CONTINUING EDUCATION
FOR PRESCRIBERS OF
CONTROLLED SUBSTANCES

Statutory Provision S.L. 2017-57
SECTION 11F.11.(a)

Report to the
Joint Legislative Oversight Committee on Health and Human Services

By

North Carolina Area Health Education Center
(NC AHEC)

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I. Executive Summary

SECTION 11F.11.(a) of S.L. 2017-57 requires the North Carolina Area Health Education Center Program (NC AHEC) report to the Joint Legislative Oversight Committee on the feasibility of providing continuing education to prescribers of controlled substances. This report describes the policy context, what NC AHEC has done to address the opioid epidemic, and what NC AHEC proposes as next steps. NC AHEC’s vision is to help implement a comprehensive strategy for reaching all health professionals in all 100 counties, targeting not just clinicians’ knowledge but also actual practice in offices, hospitals, and communities. We highlight pilot work at Mountain AHEC (MAHEC) and other NC AHEC regions, underscore collaboration with partner organizations, and describe early evidence of spread and effectiveness.

The impact of the opioid epidemic is well known. The North Carolina legislature has mandated opiate education for all prescribing clinicians. In response, in state fiscal 2017, NC AHEC gave over 8,500 health professionals in 99 counties almost 35,000 hours of education about controlled substances. This number includes 3,124 physicians, 677 physicians’ assistants, 493 nurse practitioners, and 855 registered nurses. Feedback from conferences has been excellent; large proportions of prescribers attending our conferences report that they will prescribe fewer opioids and request more education. For treating pain, clinicians report that their single greatest need is to learn more options, including appropriate use of effective over-the-counter medicines such as Tylenol, non-addicting prescription medications, behavioral interventions, physical therapy, and other proven mind-body interventions. For opiate misuse and abuse, key strategies include increasing the supply of primary care physicians and behavioral health specialists who can provide medication-assisted treatment and in-person support for front-line community practices to help develop the office systems necessary to prescribe more safely and to prevent, detect, and treat patients with opiate use disorders. Regional community pilots at MAHEC and elsewhere have included developing primary care opinion leaders, engaging schools and training programs, increasing the number of clinicians who can provide evidence-based treatments, and the convening of community task forces. The pilots have shown very promising results.

With existing funding and with substantial pilot funding from philanthropy, federal grants, and help from many collaborators, NC AHEC and its partners have shown great initial success in reaching many clinicians statewide and developing new approaches to addressing the opiate epidemic. We now seek new annual funding in the amount of $5,900,000 to increase continuing education and spread innovative models of practice change across the state, with emphasis on rural clinicians and communities.
II. Introduction

SECTION 11F.11.(a) of S.L. 2017-57 requires the North Carolina Area Health Education Centers Program (NC AHEC) to report to the Joint Legislative Oversight Committee on Health and Human Services and the Fiscal Research Division on the feasibility of providing a continuing education course for health care clinicians licensed to prescribe controlled substances in this State with respect to:

(1) controlled substance prescribing practices,
(2) controlled substance prescribing for chronic pain management, and
(3) misuse and abuse of controlled substances.

This report describes the policy context, what NC AHEC has done to address the opioid epidemic, and what NC AHEC proposes as next steps. NC AHEC’s vision is to help implement a comprehensive strategy for reaching all health professionals in all 100 counties, targeting not just clinicians’ knowledge but also actual practice in offices, hospitals, and communities. We highlight pilot work at Mountain AHEC (MAHEC) and other NC AHEC regions, underscore collaboration with partner organizations, and describe early evidence of spread and effectiveness.
III. Policy Context

The impact of the opioid epidemic is well known. Deaths due to overdoses now far exceed deaths due to motor vehicle accidents, and these deaths are the “tip of the iceberg” for the people of North Carolina. As the North Carolina Department of Health and Human Services has reported, for every death in North Carolina there are nine hospitalizations, seventeen emergency department visits, and two hundred and sixty people who misused prescriptions. The impact on families and communities is even greater, with an 893% increase in newborn hospitalizations for complications of substance use since 2004; almost 42% of all placements in foster care across the state include substance use as a factor. The opiate epidemic is universal: it touches rural and urban, affluent and poor, and infants, children, and adolescents as well as the elderly. Compared to other states, moreover, North Carolina has among the highest rates and dosages of opioid prescriptions, highest rates of opioid abuse and dependence, and lowest access to medication assisted treatment (MAT) and other evidence-based strategies to treat opioid use disorder (OUD).

How should we start addressing such a large, complex problem? An important first step has been to increase knowledge of the problem among clinicians—both the overall outlines of the problem and specific components of prevention, screening, and treatment of patients with OUD. The North Carolina legislature has demonstrated leadership in bipartisan initiatives to require education for clinicians, along with increasing access to naloxone and developing a robust controlled substances reporting system.

NC AHEC is a key component of a comprehensive state strategy for addressing the epidemic. NC AHEC was created in 1972 to respond to major health problems across the state, especially in rural areas. NC AHEC is a coordinated statewide system with nine regions devoted to the education of doctors, nurses, and other health care professionals and to improving the quality of care delivered in communities across the state. See Appendix 1 for a map and a description of the NC AHEC system and its capacity.

In line with the legislative request, NC AHEC’s first step has been to develop and provide traditional continuing professional development related to opioids for all health professionals in all 100 counties of the state. We believe, however, that the opioid crisis will also require a more comprehensive strategy, and we have piloted a variety of regional initiatives, including developing primary care opinion leaders; increasing the number of clinicians who can provide evidence-based treatments for opiate use disorder, like medication-assisted treatment; and the convening of community task forces, which engage not only health care professionals and hospitals but also first responders, law enforcement, and other stakeholders. What follows summarizes what NC AHEC has done, what we have learned so far about what works, and what we recommend for the future.
IV. What NC AHEC Has Done

Statewide, in state fiscal 2017, North Carolina AHEC gave over 8,500 health professionals in 99 counties almost 35,000 hours of education about controlled substances. This number includes 3,124 physicians, 677 physicians’ assistants, 493 nurse practitioners, and 855 registered nurses. It is important to underscore that NC AHEC works with many partners, including all of the medical schools in North Carolina, which provide many of the speakers; hospital systems; DHHS; statewide organizations like the North Carolina Medical Board; the Governor’s Institute; Project Lazarus; and many regional partners. The graphic below summarizes the number of educational programs and health professionals by region. Note that it does not include all of the education some of our partners are undertaking.

The new state requirement of opioid education for prescribers went into effect July 1, 2017, and has spurred substantial new educational activity. For example, preliminary data from one region, MAHEC, from July to October 2017 shows over 1,000 additional unique participants.

Controlled Substance Prescribing for Acute Pain Management

Managing acute pain with fewer opioids will require prescribers to learn more effective pain control for acute pain. Prescribers attending our conferences have reported, as a result of the conferences, that they will prescribe fewer opioids. National data suggests that total opiate prescriptions may have peaked, and we are planning to work with North Carolina DHHS to try to assess whether what clinicians report will be reflected in the actual documented number of prescriptions. Moving forward, as demonstrated in the MAHEC and SEAHEC
case studies (Appendices II and III,) key drivers of success include personal engagement of clinician opinion leaders, engagement of specialty groups in the various clinical specialties (primary care, surgical subspecialties, emergency medicine, dentistry and others), and focusing attention on the number and dosage of opioids in routine care plans and electronic health record order sets for routine care in the emergency department, surgery, and other settings.

**Controlled Substance Prescribing for Chronic Pain Management**

For chronic pain management, abruptly stopping patients’ opioids is not an evidence-based approach, but many prescribers are doing so because they lack knowledge and experience of appropriate alternatives. Evidence-based care for chronic pain should include behavioral interventions, physical therapy, and non-addicting medications; effective opioid management should require prescribers to assess risk, develop treatment plans that include behavioral health, and consider patient safety. Many clinicians are still not implementing basic patient controlled substances agreements, urinary drug screens, naloxone prescriptions, or using the CSRS in routine clinical workflow. In addition, many clinicians feel they need more understanding of how to effectively collaborate with behavioral health clinicians.

Surveys of clinicians attending our educational programs report that their single greatest need is to learn more options for treating chronic pain. Of note, there is increasing evidence that opioids are not as effective as formerly thought for patients with chronic pain, and opioids have common and significant side effects. Indeed, there is increasing evidence that over-the-counter medicines such as Tylenol, non-addicting prescription medications, physical therapy, and acupuncture can reduce pain and improve quality of life in many patients.

Pain of some type is the most common reason for seeing a physician. For a generation, physicians and other clinicians have been told that opioids are effective, have relatively few side effects, and are relatively non-addictive when used for acute pain. We must now change that mindset, in terms of alternative approaches to pain control, safe usage of opioids when they are needed, and safe methods of reducing dosages of patients dependent on opioids.

**Misuse and Abuse of Controlled Substances**

National data suggest that 80-90% of individuals who misuse and abuse opioids will not receive specialty substance use treatment. In North Carolina, availability of treatment for substance use has been further limited by rapid changes in the organization of the public mental health system, the lack of integration of physical and behavioral health care in
Medicaid and commercial insurance, and the relative lack of education about addiction in health professional education.

It is important to underscore the tragic consequences of misuse and abuse of opioids. Many individuals who misuse or abuse controlled substances were started on opioids by a physician for a medical problem. As inexpensive heroin and other illicit drugs have spread, sudden deaths have increased dramatically. Finally, and most tragically, the number of pregnant women on an opioid, prescribed or obtained without a prescription, has grown dramatically, with substantial consequences for newborns, families, and the systems who serve them.

How to prepare clinicians to address misuse and abuse of controlled substances statewide is a challenging problem and will require a multicomponent strategy. Traditional continuing professional development on the safe use of opioids can increase prescribers’ skills in using opioids and help develop the office systems necessary to keep patients accountable and minimize diversion. Basic education about managing patients with opioid use disorder in medical school, residencies, nurse practitioner, and physician assistant training programs can be improved. More broadly, however, training more clinicians to use or effectively refer patients to promising new evidence-based approaches, such as behavioral interventions for pain, SBIRT (Screening, Brief Intervention, and Referral to Treatment), and MAT, are necessary. MAHEC has piloted extensively the training of primary care clinicians comfortable with these evidence-based approaches. In addition, they have developed a regional initiative to address pregnant women who are addicted to opioids and other substance use disorders.

As comparison with Vermont and other states has shown, engaging both primary care and behavioral health providers in MAT can significantly impact a state’s capacity. Less than half of people with an OUD in North Carolina have access to medication-assisted treatment to treat opioid addiction. In the past, it has been difficult to get primary care clinicians to take on outpatient treatment of opioid use disorder, but about 67% of participants in MAHEC’s controlled substances CME expressed interest in more OUD training.

Community-Level Interventions

NC AHEC has piloted a variety of community-level interventions. As documented in Appendix II, MAHEC used a primary care opinion leader strategy. Dr. Fagan has given over 85 public presentations since April 2017. As a family physician, he focused initially on primary care clinicians, but he was then asked to speak to dentists, surgeons, and hospital nurses interested in what they can do. School nurses then learned about the importance of the issue, engaging the leadership of Asheville school system, which then began educating parents of high school athletes about the use of opioids for injuries. Separately, Dr. Fagan,
with his obstetric colleagues, developed a regional initiative to improve perinatal substance use disorder care, engaging OB/GYN clinicians, newborn nurses, and pediatricians. Finally, word of mouth has led to interest by the foster care agencies and judicial systems statewide.

SEAHEC, Greensboro AHEC, and Area L (Rocky Mount) AHEC, represent a different kind of community initiative. In those examples, local events—such as four sudden deaths of high school students from heroin or a report that the city had the highest rate of opiate abuse in the country—led to community wide initiatives convened by the AHECs. The goal has been to involve all community stakeholders—not just health care clinicians and hospitals but first responders, law enforcement, community organizations, and others. As trusted partners with a track record of working with all members of the community, regional AHECs provided organization and space, helping the community to define priorities and take action.

**Early Evidence for Effectiveness of NC AHEC Programs**

Feedback from participants attending controlled substances continuing education programs is excellent. Clinicians report that the presentations are high quality, that they will change their prescribing practices, and use over-the-counter medications more frequently. They also want more training, especially in non-opioid alternatives in management of pain, and many are interested in learning more about other evidence-based interventions, such as medication-assisted treatment. From a statewide perspective, in terms of reaching all health care professions in all 100 counties, NC AHEC has made an excellent start. However, as the map below illustrates, sustained effort is necessary.

Regional community initiatives have been very successful, in part a measure of the urgency of the issue, and in part through effective organization of many regional partners. A regional
lens allows counties to learn from each other, especially in rural settings. Dedicated project management is necessary. Clinical champions, or opinion leaders, have been very successful in mobilizing support.
V. **NC AHEC’s Proposed Next Steps**

Using substantial grants from philanthropy, CMS, and other sources, AHEC has had initial success in reaching clinicians and developing new approaches to addressing the opioid epidemic. We now seek new $5,900,000 annual funding to spread these innovative models across the state, with emphasis on rural communities. The initial three-year phase would:

1. Prepare clinicians in all healthcare professions and in all 100 counties to treat acute and chronic pain safely and prevent opioid addiction. We will work with prescribing clinicians across their careers and focus efforts in rural areas.

2. Develop, implement, and spread exemplar office systems for care of chronic pain in community primary care. We will provide evidence-based protocols to standardize care, incorporate behavioral strategies, support patient self-management and non-opioid treatment of pain, use the CSRS and optimize electronic health records.

3. Establish and/or support community initiatives through partnerships, resource sharing, collaboration, coordination, and identification of priorities in each of the NC AHEC regions.

4. Increase access to evidence-based opioid use disorder treatment. We will support spread of SBIRT and MAT to primary care and behavioral health specialists.

5. Focus on better outcomes for babies and families. We will tailor continuing education in evidence-based opioid treatment for obstetricians and other maternity care clinicians, while helping to spread comprehensive perinatal programs and strategies for reducing the effects of neonatal abstinence.

AHEC can implement this plan by expanding existing infrastructure and resources. All AHECs have continuing professional development teams that can be supplemented to provide more opioid educational programs, and AHECs can provide an organizational home for the project managers necessary for community engagement. With additional funding, practice support teams can expand to provide on-site assistance to practices at the front line.

We emphasize the importance of working with our regional and statewide partners while urging both a comprehensive statewide strategy and ongoing innovation. NC AHEC is distinctive nationally for continuing education for inter-professional teams and practice support for community clinicians. We are also committed to rigorous evaluation and regular reporting. We believe that evaluation is necessary for us to learn how to improve our programs.
Appendix I—The North Carolina Area Health Education System (NC AHEC)

NC AHEC has nine regional centers, which cover all 100 counties of the state. These centers serve as a bridge between health centers and their regional communities, providing over 200,000 hours of continuing professional development every year. NC AHEC is also intimately involved with the education of new clinicians, supporting over 30 medical residencies across the state; working with most of the nurse practitioner and physician assistant training programs, both of the dental schools and almost all of the universities and community colleges training nurses and allied health practitioners. Finally, with support from major federal grants, NC AHEC Practice Support has worked with over 1,400 primary care practices to improve health information technology and health care quality. Each regional AHEC is closely linked to a major academic health system. NC AHECs have strong relationships with their local health care partners, including hospitals, community-based providers, health departments, public school systems, universities, community colleges, and a wide variety of community organizations.
Appendix II – Mountain AHEC (MAHEC) Case Study

In 2011, MAHEC key stakeholders came together to address concern around how pain was managed in primary care and an increase in opioid use disorder (OUD). MAHEC submitted and received a grant from CMS for the “Regional Integrated Multidisciplinary Approach to Prevent and Treat Chronic Pain in North Carolina” in 2012. The project aimed to improve patient outcomes and quality of care, increase community involvement, expand evidence-based clinical care training for clinicians, and reduce unintentional drug overdose rates. The intervention created multidisciplinary teams to provide enhanced primary care, using mid-level and behavioral health providers to co-manage care with physicians.

The results were impressive. For 376 patients from 10/2012 to 6/2015, the average daily morphine equivalent dose (MED) decreased significantly, and 25% of participants stopped taking opioids altogether. Patients demonstrated improved functional status and relief from behavioral health issues such as anxiety, and one program site reported fewer emergency department visits (and lower health care costs), as patients visited the pain clinic instead.

MAHEC has continued to develop its pain management services in Family Medicine and OB/GYN residencies and practices. Of an initial cohort of 709 patients with chronic pain, 191 were able to be weaned off opioids completely, and almost 60% of those eligible got naloxone. MAHEC OB/GYN has had a quality improvement project on opioid prescribing over the past two-plus years. These efforts have eliminated opiate prescribing for vaginal deliveries and reduced/standardized opiate prescribing for cesarean sections to 20 pills (seven-day supplies).

Next, MAHEC identified individuals who needed treatment for substance use and OUD at MAHEC and in the region. To meet their needs, MAHEC developed a program of office based opioid treatment (OBOT) for patients with opioid use disorder. OBOT includes prescription for buprenorphine and coordinating outpatient behavioral health services. MAHEC began offering the buprenorphine waiver training to faculty, residents, and outside prescribers in 2015 and, to date, has trained 158 prescribers.

As part of the MAHEC project, Blake Fagan, MD, began engaging community members and healthcare clinicians as Physician Champion to address the opioid epidemic in the MAHEC region. Dr. Fagan has been reaching community members and healthcare clinicians through articles, interviews, educational talks, and peer-to-peer support, such as Project ECHO (described in statewide appendix). Since April 2017, MAHEC has offered 85 presentations to clinical and community groups throughout North Carolina.
Appendix III - A Collaborative Approach to a Community Crisis

In April of 2016, Wilmington was named the number one city in the nation for opioid abuse by the Castlight Health survey. South East Area Health Education Center initiated and led a regional initiative to reduce harm from opioids.

July 2016: Regional needs assessment conducted to identify areas of priority
November 2016: Multidisciplinary symposium addressing areas of priority
March 2017: SEAHEC formed the Community Partners Coalition in order to improve collaboration and coordination between those who provide care to individuals seeking access to mental health and substance use services by aligning efforts in the region. Currently over 80 organizations and agencies from various sectors are working through the coalition to positively impact opioid use in the region. Below are the coalition action teams and current efforts:

<table>
<thead>
<tr>
<th>PRIMARY PREVENTION</th>
<th>TREATMENT &amp; RECOVERY</th>
<th>INFRASTRUCTURE AND SUPPORT</th>
<th>PROFESSIONAL INTERVENTION</th>
<th>DATA ACTION TEAM</th>
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<tr>
<td>Partnered with large regional church to hold awareness &amp; education event with resource fair; over 1,200 in attendance &amp; 30 vendors</td>
<td>Development and implementation of Quick Response Team designed to engage those successfully reversed by naloxone with treatment</td>
<td>Partnering with transportation system to help develop new strategic plan that better aligns with needs of community members</td>
<td>Worked with regional health system to help develop system-wide safe prescribing policies for controlled substances</td>
<td>Developed opiate use analysis report providing data related to prevention, treatment, and recovery efforts as well as opioid overdoses, encounters with the criminal justice system and special populations so to better understand what gaps exist and needed strategy implementation.</td>
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<td>Permanent drop boxes added in community at three NHRMC locations and UNCW</td>
<td>Development and implementation of LEAD program allowing officers to redirect low level offenders engaged in drugs to community based services instead of jail</td>
<td>Working with court systems in providing education on best practice to re-design local drug treatment courts</td>
<td>Over 400 prescribers educated on the CDC safe prescribing guidelines PLUS education provided on pain management</td>
<td>Working with public health departments to design a centralized data storehouse so to create standardized data collection and analysis</td>
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<td>Medication Take-Back Event on 10/28/17; nine sites in four counties collected nearly 2,900 pounds of medications, approximately 25,000 sharps, and was able to donate over $52,000 worth of medications and supplies to Cape Fear Clinic</td>
<td>Development and implementation of Navigation Project aimed to reduce over utilization of emergency departments for mental health and substance use disorder when other levels of more appropriate</td>
<td>Working within multiple health systems in the region to standardize prescribing and best practices for pain management</td>
<td>Partnered with large regional church to host education event for pastors from over 80 churches in region focused on best practices in opioid harm reduction and the church's role in response to the epidemic</td>
<td>Leading effort to secure funding for facility based crisis beds in region</td>
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<td>Medication lock-boxes provided for patients at risk of having medications diverted in New Hanover, Pender, and Duplin Counties</td>
<td></td>
<td>Partnering with regional health system to conduct social determinants assessment to understand other areas of need</td>
<td>Working on electronic community platform for providers and patients to access behavioral health resources and supporting services</td>
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