A large, stylized compass rose graphic in shades of blue and light blue, with a central four-pointed star. A thick, semi-transparent orange-red ring is superimposed over the compass rose. The text is positioned on the left and right sides of the ring.

**PA Opioid
Overdose
Reduction**

**Technical
Assistance
Center**

Funded by: Pennsylvania Commission on Crime and Delinquency



PittPharmacy
PER_XU

Technical Assistance Center

THE CRISIS

The past year has seen a 37% increase in fatal overdoses, and the number continues to rise in Pennsylvania. In 2016, 85% of fatal overdoses included an opioid.

THE RESPONSE

The TAC is the first-ever resource & technical assistance hub to provide comprehensive, concierge-level support to Pennsylvania counties to reduce overdoses locally.

THE PROCESS

Counties create coalitions that get work done through a data-driven, evidence-based process and effectively collaborate within and between county, state, and federal entities.

Key TAC Activities

- Bridge the gap between public health and public safety to ensure the health, safety, and well-being of individuals with opioid use disorder.
- Monitor coalition health, and provide training to allow for coalitions to have the structure, leadership, learning, behavior, quality improvement measures, culture, and vision necessary to initiate multiple programs across a wide breadth to achieve sufficient outcomes in reducing overdose.
- Research, clarify, and share local, state, and national best practices as well as real-time overdose death data through OverdoseFreePA.org and online learning collaboratives.

TAC Accomplishments in 2017

- 48 out of 67 counties enrolled in technical assistance since TAC inception in 2016.
- Trained 1152 county coalition members on the TAC process.
- Developed 22 county strategic plans.
- Initiated over 150 county programs to reduce overdose.
- 22 counties received PCCD grant funding to implement new initiatives (over \$1.6 million in total funding).
- Established collaboration with major health and safety state departments as well as the DEA, US Attorney's Office, FBI, HIDTA and other partners.

THE PROCESS



Identify a Vision



Collect and Assess Data



Build Capacity and Leadership



Develop and Implement a Strategic Plan



Improve Continually and Sustain Programs

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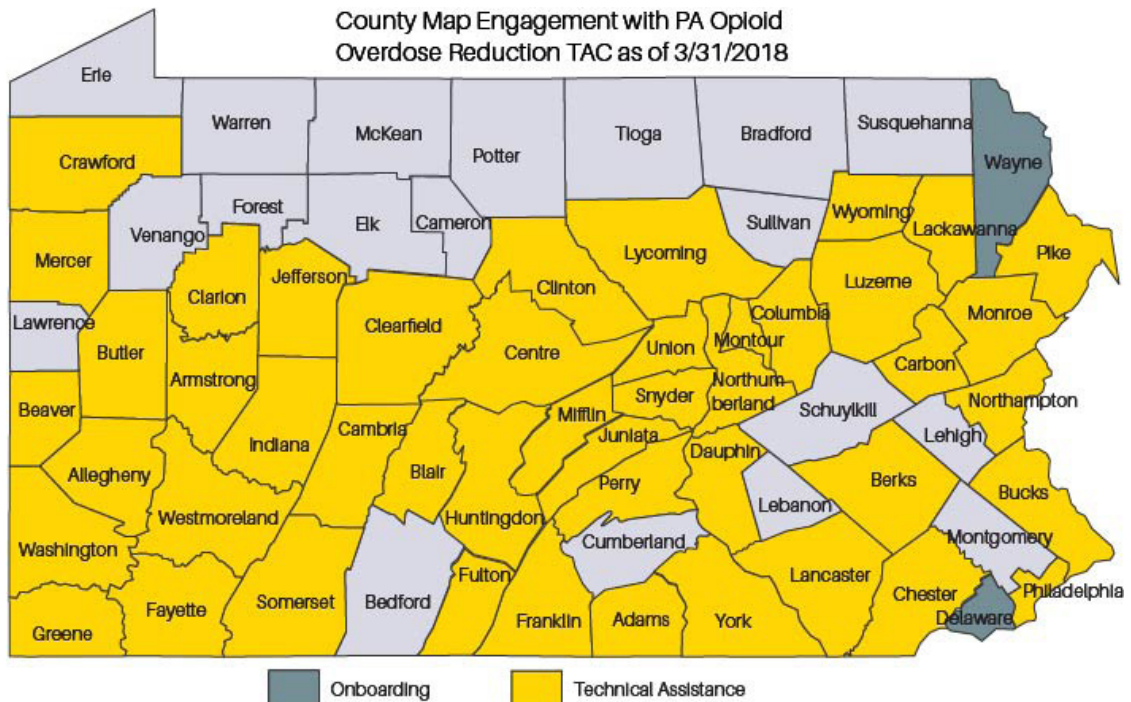
OVERVIEW

The increasing number of deaths each year caused by opioid drug overdose represents an urgent crisis in this country, and more specifically, in Pennsylvania. The Commonwealth of Pennsylvania is the sixth largest state by size and population, with a diverse range of citizens in urban, suburban, and rural areas. In each year from 2014 to 2016, Pennsylvania has experienced significant increases in its overdose death rate^(1,2). There was a 37% increase in overdose deaths in just one year from 2015 to 2016 (4642 deaths), with over 85% of fatal toxicology reports including an opioid⁽²⁾.

In response, the Pennsylvania Opioid Overdose Reduction Technical Assistance Center (TAC) was developed by the University of Pittsburgh, School of Pharmacy, Program Evaluation and Research Unit (PERU) and funded by the Pennsylvania Commission on Crime and Delinquency (PCCD) to address the need for local coordination and mediate the growing number of overdose deaths. The TAC was created as the first ever resource and technical assistance hub for all counties within the Commonwealth of Pennsylvania with the provision of concierge-type and comprehensive supportive services.

Since its inception in 2016, the TAC has engaged with 48 counties at the county's request on a rolling basis (*below*). 40 counties are fully engaged with TAC services from technical assistance on an as-needed, information sharing basis to comprehensive technical assistance involving local agency coordination and identifying data and evidence-based strategies to drive strategic planning, implementation, and evaluation. Eight counties are presently on-boarding, which involves developing a plan for technical assistance.

Founded with the vision of eliminating overdoses in Pennsylvania, the TAC has created a model for opioid supply reduction, demand reduction, and overdose reduction at the county level utilizing active participation from a coalition of county partners. Because of the novel nature of the program and lack of other programs with the same focus across the state, the TAC has documented wins and lessons learned, protocols, and tools since its inception, to share its work with other entities.



THE PROCESS

The Implementation Framework



Identify a Vision



Build Capacity and Leadership

Collect and Assess Data



Develop and Implement a Strategic Plan



Improve Continually and Sustain Programs

The TAC uses the Implementation Framework (IF, left), developed by Dr. Janice Pringle, PERU Director, to engage with counties. The IF works to reduce overdoses through assessing the local impact of overdose, building capacity, strategic planning, developing and implementing numerous interventions across a wide breadth of subject areas with quality and fidelity, and evaluating and sustaining efforts.

Assessment

Assessment consists of gathering data in real-time to understand the impact of overdoses. The TAC assists counties in the collection and analysis of data for later use in planning as well as developing relevant intervention performance and outcome measures. The TAC maintains a comprehensive list of data required for planning, as well as strategies to sustain data collection and monitoring (Table 1). Analysis services by the TAC are also offered to provide counties with regular actionable, comprehensive, and objective data reports in print and online.

TABLE 1: Data Required to Understand Local Impact

Law Enforcement- Drug-related Offense
Probation — Drug-related Offense
Coroner/Medical Examiner — Overdose
Emergency Medical Services (EMS) and Fire Departments- Overdose and Naloxone
Emergency Department (ED) — Overdose
Prescription Drug Monitoring Program (PDMP) — Drugs Dispensed
Children and Youth Services- Children Placed due to Drug Use
Educational Programming
National Forensic Laboratory Information System (NFLIS) — Drug Seizures
Pharmacy- Naloxone Accessibility
Drug and Alcohol- Prevention, Warm Hand-off and Treatment

THE PROCESS

Capacity

The TAC helps each county to develop an overdose reduction coalition or bring additional stakeholders into an existing coalition (Table 2). The TAC emphasizes the importance of developing coalitions that work to bridge public health and public safety. As public health and safety have not traditionally partnered with each other to address local concerns, technical assistance is often needed to address coordination of efforts between the two sectors.

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Technical assistance is often needed to address coordination of efforts between public safety and public health.

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County coalitions are strongly encouraged to have leaders that represent public safety and public health (e.g. County Drug and Alcohol Treatment Authority (SCA) and District Attorney (DA)), to improve community buy-in and ensure a broad enough scope of activities for the coalition to be effective. Differences in terminology, operational goals, and values and beliefs amongst stakeholders are addressed through the construction and use of an ideal vision and learning components at each coalition meeting. The use of tactically developed data is discussed openly between coalition constituents representing public safety and public health to eliminate barriers and identify opportunities for coordination. Interventions that bridge the gap between public safety and public health are encouraged and effective interventions and lessons learned are shared amongst the TAC counties. For example, law enforcement can share non-fatal overdose information with the county drug and alcohol treatment authority for follow up to create pathways to treatment for individuals who have overdosed by connecting them directly to trained Certified Recovery Specialists (CRS).

TABLE 2: Stakeholders for Effective Collaboration

Health Professionals
• <i>Single County Authority (SCA)</i>
• <i>Hospital Professionals</i>
• <i>Treatment Providers</i>
• <i>Recovery Support Professionals</i>
• <i>Center of Excellence (COE)</i>
• <i>Physicians</i>
Criminal Justice
• <i>Public Safety</i>
• <i>Criminal Justice Advisory Board (CJAB)</i>
• <i>Coroner or Medical Examiner</i>
• <i>District Attorney</i>
• <i>Probation/Parole</i>
• <i>Jail</i>
• <i>Courts</i>
Community
• <i>Schools</i>
• <i>Religious Leaders</i>
• <i>Persons in Recovery</i>
• <i>Family Members</i>
• <i>Political Figures</i>
• <i>Children and Youth Services</i>
First Responders
• <i>Fire</i>
• <i>Emergency Medical Services (EMS)</i>
• <i>Local/State Police</i>

Planning

Once a county has data to assess its overdose phenomena and sufficient capacity to get work done effectively and impactfully, the TAC assists coalitions in the development of a comprehensive strategic plan to guide counties in their overdose elimination efforts. Strategic plans ensure

THE PROCESS

interventions are developed and implemented to have the highest effectiveness and impact. The TAC has helped develop 20 strategic plans in 2017. These plans address opioid supply, demand, and overdose reduction efforts.

The TAC teaches county entities how to coordinate efforts, minimize duplication, and identify and take advantage of outside resources.

Because of heightened awareness surrounding drug overdose, there are many organizations and coalitions engaged in responding at the local, state, and federal level. The TAC teaches county entities how to coordinate efforts, minimize duplication, and identify and take advantage of outside resources. To aid in this effort, the TAC has developed OverdoseFreePA.org, which includes many content contributions from over 30 counties, and offers a wide range of resources for federal, state and county-level stakeholders of all backgrounds.

Implementation and Evaluation

Effective implementation and evaluation is accomplished through teaching best practices using an Implementation Guide that was developed by the TAC (*Table 3*) and connecting counties with local evaluators. The Implementation Guide provides structure to the county coalitions with respect to how they can implement an activity efficiently and effectively. It also provides counties with the information necessary to efficiently pursue funds from foundations, state, and federal sources. Information developed in the Implementation Guide includes a program summary, initiative champion, vision, evaluation goals and objectives, literature review, impact model, patient pathway diagram, implementation protocol, and evaluation scheme. In 2017, the TAC has provided assistance so that counties have begun to implement

nearly 150 new programs/initiatives. On average, each county has implemented 6 new programs, with counties implementing a range of 1-17 new programs.

Sustainability

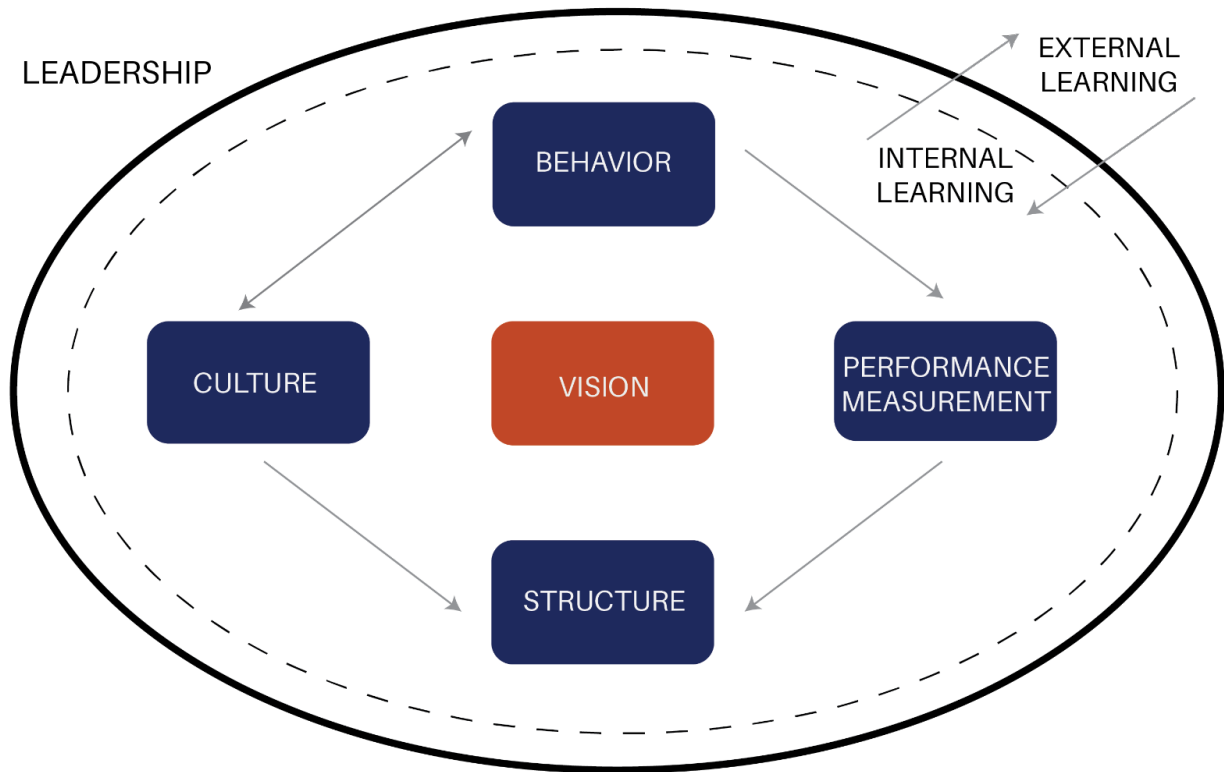
Planning for sustainability is pivotal to maintaining interventions beyond an initial pilot phase, requiring funding and improving systems to do more with less. PCCD has funded 22 counties to assist with the implementation of strategic planning initiatives, with funding totaling over 1.6 million dollars (US). To identify additional sources of funding, the TAC informs counties of funding opportunities from federal and local sources, and can assist counties with proposal writing and review (the TAC cannot assist with proposals for PCCD funding). The TAC also provides assistance to integrate new programs into existing operations at little to no cost by using the Systems Transformation Framework.

Since 2016, PCCD has supported 22 counties with funding totaling over 1.6 million US dollars to implement their strategic plans.

TABLE 3: Implementation Guide Contents

Overview/Abstract
Initiative Champion Contact Information
Initiative Vision
Evaluation Goals, Objective, Required Resources
Initiative Impact Model
A3 Initiative Patient/Program Pathway
Implementation Protocol (Daily, Weekly, Monthly, Quarterly)
Evaluation Scheme: Data Collection Protocol
Documentation of Champion Training (Principles of Performance Measurement, Internal Learning, External Learning, Implementation, Evaluation)

SYSTEMS TRANSFORMATION FRAMEWORK



The TAC executes its activities by following a Framework for Systems Transformation developed by Dr. Janice Pringle (above) (3). The Framework involves the concept that all human systems are both complex and adaptive. The strategies needed to transform these systems towards an intended outcome (e.g. optimal planning and implementation of a collaborative effort that crosses agencies to reduce opioid overdoses) must involve both a process for assessing the functioning of specific system "levers" against a list of principles, and applying strategies to facilitate the levers' functioning toward these principles. System "levers" are components of a system that have greater influence in facilitating the system's transformation towards an intended vision, such as overdose reduction (4). The principles upon which the levers are assessed have been documented as being associated with the

lever's ability to better support the system's implementation of an intended innovation aimed at improving patient care (5). The Systems Transformation Framework has been demonstrated effective in numerous settings and purposes(6-7).

The TAC regularly monitors each of the levers at the local level, and discusses them weekly with leadership to improve lever operation so will be a continuous optimal environment for maintaining coalition health, thus improving implementation and sustainability.

SYSTEMS TRANSFORMATION FRAMEWORK

The following is a brief description of each lever contained within the Framework (diagram page 8):

Vision/Greater Purpose

This lever acts as the lens that guides all the work conducted by the coalitions. This is referred to as the “True North” by county coalitions, and eliminates values and beliefs that may be held by individual members of the coalition to maintain unity and cohesive movement toward a common goal.

Leadership

Leaders are the agents within the system who see their role as providing the resources and tools to other agents so they may continuously meet the coalition or project’s vision/greater purpose every day with each targeted client. Leadership is developed through workshops as requested, regular biweekly teleconferences, assessing strengths and liabilities amongst leaders regularly and providing ongoing technical assistance based upon assessment results.

Performance Measurement

Performance measurements are meaningful information collected within the course of the stakeholder’s work. The information is used by the internal learning system to determine how to best meet the coalition or project’s vision/ greater purpose.

Internal Learning System

Internal learning systems are the systematic method of using performance measurement data to learn HOW to move towards the coalition’s vision/greater purpose (Six Sigma, Lean, and Plan, Do, Study, Act Cycle (PDSA) are three examples of Internal Learning). Coalition members are trained to use the PDSA cycle at each coalition meeting, and report results of the cycle to the coalition at large.

External Learning System

External learning systems include the identification of exactly what new knowledge or skills the system needs to learn or acquire that can address a specific performance gap. Effective external learning requires bringing the new knowledge or skill into the system only at the point when it is needed, using learning principles that potentiate the knowledge/skill uptake by the targeted stakeholders. Much coalition work revolves around trainings, town hall meetings, workshops, and other educational opportunities for relevant stakeholders. Counties are provided with tools to engage the community by identifying what is needed and how to train coalitions to provide that information in a concise, appropriate manner.

Organizational Culture

Culture comprises the attitudes, values, beliefs, and assumptions among stakeholders in a new program/ initiative or within the community coalition structure that affects how the work is completed.

Organizational Behavior

Behavior is the manner in which the system behaves across five domains: (1) Relationships; (2) Decision Making; (3) Power; (4) Conflict; and (5) Learning. Assessments and trainings with leadership and coalition members are provided regularly to monitor and optimize organizational culture and behavior.

Organizational Structure

Organizational structure is the manner in which the system is organized, and the delegation of the specification of roles between all stakeholders so that optimal communication and innovation can occur among its agents. Defining as early as possible optimal structure is critical to successful work in the county.

INTERVENTIONS

It is beyond the limited scope of this document to provide information regarding each intervention underway in 48 counties; however, a handful are highlighted below. Where initiatives already exist, the TAC provides assistance to counties to improve implementation, broaden impact, and sustain efforts.

Supply Reduction

Overdose Investigation Coordination

In partnership with the Drug Enforcement Administration (DEA), local police departments are investigating drug delivery resulting in death cases. The DEA provides analytical resources to counties, assisting with over 900 state and local overdose investigations (8). In addition, all non-fatal overdoses reported to the DEA are subsequently provided to the county authority on drug and alcohol programming, or a local Center of Excellence for Integrated Care for SUD treatment follow-up.

Prescriber Education

County coalitions have expanded training and educational opportunities to include healthcare professionals (e.g. physicians, pharmacists, nurses) and first responders. In one such program, physicians are educated on opioid prescribing guidelines, the prescription drug monitoring program (PDMP), and alternative strategies for pain management, with emphasis on peer-to-peer interactions. Another program provides training to pharmacists on identifying and speaking with patients about obtaining a prescription for naloxone (there is a statewide standing order for naloxone).

.....

Peer mentors work with high prescribing physicians to plan strategies of how to effectively change practice and implement guidelines.

.....

Medication Disposal

Safe medication disposal practices can reduce the supply of opioids available to a community, thus protocols are being developed and implemented to limit the potential diversion of opioids from homes of persons who have died, nursing homes, real estate open houses, and assisted living facilities (9). In addition, prescription take-back events sponsored by law enforcement with support from the DEA occur at least twice a year. Most counties also have fixed medicine disposal sites at law enforcement offices, with an online locator map found on the Pennsylvania Department of Drug and Alcohol Program’s website. For rural areas, where transportation to a fixed site is non-trivial, drug deactivation and disposal bags are available through community programs and local pharmacies (10).

Demand Reduction

Increasing Access to Treatment through Criminal Justice Programs

The criminal justice system is a crucial intercept point for individuals who have an opioid use disorder. Recently discharged inmates overdose and die at a much higher rate than the general population, and are more likely to recidivate and commit new crimes (11-15). Through the collaboration of county coalitions, county SCAs and criminal justice personnel (e.g. wardens, adult probation, and District Attorneys) have begun to address the gaps in services that increase inmate overdose risk, including establishing or expanding treatment programs in jails or prisons. Initiatives may also include increasing educational opportunities for inmates regarding overdose prevention, which could include the provision of naloxone upon release, and establishing or expanding drug treatment courts. Treatment interventions provided to jail and correctional facilities are beginning to utilize a comprehensive, medically-assisted opioid treatment program for incarcerated inmates through the implementation of several evidence-based practices. Cognitive behavior

INTERVENTIONS

therapy and other treatment modalities are employed while the inmate is still incarcerated in a secure, drug-free, controlled environment. Prior to release, continued treatment appointments for care management are provided.

Engaging Overdose Survivors with Treatment and Resources

First responders across the Commonwealth have reported experiencing burn-out related to repeat naloxone administrations to the same individuals, while knowing that these individuals are not being engaged in SUD treatment. In response to these frustrations, county SCA offices have been partnering with local EMS and law enforcement to establish follow-up programs that aim to engage an overdose survivor into treatment. Interventions train first responders on: (1) using naloxone for overdose reversal; (2) training patients and families on how to use “leave-behind” naloxone kits; (3) using motivational interviewing to conduct referrals and “warm hand-offs” to help patients access SUD and/or MH evaluation and treatment; and/or (4) implementing community-based paramedicine and harm reduction follow-up procedures with patients who do not wish to pursue SUD/MH treatment.

In one example, local integrated care providers work in collaboration with the COE and the Single County Authority (SCA) to ensure overdose survivors have access to SUD treatment (16). This program is designed to expand emergency response duties of first responders, resulting in more efficient and ongoing care for the patient. In this program, upon treatment by emergency responders, overdose survivors are informed of the opportunity to speak with a Care Navigator, provided by the Center of Excellence. When a survivor is interested in pursuing treatment, the Care Navigator will assist in the entrance and completion of an appropriate treatment program. If an overdose survivor initially refuses treatment and is transported to a hospital, the EMS providers will follow up with the individual the next day to further encourage treatment.

Similar engagement and connection to treatment interventions are underway in Emergency Departments, often referred to as “warm hand-offs.”

Persons in the Emergency Departments are screened and identified as needing additional follow-up treatment for a Substance Use Disorder. A care navigator, patient coordinator, certified recovery specialist, or similar role will engage with the individual and assist in identifying and connecting the person to treatment.

Workplace Education

Through workplace education interventions, presentations are conducted with a goal to provide educational materials to individuals while promoting drug-free work environments (17-18). Drug-free work environments can include: a written drug-free workplace policy, employee education, supervisor training, an employee assistance program, and drug testing. Resources such as those from PASTop.org provide a worksite toolkit to provide simple, coordinated education tools regarding the risk of prescription painkillers and illicit drug use, and how to help an individual who may need assistance.

INTERVENTIONS

Screening, Brief Intervention and Referral to Treatment

Screening, Brief Intervention, and Referral for Treatment (SBIRT) is an evidence-based practice implemented in numerous settings to identify, reduce and prevent problematic use, abuse and dependence of alcohol and illicit drugs (19-20). The SBIRT program consists of three major components:

- **Screening:** a professional in any setting will use standardized screening tools to assess and identify patients with risky substance abuse patterns.
- **Brief Intervention:** a professional will engage a patient with risky substance use behaviors in a short conversation about his/her use, providing feedback and advice.
- **Referral for Treatment:** a professional will provide a referral to brief therapy or additional treatment to patients who screen in need of additional services.

SBIRT (Screening, Brief Intervention and Referral for Treatment) is an evidence-based practice used to identify, reduce and prevent problematic use, abuse, and dependence on alcohol and illicit drugs.

An outcome from implementation of Screening, Brief Intervention, and Referral to Treatment programs is to intervene prior to the overdose, and to increase the number of overdose survivors that enter and remain with treatment. Because of this proactive strategy, a decrease in the number of overdoses in the Emergency Department is hypothesized. The combination of early intervention by drug and alcohol staff and timely assistance for the patient in obtaining treatment will increase the likelihood of a successful discharge from treatment. This will also

decrease the likelihood of overdose and further substance abuse.

Increasing Access to Naloxone in Pharmacies

To increase access to naloxone in the pharmacy setting, some coalitions have undertaken a Citizen Science Naloxone Reporting Project, which encourages pharmacy customers to engage their local pharmacists in a discussion about naloxone. Individuals can access an online form on OverdoseFreePA.org that permits documentation of naloxone availability and guides them through conversations with their pharmacist regarding compliance with the standing order, stocking naloxone for same-day purchase, and questions about insurance billing. Individuals can fill out the form online and submit it to the website. Once verified, it will be added to the Naloxone Finder Map. The Naloxone Finder Map is a tool that individuals can use to locate pharmacies in their area that stock naloxone. The Map also provides information on the formulation that is carried and the insurance the pharmacy accepts. The website also provides educational materials for pharmacies and pharmacists that do not currently honor the standing order and/or stock naloxone.

Increasing Access to Naloxone for Persons at Risk of Overdose

Naloxone priority groups have been identified through data and previously published reports. Persons at elevated risk for overdose in the community and others such as those leaving a county jail, SUD treatment facility, or Emergency Department after an overdose are offered naloxone with a brief training on overdose reduction strategies. Additionally, peer naloxone specialists are equipped with naloxone to distribute to the drug-user population. On a broader level, educational interventions are developed for the community audience, typically including education on naloxone utilization,

INTERVENTIONS

identifying addiction, and how to optimize SUD treatment engagement. Modalities typically utilized by coalitions include town halls, local newspaper and television station pieces, print media campaigns, social media campaigns, workplace lunch and learns, faith-based community events, and senior nights. The TAC assists communities in planning and providing educational efforts that offer broad and direct population coverage.

Coordination of Efforts Across County Lines

The TAC has assisted multiple agencies in the development and implementation of various workshops across the Commonwealth of Pennsylvania, resulting in over 600 individuals participating with a 99% satisfaction rate. The workshops are intended to bring together stakeholders from public safety and public health to discuss trends regarding overdose deaths, various strategies to combat the opioid epidemic, and potential solutions. Subjects have included the following:

- Substance use disorder in different populations
- Evidence-based treatment
- Overdose prevention
- Harm reduction
- Bridging public health and public safety
- Prescribing practices
- Prescription drug monitoring program
- Addictions 101
- Stigma Reduction
- Coordinating data between systems.

Throughout the planning and development stages of each workshop, the TAC meets with leadership from each requesting agency multiple times prior to the workshops to ensure that content is relevant to the needs of the audience, and to provide training on optimal leadership strategies to organize and conduct future workshops based on external learning principles.

In addition, the TAC is coordinating efforts amongst federal, state, and local stakeholders by communicating programs and initiatives from federal and state agencies to county-level entities. Thus far, the TAC has assisted in building a multitude of partnerships between counties with federal and state entities, while providing county-level perspectives to policy makers.

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