Innovative Data Science Approaches to Assess Suicide Risk in Individuals, Populations, and Communities: Current Practices, Opportunities, and Risks
A Virtual Workshop

WEBINAR 2
THURSDAY, MAY 12, 2022
11:00 AM—4:00 PM ET

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A VIRTUAL WORKSHOP

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WEBINAR LOGISTICS

- Join the webcast via this link:
  https://www.nationalacademies.org/event/05-12-2022/using-innovative-data-science-approaches-to-identify-individuals-populations-and-communities-at-high-risk-for-suicide-a-workshop-webinar-2

- An archive of the video webcast and presentation slides will be available at:
  https://www.nationalacademies.org/event/05-12-2022/using-innovative-data-science-approaches-to-identify-individuals-populations-and-communities-at-high-risk-for-suicide-a-workshop-webinar-2

- Proceedings of the workshop will be published following National Academies procedures. Rapporteurs will compose the proceedings from the workshop transcript and external reviewers will examine the proceedings to make sure it accurately reflects workshop discussions and conforms to institutional policies.

- Interested in receiving updates from the Forum on Mental Health and Substance Use Disorders or the National Academies of Sciences, Engineering, and Medicine's Health and Medicine Division?

  Sign up for the **Forum** listserv at:
  https://nationalacademies.us8.list-manage.com/subscribe?u=ab74d126b7d2db12591de5c2c&id=211686812e

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INNOVATIVE DATA SCIENCE APPROACHES TO ASSESS SUICIDE RISK IN INDIVIDUALS, POPULATIONS, AND COMMUNITIES: CURRENT PRACTICES, OPPORTUNITIES, AND RISKS A VIRTUAL WORKSHOP

AGENDA

	WEBINAR 2: IDENTIFICATION AND ASSESSMENT MAY 12, 2022 11:00AM—4:00PM ET
WELCOME FROM THE FORUM ON MENTAL HEALTH AND SUBSTANCE USE DISORDERS
11:00 AM	**Benjamin Miller, PsyD** President Well Being Trust *Planning committee Co-Chair*
	INTRODUCTION
11:10 AM	**Greg Simon, MD, MPH** Senior Investigator Kaiser Permanente Washington Health Research Institute *Planning committee member*
	PANEL DISCUSSION
11:15 AM	*Moderator:* **Colleen Carr, MPH** Director National Action Alliance for Suicide Prevention *Planning committee member* *Panelists:* **Ursula Whiteside, PhD** CEO, NowMattersNow.org Clinical Faculty, University of Washington **Adam Swanson, MPP** Senior prevention specialist Suicide Prevention Resource Center Education Development Center **Susie Reynolds Reece** Lived Experience Engagement Coordinator Suicide Prevention Resource Center

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	SESSION 1: IDENTIFYING POPULATION-LEVEL RESPONSES: RISKS AND STRATEGIES
12:00 PM	**12:00 | Daniel P. Evatt, PhD** Section Chief, Psychological Health Research Psychological Health Center of Excellence Research and Engineering Defense Health Agency **12:20 | Philip Resnik, PhD** Professor Department of Linguistics and Institute for Advanced Computer Studies University of Maryland **12:40 | Holly Wilcox, PhD** Professor, Department of Mental Health Johns Hopkins Bloomberg School of Public Health
	1:00 | AUDIENCE Q&A (30-minutes)
	Moderator: **Ayah Zirikly, PhD** Assistant Research Scientist Center for Language and Speech Processing Johns Hopkins University *Planning committee member*
1:30 PM	**BREAK** (30-minutes)
	SESSION 2: IDENTIFYING INDIVIDUAL-LEVEL RESPONSES: RISKS AND STRATEGIES
2:00 PM	**2:00 | Richard McKeon, PhD** Chief, Suicide Prevention Branch, Center for Mental Health Services Substance Abuse and Mental Health Services Administration **2:10 | John Franklin Sierra, PhD** Health Systems Engineer Los Angeles County Department of Mental Health **2:20 | Lisa Brenner, PhD** Professor, University of Colorado Director, Rocky Mountain Mental Illness Research, Education, and Clinical Center Vice Chair, Department of Physical Medicine and Rehabilitation U.S. Department of Veterans Affairs
	2:40 | AUDIENCE Q&A (20-minutes)

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	Moderator: **John McCarthy, PhD** Research Associate Professor Director, Serious Mental Illness Treatment Resource and Evaluation Center Department of Veterans Affairs (VA), Office of Mental Health and Suicide Prevention Director, Data and Surveillance Investigator, VA Center for Clinical Management Research *Planning committee member*
SESSION 3: **PANEL DISCUSSION**	
3:00 PM	*Moderator:* **Patricia Areán, PhD** Professor University of Washington *Planning committee member* *Panelists:* **Jonathan Goldfinger, MD, MPH, FAAP** Chief Executive Officer Didi Hirsch Mental Health Services **Kenton White, PhD** Co-Founder, Chief Scientist Advanced Symbolics Inc. **Ursula Whiteside, PhD** CEO, NowMattersNow.org Clinical Faculty, University of Washington
CLOSING REMARKS	
3:45 PM	**Sean Joe, PhD** Benjamin E. Youngdahl Professor of Social Development Washington University in St. Louis *Planning committee Co-Chair*
4:00 PM	**ADJOURN**

Workshop Planning Committee | This workshop was organized by the following experts: Benjamin Miller, Well Being Trust (Co-chair); Sean Joe, Washington University in St. Louis, (Co-chair); Patricia Areán, University of Washington; Colleen Carr, National Action Alliance for Suicide Prevention; Glen Coppersmith, SonderMind; John McCarthy, Department of Veterans Affairs; Gregory Simon, Kaiser Permanente Washington Health Research Institute; Ayah Zirikly, Johns Hopkins University

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Speaker Roster

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Lisa Brenner, PhD
Professor, University of Colorado
Director, Rocky Mountain Mental Illness
Research, Education, and Clinical Center
Vice Chair, Department of Physical Medicine
and Rehabilitation
U.S. Department of Veterans Affairs

Daniel Evatt, PhD
Section Chief, Psychological Health Research
Psychological Health Center of Excellence
Research and Engineering
Defense Health Agency

Jonathan Goldfinger, MD, MPH, FAAP
Chief Executive Officer
Didi Hirsch Mental Health Services

Richard McKeon, PhD
Chief, Suicide Prevention Branch
Center for Mental Health Services
Substance Abuse and Mental Health Services
Administration

Susie Reynolds Reece
Lived Experience Engagement Coordinator
Suicide Prevention Resource Center

Philip Resnik, PhD
Professor
Department of Linguistics and Institute for
Advanced Computer Studies
University of Maryland

John Franklin Sierra, PhD
Health Systems Engineer
Los Angeles County Department of Mental
Health

Adam Swanson, MPP
Senior prevention specialist
Suicide Prevention Resource Center
Education Development Center

Kenton White, PhD
Co-Founder, Chief Scientist
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Ursula Whiteside, PhD
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Clinical Faculty, University of Washington

Holly Wilcox, PhD
Professor, Department of Mental Health
Johns Hopkins School of Public Health

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Innovative Data Science Approaches to Assess Suicide Risk in Individuals, Populations & Communities: Current Practices, Opportunities, and Risks

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Speaker Bios

Lisa A. Brenner, PhD, is a Board-Certified Rehabilitation Psychologist, a Professor of Physical Medicine and Rehabilitation (PM&R), Psychiatry, and Neurology at the University of Colorado, Anschutz Medical Campus, and the Director of the Department of Veterans Affairs Rocky Mountain Mental Illness Research, Education, and Clinical Center (MIRECC). She is also Vice Chair of Research for the Department of PM&R. Dr. Brenner is the Past President of Division 22 (Rehabilitation Psychology) of the American Psychological Association (APA) and an APA Fellow. She serves as an Associate Editor of the Journal of Head Trauma Rehabilitation. Her primary area of research interest is traumatic brain injury, co-morbid psychiatric disorders, and negative psychiatric outcomes, including suicide. Dr. Brenner has numerous peer-reviewed publications, participates on national advisory boards, and has recently co-authored a book titled: Suicide Prevention After Neurodisability: An Evidence-Informed Approach.

Daniel Evatt, PhD is the Section Chief of Psychological Health Research at the Psychological Health Center of Excellence. Previously, he was a clinical research psychologist at the Henry Jackson Foundation. Dr. Evatt earned is PhD at the University of Illinois at Chicago.

Jonathan Goldfinger, MD, MPH, FAAP, is a nationally recognized pediatrician, tech and social entrepreneur, and advocate for mental health equity for children and families. Since joining Didi Hirsch Mental Health Services as CEO in 2020, Dr. Goldfinger has significantly grown its crisis care delivery offerings, raising over $46 million to scale 988 to save lives and connect people to care across California, with tens of millions more anticipated to integrate 988 with crisis services across LA County. He's Co-Chaired the county's crisis call center collaborative to decriminalize mental illness, galvanizing progress through Didi Hirsch's groundbreaking 911 to 988 diversion pilot with the LAPD, which is disproportionately serving young, Black and Latino men. Dr. Goldfinger's developed additional public-private partnerships to address the US youth mental health crisis, including with Selena Gomez's Rare Beauty/Rare Impact Fund, Sozosei Foundation, Kenneth Cole's Mental Health Coalition, MTV Entertainment, and Mantra Health. With expertise in intergenerational trauma, integrated care, and health tech, Dr. Goldfinger's work

has brought healthcare into a more equitable, digital age. He currently serves on the California Surgeon General and Department of Health Care Services' Trauma-Informed Primary Care Advisory Committee and has advised many in these spaces including the federal Centers for Medicare and Medicaid Services, the CDC, and the American Academy of Pediatrics. His work has been published in the National Academies of Sciences, Engineering and Medicine Perspectives and Health Affairs.

Richard McKeon, PhD, MPH, received his Ph.D. in Clinical Psychology from the University of Arizona, and a Master's of Public Health in Health Administration from Columbia University. He has spent most of his career working in community mental health, including 11 years as director of a psychiatric emergency service and 4 years as Associate Administrator/Clinical Director of a hospital based community mental health center in Newton, New Jersey. In 2001, he was awarded an American Psychological Association Congressional Fellowship and worked in the United States Senate for Sen. Paul Wellstone, covering health and mental health policy issues. He spent 5 years on the Board of the American Association of Suicidology as Clinical Division Director and has also served on the Board of the Division of Clinical Psychology of the American Psychological Association. He is currently Chief for the Suicide Prevention Branch in the Center for Mental Health Services, of the Substance Abuse and Mental Health Services Administration, where he oversees all branch suicide prevention activities, including the Garrett Lee Smith State/Tribal Youth Suicide Prevention, and Campus Suicide Prevention grant programs, the National Suicide Prevention Lifeline, the Suicide Prevention Resource Center, and the Native Connections program. In 2008, he was appointed by the Secretary of Veterans Affairs to the Secretary's Blue Ribbon Work Group on Suicide Prevention. In 2009, he was appointed by the Secretary of Defense to the Department of Defense Task Force on Suicide Prevention in the Military. He served on the National Action Alliance for Suicide Prevention Task Force that revised the National Strategy for Suicide Prevention and participated in the development of WHO's World Suicide Prevention Report. He is also the Co-Chair of the Federal Working Group on Suicide Prevention.

Susie Reynolds Reece is a child survivor of a decorated army veteran who died by suicide. Reece began her prevention career as a grassroots organizer of suicide prevention efforts. Reece has championed and led multiple county and state level activism efforts revolving around suicide prevention, mental health, and systemic improvement efforts. She has been a recognized leader and suicide prevention strategist in the state of Arkansas for nearly 10 years. Her most significant community impact came from a targeted coalition effort in 2016, where her

community saw a 52% reduction of suicide. In 2019, Reece began an independent consulting firm, SFA (Speak Fearlessly Always) Consulting. Reece has conceptualized and implemented state, national, and global (400 locations worldwide, including the United States, the United Kingdom, Brazil, Australia, United Arab Emirates, South Africa, and Vietnam) level awareness initiatives through her consulting firm. Reece has developed trainings, educational programming, and strategic efforts both in the community and for organizations and agencies. Her varied involvement ranges from direct trainings of youth to active military personnel and even first responder agencies. Her consulting efforts have resulted in millions of dollars of grants, donations, and awards being raised by the organizations she has contracted with, not to mention countless individual interventions and mental health support connections. Reece is the committee lead for the American Foundation for Suicide Prevention's Corrections Implementation project, which falls under the AFSP Project 2025 strategy. She is a Project 2025 Champion. She serves on the SPRC's Lived Experience Advisory Committee, and acts as the LEAC Engagement Coordinator. Reece also serves as a member on several other boards throughout the state of Arkansas and nationally. Reece's lived experience inspires others to overcome the fear that deters most from expressing their truth. Her life's work inspires others to safely engage in the healing process that occurs upon sharing the challenging stories of their lives, while strengthening mental health resilience. Susie is living proof that no matter the childhood adversity one may have faced, anyone can create a life full of success. Reece's forthcoming book, *Speaking of Intent* (2023) chronicles her unexpected life path from loss and depression to prevention training & public speaking.

Philip Resnik, PhD is Professor at University of Maryland, with joint appointments in the Department of Linguistics and the Institute for Advanced Computer Studies. He earned his bachelor's in Computer Science at Harvard and his PhD in Computer and Information Science at the University of Pennsylvania. Prior to joining UMD, he was an associate scientist at BBN, a graduate summer intern at IBM T.J. Watson Research Center (subsequently awarded an IBM Graduate Fellowship) while at UPenn, and a research scientist at Sun Microsystems Laboratories. Resnik's most recent research focus has been in computational social science, with an emphasis on connecting the signal available in people's language use with underlying mental state -- this has applications in computational political science, particularly in connection with ideology and framing, and in mental health, focusing on the ways that linguistic behavior may help to identify and monitor depression, suicidality, and schizophrenia. He is also engaged in research in the computational cognitive

neuroscience of language with an emphasis on the role of context in sentence processing. Resnik co-founded the annual Workshop on Computational Linguistics and Clinical Psychology (CLPsych.org), and serves on the American Association of Suicidology's Technology and Innovation Committee. Outside his academic research, Resnik has been a technical co-founder of CodeRyte (natural language processing for electronic health records, acquired by 3M in 2012), and is an advisor to FiscalNote (machine learning and analytics for government relations), SoloSegment (web site search and content optimization), and the non-profit Coleridge Initiative (data-driven methods for public decision-making).

John Franklin Sierra, PhD completed his Ph.D. in Industrial and Systems Engineering, with a focus on Healthcare Systems, from the University of Southern California in 2017. Soon after he joined the Los Angeles County Department of Mental Health, first as a consultant and then in 2019 as a full-time Senior Staff Analyst. In his 4+ years with DMH he has worked for the Director, Dr. Jonathan Sherin, on numerous systems redesign and strategic planning projects, including as lead coordinator for the development of DMH's new 2020-2030 strategic plan, as lead author for an analysis of gaps in the county's mental health treatment bed network, and as lead project manager for Alternative Crisis Response (ACR), a multi-departmental initiative in partnership with the CEO's Alternatives to Incarceration (ATI) initiative seeking to significantly bolster civilian, non-law enforcement responses to individuals experiencing behavioral health crises/emergencies throughout the county. Recently, Dr. Sierra transferred to the CEO-ATI office and is continuing to lead LA County's ACR efforts from there.

Adam Swanson, MPP, is a Project Associate at the Education Development Center (EDC) and serves as a Senior Prevention Specialist with the Suicide Prevention Resource Center (SPRC) project. He is also a member of the National Suicide Prevention Lifeline's Lived Experience Advisory Committee. In his role at SPRC, Mr. Swanson provides consultation support to state agencies, U.S. territories, and other public health systems regarding the implementation and improvement of public health approaches to suicide prevention.

Kenton White, PhD has been working in the AI space since 2003, when he was co-founder and Chief Technology Officer for Distil Interactive. Distil Interactive used artificial intelligence to evaluate worker performance in training simulations. In 2009 Canadian Standards Association, North America's largest corporate training provider, acquired Distil Interactive. Following the acquisition, Dr. White was a Professor of Computer Science, first with Carleton University and then with

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University of Ottawa. Today, Dr. White is co-founder and Chief Scientist of Advanced Symbolics, an artificial intelligence company. Dr. White studied Physics at University of California, Berkeley (go Bears!) and holds a Ph.D. in Physics / Applied Mathematics from The University of Arizona (go Wildcats!). He is a past chair of the Canada's National Science and Engineering Research Council's Electrical and Computer Engineering committee and a Special Advisor to the Defence Science Advisory Board. Dr. White has published over 80 peer reviewed journal and conference articles, 7 patents, and has been a featured and keynote speaker at several international AI conferences.

Ursula Whiteside, PhD is a licensed clinical psychologist, CEO of NowMattersNow.org and Clinical Faculty at the University of Washington. As a researcher, she has been awarded grants from the National Institute of Mental Health (NIMH) and the American Foundation for Suicide Prevention. Clinically, she began her training with Dr. Marsha Linehan in 1999 and later served as a DBT-adherent research therapist on a NIMH-funded clinical trial led by Dr. Linehan. Dr. Whiteside is a group and individual certified DBT clinician. Now, she treats high-risk suicidal clients in her small private practice in Seattle using DBT and caring contacts. Dr. Whiteside is national faculty for the Zero Suicide initiative, a practical approach to suicide prevention in health care and behavioral healthcare systems. This program was described by NPR on a segment titled "What Happens If You Try to Prevent Every Single Suicide?" She is also vice-president of United Suicide Survivors International. As a person with Lived Experience, she strives to decrease the gap between "us and them" and to ensure that the voices of those who have been there are included in all relevant conversations: nothing about us without us.

Holly Wilcox, PhD is internationally recognized for her work on suicide prevention, a critical aspect of public mental health. She is a graduate of our own Psychiatric Epidemiology Training program where she first began working on PIRC data, studying the long-term impact of the Good Behavior Game on suicidality. After a postdoctoral fellowship at George Washington University, she became faculty in Psychiatry and Behavioral Medicine at JHU School of Medicine, with a joint appointment in DMH. She moved to our department in 2017. Throughout her career, she has been an actively engaged with DMH as a dedicated colleague and educator. Dr. Wilcox's research is focused on understanding the etiology of, and developing prevention strategies for, suicidal behaviors and mood disorders among children, adolescents, and young adults. Her most significant contributions have been in three areas: 1) large population-based, prospective cohort studies of suicidal behaviors; 2) development and evaluation of community-based universal prevention

programs targeting suicidal behaviors; and 3) data linkage and harmonization to best identify suicide risk and strategically deploy prevention interventions. Given her expertise, Holly has served in multiple advisory capacities at the federal, state, and local levels. To name a few, she has given federal guidance on suicide prevention for US veterans, serves as co-chair of the MD state Commission on Suicide Prevention and is a member of the state's board of education, and serves on the JHU faculty training and resource working group as well as leading a SAMHSA-funded universal screening effort for students across JHU.

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Planning Committee Roster

Benjamin F. Miller, PsyD (Co-Chair)
President
Well Being Trust

Sean Joe, PhD, (Co-Chair)
Benjamin E. Youngdahl Professor of Social Development
Washington University in St. Louis

Patricia A. Areán, PhD
Professor
University of Washington

Colleen Carr, MPH
Director
National Action Alliance for Suicide Prevention

Glenn Coppersmith, PhD
Chief Data Officer
Sondermind

John F. McCarthy, PhD, MPH
Research Associate Professor
Director, Serious Mental Illness Treatment Resource and Evaluation Center
Office of Mental Health and Suicide Prevention, Department of Veterans Affairs
Director, Data and Surveillance Investigator, VA Center for Clinical Management Research

Gregory Simon, MD, MPH
Senior Investigator
Kaiser Permanente Washington Health Research Institute

Ayah Zirikly, PhD
Assistant Research Scientist
Center for Language and Speech Processing
Johns Hopkins University

Forum on Mental Health and Substance Use Disorders

Innovative Data Science Approaches to Assess Suicide Risk in Individuals, Populations & Communities: Current Practices, Opportunities, and Risks

Planning Committee Bios

Benjamin F. Miller, PsyD, is President of Well Being Trust and oversees the implementation of the foundation's strategies and full portfolio of investments and partnerships to help Well Being Trust have a real-world impact on America's mental health and addiction crisis. These responsibilities build on those in Dr. Miller's prior role as Chief Strategy Officer of Well Being Trust, through which he ensured alignment across the foundation's grants, research, partnerships, and policy recommendations. Dr. Miller is a nationally recognized mental health expert and a highly sought-after public speaker. Dr. Miller has presented around the world on the need to make mental health an integral part of health care, most recently testifying before the Senate Committee on Finance about the need for an integrated approach to treating mental health and addiction He is also the author of the weekly newsletter – Mental: Fighting the fragmentation of mental health one policy at a time, where hundreds of subscribers gather to read about how everyday happenings are connected to mental health, and what actions they can take to address them. In addition, Dr. Miller has been featured in numerous local and national media outlets – the New York Times, CNN, NBC News, USA Today, NPR, PBS NewsHour, among countless others – and today maintains advisory and adjunct professor positions at the following organizations: Inseparable; the University of Colorado School of Medicine's Eugene S. Farley, Jr. Health Policy Center; Mental Health Colorado; the Stanford School of Medicine's Department of Psychiatry and Behavioral Sciences; and the British Journal of General Practice. He was previously president of the Collaborative Family Healthcare Association and an Institute for Healthcare Improvement faculty member. Dr. Miller's expertise in this space largely stems from the early days of his career. In receiving his doctorate in clinical psychology from Spalding University in Louisville, Kentucky, completing his predoctoral internship at the University of Colorado Health Sciences Center, and working as a postdoctoral fellow in primary care psychology at the University of Massachusetts Medical School in the Department of Family Medicine and Community Health, Dr. Miller gained firsthand insight into our country's foster care, education, health care and criminal justice systems. He helped emotionally disturbed children navigate school, individuals with breast cancer cope with their diagnosis, prisoners plan for a successful return to society, and trained primary care physicians on how to best handle their patients' mental and behavioral health concerns – experiences that showed Dr. Miller how the continued marginalization of mental health in America has ripple effects throughout every layer of society.
This realization inspired Dr. Miller to become a principal investigator on several federal grants, foundation grants, and state contracts related to comprehensive

primary care and mental health, behavioral health, and substance use integration. And during the eight years he spent as an associate professor in the Department of Family Medicine at the University of Colorado School of Medicine, it contributed to him becoming a founding director of the Eugene S. Farley, Jr. Health Policy Center. Under Dr. Miller's leadership, the Farley Health Policy Center evaluated policies related to behavioral health integration, payment reform, workforce response and preparedness, and community-based prevention to help key decision makers positively improve mental health in their communities.

Dr. Miller has received numerous awards for his work, which includes leading the Agency for Healthcare Research and Quality's Academy for Integrating Behavioral and Primary Care project, the Sustaining Healthcare Across Integrated Primary Care Efforts (SHAPE) project, and acting as a technical expert for multiple CMS panel discussions. He has also written and published extensively on enhancing the evidentiary support for integrated models, increasing the training and education of behavioral health providers in medical settings, and the need to address specific health policy and payment barriers for successful integration. Dr. Miller was the lead author on the Robert Wood Johnson Foundation Culture of Whole Health report – which provided specific direction to advance mental health nationally – and is on the editorial board for Families, Systems and Health.

Dr. Miller's work has taken him into communities all across the country, from the Rocky Mountains in Colorado to the foothills of the Appalachian Mountains in Chattanooga, Tennessee, where he currently plays music, paints, and spends time with his wife and daughters.

Sean Joe, PhD, MSW is the Benjamin E. Youngdahl Professor of Social Development and Associate Dean for Faculty and Research at Brown School at Washington University in St. Louis. Dr. Joe is a nationally recognized authority on suicidal behavior among African Americans. His research focuses on Black adolescents' mental health service use patterns, the role of religion in Black suicidal behavior, salivary biomarkers for suicidal behavior, and development of father-focused, family-based interventions to prevent urban African American adolescent males from engaging in multiple forms of self-destructive behaviors. Working within the Center for Social Development, Dr. Joe launched the Race and Opportunity Lab, which examines race, opportunity, and social mobility in the St. Louis region, working to reduce inequality in adolescents' transition into adulthood.

Patricia A. Areán, PhD is a Professor in the Department of Psychiatry at UCSF and is a licensed Clinical Psychologist. Dr. Areán is an international expert on effectiveness of behavioral interventions for mood disorders. She leads a research and training group that known for developing, studying, increasing access to and implementing user friendly, high quality behavioral interventions for mood as it

presents in chronic illness, aging, low income and ethnic minority populations, in a variety of service settings: mental health, primary care, senior services, and mobile platforms. Her team combines latest information from cognitive neuroscience, socio-economics and implementation science in their designs. Since 1994, Dr. Areán has published 115 peer-reviewed articles on these topics and has been funded by SAMHSA, NIMH, NIA, NIDDK and the Hartford Foundation. She is currently funded by NIMH to study the effectiveness of "brain games" on mood and the effectiveness of mobile health apps on mood. Her work has won national recognition, resulting in an early career award from the American Psychological Association, a Mid-career Award from NIH for her work on disseminating evidence based practices and The Award for Achievements in Diversity in Mental Health from the American Association of Geriatric Psychiatry. Dr. Areán currently leads an interdisciplinary research and implementation team consisting of researchers from diverse backgrounds, including social work, nursing, psychiatry, family and general medicine, medical sociology and clinical psychology. She also provides training in evidence-based treatments to community mental health and health professionals, and is developing deployable and cost effective training models based on contemporary adult learning methods.

Colleen Carr, MPH, director for the National Action Alliance for Suicide Prevention (Action Alliance) at EDC, brings nearly two decades of public health experience to leading the nation's public-private partnership for suicide prevention charged with advancing the National Strategy for Suicide Prevention. Current key Action Alliance national initiatives include efforts to transform health systems to reduce suicide, strengthen community-based suicide prevention, and change the public conversation about suicide and suicide prevention. In her role as director, Carr cultivates partnerships to bring new, nontraditional partners to suicide prevention, including federal and private sector leaders from diverse industries such as business, defense, entertainment, faith, health care, insurance, news media, public safety, transportation, and veteran services. Carr brings high-level expertise in suicide prevention, policy analysis, system-level change, strategic communications, and media relations. Prior to joining EDC, Carr worked with the Massachusetts/Rhode Island Poison Control Center at Boston Children's Hospital and the Massachusetts Department of Public Health. Carr holds an MPH from Boston University and a BA in Public Policy Analysis from the University of North Carolina at Chapel Hill.

Glen Coppersmith, PhD is the Chief Data Officer at SonderMind, after they acquired Qntfy, the company he founded and ran for 7 years. Prior to Qntfy, Glen was at the Johns Hopkins University, in the Human Language Technology Center of Excellence and the Center for Language and Speech Processing. Glen has authored more than 50 peer-reviewed publications in the analysis of human behavior with machine learning, most focused on mental health and wellbeing. He and the team at

Qntfy published early work on using digital life data, like social media and wearables, to understand suicide risk. As much as Glen has pushed scientific advances in this space, he is also known for publishing on the ethics and pragmatic use of technology like this. Glen was named the alumnus of the year in 2019 for Northeastern's Khoury College of of Computer Sciences. He has a B.S. in Computer Science and Cognitive Psychology, a Masters and a Doctorate in Experimental Psychology all from Northeastern University.

John F. McCarthy, PhD, MPH, is Research Associate Professor in the Department of Psychiatry. After working for four years in physician education and ambulatory administration at Brigham and Women's Hospital in Boston, John earned an MPH from the School of Public Health and a PhD in Health Services Organization and Policy from the University of Michigan. For over 21 years, his work has focused on Veterans, mental health access, health systems, health behavior and population health. He has held national VA scientific leadership roles since 2007. Currently, e serves as Director of VA's Serious Mental Illness Treatment Resource and Evaluation Center, Director of the National Primary Care-Mental Health Integration Evaluation, and Director of Data and Surveillance for Suicide Prevention. He also provides site leadership for SMITREC's post-doctoral training program (link is external). His experiences include VA leadership roles for Congressional and White House initiatives. Dr. McCarthy has had ongoing funding for mental health services research, program evaluation, and operations work, including VA and NIH grants and dedicated Center funding. His scientific expertise includes health system access, suicide epidemiology, measurement based management, medication adherence, serious mental illness, mental health services program evaluation, and suicide predictive modeling.

Gregory Simon, MD, MPH is an investigator at Kaiser Permanente Washington Health Research Institute, a psychiatrist in Kaiser Permanente's Behavioral Health Service, and a Research Professor in the Department of Psychiatry and Behavioral Sciences at the University of Washington. Dr. Simon's research focuses on improving access to and quality of mental health care, especially for mood disorders and people at risk for self-harm and suicide. Specific areas of research include improving adherence to medication, increasing the availability of effective psychotherapy, personalization of treatment for mood disorders, evaluating peer support by and for people with mood disorders, prediction of suicidal behavior, population-based suicide prevention programs, and racial/ethnic disparities in mental health care. Dr. Simon currently leads the Mental Health Research Network, an NIMH-funded cooperative agreement supporting population-based mental health research across 14 large health systems.

Ayah Zirikly, PhD is an assistant research scientist in the Center for Language and Speech Processing. She was previously a postdoctoral fellow at the National Institutes of Health (NIH) and holds a PhD in computer science from Dr. Mona Diab's NLP lab at the George Washington University. She has been actively involved in suicide risk assessment research in social media, and published the UMD Reddit Suicidality Dataset, one of the few annotated suicide risk assessment datasets. During her postdoc fellowship, she developed health informatics NLP solutions for retrieving mobility and mental health status to improve the disability eligibility process at the Social Security Administration. Previously, she did research on transfer learning techniques for high-low resource settings, especially for NER. She has also contributed to the Arabic NLP domain, and co-authored MADAMIRA, the leading toolset for Arabic NLP.

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Innovative Data Science Approaches to Assess Suicide Risk in Individuals, Populations & Communities: Current Practices, Opportunities, and Risks

Webinar #2: May 12, 2022

Readings and Resources

Advanced Symbolics. 2021. Using AI to prevent suicide in First Nations communities. https://advancedsymbolics.com/using-ai-to-prevent-suicide-in-first-nations-communities/

Department of Veterans Affairs and Department of Defense. 2019. VA/DoD Clinical Practice Guidelines: The Assessment and Management of Patients at Risk for Suicide. Provider Summary. Version 2.0. https://www.healthquality.va.gov/guidelines/MH/srb/VADoDSuicideRiskCPGProviderSummaryFinal5088212019.pdf

Temin, T. 2022. DARPA's now testing a new method to identify service members at risk of suicide. Federal News Network, March 29. https://federalnewsnetwork.com/defense-main/2022/03/darpas-now-testing-a-new-method-to-identify-service-members-at-risk-of-suicide/ (Accessed on April 8, 2022).

PREVENTING DISCRIMINATION, HARASSMENT, AND BULLYING
EXPECTATIONS FOR PARTICIPANTS IN NASEM ACTIVITIES

The National Academies of Sciences, Engineering, and Medicine (NASEM) are committed to the principles of diversity, integrity, civility, and respect in all of our activities. We look to you to be a partner in this commitment by helping us to maintain a professional and cordial environment. All forms of discrimination, harassment, and bullying are prohibited in any NASEM activity. This commitment applies to all participants in all settings and locations in which NASEM work and activities are conducted, including committee meetings, workshops, conferences, and other work and social functions where employees, volunteers, sponsors, vendors, or guests are present.

Discrimination is prejudicial treatment of individuals or groups of people based on their race, ethnicity, color, national origin, sex, sexual orientation, gender identity, age, religion, disability, veteran status, or any other characteristic protected by applicable laws.

Sexual harassment is unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature that creates an intimidating, hostile, or offensive environment.

Other types of harassment include any verbal or physical conduct directed at individuals or groups of people because of their race, ethnicity, color, national origin, sex, sexual orientation, gender identity, age, religion, disability, veteran status, or any other characteristic protected by applicable laws, that creates an intimidating, hostile, or offensive environment.

Bullying is unwelcome, aggressive behavior involving the use of influence, threat, intimidation, or coercion to dominate others in the professional environment.

REPORTING AND RESOLUTION

Any violation of this policy should be reported. If you experience or witness discrimination, harassment, or bullying, you are encouraged to make your unease or disapproval known to the individual, if you are comfortable doing so. You are also urged to report any incident by:

- Filing a complaint with the Office of Human Resources at 202-334-3400, or
- Reporting the incident to an employee involved in the activity in which the member or volunteer is participating, who will then file a complaint with the Office of Human Resources.

Complaints should be filed as soon as possible after an incident. To ensure the prompt and thorough investigation of the complaint, the complainant should provide as much information as is possible, such as names, dates, locations, and steps taken. The Office of Human Resources will investigate the alleged violation in consultation with the Office of the General Counsel.

If an investigation results in a finding that an individual has committed a violation, NASEM will take the actions necessary to protect those involved in its activities from any future discrimination, harassment, or bullying, including in appropriate circumstances the removal of an individual from current NASEM activities and a ban on participation in future activities.

CONFIDENTIALITY

Information contained in a complaint is kept confidential, and information is revealed only on a need-to-know basis. NASEM will not retaliate or tolerate retaliation against anyone who makes a good faith report of discrimination, harassment, or bullying.

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