



**MONTANA
STATE UNIVERSITY**

Center for Mental Health
Research & Recovery

Matt Byerly, M.D.

**Director, Center for Mental Health
Research and Recovery**

**Professor, Cell Biology and Neuroscience
Montana State University**

Matt Byerly: Background

- Psychiatrist
- Past 17 years: Dept. of Psychiatry, UT Southwestern Medical Center, Dallas, TX
- Clinical effectiveness researcher, largely focused on schizophrenia treatments
 - Some experience in translational brain research
- Clinician and clinical educator

Impact of Mental Illness in the US and Montana

Mental illness and its consequences in the US

- Affects 25% of the US population each year, 6% having serious mental illness¹
- Strikes the young: 50% develop illness by age 14 and 75% by age 24²
- Most disabling disorders before age 50,³ and most costly of all health conditions world-wide,³ with estimated annual US costs of more than \$300 billion⁴

Mental illness and its consequences in Montana

- Highest suicide rate in the country, at nearly twice the national rate⁵
- Large populations at high risk of mental illness including Native Americans⁵ and veterans⁵
- Rural settings with limited mental health treatment resources⁶

History of the Center

Summer 2013: Executive Director and President of Montana NAMI, Matt Kuntz and Gary Popiel, approached Montana State University about the need for improved diagnosis and treatment approaches of mental disorders in Montana.

December 2013: Vice President for Research, Dr. Renee Reijo-Pera, endorsed program and submitted pre-proposal to the OCHE in March 2013.

September 2014: Board of Regents approved the CMHRR.

September 2014: Frances Lefcort, Ph.D., leads Center as Interim-Director.

December 2014: CMHRR awarded \$500,000 from State of Montana in BCBS settlement

August 2015: Matt Byerly, M.D. hired as Director

September 2015: Center awarded \$1.45 million grant from the State to support 4, CMHRR-sponsored research projects

Why a Mental Health Academic Center in Montana?

- Highest suicide rate in the country
- Populations with especially high mental health risks
 - 2nd highest Veteran population in the U.S.
 - Multiple Native American Nations
- Limited number of mental health (MH) diagnosticians and treaters, especially in frontier settings

Mission

To improve the mental health and wellbeing of the people of Montana.

Vision

To establish an academic center of excellence that addresses the mental health challenges of Montana and similar rural states by advancing mental health prevention, diagnosis, treatment, and workforce development.

Activities of the Center

- Contribute to neuroscience research aimed at better understanding the brain changes associated with mental illness
- Develop and test novel approaches to better prevent, diagnose and treat mental disorders
- Develop and test approaches to speed translation of emerging “best practices” into care
- Education of community and mental health students and professionals
- Outreach support for education, prevention, diagnosis, treatment

Education

- Provide Mental Health education in MSU's neuroscience and nursing programs
- Contribute to teaching in MSU's Nurse Practitioner, Psychiatric/Mental Health program

Outreach Collaboration with Extension

- Extension faculty and offices in all 56 counties.
- Mission: “...improves the lives of Montana citizens by providing unbiased research-based education and information that integrates learning, discovery and engagement to strengthen the social, economic and environmental well-being of individuals, families, and communities.”
- **Family and Human Development Program**
 - Alzheimer’s caregiving
 - Grandparents raising grandchildren
 - Powerful tools for caregivers
 - 4-Health parent education program (developed specifically for rural Montana)

Outreach Collaboration with MSU's Montana Area Health Education Center (AHEC) and Office of Rural Health

- Mission: "...to improve the supply and distribution of healthcare professionals, with an emphasis on primary care, through community/academic educational partnerships, in order to increase the access to quality healthcare."

Outreach: Continued

- Resource for evidence-based guidelines in mental health diagnosis and treatment
- Consultation service with mental health expertise, especially designed to support PCP's (e.g., schizophrenia, depression, PTSD, etc.)?
- Specialized diagnostic/intervention programs?
 - Suicide Prevention, Veterans, Native American Communities

Currently-Funded Research for CMHRR

- \$1.45 million MUS Research Initiative Grant
 - Translational brain research in childhood depression/anxiety and Alzheimer's
 - Novel, non-opioid pain medication [SiteOne-MSU]
 - Suicide prevention (YAM) in freshman high school students
- \$50,000 to establish a focus of YAM research in Native American communities
- \$6.25 million, multi-site schizophrenia "adherence" study

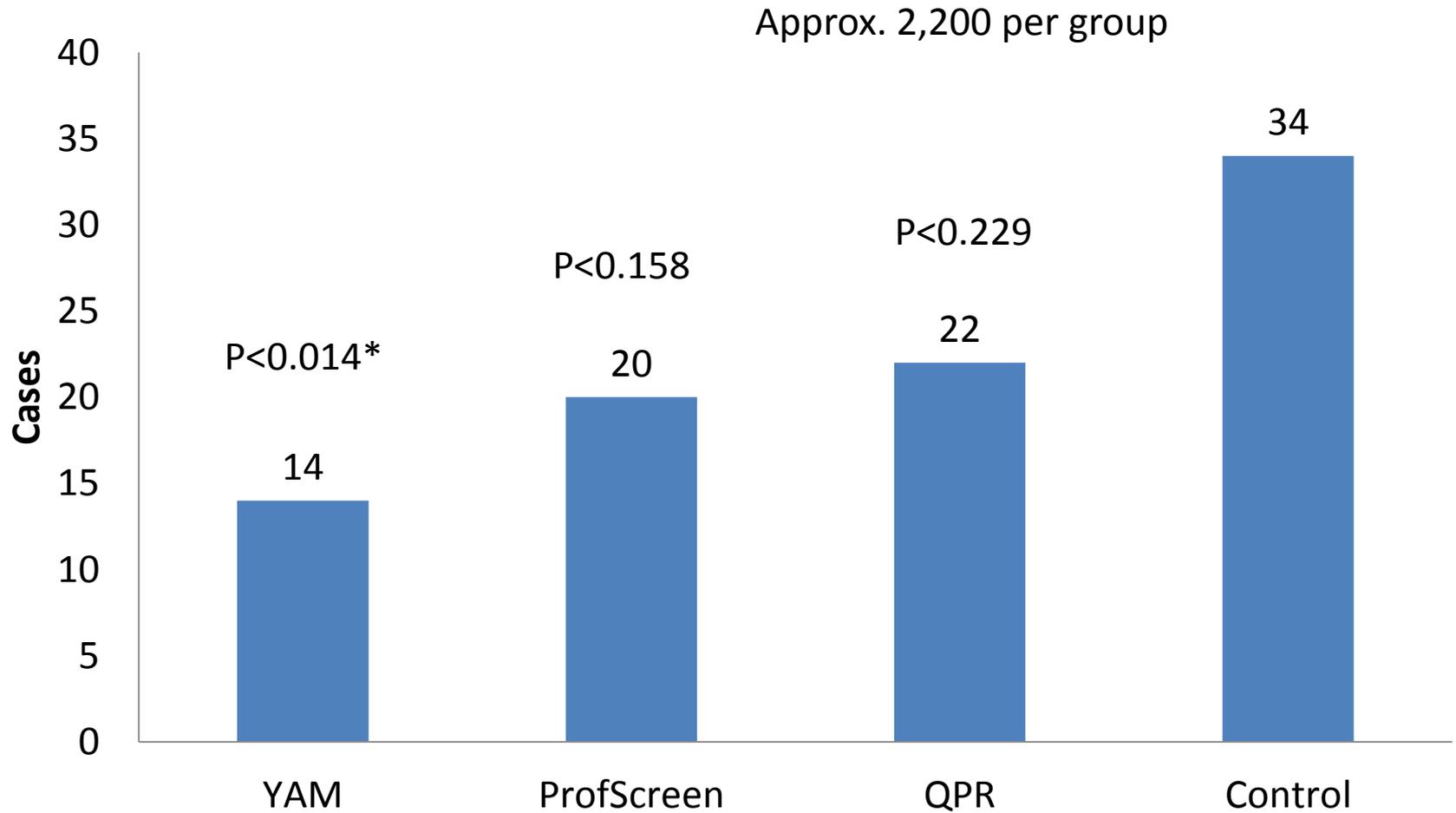
YAM YOUTH AWARE OF MENTAL HEALTH

is a culturally sensitive program promoting increased knowledge and discussion about mental health and the development of problem-solving skills and emotional intelligence for adolescents



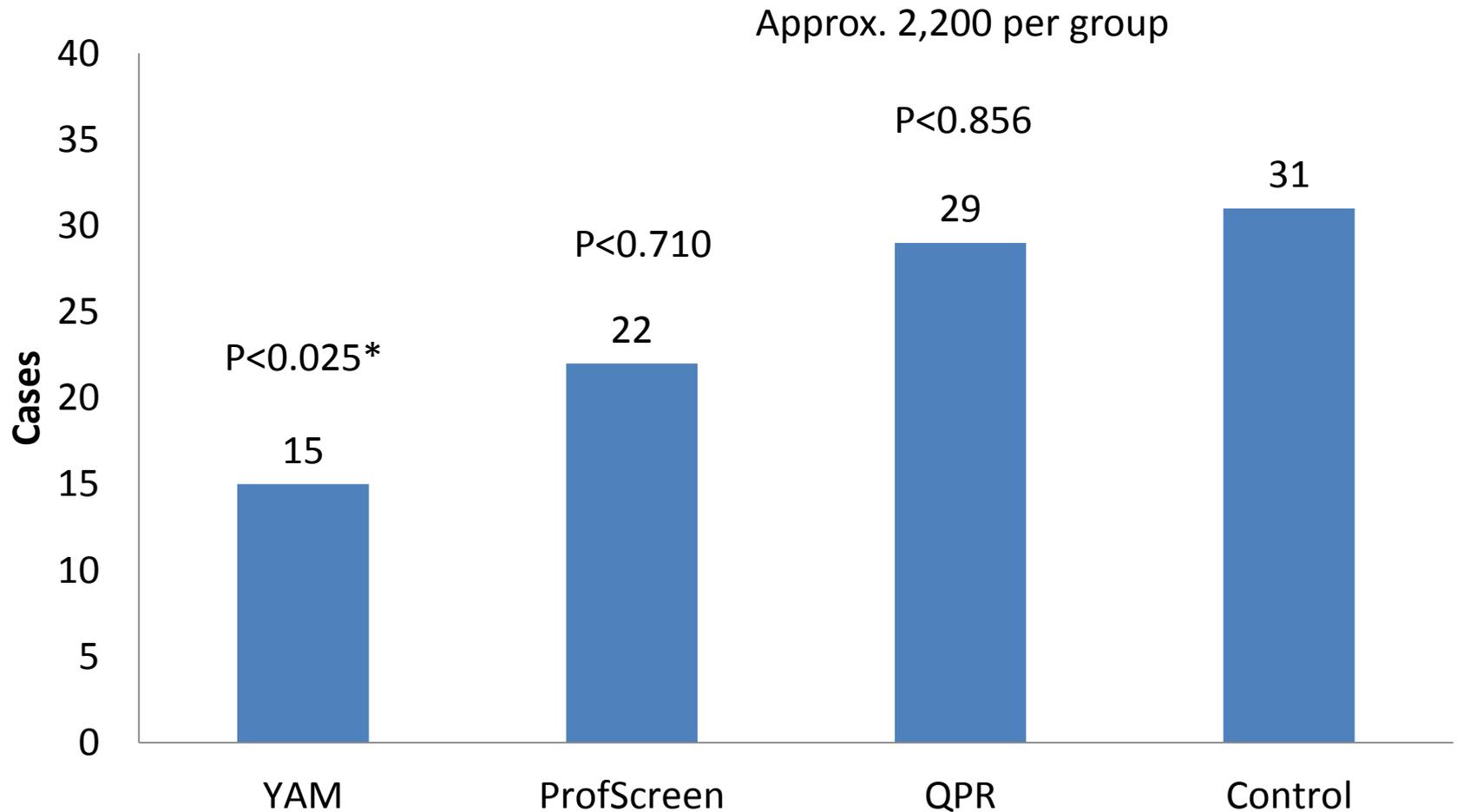
www.y-a-m.org

Suicide Attempts at 12 Months



Wasserman et al, Lancet 2015

Severe Suicidal Thoughts at 12 Months



Wasserman et al, Lancet 2015

Pilot Feasibility Trial of YAM in Montana and Texas

First to Adapt and Test YAM in the US

In Consideration: MSU Post-Doctoral Nurse Practitioner Program in Rural Mental/Behavioral Health

- Collaboration with the MSU Center for Multi-disciplinary Health Workforce Studies (Director, Peter Buerhaus, PhD, RN, FAAN)
- 1-year program, focused on experience in **rural setting** with extended clinical and didactic training
- \$300,000 committed from Gordon and Betty Moore Foundation
 - Seeking \$1 million in initial funding
- Discussion with U Washington about partnership

Other Workforce Efforts Related to Mental Health

- Assisting Billings Clinic (Pat Coon, M.D.) in developing/evaluating comprehensive Alzheimer's screening, treatment, and community support approach
- Potential to contribute to BCC's Behavioral Health Aid certificate program
- Student-run free mental health clinic in Bozeman (medical students, and students in social work, nursing, psychology, business)?

END