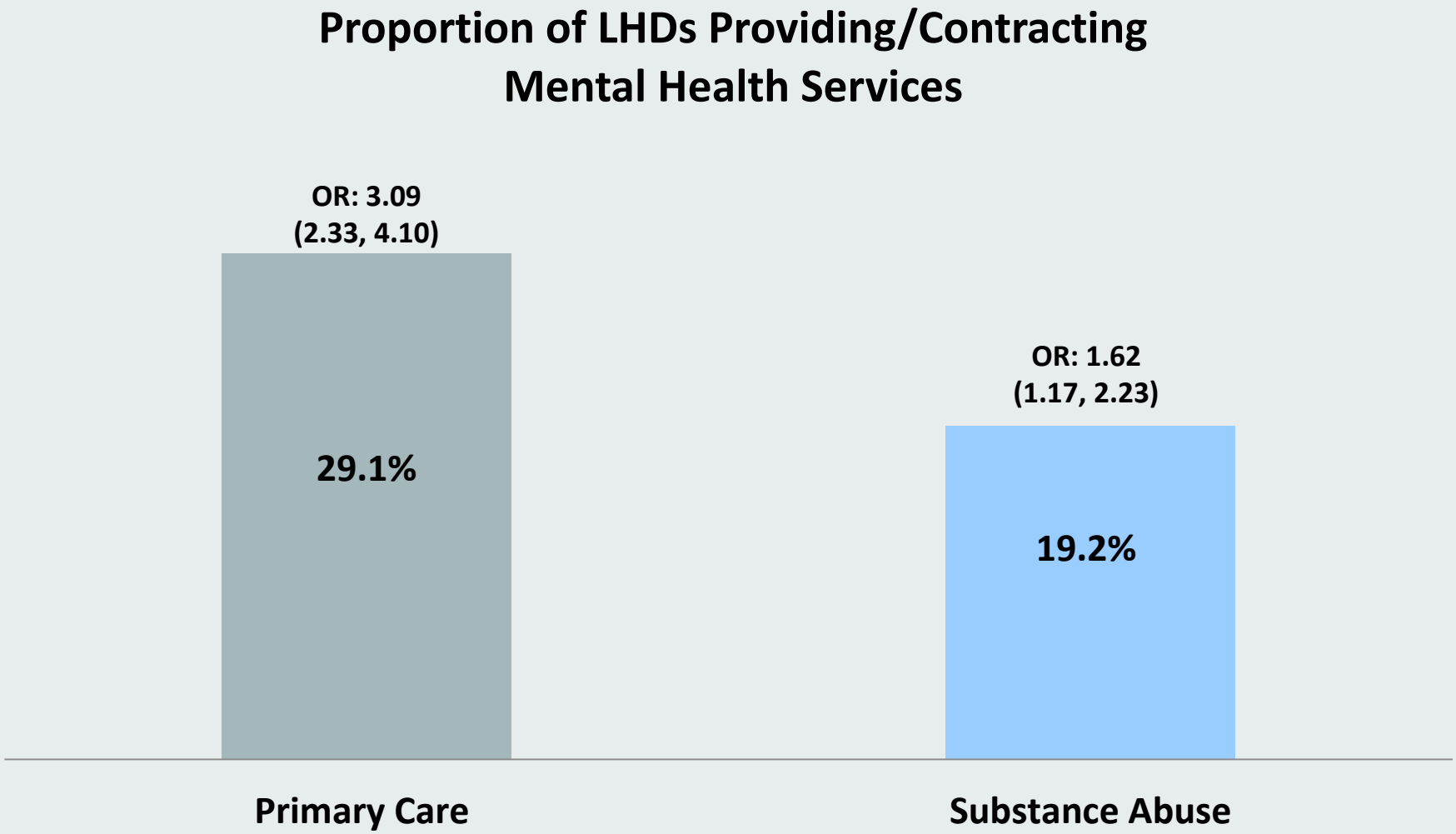

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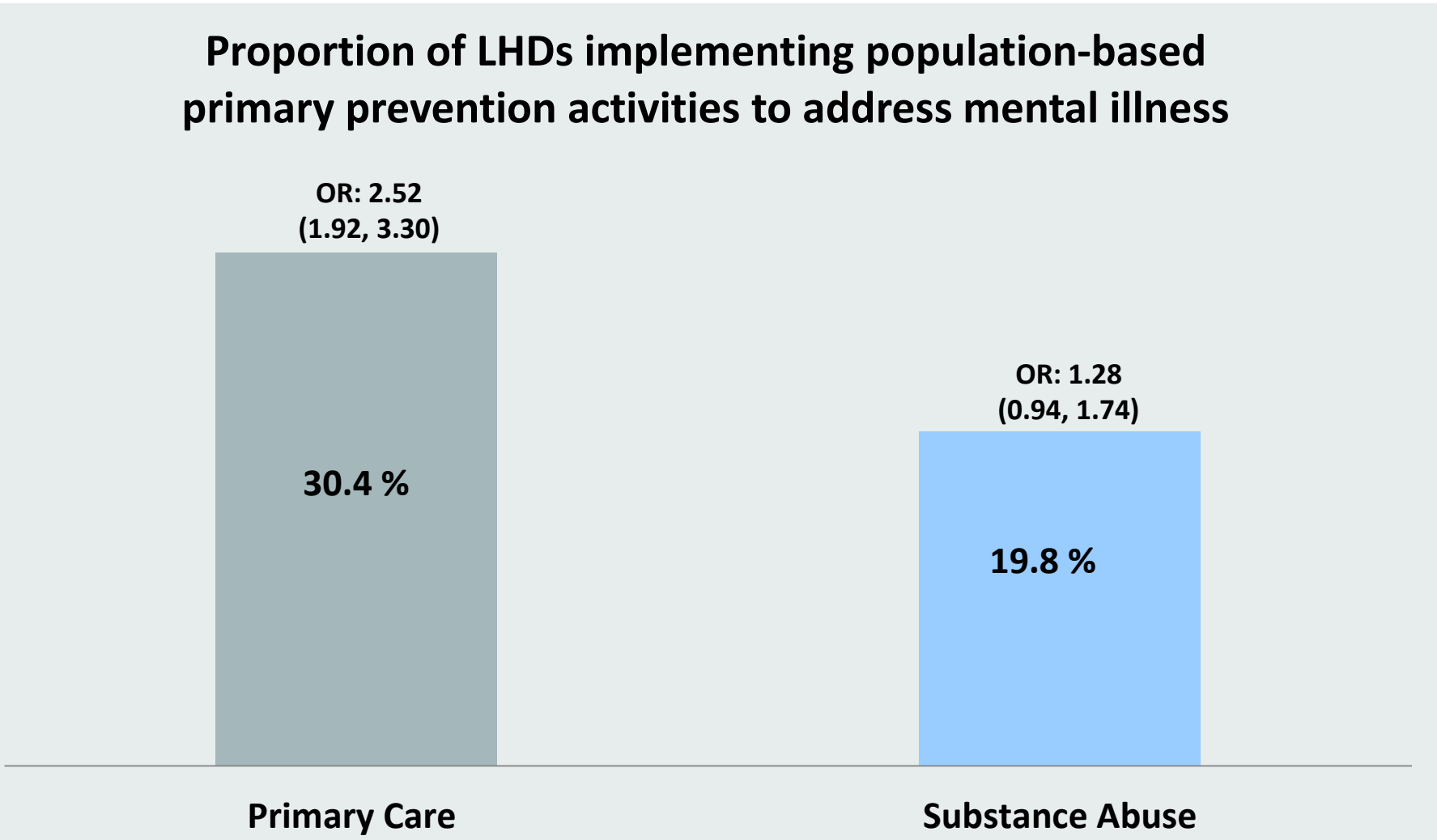

# RESULTS: ASSOCIATIONS BETWEEN TYPES OF MENTAL HEALTH ACTIVITIES PERFORMED

- 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/contracted direct 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)
  - Among LHDs that engaged in policy/advocacy activities to address mental health
    - 74.9% assessed gaps in access to mental health services
      - AOR: 2.96 (2.10, 4.18)

# QUANTITATIVE STUDY: DISCUSSION

- Many LHDs are actively engaged in activities to address mental health
  - Most (55.8%) LHDs performed ≥1 activity
  - Over one-quarter (28.3%) of LHDs performed ≥3 activities
    - 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/contracted clinical services were most engaged in mental health activities—especially population-based activities (e.g., prevention, policy/advocacy)
  - Among LHDs that provided/contracted primary care services:
    - 26.8% performed ≥5 mental health activities (OR: 2.31; 95% CI: 1.75, 3.06)
  - Among LHDs that provided/contracted direct 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)
      - Need for research that explores inter-relationships between clinical and population-based mental health services

# 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

# 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

# NEXT STEPS

Summer 2015:

- Complete interviews and analysis
- Three publications
  - Quantitative
  - Qualitative—broad
  - Qualitative—focused on trauma-informed public health practice
- American Public Health Association 2015 Annual Meeting
  - Presentation on LHD mental illness prevention activities

# Commentary

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# Questions and Discussion

## Archives of all Webinars available at:

***http://www.publichealthsystems.org/phssr-research-progress-webinars***

## Upcoming Webinar – June 2015

Thursday, June 18 (1-2pm ET)

**INJURY-RELATED INFANT MORTALITY AMONG VULNERABLE POPULATIONS: ROLE OF PUBLIC HEALTH, PRIMARY CARE & POLICY**

Sharla Smith, MPH, PhD, University of Kansas School of Medicine-Wichita *(PPS-PHD Award)*

# Upcoming Webinars – July and August 2015

Wednesday, July 1 (12-1pm ET)

**The Affordable Care Act and Childhood Immunization Delivery in Rural Communities**

Van Do-Reynoso, MPH, PhD Candidate, U. California-Merced *(PPS-PHD Award)*

Wednesday, July 8 (12-1pm ET)

**National Evaluation of Leadership Styles and Outcomes in Local Health Departments**

Laura Cassidy, MS, PhD, Medical College of Wisconsin *(RWJF PHS3 award)*

Wednesday, August 5 (12-1pm ET)

**Applying failure Modes & Effects Analysis to Public Health: Breathe Easy at Home Programs**

Megan Sandel, MD, MPH, FAAP, Boston Medical Center

Margaret Reid, RN, MPA, Director, Healthy Homes and Community Supports, Boston Public Health Commission *(RWJF PHS3 award)*

# Thank you for participating in today's webinar!

## For more information:

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