North Carolina

Strategic Plan to Reduce Prescription Drug Abuse
ACKNOWLEDGEMENTS

The North Carolina Department of Health and Human Services, Division of Mental Health and Substance Abuse and Developmental Disabilities and Substance Abuse Services (DHHS, DMH/DD/SAS), with the support of the National Governors Association (NGA) and Substance Abuse and Mental Health Services Administration (SAMHSA), convened a group of more than 150 stakeholders to develop the 2016 N.C. Strategic Plan to Reduce Prescription Drug Abuse.

2016 N.C. Strategic Plan to Reduce Prescription Drug Abuse

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EXECUTIVE SUMMARY

North Carolina, as well as the entire nation, is facing a health crisis with the ever-growing misuse and abuse of prescription drugs. In the fall of 2014, a group of state leaders representing North Carolina participated in both the National Governors Association Policy Academy on Reducing Prescription Drug Abuse and the Substance Abuse and the Mental Health Services Administration Policy Academy on Reducing Prescription Drug Abuse. To successfully combat this disease, the state must develop a well-coordinated and multi-pronged strategic plan to confront the most pressing aspects and tackle underlying sources of this disease. The Division of Mental Health Developmental Disabilities and Substance Abuse Services, in collaboration with local, state and federal stakeholders, developed the North Carolina Strategic Plan to Reduce Prescription Drug Abuse focusing on four core areas:

I. Prevention and Public Awareness;
II. Intervention and Treatment;
III. Professional Training and Coordination; and
IV. Identification of Core Data.

I. Prevention and Public Awareness
   Develop a creative and effective public outreach campaign utilizing evidence-based prevention programs to increase awareness of accidental overdose and the dangers of prescription drug abuse

II. Intervention & Treatment
   Identify and implement strategies to improve access to intervention and treatment

III. Professional training and coordination
   Develop and implement training programs that will increase the effectiveness of public safety, health care, education and other professionals

IV. Identification of core data
   Assess and update existing data sources and develop a data inventory specific to prescription & drug use and overdose, in order to develop a comprehensive plan for utilization of new and existing data sources for prevention, surveillance and research
PRESCRIPTION DRUG ABUSE OVERVIEW

In the last 15 years, the United States and the state of North Carolina have seen a dramatic increase in the rate of death caused by an overdose of opioid prescription drugs. This increase is running parallel with the ever-increasing rate of prescription of opioid painkillers. North Carolina’s 2010 prescription painkiller death rate of 11.4 per 100,000 residents is just below the national average of 12.4 per 100,000 (CDC, 2013). Across the nation, death from prescription pain relievers is nearly double that of the rate of overdose for all other illegal drugs combined (NIDA, 2014). It is important for the state of North Carolina to take a multifaceted approach to prevent diversion, abuse and misuse of prescription drugs. To that end, leaders from throughout the state came together to develop a strategic plan that would serve as a framework for addressing the many aspects of the prescription drug abuse epidemic consuming many of our residents and their families.

Because the majority of the prescription drugs being abused are opioids, North Carolina has seen a rise in heroin use, as those individuals addicted to pills find a cheaper, more accessible method to continue their addiction. This is not isolated to our state, but a national problem (Volkow, 2014). North Carolina recognizes that heroin abuse is an increasing health risk that requires individual attention. There was a 300% increase of heroin-related deaths between 2008 and 2013. While this strategic plan does not directly address heroin addiction disorder, the working group recognizes the importance of developing an individual coordinated response to this growing challenge.

![Prescription Opioid & Heroin Deaths: 2008-2013](source)

Nearly 3x as many Rx Opioid deaths as heroin in 2013
Nearly 16x as many Rx Opioid deaths as heroin in 2008

Analysis by Injury Epidemiology and Surveillance Unit
I. Prevention and Public Awareness

Focus Area 1a - Evidence-Based Prevention Programming

Strategic Goals

A. Increase utilization of non-opioid strategies for managing pain

B. Reduce misuse of opioids

Objective

A. Promote evidence-based primary prevention programs

Background

Communities are often unprepared to deal with the onset of prescription drug abuse among their members. While the research and data is often available as to which types of community and health programs work, it is often found that many initiatives fail to include these best practices (Rosenheck, 2001). Some of the noted obstacles to implementing evidence based programs within the human services sector are often insufficient agency resources, time, access to research evidence, funding and poor understanding of evidence based practices (Gray et al, 2012). It is essential that the state and statewide organizations support these communities by helping them to implement strategies and programs that have been proven effective.

Activities

A. Conduct and/or review local and regional needs assessments, risk assessments or other risk indicators to match best evidence based prevention programs

B. Provide education about available resources and technical assistance to prevention coalitions and other community stakeholders regarding evidence-based programs that can be utilized based on local needs

C. Conduct a public awareness survey for target audiences

Evaluation

<table>
<thead>
<tr>
<th>Measurable Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of needs assessments, risk assessments or other risk indicators completed or reviewed</td>
<td>Increased number of evidence based prevention programs being used</td>
</tr>
<tr>
<td>Number of coalitions and other community stakeholders assisted</td>
<td>Increased number of coalitions and other community stakeholders actively using evidence based prevention programs</td>
</tr>
<tr>
<td>Knowledge and understanding regarding the use of opioid and non-opioid strategies for the management of pain</td>
<td>Increased knowledge and understanding regarding the use of opioid and non-opioid strategies for the management of pain</td>
</tr>
</tbody>
</table>
Focus Area 1b - Public Education

Strategic Goals
A. Reduced unnecessary prescribing and dispensing of controlled substances
B. Reduced diversion of unused controlled substances

Objectives
A. Increase community understanding of strategies for managing pain
B. Increase awareness of personal and community risks of prescription opioids

Background

Community-wide education regarding the proper use and risks of prescription drugs is essential in lowering abuse and accidental overdose rates for the state. Within our own state, preliminary data suggests that targeted community education programs have seen strong positive impacts on these rates. Community education tools can range from town hall style meetings to school-based initiatives (Albert et al, 2011). Not only is further education for prescribers and dispensers important, but the National Institute on Drug Abuse has emphasized the importance of community education programs that target some of our most vulnerable populations such as teens (Volkow, 2014).

Activities
A. Disseminate patient information in written and electronic media regarding pain management and controlled substances
B. Develop and launch a statewide, comprehensive, evidence based public relations campaign that targets the general public, parents and caregivers on non-opioid strategies to manage pain and the misuse of prescription drugs, related overdose deaths, dangers of abusing/misusing prescription drugs, and proper storage and disposal of medications
C. Collaborate with the Department of Public Safety (DPS) Juvenile Justice section and the Center for Safer Schools to provide education and awareness, such as “Mental Health First Aid” and MHFA prescription drug abuse modules
D. Collaborate with higher education institutions, community based coalitions and faith based groups to disseminate information regarding potential harmful effects of controlled substance
Evaluation

<table>
<thead>
<tr>
<th>Measurable Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of prescribed controlled substances from CSRS</td>
<td>Decreased number of prescribed controlled substances</td>
</tr>
<tr>
<td>Reach of the public relations campaign</td>
<td>Increased reach to the public via the public relations campaign</td>
</tr>
<tr>
<td>Number of new media products addressing pain and controlled substances</td>
<td>Increased number of new media products addressing pain and controlled substances</td>
</tr>
<tr>
<td>Number of controlled substance related deaths</td>
<td>Decreased number of controlled substance related deaths</td>
</tr>
<tr>
<td>Number of certified Mental Health First Aid instructors</td>
<td>Increased number of certified Mental Health First Aid instructors</td>
</tr>
<tr>
<td>Number of Mental Health First Aid trainings delivered</td>
<td>Increased number of Mental Health First Aid trainings delivered</td>
</tr>
</tbody>
</table>

Focus Area 1c – Drug Disposal

Strategic Goals
A. Reduce number of unused controlled substances in households across the state

Objectives
A. Increase disposal resources for controlled substances

Background

In SAMHSA’s 2014 report, 53% of people using a prescribed pain reliever for non-medical use reported receiving it free from a friend or relative. An additional 14% reported purchasing it from a friend or relative (SAMHSA, 2014). With diversion so closely linked to the general population, it is imperative that there is easy access throughout the state for the safe and quick disposal of controlled substances before they are distributed to friends or relatives.

OxyContin—a painkiller claiming more lives in the United States than heroin and cocaine combined by 2012/ Getty Images
Activities

A. Increase number of available drop-boxes for authorized collectors to receive unused pharmaceutical controlled substances
B. Increase opportunities for consumers to dispose of unwanted/unused drug administration devices (syringes, etc.) via “Syringe Take Back Days” (contingent upon funding for disposal)
C. Develop a mobile incineration program for controlled substances in drop-boxes
D. Provide education to ultimate users, in literature and media form, regarding the collection of controlled substances, location of drop-boxes and process for disposal in a safe and effective manner consistent with effective controls to prevent diversion
E. Increase funding for “Take Back” programs from state and federal resources

Evaluation

<table>
<thead>
<tr>
<th>Measurable Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of available drop-boxes across the state</td>
<td>Increased number of available drop-boxes</td>
</tr>
<tr>
<td></td>
<td>across the state</td>
</tr>
<tr>
<td>Number of incinerations performed</td>
<td>Increased number of incinerations performed</td>
</tr>
<tr>
<td>Amount of funding for “Take Back” programs</td>
<td>Increased funding for “Take Back” programs</td>
</tr>
</tbody>
</table>

Focus Area 1d - Naloxone

Strategic Goals
A. Reduce number of deaths associated with opioid overdose

Objectives
A. Promote specific strategies for prevention of opioid overdose deaths

Background

By far, the leading cause of overdose death in the state of North Carolina is from opioids. At the time of death 51% had an active prescription for opioids (Dasgupta, 2015). The timely availability of naloxone, a fast-acting opioid antagonist is essential in decreasing the number of prescription drug deaths within our state.
Age-adjusted death rates allows a comparison of death rates between states where there are differences in the population’s age distribution.

Sources: National Conference of State Legislatures, 2013; and Centers for Disease Control and Prevention, 2013.

Activities

A. Promote public awareness of naloxone as a prescribed medication, available to anyone at risk for experiencing or witnessing an opioid overdose
B. Educate individuals about how to prevent, recognize and intervene when an opioid overdose occurs to prevent death
Evaluation

<table>
<thead>
<tr>
<th>Measurable Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of new media products on how to prevent, recognize and intervene when an opioid overdose occurs</td>
<td>Increased number of new media products on how to prevent, recognize and intervene when an opioid overdose occurs</td>
</tr>
<tr>
<td>Number of prescribed opioid overdose related deaths</td>
<td>Decreased number of prescribed opioid overdose related deaths</td>
</tr>
<tr>
<td>Number of naloxone prescription drugs overdose recoveries</td>
<td>Increased number of naloxone prescription drugs recoveries</td>
</tr>
</tbody>
</table>

II. Intervention and Treatment

Focus Area – Intervention and Treatment for Opioid Use Disorder

Strategic Goal
   A. Reduce opioid use disorder

Objective
   A. Increase access to Medication-Assisted Treatment (MAT)

Background

Because of long-term neurobiological changes due to opioid abuse, thus creating a higher risk of relapse than other drug addictions, studies point to Medication Assisted Treatment (MAT) as the best treatment to help a patient successfully fight addiction to opioids. The most effective treatment available is opioid agonist maintenance treatment (such as methadone or Buprenorphine) in combination with psychosocial assistance. While complete withdrawal rather than maintenance treatment has poorer outcomes because of neurobiological changes, its rate of success is increased when naltrexone is used to help prevent relapse (WHO, 2009). Across the US, and in North Carolina, the rate of Opioid abuse far surpasses the MAT treatment capacity (Jones et al, 2015).

Multiple controlled substance prescriptions from multiple providers can pose a high risk of overdose for patients. One of the ways to combat this for Medicaid patients is to "lock in" a provider and pharmacy for the prescribing and dispensing of controlled substance. This initiative is meant to increase coordination of care for prescribers treating the patient and ultimately to reduce abuse. Medicaid recipients would only be "locked in" after exhibiting certain behaviors that deems them to be high risk for abuse of controlled substances.

Activities

   A. Increase state funding to cover the cost of MAT for non-Medicaid population
   B. Explore opportunities for new federal grant funding or other supports for educational and outreach activities related to treatment access and availability
C. Establish and expand mentoring for physicians who provide MAT
D. Identify and expand existing counseling resources
E. Promote physician participation in office and tele-health MAT programs. Conduct provider focus groups to identify challenges/barriers (Governor’s Institute on Substance Abuse, Medical Society, hospital systems, Community Care of North Carolina (CCNC), Local Management Entities (LMEs) and Management Care Organizations (MCO’s))
F. Maximize the effectiveness of the NC Beneficiary Management Lock-in Program (“Narcotic Lock-In Program”) to minimize the risk that prescription drugs pose to NC Medicaid recipients

Evaluation

<table>
<thead>
<tr>
<th>Measurable Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of buprenorphine providers and patients</td>
<td>Increased number of buprenorphine providers and patients</td>
</tr>
<tr>
<td>Number of buprenorphine providers accepting third party payment</td>
<td>Increased number of buprenorphine providers accepting third party payment</td>
</tr>
<tr>
<td>Number of physician mentors and mentees</td>
<td>Increased number of physician mentors and mentees</td>
</tr>
<tr>
<td>Amount of state and federal resources available for treatment</td>
<td>Increased amount of state and federal resources available for treatment</td>
</tr>
<tr>
<td>Number of counseling slots for patients</td>
<td>Increased number of counseling slots for patients</td>
</tr>
<tr>
<td>Rate of ED visits and hospitalizations among Medicaid patients receiving MAT</td>
<td>Decreased rate of ED visits and hospitalizations among Medicaid patients receiving MAT</td>
</tr>
<tr>
<td>Rate of overdose deaths among individuals receiving MAT</td>
<td>Decreased rate of overdose deaths among individuals receiving MAT</td>
</tr>
<tr>
<td>Number of arrests, convictions and incarcerations related to controlled substances and illicit opioids</td>
<td>Decreased number of arrests, convictions and incarceration related to controlled substances and illicit opioids</td>
</tr>
<tr>
<td>Cost of MAT expansion compared to cost of failing to provide treatment</td>
<td>MAT expansion costs less than failing to provide treatment</td>
</tr>
<tr>
<td>Quality of life for people on MAT and their families</td>
<td>Improved quality of life for people on MAT and their families</td>
</tr>
<tr>
<td>Number of North Carolina Medicaid recipients “locked-in” to using one doctor, one pharmacy and one hospital</td>
<td>Increase in the number of North Carolina Medicaid recipients “locked-in” to using one doctor, one pharmacy and one hospital</td>
</tr>
<tr>
<td>Number of prescription drug overdoses for Medicaid recipients</td>
<td>Reduce the number of prescription drug overdoses for Medicaid recipients</td>
</tr>
<tr>
<td>Cost associated with prescription drugs and doctors’ visits for Medicaid recipients</td>
<td>Reduce the cost associated with prescription drugs and doctors’ visits for Medicaid recipients</td>
</tr>
</tbody>
</table>
III. Professional Training and Coordination

Focus Area 3a – Education for Health Care Professionals

Strategic Goals
   A. Reduce over prescribing and dispensing of controlled substances

Objective
   A. Increase prescriber and dispenser education regarding controlled substance use and abuse

Background

North Carolina has one of the highest rates of opioid prescribing in the US. There is a direct correlation between the rates of prescribing and the rates of overdose (CDC, 2014). States that have implemented strong CME programs focusing on opioid use and abuse saw an immediate decrease in their total overdose deaths in just one year while seeing lower dosing rates from clinicians (Katzman et al, 2014). It is imperative that all prescribers have the most accurate information about the opioids they are prescribing but also alternatives to pain management to decrease the number of opioid prescription, and ultimately overdose rates, in the state.

This color-coded U.S. map shows the number of painkiller prescriptions per 100 people in each of the fifty states plus the District of Columbia in 2012. Data from IMS, National Prescription Audit (NPATM), 2012.
Activities

A. Adopt chronic pain guidelines and educate physicians on evidence-based practices for managing pain
B. Develop and implement training programs for prescribers and dispensers aimed at increasing public safety and improving treatment of pain
C. DHHS, in collaboration with North Carolina Medical Board, North Carolina Board of Nursing, North Carolina State Board of Dental Examiners, North Carolina Board of Pharmacy and North Carolina Hospital Association, will create a coordinated system to disseminate information regarding physician and pharmacist education and patient information cards
D. Create tools for doctors to quickly reference best drug choices or non-opioid treatments to better manage patients with top-prescribed conditions such as back pain, headache, fibromyalgia and osteoarthritis

Evaluation

<table>
<thead>
<tr>
<th>Measurable Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of training programs developed and delivered for prescribers and dispensers</td>
<td>Increased number of training programs developed and delivered for prescribers and dispensers aimed at increasing public safety and improving treatment of pain</td>
</tr>
<tr>
<td>aimed at increasing public safety and improving treatment of pain</td>
<td></td>
</tr>
<tr>
<td>Number of tools created for prescribers to quickly reference best drug choices or non-opioid treatments to better manage patients with the top-prescribed conditions</td>
<td>Increased number of tools created for prescribers to quickly reference best drug choices or non-opioid treatments to better manage patients with the top-prescribed conditions</td>
</tr>
<tr>
<td>Number of prescribed controlled substances from CSRS</td>
<td>Reduced number of prescribed controlled substances from CSRS</td>
</tr>
</tbody>
</table>

Focus Area 3b – Controlled Substances Reporting System (CSRS)

Strategic Goals
A. Increase number of patients referred to treatment for a substance use disorder related to opioids

Objectives
A. Enhance CSRS and increase utilization as a clinical tool

Background

Prescription drug abuse and misuse is a national challenge. Several states have implemented programs to increase prescriber use of prescription drug monitoring programs before prescribing to patients. For example, after implementation, states such as Tennessee saw a 36% decrease in patients who were seeing multiple prescribers to obtain the same drugs. This ultimately decreases the risk of overdose (CDC, 2014).
The use of the CSRS as a clinical tool is essential in addressing the ever-growing prescription drug abuse epidemic. Several studies have shown that using a PDMP as a clinical tool has many benefits (Gugelmann et al., 2012). In one study of ER doctors, when using a database such as NC’s CSRS, clinicians chose not to prescribe an opioid or they lowered the dose prescribed in over 50% of cases (Baehren, 2010).

**Activities**

A. Improve CSRS functionality to manage high volume of transactions  
B. Develop guidelines for health care systems to adopt regarding registration and utilization of the CSRS  
C. Develop online training modules focusing on the utilization of the CSRS  
D. Partner with the Office of the National Coordinator for Health Information Technology and health care systems across the state to integrate CSRS with EHRs  
E. Integrate CSRS with the NC Health Information Exchange  
F. Support legislation to mandate registration and required utilization of the CSRS if dispensers have reasonable suspicion that a patient is attempting to obtain medically unnecessary controlled substances

**Evaluation**

<table>
<thead>
<tr>
<th>Measurable Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of prescribers and dispensers registered to use the CSRS</td>
<td>Increase of number prescribers and dispensers registered to use the CSRS to 30,000 by January 1, 2018</td>
</tr>
<tr>
<td>Number of patient queries performed in the CSRS</td>
<td>Increased number of patient queries performed in the CSRS</td>
</tr>
<tr>
<td>Number of controlled substances prescribed</td>
<td>Decreased number of controlled substances prescribed</td>
</tr>
<tr>
<td>Prescriber knowledge in order to make more informed prescribing decisions</td>
<td>Increased prescriber knowledge in order to make more informed prescribing decisions</td>
</tr>
</tbody>
</table>
IV. Identify Core Data

Focus Area – Primary Data

Strategic Goals
A. Broad use of data to support education initiatives, prevention, law enforcement, research and funding

Objective
A. Facilitate the utilization of data for prevention, monitoring, treatment, evaluation and research

Background
Timely and accurate data and analysis is essential in effectively addressing North Carolina’s prescription drug abuse epidemic. As noted previously, it is vital to have evidenced based programs and initiatives to address prescription drug abuse, however, without primary data, there is little evidence available to state leaders about what is and is not working. Because this is a multifaceted issue which touches, community groups, healthcare and law enforcement, it is essential that all parties have the data they need to be the most effective in tackling North Carolina’s prescription drug abuse problem. Without accurate and timely data, there is no true way to know the success or effectiveness of many of the initiatives in place or being proposed.

Activities
A. Identify key data sources and work with data source agencies to facilitate potential use, security issues and data use agreements
B. Provide education to stakeholders on the data elements available through key data sources, identify their reporting and data needs, and how data may be linked to other data systems
C. Share data resources (codebooks, data structure documents, etc.) and analysis software to facilitate identification and study of state substance abuse issues
D. Collaborate with other states and national organizations regarding prescription drug abuse
E. Provide linkage to healthcare system electronic health records to facilitate use of data in clinical practice (e.g. CSRS, ED)
F. Promote standardization and consider potential modifications to the data structure of the key data sources to facilitate utilization and linkage
G. Develop plan for reports that includes mechanism for dissemination (e.g., web, email, dashboard)
## Evaluation

<table>
<thead>
<tr>
<th>Measurable Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of data driven education, prevention, law enforcement, research and funding initiatives</td>
<td>Increase number of data driven education, prevention, law enforcement, research and funding initiatives</td>
</tr>
<tr>
<td>Data dashboard utilization</td>
<td>Increase dashboard utilization</td>
</tr>
<tr>
<td>Number of notifications sent out to prescribers</td>
<td>Increase notifications sent to prescribers</td>
</tr>
<tr>
<td>Number of databases modified or integrated for data sharing</td>
<td>Identified databases modified or integrated for data sharing</td>
</tr>
<tr>
<td>Number of data driven education, prevention, law enforcement, research and funding initiatives</td>
<td>Increase number of data driven education, prevention, law enforcement, research and funding initiatives</td>
</tr>
</tbody>
</table>
REFERENCES


