

The Chronic Pain Initiative and Community Care of North Carolina

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The rate of unintentional deaths from opioid poisoning has reached epidemic proportions. One model of successful intervention is Project Lazarus, an integrated-care pilot program in Wilkes County, North Carolina. Community Care of North Carolina, supported by a grant of \$1.3 million from the Kate B. Reynolds Charitable Trust and matching funds of \$1.3 million from the North Carolina Office of Rural Health and Community Care, is now expanding the Project Lazarus approach statewide.

The number of filled prescriptions for opioid analgesics has increased dramatically in the United States. From 1997 to 2007, for example, per-capita sales of opioids increased 402% [1]. With 10.12 deaths per 100,000 residents in 2010, North Carolina ranked 26th among all the states in the country in terms of deaths by unintentional poisoning (a category that includes but is not limited to deaths due to drug overdose) [2]. The Centers for Disease Control and Prevention (CDC) and the White House's Office of National Drug Control Policy have declared prescription drug overdose deaths to be an "epidemic" [3, 4]. This problem is reflected in North Carolina's emergency departments, which are increasingly seeing patients seeking prescriptions for opioids; in primary care practices, where both the number of prescriptions being written for opioids and the dosages of those prescriptions are increasing; and in communities, where the problems associated with misuse of opioids affect all socioeconomic strata [5, 6].

Emerging evidence suggests that many chronic pain conditions—such as degenerative joint disease, bulging discs, and other chronic lower back or musculoskeletal problems—may often be addressed more effectively and more safely with nonopioid pharmacotherapy. [Editor's note: For more information on nonopioid medications, please see the commentary by Laguerre on pages 209-214.] When indicated, reasonable alternatives or adjuncts to medication include physical therapy, occupational therapy, chiropractic care, acupuncture, weight reduction, meditative practices, cognitive reframing, and cognitive behavioral therapy. In addition, treating underlying mental illness, teaching coping strategies, and encouraging proper nutrition, exercise, and improved sleep hygiene have all been shown to improve chronic pain management.

The Project Lazarus: Chronic Pain Initiative (CPI), led by Community Care of North Carolina (CCNC), is a statewide program that is patterned after a successful pilot project conducted in Wilkes County, which in 2007 had the third-highest per-capita overdose rate in the nation [7]. This single-county pilot initiative was launched in 2008 and involved the combined efforts of Northwest Community Care (the local CCNC network in Wilkes County), the initial Project Lazarus (a community-based overdose prevention program), local hospitals, health care providers, and professionals from the fields of education, law enforcement, and public health. Thanks to the work of this coalition, the number of overdose deaths in Wilkes County (defined as the death of a county resident due to overdose of a opioid obtained from a provider within the county) decreased 69% between 2009 and 2011 [8]. In 2011, there were no such overdose deaths reported for Wilkes County.

Like the Wilkes County model, the statewide CPI has 3 components. The first is community engagement, under the guidance of Project Lazarus. The second component consists of specific clinical elements: those described in the CPI tool kits developed for emergency department personnel and primary care clinicians, which align these providers with the pharmacist community; the physician mentoring and opioid prescription training that is being provided by the Governor's Institute on Substance Abuse; and the care management that the CCNC networks provide for patients. The third component consists of outcome measures determined and measured by the Injury Prevention Research Center at the University of North Carolina at Chapel Hill.

The CPI, which began in early 2012, is unique in that its 3 components address not only complex clinical issues involved in the prescription of opioid medications but also the need for the community to be actively engaged in what is both a clinical problem and a community-based public health problem. The CPI recently received a grant of \$1.3 million from the Kate B. Reynolds Charitable Trust,

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which is being matched by funding from the North Carolina Office of Rural Health and Community Care. This funding will facilitate the expansion of the initiative throughout the state by underwriting training in evidence-based approaches to pain management and the development of clinical and community coalitions.

Community Coalition Building

The Project Lazarus experience in Wilkes County demonstrated the power and impact of local community coalitions, particularly those that are led by a motivated leader or champion [8]. In general, such coalitions are made up of community partners including clinicians, parents, health officials, faith community representatives, school officials, and law enforcement professionals. Local coalitions are involved in developing the specifics of the overdose prevention interventions for their area. Project Lazarus provides support to allow the coalitions to design and implement these interventions; this support may involve strategic planning, securing funding, allocating resources, carrying out community awareness campaigns, and/or choosing a specific set of interventions that are appropriate for the community.

Broad engagement of community stakeholders, which is essential to helping individual communities take responsibility for their own health, sets the Project Lazarus model apart from other such efforts. This comprehensive approach sets the stage for societal and cultural change. Experience has shown that lasting change entails repetitive reinforcement within one generation in order to have a positive effect on subsequent generations [9].

CCNC Infrastructure and CPI Coordinators

CCNC has a statewide infrastructure consisting of 14 networks with more than 600 care managers and more than 5,000 primary care providers. This infrastructure has supported the chronic disease management programs for asthma, diabetes, congestive heart failure, and chronic obstructive pulmonary disease that have been a successful part of CCNC for many years. Over the past 2 years, an integrated care model has been added, which includes full-time behavioral health coordinators and part-time psychiatrists located in each network. Each of the 14 networks has designated a CPI coordinator to serve as the CPI champion, to act as a facilitator, and to train participating sites on ways to increase awareness of the problem, on the status of the CPI, and on the availability of various resources. The actual clinical training is delivered by clinical resource experts from the Governor's Institute on Substance Abuse. Other tasks of the CPI coordinator include working with emergency departments to accomplish policy changes and to encourage the use of the CCNC Provider Portal (to access information about Medicaid-enrolled patients) and the North Carolina Controlled Substances Reporting System; visiting primary care practices to discuss specific chronic

pain cases, using the tool kit for primary care physicians as a starting point; and serving as a community liaison by developing county resource lists for pain management and substance abuse services and, in some instances, by providing care management for patients who are identified through the initiative.

CPI tool kits are available for care managers, emergency department physicians, and primary care physicians (these can be downloaded at <http://www.p4communitycare.org/media/related-downloads/cpi-toolkit-care-manager.pdf>, <http://www.p4communitycare.org/media/related-downloads/cpi-toolkit-eds.pdf>, and <http://www.p4communitycare.org/media/related-downloads/cpi-toolkit-pcps.pdf>, respectively). The tool kits contain the basic training guidelines for all of CCNC's CPI efforts across the state. The CCNC networks have edited and enhanced the tool kits as their local needs and resources have required.

An enhancement has also been made to CCNC's Provider Portal, which now allows pain agreements to be uploaded. A goal of the CPI is to have a signed pain agreement for every Medicaid patient who receives treatment with opioids and who has been clinically evaluated and determined to benefit from such an agreement; once that agreement has been uploaded into the Provider Portal, it will be available to all providers working with the patient, allowing for consistency of treatment and an immediate response to the patient's needs.

Another use of technology is the development of a Chronic Pain Indicator, which is based on an algorithm that uses Medicaid claims data; this indicator can be used to identify patients who are at risk of becoming (or already are) high utilizers of chronic pain management services. This allows for proactive management of the care of these individuals to ensure that they are linked to appropriate assessments (either pain assessments or substance abuse assessments). Referrals for care management can come from other sources as well.

With the introduction of grant funding, CCNC is adding a statewide project coordinator and facilitator to oversee all aspects of the CPI. This individual will be responsible for conducting regular meetings with the leaders of stakeholder organizations, overseeing and supporting the network CPI coordinators, conducting regular reviews of scheduled trainings and coalition meetings, and tracking the progress of the initiative. The project coordinator will be in a position to oversee activities relating to all 3 components of the initiative—community engagement, clinical training, and outcomes assessment—and thus to assure effective coordination across the initiative and across the state.

A CPI Stakeholder Advisory Board, consisting of representatives from clinical and professional associations across the state, was created so that members could coordinate efforts within their respective groups to support the CPI and to advise CCNC regarding specific interventions or directions for the initiative to explore. Meetings of this active

group have been well attended, and subgroups have already formed to address specific tasks (such as evaluating guidelines for pain clinics and developing the best models of pain management for specific types of pain).

The strength of CCNC lies in its statewide infrastructure, which allows programs such as the CPI to be consistently implemented and supported, while preserving the sensitivity to local needs and variations that makes each program successful. While the CPI has certain overarching goals and offers central office support, there is local autonomy in how these goals are achieved. Each CCNC network has developed its own plan for implementing the CPI, based on existing resources and funding. Although most CCNC networks include multiple counties, the CPI is a county-based initiative, because local and community resources—such as health departments, sheriff departments, school systems, and hospitals—are primarily county-based. Given this county-focused implementation, particular attention and support (both financial support and human resources) will need to be devoted to addressing the needs of underserved counties. The Kate B. Reynolds Charitable Trust grant and the matching funds from the North Carolina Office of Rural Health and Community Care will make it possible for support to be available for every county in the state. The workforce available to support this implementation consists of the CCNC central office behavioral health team, CCNC network resources (behavioral health coordinators, CPI coordinators, network psychiatrists, and network pharmacists), and the CCNC care managers who have regular contact with each practice. The ability to take this initiative statewide and to inculcate it as part of CCNC health care practices is a truly unique opportunity facilitated by the CCNC infrastructure.

The Impact of Clinician Training on the Current Model of Care

The Governor's Institute on Substance Abuse is partnering with CCNC to provide local trainings for clinical staff in order to teach strategies for safe and effective management of chronic pain. [Editor's note: For more information on this training, please refer to the sidebar by Finch and McEwen on pages 233-234.] These trainings will include a Continuing Medical Education-accredited launch event that will be widely promoted through professional and community groups and will aim to reach a range of health care providers, including emergency department physicians, primary care physicians, community pharmacists, and dentists. The curriculum will facilitate the acquisition, application, and maintenance of rational, low-risk prescribing practices for the treatment of chronic pain in order to reduce the risks of medication misuse, addiction, diversion, and death. CCNC Behavioral Health Program Director Michael Lancaster is collaborating with Jim Finch (a nationally recognized expert on addiction medicine, physician education, and curriculum development) to develop a training curriculum that will be

presented in conjunction with CPI tool kits to physicians and other health care providers throughout the state. Finch, who is also Director of Physician Education at the Governor's Institute on Substance Abuse, will identify and work with approximately 6-8 physicians who will serve as regional experts, lead the training events, and deliver the follow-up coaching and mentoring.

There is evidence that positive changes in physician behavior can be achieved by providing coaching and mentoring within a "systems approach," central elements of which are teaching, follow up, and ongoing support; there is also evidence that an academic detailing approach (which involves face-to-face noncommercial education by trained health care professionals) works well in the practice setting [9, 10]. Recent studies have looked at the core competencies that primary care physicians need in order to effectively screen patients for needed interventions (or appropriate referrals) for mental health support, substance abuse treatment, or pain specialist support, and data regarding these core competencies will be used in the development of the training curriculum [11]. A recent study specifically looking at opioid prescribing [12] showed better outcomes for approaches that pair didactic methods of knowledge acquisition with access to pain management and behavioral health consultation.

Practitioners will be provided with ongoing physician-to-physician support from regional experts who will assist with skills acquisition and will provide mentoring and support during clinical implementation. This mentoring may include case conferencing, assistance in using the suggested tools (such as the CPI tool kits, the Opioid Risk Tool, and the North Carolina Controlled Substances Reporting System), or help in locating a physician who can prescribe buprenorphine. Clinical concerns will be addressed as they arise. Chronic pain management, opioid prescribing, and opioid safety are currently issues of state and national significance, and numerous clinicians, pharmacists, and health department officials are actively seeking help with these issues. The demand for such assistance grows daily.

This comprehensive approach will reduce confusion and increase synergy. Presently, physicians are understandably confused as a result of the multitude of competing initiatives, coalitions, and freestanding training programs that aim to address safer opioid prescribing and chronic pain management. The CPI will seek to solve this problem by developing a highly visible, comprehensive, statewide infrastructure and by adopting an inclusive approach so that individual groups and communities can benefit from the experience of existing programs and available resources. As the project rolls out across the state, previously unmotivated communities are expected to welcome assistance, either because they see how outcomes have improved in counties where the CPI has already been implemented, or because their community's opioid problems are exacerbated when neighboring counties begin to get on board with the CPI.

TABLE 1.
Outcome Measures That Will Be Used to Assess the Effectiveness of the Chronic Pain Initiative

Outcome measure	Source of data
Implementation of intervention components and strategies by participating community-based drug prevention coalitions	Logs submitted by leaders of community coalitions and CPI regional leaders; annual survey of health directors
Prescriber registration with and utilization of the NCCSRS ^a	NCCSRS
Access to substance abuse treatment	NCCSRS
Prescriptions of high-level opioids ^b	NCCSRS and CCNC patient records
Prescriptions of low-level or medium-level opioids to Medicaid patients diagnosed with chronic pain ^b	CCNC patient records
Emergency department visits attributable to opioid overdoses	NC DETECT ^c
Opioid-related unintentional poisoning mortality rates	OCME, NCSCHS ^d
Patient satisfaction with care for chronic noncancer pain	Longitudinal sample of CCNC patients with chronic noncancer pain

Note. CCNC, Community Care of North Carolina; CPI, Chronic Pain Initiative; NC DETECT, North Carolina Disease Event Tracking and Epidemiologic Collection Tool; NCCSRS, North Carolina Controlled Substances Reporting System; NCSCHS, North Carolina State Center for Health Statistics; OCME, Office of the Chief Medical Examiner.

^aThe NCCSRS is a statewide electronic program that monitors all controlled substance prescriptions dispensed across the state, irrespective of payment source or provider.

^bThe categorization of opioids as low-level, medium-level, or high-level is based on the particular medication or prescription, the dosage (measured in morphine equivalents per day), and the level of abuse risk.

^cNC DETECT was created by the North Carolina Division of Public Health to address the need for early event detection and surveillance using timely electronic data from a variety of sources. It includes electronic data from the state's 114 hospital-affiliated acute care emergency departments. De-identified data become available for research 3 months after the close of the month. Data elements used will include date and time of visit and patient's county of residence, age, sex, final diagnosis codes, and discharge disposition. Drug-related ED visits are defined using ICD-9-CM final diagnosis codes.

^dEach poisoning death in North Carolina triggers a medical examiner death certificate, which lists the cause(s) of death and is submitted by the OCME to the NCSCHS. Annual data from the NCSCHS are typically unavailable for research and monitoring purposes for at least 9 months following their submission. However, CCNC is in the process of training medical examiners to notify the health department's statistician immediately upon the occurrence of an overdose event. These events will then be provided directly to CCNC, which will in turn provide them to the Chronic Pain Initiative.

Evaluation and Outcomes

Ongoing assessment and evaluation of the CPI process, assimilation of feedback, and dissemination of outcomes to stakeholders are critical to the success of the initiative. Each participating community-based coalition will receive periodic data for the county or counties in its catchment area relating to the particular objectives on which the coalition is focused, as well as benchmark data that can be used to measure progress. A brief explanation of the sources of these data can be found in the footnotes for Table 1.

Conclusion

CCNC believes that making enduring changes in clinical practice is challenging but possible. Physicians' opioid-prescribing practices and patients' expectations regarding what constitutes appropriate management of chronic pain can be successfully modified. To be successful, the initiative will need to make necessary adaptations in practice settings and health care systems, to gather and follow process and outcomes measures, and to provide ongoing support so that new behaviors can be sustained. CCNC and its CPI partners believe that this challenge must be met for the sake of the health of North Carolina's citizens. **NCMJ**

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