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The Behavioral Health Experts

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SAE's Operational Guide to the Treatment, Prevention, and Evaluation of Opioid Addiction

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It is by now widely recognized that the United States is in the midst of a massive opioid drug epidemic. SAE & Associates recognizes both the impact of this devastating epidemic and the profound gap in resources and knowledge that must be overcome to address this plague. Consequently, we now make available to the behavioral health public sector a comprehensive, multi-faceted opioid addiction ***treatment***, ***prevention***, and ***evaluation*** resource: **the SAE-TPE team**, which holds to the following principles.

1. SAE-TPE Team's Core Principles

What is clearly needed is a comprehensive community-based program to address opioid use disorder (OUD) and the growing numbers of overdose deaths. Toward this end we work from two core principles.

- A comprehensive treatment and prevention program needs to be informed by a solid evidence base that incorporates local trends, geographical features, and stakeholder perspectives into account. Such a program is effective only to the extent that its component parts work together as a fully integrated and seamlessly functioning system.
- Active prevention involvement must include not only those vulnerable to use and their social supports, but also the medical, social service, and criminal justice providers and first responders in every community; the EMT workers, firefighters, police, correctional system staff, child protective services, and hospital ED staff; among others. All are involved in making and promoting critical changes in the systems of care to transform it into a responsive and effective service and preventive array that is barrier free, interactive and prevents gaps-in-care and lessens community stigma about the issue of substance abuse treatment and prevention that can lead to cycles of relapse and death.

With these guiding assumptions in mind, our ultimate goals are to:

- Increase the number of people on medication-assisted treatment.
- Make information on prevention, recognition, and treatment of opioid overdose available to people who use drugs, their family members, as well as community medical and social service providers and first responders.

- Help communities build effective service delivery models for rural and urban and resource-limited counties and municipalities, and organizations such as integrated health systems, hospitals; including their emergency departments; clinics, community based organizations, law enforcement entities, community recovery organizations, faith-based organizations, and/or other local coalitions in order to provide a robust suite of treatment and recovery support services that effectively identify, engage, and retain individuals in OUD treatment and facilitate long-term recovery.

2. The SAE-TPE Service Models

Suggested Model for a Comprehensive Rural Treatment System

The Vermont Hub and Spoke model offers a time tested and effective approach that has been operating for several years in a mostly rural state with many similarities to rural counties in other states. This model involves a Hub—a location where clinical staff have expertise and experience in treatment of addiction and access to support services that assist patients in their recovery. A screening tool is used to identify patients whose medical, behavioral, social and mental health issues require more intensive and specialized services. A single practice in a rural county area could initially be designated as the Hub. Once patients are stabilized at the Hub, they can be referred—a warm handoff is absolutely necessary—to a Spoke, or community-based primary care practice. This might involve an FQHC a private practice with clinicians who prescribe buprenorphine in the targeted county. Patients who experience repeated problems such as relapse may need to be referred back to the Hub and receive more intensive and specialized services before they can return to their own community-based Spoke.

The Vermont model provides an RN Coordinator and a social worker (or alternatively, peer educator or counselor) to work with each the Spokes. The advantage is that the Coordinator and Psychosocial support staff people are more experienced than most of the Spoke providers (at least initially) and will be able to assist the Spoke providers in clinical and other decisions for their patients. The Hub and Spoke model can also be used to provide training and consultations to new providers and those with patients with complex issues. A weekly or biweekly teleconference utilizing the ECHO- type approach to educate, train and support clinicians and other staff in this work could be integrated into this model. This is a general model which can be adapted to local circumstances with limited resources.

Models of Evidence-Based Treatment

Methadone and buprenorphine are two evidence-based medication-assisted treatments (MATs) for persons with OUD. Because of the special difficulties of providing methadone treatment in rural communities (regulatory complexities, cost, transportation, etc.), buprenorphine, developed for use in primary care, office-based settings, should be the first-line treatment in rural communities. Low-threshold Buprenorphine (which is combined with naloxone with the exception of when it is used in pregnancy) should be offered to anyone with OUD who meets the established criteria and who wishes to start treatment. Strict rules that require attendance at classes, psychotherapy, or counseling sessions have not been shown to have a strong influence on retention and/or on illicit drug use (Dugosh 2016) and therefore should not be barriers to providing quick access and continued treatment for patients to this potentially life-saving treatment. The goal should be to

assure rapid initiation to anyone seeking care. Peer educators, social workers, counselors, case managers will be a key part of the treatment team in terms of social support, supportive treatment and as agents in support of treatment transitions. It is vital to address the socioeconomic determinants of health as well as the medical and psychological issues. Thus, the treatment protocol should be expanded as needed to include psychotherapy, self-help groups with a strong sponsor, family involvement in the treatment, educational and job assistance and training — reflecting again our core principle of an integrated, multifaceted addiction care system.

Whenever possible, all three of the Food and Drug Administration (FDA) approved medications for treatment of OUD; methadone, buprenorphine, and extended-release injectable naltrexone (should be offered to patients. Both opioid agonist treatments – methadone and buprenorphine – have been used and studied for decades and have the strongest evidence base showing their success for treatment of OUD including decreasing mortality. Naltrexone is a newer medication and there are fewer studies showing its effectiveness and no long-term evidence of its impact on mortality. Therefore, most addiction experts consider methadone and buprenorphine to be the first-line treatments for OUD. Patients who do not wish to use these medications, or who are not able to receive them, should be offered naltrexone. If patients are not successful with one medication, then switching to another is appropriate.

Naloxone, which reverses opioid overdoses, should be offered to every person who is prescribed chronic opioid pain medications or who uses opioid illicitly. It should also be offered to anyone receiving a chronic opioid prescription. A comprehensive treatment program can send outreach workers to every pharmacy in the targeted counties to assure that the staff there understand federal rules and regulations and to encourage them to make naloxone available on request. Those without insurance can be referred to a health department or harm reduction program in the community that can dispense naloxone for free to those at risk or to their friends or family members.

Needle exchange is an evidence-based harm reduction intervention for people who inject drugs that has been shown to prevent transmission of HIV, hepatitis C and other blood borne infections. Access to State-sponsored programs to provide sterile needles and syringes to those who need them should be established. This will ensure that people who inject drugs in every community have access to confidential needle and syringe programs. These may be from pharmacies, public health departments or provided by primary care clinics.

Prevention interventions are a crucial component of our service model, not only for the patient's immediate family and social support system, but also for the community as a whole. An effective prevention campaign would disseminate information through a variety of channels on the warning signs of a person's misuse and on how they can convince him or her to seek treatment—which might be an entirely new experience for someone who is abusing opioids. A comprehensive program of education, training, and professional Continuing Education interventions is desirable-indeed necessary—and should be variously targeted to the general community, first responders, law enforcement, medical staff, and anyone else in position to halt the progress of a potential addiction. All have the potential to innovate and enact critical changes in the local and regional systems of care.

Model for the Criminal Justice System

Many patients with OUD are under the jurisdiction of the criminal justice system in jails, prisons, probation and parole and drug courts. Such persons leaving jails and prisons are at extremely high risk of overdose death if they leave these settings without the protection of being on MAT. People who are in the criminal justice system should have access to the MAT community-standard of care, which should not be discontinued when people enter a correctional setting. Therefore, it is imperative to meet with judges, police, DAs, sheriffs, administrators, political leaders and correctional medical personal to explain how MAT can be used in criminal justice settings such as drug courts, jails and prisons. Recent models for implementing MAT in jails and the recent statement in support of MAT from the American Correctional Association and the American Society of Addiction Medicine should be disseminated and discussed.

3. How the SAE-TPE Team Works with You

SAE-TPE clearly recognizes the need to first obtain a comprehensive, emerging picture of the current state of the opioid addiction treatment and prevention network in targeted project communities. This effort also requires an additional review of, and input from, residents of these affected communities –current and potential consumers of this service network as well as regional social, governmental and health care service providers. These are the key stakeholders who have experienced, developed and delivered the addiction treatment and prevention services. They are in a unique position to clarify our understanding of the current regional network's functions, its gaps in services, community acceptance of prevention, and improved access to treatment services. Our initial efforts are focused on rigorously collecting the data necessary to a solid framework that accurately portrays the region's ability to carry out proposed treatment and preventive initiatives, and its ability to oversee, support, integrate and evaluate changes that may evolve over the course of our involvement in this effort. This initial collaborative process further informs the development of data collection protocols and information systems to support implementation efforts, continuous quality improvement, and summative program evaluation.

Initially we help you to identify your population(s) of focus where services will be delivered; fully describe the extent of the problems in your catchment area, including service gaps, training gaps; and the degree of community involvement. We help you to document the extent of the need (i.e., current prevalence rates or incidence data) for the population(s) of focus that you identify as in need of MAT services, and we help you to identify Health Disparities within your Populations of focus, thereby highlighting access to care issues. We then help you to define and implement the necessary and required project activities that will support you in reaching your goal of addressing the problem of opioid addiction in your community. At the same time, we will assist you in your efforts to reach out to, and involve community stakeholders for their input in your planning, oversight and course correction efforts. As part of our operational solution tools approach, we will help you identify the Evidence-Based Practice(s) (EBPs) that will be used to support positive project outcomes. In doing so, we will help you define how each EBP chosen is appropriate for your population(s) of focus and the outcomes you want to achieve. In addition, in recognition of the fact that there is a growing diversity of at risk populations impacted by this opioid epidemic, we will help you identify Promising Practices that emerge from the need to address unique cultural values, norms and beliefs of these diverse populations of focus. Finally, we will provide assistance

regarding how you will collect and organize the required data for this project and how such data will be utilized to manage, monitor and enhance the program's effectiveness.

The SAE-TPE team is well-versed in linking data to practice. We will actively seek the input of key community stakeholders by using both the structured interview format and a more open-ended focus group methodology to document and quantify the most pressing issues raised by community stakeholders in the targeted environment. On the basis of our findings, SAE-TPE will work directly with providers and community partners to pinpoint gaps in, and challenges to, the provision of opioid treatment and prevention services.

We have experience in a wide range of settings. Our deep understanding of rural challenges and barriers to service (including poor transportation, limited network access, and few providers practicing within the region's communities) and their impact on the critical issue of access to care, uniquely positions the SAE-TPE team to assist in identifying potential solutions for rural clients and our SAE-TPE consultants have substantial experience in providing operational solution tools in urban settings where the key to effective treatment often is defining agency role implementation within a comprehensive treatment network and ensuring that there is barrier free access with support as one moves from one level of care to another (see Section 5 below for a description of the team's past projects and staff bios).

The goal of this SAE-TPE team is to help communities build effective service delivery models for rural and urban and resource-limited counties and municipalities, organizations such as health plans, integrated health systems, hospitals, including emergency departments, clinics, community based organizations, law enforcement, community recovery organizations, faith-based organizations, and/or other local coalitions in order to provide a robust suite of treatment and recovery support services that effectively identify, engage, and retain individuals in OUD treatment and facilitate long-term recovery.

4. Specific Operational Assistance

We will work closely with you on all aspects of building a comprehensive opioid treatment and prevention system. For example, we can:

- Assist in the provision of MAT using at least two of the three FDA-approved medications for the maintenance treatment of opioid use disorder in combination with comprehensive OUD psychosocial services.
- Help you conduct an appropriate clinical assessment to determine patients meeting the diagnostic criteria for OUD relative to MAT, including determination of opioid dependence, a history of opioid dependence, or high risk of relapse.
- Help you to develop protocols for checking the state Prescription Drug Monitoring Program (PDMP), for each new patient admission and periodic review in compliance with relevant state rules or regulations.
- Help you to conduct screening and assessment for co-occurring substance use and mental health disorders, and improve the delivery of any such services determined to be necessary for this cohort of patients to achieve and sustain recovery.
- Help you develop and implement a plan to mitigate the risk of diversion of buprenorphine to monitor appropriate use/dose of medication by patients.

- Help you develop outreach and engagement strategies to increase participation in, and access to, MAT for diverse populations with OUD.
- Ensure that all applicable practitioners working on the provision of MAT services are well trained and obtain a DATA waiver.
- Conduct buprenorphine waiver training for physicians, nurse practitioners and physician's assistants to qualify for prescribing buprenorphine
- Conduct trainings for criminal justice personnel, drug treatment programs, child protective service workers, primary care providers and medical specialists on best practices for providing Medication for Addiction Treatment using methadone, Buprenorphine and Naltrexone.
- Help to provide a harm reduction framework in trainings, clinical and psychosocial support services that respect patient's autonomy and human rights and provide evidence-based practices to improve and save lives.
- Work with public health, behavioral health, primary care and academic medicine to develop policies and programs to increase access for treatment of opioid use disorder.
- Work with correctional health systems, pre- and post-release, to develop programs to provide MAT in correctional settings
- As many children are in foster care and under the supervisor of Child Protective Service (CPS) agencies due to parental substance use, the SAE-TPE team will provide the staff and leadership of CPS agencies with information about MAT and how it is the best option to assist members of families that are struggling with addiction
- Encourage the use telehealth services, or other innovative interventions, to reach, engage, and retain clients in treatment, especially those in rural communities.
- Help you to provide Recovery Support Services, including peer recovery support services, designed to improve access to and retention in MAT and facilitate long-term recovery, and including but not limited to counseling, behavioral therapies, and other clinically appropriate services.
- Help you to organize project data to indicate, *"Who is doing what to whom, to what effect, and ultimately what cost?"*
- Identify Proposed Measures for Data Mapping of Opioid Prevention Indicators
- Provide you with a compendium of National and Rural Health Opioid Overdose Prevention Tools and Initiatives.
- The SAE-TPE team can call upon the SAE Parity compliance team for assistance in evaluating the impact of apparently inappropriate or questionable claims denials issued by Health plans and their behavioral health vendors regarding services offered by providers to persons in treatment for opioid addiction. For further information on this valuable asset, please review the Parity compliance narrative on the SAE website (www.saeandasociates.com).

5. The SAE-TPE Team

Bruce Trigg, MD focuses on the assessment of the target regions' opioid addiction services networks and is our medical lead in training protocols and system transformations to serve at-risk populations. **Loan Mai, PhD** assists **Steve Estrine, PhD** in his oversight of the project's progress and goal attainment. In this supportive capacity, Dr. Mai also uses her extensive direct experience and knowledge of coordinating multi-site implementation data projects, and the application of addiction treatment's evidence-based practices and prevention models.

The team's evaluation lead is **Frank Guida, PhD**, who is a seasoned SAMHSA evaluation expert and known nationally for his strong analytic work in substance abuse and with many vulnerable populations of focus. **Warren Reich, PhD** has worked extensively as an evaluator in criminal justice projects and disparity projects and has honed qualitative methodologies to provide an understanding of local challenges and solutions. **Maria Messina, PhD** has experience in utilizing targeted learning processes in evaluation to ensure active collaboration and input from project stakeholders. **Carrie Muchow, MA** is a seasoned member of our evaluation team and focuses on the evaluation requirement of this initiative and provides support to site-specific needs.

The SAE-TPE Team's Expertise and Experience:

Our team includes an expert physician who functions as the medical MAT lead for the SAE-TPE team. **Bruce Trigg, MD** has a dedicated career in transforming addiction treatment and addiction medicine, including services for high risk populations and communities struggling with availability of provider services. Dr. Trigg is a public health physician and addiction medicine consultant who lives in New York City who brings extensive experience with health care systems as a physician and as a collaborator/ partner, with a variety of health care providers and governmental institutions both locally, nationally, and internationally as well. Dr. Trigg is also approved by ASAM and AAAP to do waiver trainings and has done at least 15 of them. He currently works with the NY State Department of Health, AIDS Institute, Office of Drug User Health, on expansion of access to buprenorphine treatment throughout New York State. Since February 2018, he has been the Interim Medical Director for the Harm Reduction Coalition; a national non-governmental advocacy and capacity-building organization with offices in NYC, Oakland, CA and Washington, DC. He is also a consultant for JBS International, where he provides technical assistance on medication-assisted treatment for the SAMHSA funded State Targeted Response grant in Montana.

Dr. Trigg trained in pediatrics and was a public health physician for 23 years with the New Mexico Department of Health. He helped to plan and develop the New Mexico harm reduction program; one of the first statewide harm reduction programs in the US, that offered needle and syringe exchange, buprenorphine treatment, and overdose prevention with provision of naloxone. There he helped to start public health and methadone maintenance programs at the Bernalillo County Metropolitan Detention Center in Albuquerque, one of the 35 largest jails in the US. Since 2011, Dr. Trigg has been the medical director for several opioid treatment programs (OTPS) in New Mexico. He worked with the University of New Mexico ECHO (Extension for Community Healthcare Outcomes) Program, a collaborative model of medical education and care management, where he was on the faculty for buprenorphine waiver trainings throughout New Mexico in 2007, he was the co-convener of a national roundtable meeting on medication-assisted treatments (MAT) in correctional settings. From 2012 to 2015, Dr. Trigg worked as an addiction treatment consultant in several Southeast Asian countries. He worked with Australian AID in Cambodia, Vietnam and Indonesia, with Médecins du Monde in Burma, and in 2015, with SAMHSA, CDC and the Government of Vietnam. Throughout his career, he has extensive experience doing buprenorphine waiver trainings for clinicians, training of all staff about opioid addiction and MAT, working with correctional staff and re-entry task forces to continue treatment with MAT for people who are in treatment before their arrest, initiating evidence-based MAT treatment for people who are incarcerated, and creating a system for continuation of treatment in the community with warm handoffs via Peer support. With his extensive experience in health-

related projects in rural and underdeveloped areas, Dr. Trigg also takes the lead in ensuring that our team is made fully aware of the role and impact of these non-urban factors in its implementation of the project's evaluation activities.

Kieu-Loan Mai, PhD is a researcher, evaluator and clinician with a background in epidemiology, health psychology, multicultural psychology, and disparities in care. Dr. Mai has over 25 years of experience with a focus on addiction, trauma and prevention in cultural, social and sexual minority communities. She has participated in early health navigation models to address adherence and retention in care with marginalized addiction and HIV treatment communities. Dr. Mai has documented barriers to care for special needs populations and cultural minority groups, and has a comprehensive understanding of patient navigation systems to improve care coordination for vulnerable populations living with co-occurring chronic and infectious diseases, such as HIV/AIDS, tuberculosis and hepatitis. Her clinical work in addiction and trauma has also included co-occurring Eating Disorders and victims of sex trafficking. Whether triaging care in San Francisco's Tenderloin's SROs or the "flophouses" on the Bowery in New York City, Dr. Mai has increased direct access to care, implemented system improvements for integrated care, advocated for congruent services for social and cultural minority communities, and addressed research needs for EBPs to document co-occurring and co-morbid medical and mental health disorders and treatment for special needs populations.

Dr. Mai's varied background, including information system development for social service and integrated care modules, leads her to comprehensively understand the changes in health care reform, assist with operational practice changes and develop data management and report management practices. She has practical knowledge on how these changes affect billing, staffing patterns and agency opportunities and worked with a coding team to identify practice change for performance measure application and solutions for gaps in care transitions. In 2013, as part of an attestation team, Dr. Mai worked with coders to develop an integrative module for HIV/AIDS that incorporated medical, behavioral, substance abuse and social determinants variables. Dr. Mai has conducted integrated care trainings for primary care providers implementing SBIRT within an integrated care model, managed projects for managed care service transitions, guided IT vendor selections with build-out for capture of clinical values and performance measures, and served as a program lead for data management of multi-site Hepatitis C projects. Currently, she serves on a consulting project for an upstate hospital struggling with alignment with managed care transitions for its mental health clinic. She provides knowledge on rural needs and vulnerabilities of the system for care engagement. With knowledge on behavioral health measure sets for pay-for-performance screening and treatment, Dr. Mai is able to guide transformations of care for the direct providers as well as care systems with needed administrative, clinical and IT functions.

Frank Guida, PhD oversees the evaluation SAE-TPE evaluation component. Dr. Guida has 40 years of experience with conducting process and outcome program evaluations for a variety of federal, state and local agencies. In addition to standard SAMSHA prevention initiatives, Dr. Guida has evaluated NY State Department of Education Tech Prep programs which sought to place inner-city high school students on a fast track to community colleges; and, US Department of Labor School-to-Work programs which sought to teach necessary soft and hard employment skills to inner-city high school students. Dr. Guida has also evaluated US Department of Justice mental health collaboration and 2nd chance re-entry demonstration programs, as well as NY State AIDS Institute healthy relationships and harm reduction programs, and NY City Administration for

Children's Services foster care performance program. Dr. Guida is very well versed in understanding and demonstrating how systems of care and services impact overall outcome, quality of life, social structures, and morbidity.

Dr. Guida, via SAE, has also evaluated Substance Abuse and Mental Health Services Administration (SAMHSA) programs for agencies who co-locate primary medical care into substance abuse and community mental health settings, SAMHSA pregnant and postpartum women's programs and adolescent assertive community treatment (ACT) programs. Other SAMHSA programs which Dr. Guida evaluated include homeless and supportive housing in the community programs, adult and family treatment drug court and offender re-entry programs, TCE-HIV minority women programs, TCE-TAC electronic supported sobriety and recovery program.

Warren Reich, PhD is the SAE-TPE team lead on qualitative methodologies that are used to develop and support local stakeholder responses to community and population specific needs. Our team employs targeted learning processes in its evaluation approach to ensure active collaboration and input of project stakeholders. As such, Dr. Reich brings over 15 years of experience with small and large, formative and summative evaluation project to this task. His work has involved utilizing focus groups involving community and client participant samples; work with surveys and risk assessments, and also propensity-score matched comparisons of administrative data; and the use of analytic techniques to identify subgroup profiles that flag those who are at particularly high risk—or who are particularly likely to benefit from an intervention. The SAE-TPE team clearly understands the benefits of using evaluation data for ongoing process improvements.

Dr. Reich holds a degree in social psychology (Rutgers, 1994). From 2003 through 2012 he was the Research and Evaluation Manager at The Family Center, where he directed program evaluations for a cutting-edge nonprofit organization that serves the needs of New York City families affected by serious illness, including HIV/AIDS, substance use, and cancer. Dr. Reich has comprehensive knowledge on court interventions, substance abuse treatment interventions, community advocacy and the evolution of formulizing promising practices for implementation with vulnerable populations. From 2012 through 2017 he was a Principal Research Associate at the Center for Court Innovation, where he published 14 papers that included program evaluations of the New York State Adolescent Diversion Program, assessments of risk and predictors of success in New York City drug and mental health courts, and several community surveys and focus groups. Dr. Reich is an Adjunct Assistant Professor of Psychology at Hunter College/CUNY and continues to work on disparity in care for risk populations.

Maria Messina, PhD, is a medical anthropologist with nearly 30 years of experience conducting both long- and short-term ethnographic fieldwork, nationally and internationally, with funding from Fulbright, Social Science Research Council (SSRC), the National Institute for Drug Abuse (NIDA), the National Institute of Health (NIH), National Institute of Justice (NIJ). Maria's areas of expertise range from indigenous healing practices and popular culture in North Africa to public health and ethno-epidemiological fieldwork among a variety of vulnerable populations at high risk for multiple morbidities, i.e., the reception or transmission of HIV/AIDS, other STI's, and behavioral health disorders. The populations of focus include, e.g., ethnic minority and gender variant young and adult men who have sex with men (Y/MSM); youth at risk for drug use and forensic involvement in a Venezuelan favela, homeless youth in NYC who injected crack; long-term outcomes of adjudicated youth in residential drug treatment in the US and Canada; and homeless, severely mentally ill adults

with alcohol, drug dependencies, and/or other co-morbidities. Maria also has extensive experience as a program evaluator of projects funded by The Centers for Disease Control and Protection (CDC), The Substance Abuse and Mental Health Services Administration (SAMHSA), Gilead Science, The New York City Department of Health and Mental Hygiene (DOHMH), and The AIDS Institute.

Carrie Muchow, MA, is a quantitative researcher and a PhD candidate at Columbia University and is experienced with advanced skills with statistical procedures to create assessment tools and evaluate their psychometric properties. Through research and clinical practice, Ms. Muchow has obtained a broad background of knowledge and skill in the biological, psychological, social, and behavioral effects of trauma; the health correlates of discrimination; the psychological treatment of substance dependence; comprehensive cognitive and personality assessment; and the effects of traumatic brain injury and psychosis on neuropsychological functioning. Ms. Muchow has also developed expertise in the psych diagnostic assessment of adults, including comprehensive cognitive and personality testing with current work specializing in cognitive-behavioral therapy (CBT), social cognitive modalities, dialectical behavior therapy (DBT), trauma-focused, interpersonal, and cultural-relational interventions in an inpatient psychiatric hospital. She is currently investigating the link between health beliefs, psychosocial factors, culture, and behavior in adults with chronic health conditions.

Over the course of the past decade, Ms. Muchow has also worked in forensic-based healthcare, public sector psychiatric facilities, and substance abuse treatment settings, training at Columbia Medical Center, Mount Sinai Hospital's Brain Injury Research Center (BIRC), Rikers Island Correctional Facility, and the Colorado Institute of Mental Health at Ft. Logan. She also gained experience providing administrative and therapeutic services at Columbia Medical Center's outpatient buprenorphine program. She has strong clinical knowledge and experience in the areas of severe and persistent mental illness, trauma, addiction, traumatic brain injury (TBI), and neuropsychological functioning. As an evaluation consultant, Carrie helps manage data for federally-funded grant programs providing integrated healthcare. Her expertise in this domain involves developing and implementing program evaluation plans, including research design, sampling method(s), data collection strategies, and the statistical analysis of process and outcome data. She also provides guidance to program staff and key stakeholders in interpreting evaluation findings to inform program development and improvement processes.

Regarding prevention, with their comprehensive understanding of how to effectively elicit the input of community stakeholders and the methodology supporting their findings, Dr. Reich, Dr. Messina and Ms. Muchow will form the SAE team tasked with using community stakeholder involvement as the basis for development and evaluation of an effective community prevention program that addresses the opioid crisis and adheres to the prevention principles put forth by the National Institute on Drug Abuse (NIDA). Thus, this team will work with community stakeholders to develop a plan for research-based prevention that incorporates the prevention principles espoused by NIDA and will use its knowledge of community engagement principles to motivate stakeholders to implement, sustain and evaluate its research-based prevention program.

Steven A. Estrine, PhD is the founder and president of SAE & Associates. He has over 35 years of experience as a high-level administrator, strategic planner, and mental health and substance abuse program developer for the most vulnerable, at-risk populations across the life span. Dr. Estrine has

held positions as Director of Adult Psychiatric Services of the New York State Office of Mental Health, Director of Public Sector Psychiatry at New York Presbyterian Hospital, and Director of Program Development at North Shore-Long Island Jewish Health Systems (Northwell). His guidance as CEO of SAE has yielded millions in grant funding for programs serving the needs of those who are homeless, coming out of prison, and/or impacted by co-occurring mental illness and substance abuse and chronic medical conditions, including veterans. His extraordinary knowledge of public sector behavioral health issues and the co-occurring disorders of mental illness and substance abuse and his innovative approaches to designing effective community based systems of care that reduce inappropriate inpatient admissions and ER presentations; increase health literacy, and improve health integration and access to care for the most vulnerable populations has been an asset to human services organizations and agencies throughout his career in Public sector behavioral health. He is the editor of *Service Delivery for Vulnerable Populations: New Directions in Behavioral Health*, published in 2011 by Springer publications.

To learn more about us, feel free to visit our website: http://saeandassociates.com/ to view SAE's resources, including our SAE CAREs (Clinical and Research Experts) Podcast: *Treating Addiction is a Team Sport*. If you would like to explore how we can help you in this arena, contact us by emailing info@saeassociates.com or by calling our office at (212) 684-4480.