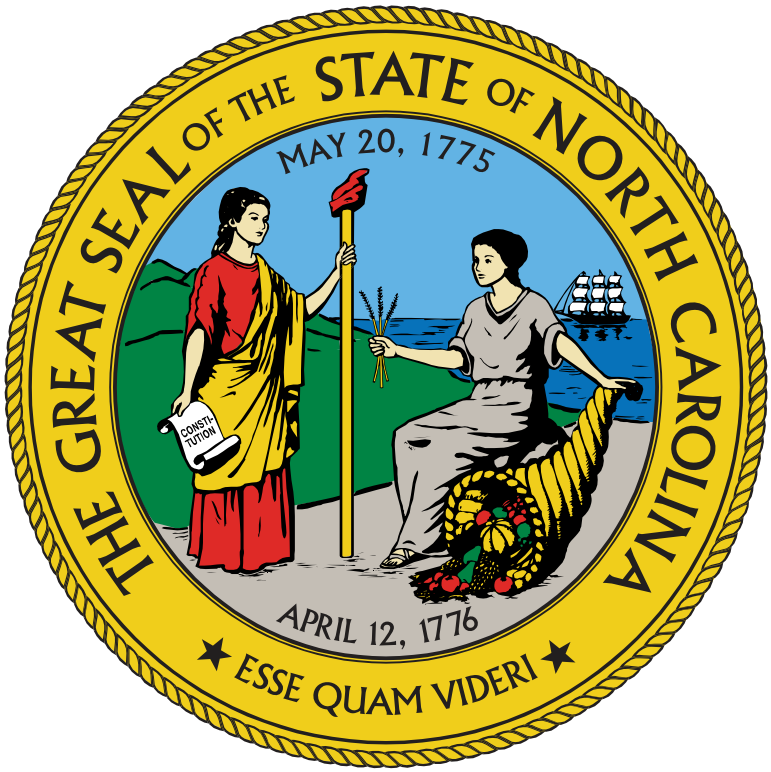
NC PAYERS COUNCIL

Bringing together public and private payers to identify, align and implement policies to respond to the NC opioid epidemic

SEPTEMBER 2018 REPORT



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Opioid Epidemic in North Carolina

The opioid epidemic continues to be a public health crisis in North Carolina with increasing rates of opioid misuse, overdose, and death.

- Four NC residents died every day due to an opioid overdose in 2016
- In 2016, for every one opioid overdose death, there were just under two hospitalizations and nearly three emergency department visits due to opioid overdose
- Opioid-related overdose deaths in NC have increased by more than 900% since 1999, resulting in over 12,000 potentially preventable deaths

NC Payers Council

In 2017, North Carolina launched a comprehensive Opioid Action Plan aimed at reducing opioid misuse, overdose, and death. As part of the plan, the NC Department of Health and Human Services convened a Payers Council including public and private payers throughout the state to share best practices, align policies, and issue consensus recommendations. The Council included representatives from Medicare, Medicaid, Military and Veterans Administration, private insurers, pharmacy benefit managers, and workers' compensation organizations.

Role of Payers in Combating the Crisis

Payers and health plans can play a critical role in mitigating the consequences of the opioid epidemic through prevention and treatment. Payers have the ability to promote safer prescribing patterns through formulary structures and provider education, facilitate non-opioid approaches to pain management through benefit design, address substance use disorder treatment through coverage policies, educate beneficiaries on opioid risks through member services, and use data to develop and track programmatic and policy changes.

Recommendations and Next Steps

The NC Payers Council developed consensus recommendations selected for their potential to positively impact the epidemic. A summary of the strategies is below; detailed recommendations can be found in the full report.

Summary of Payers Council Recommendations to Respond to the Opioid Epidemic

1. Pain Treatment

- Align pharmacy benefits with CDC safe prescribing guidelines and utilize formulary structure to implement dose limits, limit the use of long-acting or extended release opioids, limit methadone use for acute pain, limit concurrent use of opioids and benzodiazepines
- Provide coverage for a range of evidence-supported non-narcotic pharmacologic and non-pharmacologic pain treatment options

2. Naloxone Access

- Promote access to naloxone through formulary structures

3. Substance Use Disorder Treatment

- Inclusion of SBIRT in select healthcare settings where proven effective
- Provide access to medication-assisted treatment by eliminating or streamlining prior authorization
- Provide access to medication-assisted treatment through quality, evidence-based formulary design
- Encourage behavioral health treatment through telehealth

4. Data Analytics

- Track and monitor selected outcome measures
- Use analytics to identify outlier prescribers and flag for education, coaching and/or fraud investigation
- Use analytics to identify members at risk of overuse or misuse and offer case management for those members
- Use provider and/or pharmacy lock-in programs with evaluation of impact on patient safety and outcomes

5. Patient and Provider Education

- Offer or support selected provider, pharmacist, and patient education resources

I. INTRODUCTION AND BACKGROUND

A. Opioid Epidemic in NC

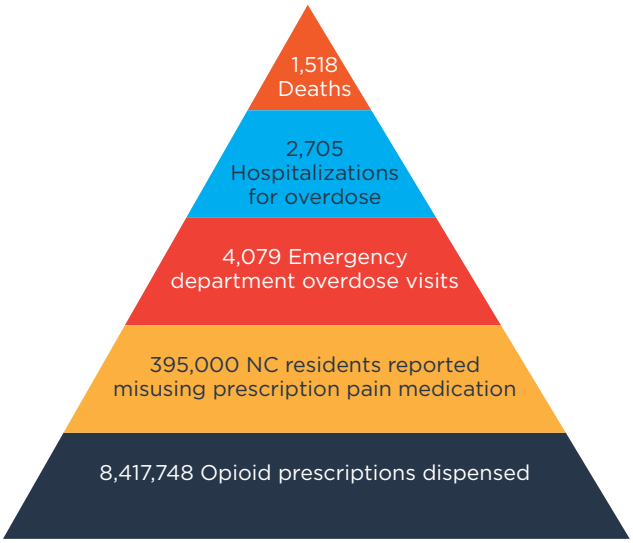
In North Carolina (NC), as in the United States as a whole, the opioid epidemic continues to be a public health crisis with increasing rates of opioid misuse, overdose, and death. Opioid-related overdose deaths in NC increased by more than 900% from 1999 to 2016 resulting in over 12,000 potentially preventable deaths.[1] In 2016, four NC residents died daily due to an opioid overdose – the majority of these deaths were unintentional.[2] Prescription opioids (medications like hydrocodone, oxycodone, morphine) have contributed to the majority of overdose deaths throughout this epidemic. Previous analyses in NC have shown that opioid overdose deaths are more common in counties where more prescription opioids are dispensed. [3] The statewide outpatient opioid dispensing rate in 2016 was 66.5 pills per resident. [4]

More recently however, illicit narcotics (e.g., heroin, fentanyl, and fentanyl analogues) have resulted in increasing numbers of opioid deaths in NC. In 2016, all medication and drug poisoning led to 1,965 deaths, 552 of which involved heroin.[5] Heroin or other synthetic narcotics were involved in over 60% of unintentional opioid deaths related to opioids in 2016.[5]

Overdose deaths are just the tip of the iceberg. Every day, even more people visit emergency departments or are hospitalized due to overdose and opioid-related complications. In 2016, there were more than 13,000 naloxone administrations for suspected opioid overdoses by our emergency medical services and first responders.[6] Further, as we see more pregnant women fighting opioid addiction, NC has seen a 922% increase in hospitalizations associated with drug withdrawal in newborns (2004-2016).[7]

While much work has been done to address the opioid crisis – including launching NC's Opioid Action Plan, adopting a statewide standing order for naloxone dispensing through pharmacies, passing the STOP Act, expanding lock-in abilities to commercial plans, and making changes to NC's Medicaid program – there is much more work to be done since we still see increased numbers of people dying from opioid overdoses each month.[8]

Four North Carolinians died each day from an opioid overdose in 2016[2]



OVERDOSE PYRAMID, NC Residents (2016)

Opioid deaths, hospitalizations, ED visits,
misuse and dispensing of opioid prescriptions

B. NC Opioid Action Plan

In June of 2017, NC launched the state's Opioid Action Plan (2017-2021). The intent of the NC Opioid Action Plan is to identify specific and achievable steps that will have the greatest impact on reducing the burden of death from the opioid epidemic. The Action Plan is a concise, living document that will be updated as NC makes progress on the epidemic, addresses new issues, and introduces new solutions in a fast-changing environment.

The Opioid Action Plan focus areas include:

1. Creating a coordinated infrastructure
2. Reducing the oversupply of prescription drugs
3. Reducing diversion and flow of illicit drugs
4. Increasing community awareness and prevention
5. Increasing naloxone availability and linkages to care
6. Expanding access to treatment and recovery
7. Measuring impact

C. Role of Payers in NC's Coordinated Response

Payers and health plans can play an important role in addressing the opioid epidemic through prevention (lowering rates of substance use disorders and complications associated with opioid use) and treatment (ensuring patients get needed pain management, medication assisted treatment [MAT], and substance use disorder [SUD] services).[9] As payers for prescription medications and clinical services, health plans are able to influence both provider and patient behavior and are in a unique position to track and respond to the effects of the epidemic on their members. Health plans can engage in multiple strategies to make sustainable changes in prescribing culture, drive decisions based on data, offer evidence-based practice incentives, offer non-opioid treatments for pain, and ensure availability of evidence-based treatment for SUD, including MAT.

The full NC Opioid Action Plan can be found at **ncdhhs.gov/opioids**.

II. NC PAYERS COUNCIL

One of the strategies listed in the NC Opioid Action Plan is the creation of a Payers Council to identify and implement policies that reduce the oversupply of prescription opioids and improve access to substance use disorder treatment. In December 2017, the NC Department of Health and Human Services (DHHS) established the NC Payers Council to bring together healthcare payers across the state to partner on benefit design, member services, provider outreach & education, and pharmacy policies to reduce opioid use disorders, overuse, and overdose.

A. Goals and Objectives

The NC Payers Council seeks to bring together public and private payers to identify, align, and implement policies that:

- Support providers in judicious prescribing of opioids and improve access to naloxone
- Promote safer, more comprehensive, and evidence-informed pain management
- Increase access to a continuum of care for substance use disorder treatment and recovery supports
- Engage and empower patients in the overall management of their health

To accomplish these goals, the NC Payers Council agreed to:

- Review and share best practices and work that has already been done by payers
- Identify, align, and implement policies where possible
- Develop consensus recommendations and guidance when possible

B. List of Participating Health Plans and Payers Council Members

The Council is chaired by the NC State Health Director/Chief Medical Officer of DHHS, Dr. Elizabeth Cuervo Tilson, is staffed by individuals from the Office of the Secretary and the Division of Public Health, and includes representatives from the following health plans:

- Aetna
- America's Health Insurance Plans
- Blue Cross and Blue Shield of North Carolina
- Cherokee Indian Hospital
- Cigna
- Defense and Veteran's Center for Integrative Pain Management
- DHHS - Division of Health Benefits (NC Medicaid)
- DHHS - Division of Mental Health, Developmental Disabilities, and Substance Abuse Services
- DHHS - Division of Public Health
- DHHS - Office of the Secretary
- Express Scripts
- FirstCarolinaCare
- Humana
- Medicare
- Prime Therapeutics
- TriCare
- United Healthcare
- Veteran's Affairs
- Office of State Human Resources' self-insured workers' compensation program for State employees

C. Methodology

Between December 2017 and June 2018, members of the NC Payers Council and occasional guest experts attended monthly meetings in Raleigh, NC. During the first "forming and norming" meeting, the Council reviewed the NC Opioid Action Plan, set goals and objectives for these meetings, and established group expectations about what would be accomplished over the following seven months.

The second meeting was devoted to reviewing the California Healthcare Foundation's **"Curbing the Opioid Epidemic: Checklist for Health Plans and Purchasers"** which served as a model and foundational reference document for NC's consensus process. Members of the Payers Council reviewed this list and discussed whether each strategy was a high or low priority for NC health plans and if there was an opportunity for consensus or change in each topic area.

Subsequent meetings were devoted to exploring these prioritized topics, establishing a shared understanding of best practices, learning about what NC health plans were already successfully doing in each area, and suggesting potential strategies to fill identified coverage gaps and mitigate anticipated challenges. At the final meeting, the Payers Council reviewed the list of suggestions from past meetings and selected specific recommendations that most members felt would have a significant positive impact on the opioid epidemic in NC and that they would be willing to take into consideration for their own health plans. This final summary document was completed in September 2018 and was approved by Council members for public distribution.

III. EVIDENCE-BASE AND MEETING DISCUSSION

Section III details the evidence base and discussions that guided the Payers Council recommendations listed in Section IV. They are divided into five categories: (1) Pain Treatment, (2) Naloxone Access, (3) Substance Use Disorder Treatment, (4) Data Analytics, and (5) Provider and Patient Education. It also includes Payer Highlights that illustrate some of the innovative policies of Council members.

1. Pain Treatment

Formulary Strategies for Opioid Prescriptions

Risk of overdose increases when opioid prescriptions have long duration (e.g., multi-week supply), higher doses (≥50 morphine milligram equivalents [MMEs] per day), or are in the extended-release form.[10] The CDC Guideline for Prescribing Opioids for Chronic Pain recommends leveraging formulary policies as a utilization management strategy to mitigate the risk of opioid use.[11] Through formulary restrictions, pharmacy edits, and quantity limits, both public and private payers have succeeded in reducing inappropriate opioid prescriptions.[12,13] North Carolina's Strengthen Opioid Misuse Prevention Act (NC STOP Act, S.L. 2017-74) enacted quantity limits for initial opioid prescriptions for acute pain, effective January 2018. Formulary guidelines aligned with CDC recommendations and the NC STOP Act have the potential to curb unsafe opioid prescribing practices.

Payer Highlight: Blue Cross NC

Effective April 1, 2018, Blue Cross NC began limiting first-time prescriptions of short-acting opioids to a seven-day maximum supply. After that first prescription, Blue Cross NC members can fill future prescriptions for a larger supply if it is appropriate. This policy was meant to lower the risk of chronic opioid use and limit the number of unused opioids that can wind up being misused, whether intentionally or not.

Key Features of the CDC's Guideline for Prescribing Opioids for Chronic Pain

- Use non-pharmacologic interventions or non-opioid medications first
- Before initiating opioids, establish treatment goals with patient
- Prescribe immediate release instead of long-acting opioids
- Prescribe the lowest effective dosage
- Prescribe no more than the quantity needed, typically for less than 3-7 days
- Avoid concurrent opioid and benzodiazepine use
- Reevaluate risk vs. benefits often, taper or discontinue opioids when necessary

Discussion

The Payers Council discussed additional formulary strategies that align with the CDC guideline, including formulary dose limits (total MMEs) with prompt authorization review to manage exceptions, authorization requirements for ongoing treatment after first fill to limit progression to chronic use, limiting the use of methadone as a treatment for acute pain, and point-of-care and point-of-sale prescribing alerts.

Payer Highlight: NC Workers Compensation Rules

NC workers' compensation payers follow the NC Industrial Commission Rules for the Utilization of Opioids (effective May 1, 2018). The goal of these Rules is to deter the use of opioids and to prevent the progression of workers from acute to chronic treatment of pain with opioids. The Rules require providers to document that non-pharmacological and non-opioid therapies are insufficient to treat pain before prescribing opioids and set a dosage limit of 50 MME/day for acute pain and 90 MME/day for chronic pain, among other requirements.

Non-Opioid Pharmacologic and Non-Pharmacologic Treatment

According to the CDC guideline, treatment for chronic pain should be multi-faceted and tailored to the needs of the individual patient.[11] Numerous studies have concluded that a multi-modal, interdisciplinary approach may provide better pain relief than any one single intervention.[14,15,16,17] Optimal strategies may use multi-modal non-opioid therapies earlier in the pain treatment plan before the pain condition progresses from acute to chronic. Non-pharmacologic, evidence-based approaches like physical therapy and chiropractic interventions may be effective in treating chronic pain.[11,18,19] Lack of adequate benefits and coverage can result in high out-of-pocket costs for patients for these non-opioid treatments for pain.

In June 2018, the Agency for Healthcare Research and Quality (AHRQ) released a comparative effectiveness review on non-invasive, non-pharmacologic treatments for common chronic pain conditions.[19] The findings of the report describe interventions that improved function and/or pain for at least 1 month after treatment (see list below). The authors did note, however, that most effects were small, that long-term evidence was sparse, and that additional comparative research on sustainability of effects is needed. There was no evidence suggesting serious harms from any of the interventions studied, however, the authors also noted that data on harms were limited. The authors discussed developing payment and reimbursement policies that expand access to non-pharmacologic treatment modalities. The report states that "given heterogeneity in chronic pain, variability in patient preferences for treatments, and differential responses to specific therapies in patients with a given chronic pain condition, policies that broaden access to a broader array of effective nonpharmacological treatments may have

greater impact than those that focus on one or a few therapies." The American College of Physicians has also created an evidence-based clinical practice guideline for the treatment of acute, subacute, and chronic back pain. This guideline focus on non-invasive therapies and non-opioid pharmacologic treatment.[20]

AHRQ Summary of Evidence on Non-invasive, Non-pharmacologic Chronic Pain Treatments

- **Exercise:** Effective for chronic low back pain, chronic neck pain, knee osteoarthritis, hip osteoarthritis, fibromyalgia
- **Psychological therapies, including cognitive behavioral therapy:** Effective for chronic low back pain, fibromyalgia
- **Spinal Manipulation (Chiropractic):** Effective for chronic low back pain, chronic tension headache
- **Low-level laser therapy:** Effective for chronic low back pain, chronic neck pain
- **Massage:** Effective for chronic low back pain, fibromyalgia
- **Acupuncture:** Effective for chronic neck pain, chronic low back pain, fibromyalgia
- **Multi-disciplinary rehab:** Fibromyalgia, chronic low back

To promote access to comprehensive biopsychosocial pain treatment, the American Academy of Pain Medicine (AAPM) created a position statement on Minimum Insurance Benefits for Patients with Chronic Pain. To reduce use of opioids and unnecessary procedures, the AAPM advocates for the following coverage framework for all patients: medical management, evidence-based interventional treatment, ongoing psychologic therapies, interdisciplinary care, and complementary and integrative medicine.[21] Review for evidence-based practice and clinical efficacy is critical.

Payer Highlight: Aetna*

Sample Coverage Policies

Medical Massage - Cover as adjunct therapy to other therapy for:

- Acute pain, acute exacerbation of chronic muscular pain, and some chronic low back pain
- No indications for long-term massage therapy.

Chiropractic Care - Cover four visits in first two weeks and re-evaluate before additional visits for chronic back or neck pain.

Acupuncture - Initially up to six visits or up to four weeks with documentation of improvement to justify continued care for:

- Chronic neck or low back pain (12 weeks duration)
- Chronic headache (12 weeks)
- Adjunctive therapy for osteoarthritis of knee or hip
- Post-operative dental pain or TMJ disorders.

** Varies by line of business and state*

Discussion

The Payers Council discussed evidence-based non-opioid pharmacologic therapies, including non-steroidal anti-inflammatory drugs, acetaminophen, muscle relaxants, anti-seizure medications, antidepressants, corticosteroids, and various topical treatments.[11,14-18] The Council discussed stepped care models as an effective method of quality pain management—providing the right treatment at the right level for the complexity of the pain. Individualized care pathways can be created for patients with a bundled set of services available to patients according to their perceived pain levels and clinical criteria.

Pain Management Specialists

Also discussed by the Payers Council was the possibility of identifying pain management specialists in a way that would allow payers to stratify policies or coverage for this group of providers. However, Council members concluded that it would be challenging and impractical to create such an identification system given the wide variety of practitioners who engage in pain management. The concept of a "gold card" status may be more feasible; this could be given to providers with a track record of prescribing that was consistent with clinical guidelines and used by payers for referrals and preferential treatment regarding reimbursement or prior authorization policy.

Urine Drug Screening

Payers reviewed evidence on urine drug screening (UDS), which is used to monitor a patient's compliance with opioid therapy, identify misuse or concurrent use of risky drugs, and aid prescribers in decision-making regarding the treatment plan. UDS has been found to be underutilized by some physicians (only 8% of opioid prescribers in one study) who could be using UDS as a risk mitigation tool that can provide early detection of drug misuse.[22] Appropriate use of UDS can build trust among the patient and provider and promote safe use of opioids. In other settings, there may be overutilization of UDS which can result in large out of pocket costs to patients ($211–$363).[23] In addition, UDS is costly to payers, with one Kaiser Health and Mayo Clinic analysis revealing that Medicare and private insurers spent an estimated $8.5 billion a year on UDS between 2011 and 2014.[24] The Council had an in-depth discussion on the potential benefit of aligning coverage policies and limits of UDS with the clinical risk of the patient. However, it was concluded that—presently—this type of utilization management would be difficult to operationalize in a standard manner across all payers.

Payer Highlight: Military Health System

The Defense & Veterans Center for Integrative Pain Management is a robust multi-modal pain management program and provides a variety of publicly available tools and resources.

The Defense Health Agency's stepped-care model consists of:

1. **Primary Level** – Patient-centered medical home. Primary care providers with suitable education, and tools for evidence-based and patient-centered pain management.
2. **Secondary Level** – Medical Neighborhood. More resources with which the primary care provider can integrate and connect, e.g., behavioral health specialist, pharmacist, physical and occupational therapy, care coordination, ECHO.
3. **Tertiary Level** – Inter-disciplinary pain management clinic. Case manager, pharmacist, health psychologist, addiction specialist, physical therapist, acupuncturist, and complementary and integrative therapies.

There can be criteria to determine which patients move to higher levels [e.g., pain severity, mood disorders, opioid dosage or length of prescription (>90 MME or >90 days) concurrent medications, treatment refractory (> 6 months of pain), decreased functionality, sleep quality, emergency department visits].

2. Naloxone Access

Increased community availability and targeted distribution of the opioid reversal drug naloxone has been shown to decrease overdose deaths.[25] The CDC recommends co-prescribing naloxone to patients when factors that increase risk for overdose are present. Risk factors include a history of SUD or overdose, opioid dosages > 50 MME/day, or concurrent opioid and benzodiazepine use.[23]

The 2016 Coffin study demonstrated that naloxone co-prescribing for patients receiving long-term opioids for chronic pain decreased emergency department visits and health care costs.[26] However, one study found that primary care providers cited lack of education and payer logistics as barriers to naloxone prescribing.[27] Decreasing coverage barriers such as cost-sharing requirements and increasing provider education on co-prescribing of naloxone, along with the **NC State Health Director's Standing Order** for Naloxone could increase availability of the life-saving medication. Payers have also placed naloxone on their preferred drug or preventive medicine plan.

Discussion

The Payers Council also discussed:

- Provider and pharmacist education on the State Health Director's standing order for dispensing naloxone
- Patient education to take away the stigma of receiving naloxone. People who are at risk of overdose due to high opioid doses, dangerous drug combinations, or underlying medical conditions may not recognize their vulnerability and may believe that naloxone is intended only for illicit drug users or those misusing prescription drugs.
- System design that includes pharmacy or provider alerts that advise a naloxone prescription when a patient meets certain high-risk criteria. This could be facilitated through prescription monitoring programs like the North Carolina Controlled Substance Reporting System, claims data, and electronic medical records.

Payer Highlight: Aetna

Effective January 1, 2018, Aetna was the first national payer to waive the co-pay for naloxone for fully insured commercial members once their deductible has been met.

3. Substance Use Disorder Treatment

Medication-Assisted Treatment

Medication-assisted treatment (MAT) combines medication, such as methadone, buprenorphine, or naltrexone, with behavioral therapy and is one of the most effective treatments for opioid use disorder (OUD).[28] MAT can decrease withdrawal symptoms, lessen cravings, improve treatment retention, and increase survival.[29] In addition, MAT reduces illicit use of opioids and risky behaviors associated with HIV and Hepatitis C transmission.[29] A recent study has demonstrated that treatment for OUD with buprenorphine or methadone can decrease OUD-related mortality, as well as all-cause mortality.[30] MAT has been shown to decrease cost for Medicaid beneficiaries by reducing health care utilization, prolonging periods of abstinence, and decreasing overdoses.[31] Despite the evidence in support of MAT, there is evidence to suggest under-utilization among patients who may benefit from MAT. National data from 2014 reported that less than 40% of adults with OUD receive MAT.[28] A lack of insurance may have been a contributed to this finding, as it pre-dated the Affordable Care Act. However, the recent study on OUD-mortality included only insured patients in Massachusetts and reported only 30% of patients received any MAT after a non-fatal overdose.[30] Stigma, inadequate funding, coverage barriers, and insufficient numbers of MAT-trained providers may all contribute to national underutilization.[28] In order to prescribe buprenorphine to treat OUD in an office-based setting, providers must receive specialized training and obtain a waiver from the federal government under the Drug Addiction Treatment Act (DATA) of 2000.

Discussion

The group discussed strategies to increase access to MAT including:

- Eliminating prior authorization for MAT. Most NC payers have done so and others are streamlining prior- authorization processes
- Minimizing or waiving co-pays (e.g., by placing MAT formulations on the preventive medicine plan or the preferred drug list)
- Providing incentives to encourage providers to receive the DATA 2000 waiver to increase the number of providers eligible to prescribe MAT
- Developing coverage opportunities for treatment provided by federally certified Opioid Treatment Programs.

Payer Highlight: NC Medicaid

In November 2017, NC Medicaid removed the prior authorization requirement for Suboxone film.

Emergency Department to Treatment Linkages and Peer Support

Peer support specialists (PSS) are individuals in recovery who use their lived experience with SUD and/or behavioral health concerns to support those with OUD and engage them in treatment. Peer support specialists have been successful in reducing emergency department visits and hospitalizations, reducing relapse rates, decreasing criminal justice involvement, and improving housing stability among those with substance use disorders.[32] Development of the PSS workforce and payment systems that incorporate peer support are a promising practice of linking individuals to addiction treatment, especially after a near-fatal opioid overdose event. After an emergency department admission, many overdose survivors are put on long waiting lists for treatment programs and fall through the cracks after discharge. An emergency department is often an individual's only interaction with the health system, so timely referral and initiation of treatment could be an effective strategy to help individuals engage in recovery.[33] Integration of peer support into emergency department could increase engagement in substance use treatment. The Council discussed PSS as part of hospital or bundled payments but emphasized the need for a service definition to cover this role and relevant activities.

North Carolina Highlight: Pilot Program for Peer Support in Emergency Departments

In May 2018, the NCDHHS and the North Carolina Healthcare Association launched $1.37 million in grants to six hospitals to support the integration of PSSs into their emergency departments. The state recognizes that high rates of non-fatal overdoses make NC emergency departments the first point of contact for many with OUD and an opportune place for PSSs to link individuals with immediate treatment, harm reduction, and recovery services.

Screening, Brief Intervention, and Referral to Treatment (SBIRT)

Screening, Brief Intervention, and Referral to Treatment (SBIRT) is an approach to early identification and intervention for people who are using or are at risk for misusing substances. After screening, a 15-20 minute counseling session is undertaken to inform the patient of his or her risks and, if indicated, explore the readiness of the patient to seek treatment.[34] SBIRT can be provided by a variety of different health professionals in any medical or community setting. Training and reimbursement are both likely important for the adoption of SBIRT by providers. The American Medical Association (AMA) has identified and approved several billing codes that would allow for SBIRT reimbursement.[35]

American Medical Association - Screening, Brief Intervention, and Referral to Treatment (SBIRT) [38]

Medicaid and Commercial Insurance: CPT Code 99408 (SBIRT 15-30 mins, $33.41) and 99409 (SBIRT > 30 mins, $65.51)

Medicare: Code G0396 (SBIRT 15-30mins, $29.42) and G0397 (SBIRT > 30 mins, $57.69)

Other Codes

Medicare: G0442 (Screening for alcohol misuse in adults, one time per year, prevention) and G0443 (Up to four, 15 minute behavioral counseling interventions per year for those who screen positive for alcohol misuse)

Medicaid: H0049 (Alcohol and/or drug screening) and H0050 (Alcohol or drug brief intervention).

Alternative Payment Models for Substance Use Treatment

Payment system reform in substance use treatment has the potential to increase access to quality services, contain costs, and ensure adequate financial support for providers. Alternative payment models (APMs) like bundled payments can allow for team-based care and decrease barriers by having a single co-pay for bundled treatment services. Several states have introduced innovative treatment models and alternative payment methodologies, including Vermont Medicaid's Hub and Spoke Model, Massachusetts's Nurse Managed Care Model, the Co-OP Model in Baltimore, and Maryland Medicaid's rebundling initiative for Opioid Treatment Programs. A 2017 evaluation of the Hub and Spoke system showed an increase in DATA waivered physicians, a 73% treatment penetration, and dramatic decreases in opioid use (including among intravenous drug users), emergency department visits, and overdoses.[36]

In April 2018, the American Society of Addiction Medicine and the American Medical Association introduced a new alternative payment model, the Patient-Centered Opioid Addiction Treatment model, or "P-COAT" (see box). Examples of many alternative payment models in behavioral health can be found in this **overview** by the Scattergood Foundation.

Payer Highlight: Tricare Bundled Payment for Treatment at Opioid Treatment Programs (OTPs)

Methadone OTPs are reimbursed with a weekly, bundled payment that covers the cost of the drug and any medical or psychosocial support services that are provided. The rate is $126 (based on estimated $3/day for the medication and $15/day for the support services) and the cost-sharing for a Prime Retiree beneficiary is $12/week.

Alternative Payment Model at a Glance: P-COAT for Medication-Assisted Treatment

The Patient-Centered Opioid Addiction Treatment model is endorsed by the American Medical Association and the American Society of Addiction Medicine.

Payment is separated into two treatment phases: a one-time bundled payment for Initiation of MAT (IMAT) and a monthly bundled payment to support Maintenance of MAT (MMAT). **IMAT payment** is higher than MMAT to support the evaluation, diagnosis, and treatment initiation in the first month. **MMAT payment** is a monthly payment to cover medication, counseling, and case management. The payment varies within the three options for care delivery: (1) a DATA-waivered physician with a consulting addiction specialist, (2) an addiction specialist who treats the patient in conjunction with a coordinated, multidisciplinary team, or (3) a single organization that acts as the treatment team. Enhanced payments are allowed for more complex patients or providers that utilize telehealth technology.

Discussion

The Payers Council also discussed value-based payment and the need to develop robust risk-based strategies encompassing behavioral health diagnoses and treatment and incorporating social factors. Insufficient risk-adjustment could worsen health disparities, disenfranchise vulnerable patients, and decrease resources to providers caring for high-risk populations. There is also a need to further develop and refine meaningful metrics to drive high-quality care and recognize and reward high-quality care providers, especially those who care for those most in need. In June 2018, North Carolina state law was changed to permit commercial insurers to explore value-based payment options for the first time.

Payer Highlight: Cigna

Cigna uses outcome and cost-efficiency measures to identify substance use disorder treatment providers as "designated" providers, thereby educating its members and helping them consider quality and cost-efficiency when choosing a facility.

Telemedicine

Telehealth services are an effective technology for treating alcoholism, depression and PTSD. Although there is insufficient evidence on the telemedical treatment of OUD, telehealth services have decreased hospitalizations, reduced negative symptoms, increased satisfaction with treatment, and improved treatment adherence in other behavioral health conditions.[37] Telemedicine is emerging as a promising method of expanding MAT to rural or hard-to-reach populations.

As noted above, to prescribe buprenorphine for MAT in an office-based setting, providers must obtain a DATA waiver. However, 90% of DATA-authorized physicians practice in urban areas, leaving 30 million Americans in rural counties where there is no MAT prescriber.[38] Telemedicine has the potential to increase access to life-saving substance use treatment in rural areas. Barriers to widespread adoption of telemedicine include, restrictions on provider types and qualifying originating sites, credentialing requirements, and lack of comprehensive broadband access. Payers can increase access to substance abuse treatment by designing comprehensive coverage for delivery of telehealth treatment of substance use disorders.

Even after DATA waiver completion, many providers believe they need more education and practice mentoring when caring for MAT patients. Telemedical programs like the **ECHO project** can connect providers, especially those practicing in rural areas, with addiction specialists. Payers can fund or incentivize providers to obtain DATA waivers and participate in programs like ECHO (see provider education section).

4. Data Analytics

Payers discussed the importance of leveraging data to inform best practices. Data analysis and surveillance can be used to support a range of important activities, including:

- **Identifying outlier patients:** May identify patients at risk of overuse or misuse and provide case management for those members. Use of provider and pharmacy lock-ins with evaluation of impact on patient safety and outcomes may be effective tools as well.
- **Identifying outlier prescribers:** May identify need for education, coaching and/or fraud investigation. Currently NCDHHS reports high prescribers to the NC Medical Board and NC Board of Nursing to investigate. Payer intervention can supplement regulatory board efforts to identify outlier prescribers.
- **Developing the evidence base:** Health systems are beginning to analyze the amount of opioid medication needed for various types of surgeries and issuing recommendations based on this data.[39-40]
- **Detecting emerging risk factors:** The opioid epidemic is multifaceted and quickly changing. Numerous datasets, including state surveillance data and claims data, can be used to identify emerging risk factors in patients. This information can then drive timely interventions, for example by identifying patients in need of naloxone co-prescription or updating patient risk scores.
- **Driving performance monitoring and improvement:** Routine tracking of a set of key evidence-based prescriber indicators can be used to drive quality improvement. Several groups and organizations have individually developed sets of metrics, including America's Health Insurance Plans (AHIP), NC Medicaid, Optum, National Quality Forum (NQF), Pharmacy Quality Alliance (PQA), and the American College of Physicians (ACP). There was consensus that working toward having an aligned set of provider-facing metrics could foster quality improvement across all populations. The most promising measures for possible alignment include:
  - Initial prescribing for acute pain – This measure has broad alignment, is consistent with the STOP Act, and is a PQA measure in development.
  - Co-prescribing of opioids and benzodiazepines – There is broad alignment with this PQA measure.
  - Prescriptions for high-dose chronic opioid therapy – This is a PQA and NQF measure.
  - Co-prescribing naloxone to high-risk patients – There are no current PQA or NQF metrics in this area. However, this may be an important emerging metric to consider to prevent opioid overdose deaths. Optum's metric includes Evidence of Naloxone among patients with opioid use disorder or overdose. NC Medicaid has looked at data reflective of Evidence of Naloxone within the past 24 months among patients with concurrent opioid and benzodiazepine use.

Payer Highlight: Optum

Optum has created an Opioid Dashboard of key performance metrics, including measures for prevention, pain management, opioid use disorder treatment, and maternal and child health. See Appendix I for a list of metrics. Optum will use these metrics to measure changes in prescriber behavior to align with best practices.

To further these efforts to leverage data, there are many different resources available. Each payer collects internal data which includes information both on patients and providers. There are also available datasets which can be used for surveillance purposes, including the National Survey on Drug Use and Health (NSDUH), Medicare Part D data, as well as the NC Vital Statistics. Resources for treatment provider datasets include the National Survey of Substance Abuse Treatment Services (N-SSATS) and the National Mental Health Services Survey (N-MHSS). Summaries of county level surveillance data on each of the Opioid Action Plan Metrics are available at the NC Opioid Action Plan Data Dashboard.

Payer Highlight: United Healthcare

United Healthcare is using data to identify top opioid prescribers and then sending medical directors directly to the providers' practices to provide education and assistance in safer opioid prescribing.

5. Provider and Patient Education Resources

Provider Education

Payers can support providers' practice by linking them to continuing education, prescribing guidelines, screening tools, and other clinical resources. Education should be grounded in the CDC prescribing guidelines, including guidance on initial prescription decisions, avoiding concurrent benzodiazepine use, naloxone co-prescribing, and risk factors for progressing to chronic use of opioids.

Additional training and educational elements were identified by the Council:

- Non-opioid pharmacologic pain management (NSAIDS, acetaminophen).
- Non-pharmacologic, multi-modal treatment strategies.
- Use of tools to promote safer chronic opioid prescribing (i.e. function-based pain rating scales, such as the Defense and Veterans Pain Rating Scale, and making timely referrals to specialists using stepped care model).

Discussion

The Council reviewed available tools to support evidence-based practice, including the NC Governor's Institute's opioid website (see box), Project ECHO (see box), and the previously mentioned resources from the Mayo Clinic, American College of Physicians, and the American Academy of Pain Medicine. The North Carolina Medical Board has also implemented a safe prescribing CME requirement and the Safe Opioid Prescribing Initiative with the intent of proactively identifying and educating providers on safer opioid prescribing habits.

North Carolina Resource Highlight for Providers and Patients: The Governor's Institute

The Governor's Institute, a NC non-profit, maintains a comprehensive collection of training and educational materials focused on assisting all providers with the treatment of chronic pain and substance use disorders. The Governor's Institute has created a streamlined, user-friendly, and clinically-focused resource for providers and patients.

The site contains:

- Education: Best practice guidelines on complex situations, e.g., how to discontinue or taper opioids, treating pregnant women with OUD, post-op prescriptions for opioid naive patients
- Updates: NC Medical Board policy updates, navigating the NC Controlled Substance Reporting System (CSRS), state laws like the STOP Act, transitioning to Medicaid Managed Care, continuing education opportunities and training
- Tools: SBIRT and SUD screening tools, MME calculator, guidelines for urine drug screens, and patient counseling materials.

Patient Education

Payers can utilize member services to provide their beneficiaries with educational material on pain treatment, safe opioid use, alternative therapies, SUD and behavioral health/social determinant treatment and support.

Project ECHO for Opioid Use Disorder: Extension for Community Healthcare Outcomes

Project ECHO, an initiative created by physicians at the University of New Mexico, connects providers in rural or underserved areas to addiction treatment specialists in academic medical centers through teleconferencing and virtual clinics. The program can increase access to substance use treatment by supporting primary care providers, providing education on best practices, and providing experts to consult on treatment decisions and complex patients. North Carolina's Project ECHO hub is based at the University of North Carolina and currently provides support for office-based MAT to providers in all 100 NC counties.

Discussion

The Council discussed key elements of patient education including:

- Risk of opioid use, especially beyond 30 days
- Managing expectations about receiving opioids, including communication with provider
- Safe storage and disposal of opioids
- Self-management of pain
- The biopsychosocial model of pain and multimodal treatment options:
  - Physical modalities include low impact exercise, stretching, yoga, biofeedback, sensory modalities
  - Behavioral modalities include pain journals, daily task lists
  - Emotional/psychological modalities include progressive muscle relaxation, stress management, relaxation skills
- Overdose prevention education
  - Risk factors for unintentional overdose, including high doses of opioids, opioids in combination with benzodiazepines, or opioid use with underlying medical conditions (e.g. COPD)
  - Use of naloxone, including education and training of family members and social support members.

IV. RECOMMENDATIONS

The NC Payers Council is focused on areas with the strongest evidence for impact and recommends the following strategies:

Table 1. NC Payers Council Recommendations to Respond to the Opioid Epidemic

I.	**PAIN TREATMENT**
1.	Align pharmacy benefit management to be consistent with CDC Guideline (applicable to non-federal programs)
2.	Implement quantity limits for new starts consistent with NC law
3.	Implement formulary dose limits for new starts and treatment of chronic pain with prompt authorization review to manage exceptions (applicable to non-federal programs)
4.	Limit the use of long-acting/extended-release opioids for the treatment of acute pain
5.	Limit the use of methadone as a treatment for acute pain
6.	Limit concurrent prescriptions for opioids and benzodiazepines
7.	Cover a range of evidence-supported non-narcotic pharmacologic and non-pharmacologic pain treatment options in line with state benefit design
II.	**NALOXONE ACCESS**
1.	Promote access to naloxone through formulary structures and benefit design
III.	**SUBSTANCE USE DISORDER TREATMENT**
1.	Encourage SBIRT screening in primary care and other medical settings, such as emergency departments, obstetric, geriatric, pediatric and other practices in fee-for-service and value-based reimbursement models
2.	Increase access to medication-assisted therapy (MAT) by eliminating or streamlining prior authorization
3.	Increase access to medication used in medication-assisted therapy (MAT) through formulary design
4.	Encourage the availability of substance/opioid use disorders and behavioral health treatment through telehealth
IV.	**DATA ANALYTICS**
1.	Track and monitor the outcome measures as detailed in Table 2 below and regularly share results with network providers
2.	Use analytics to identify outlier prescribers and flag for education, coaching and/or fraud investigation
3.	Use analytics to identify members at risk of overuse or misuse and offer case management for those members
4.	Use provider and/or pharmacy lock-ins with evaluation of impact on patient safety and outcomes
IV.	**PRESCRIBER AND PATIENT EDUCATION AND RESOURCES**
1.	Offer or support prescriber education and training on: ● CDC guidelines for prescribing opioids ● Avoiding concurrent use of opioids and benzodiazepines ● Prescribing buprenorphine for substance use disorder treatment ● Best practices and opioid-sparing alternative therapy in acute pain treatment ● Best practices in chronic opioid therapy (e.g., use of opioid risk tools, pain management agreements, urine drug screens, function-based pain rating scales such as the Defense and Veterans Pain Rating Scale, co-prescribing naloxone to patients at elevated risk, tapering protocols, timely referrals to specialists)
2.	Educate patients on: ● Expectations about receiving and appropriate use of opioids ● The risks of opioid use ● Self-management of pain ● Risk factors for unintentional overdose ● Use of naloxone ● Safe storage and disposal of opioids
3.	Promote and support the NC Governor's Institute website as a common place for provider education materials – governorsinstitute.org/opioid.

Table 2. Data Analytics: Proposed Shared Provider-Facing Metrics		
MEASURE		**DETAIL**
1.	Initial opioid prescription (Rx) compliant with CDC guidelines (composite measure)	Composite elements ● Initial opioid prescription is prescribed while patient is not exposed to benzodiazepine ● Initial Rx is not for methadone ● Initial opioid prescription is for <50 MME/day ● Initial Rx is for short acting formulation ● Initial Rx is for ≤ 7 days supply (<4 AHIP)
2.	Concurrent use of opioids and benzodiazepines	● Percentage of individuals 18 years and older with concurrent use of prescription opioids and benzodiazepines (patients in hospice care and those with a cancer diagnosis are excluded) • The numerator includes individuals from the denominator with 2 or more prescription claims for benzodiazepines filled on 2 or more separate days, and concurrent use of opioids and benzodiazepines for 30 or more cumulative days • Denominator includes individuals 18 years and older by the first day of the measurement year with 2 or more prescription claims for opioids filled on 2 or more separate days, for which the sum of the days supply is 15 or more days during the measurement period
3.	Use of opioids at high dosage in persons without cancer	● The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MME) for 90 consecutive days or longer.

V. CONCLUSIONS AND NEXT STEPS

Recommendations from this Payers Council report will help influence strategic planning across NC health plans. NCDHHS will assure broad dissemination of the report so that payers in NC can develop new or modify existing benefits and services that address the NC opioid epidemic and are relevant to their stated missions.

Additional items to continue to explore in future Payer Council discussions in NC are listed below.

Table 3. Items to Explore Further	
1.	Require authorization for ongoing opioid prescriptions after the first fill for acute pain to limit progression to chronic use
2.	Pay for services in emergency departments to link patients to outpatient treatment (e.g., MAT, peer support)
3.	Provide bundled and value-based payments for SUD treatment that allow for flexibility in care delivery systems
4.	Fund or incentivize providers who complete DATA waivers and ECHO training (for pain management and MAT)
5.	Evaluate coverage options for treatment of SUD in federally certified Opioid Treatment Programs (i.e., methadone treatment)
6.	Develop a consensus measure to promote Naloxone prescribing for patients at high risk of overdose that may include concurrent opioid and benzodiazepine use, a history of substance use disorder or overdose, and/or opioid dosages > 50 MME/day.
7.	Consider allowing health plan access to the state Controlled Substances Reporting System to help identify outlier prescribers and members at risk of overuse or misuse.

It is our hope that this report and follow-up activities will be of use to health plans, health systems, communities and medical providers alike, for all these partners are working toward the common goal of helping all North Carolinians live long, healthy, and productive lives.

Opioid Dashboard: Key performance metrics

Domain areas	Primary outcome measures	Secondary process measures
Prevention	1. New opioid fillers per 1,000 enrollees 2. Initial opioid prescription compliant with CDC recommendations (*composite*)[b] 3. New opioid fillers who avoid chronic use 4. Prevalence of opioid overdose (OD) per 100,000 person-years	5. Initial opioid prescription is prescribed while patient is not exposed to benzodiazepines (*component of primary measure #2*) 6. Initial prescription is not for methadone (*component of primary measure #2*) 7. Initial opioid prescription is for short-acting formulation (*component of primary measure #2*) 8. Initial opioid prescription is for <50 MME/day (*component of primary measure #2*) 9. Initial opioid prescription is for <=7 days supply (*component of primary measure #2*) 10. No use of opioids for new low back pain patients 11. No concurrent opioid and benzodiazepine use 12. Appropriate contact with provider before second opioid prescription
Pain Management	13. Chronic pain treatment with opioids is optimally managed (*composite*)[c] 14. Avoidance of breakthrough post-surgical pain leading to ED visit and new opioid prescription	15. Appropriate contact with provider among chronic opioid users (*component of primary measure #13*) 16. No ED visit for breakthrough pain among chronic opioid users (*component of primary measure #13*) 17. Evidence of non-opioid pharmacological treatment for pain among chronic opioid users (*component of primary measure #13*) 18. Evidence of non-pharmacological therapy for pain among chronic opioid users (*component of primary measure #13*)
OUD Treatment	19. Evidence of medication-assisted treatment (MAT) among patients with opioid user disorder (OUD) or OD 20. Prevalence of OUD per 1,000 person-years	21. Evidence of MAT following OD 22. Evidence of naloxone fill among patients with OUD or OD 23. No opioid prescription following any OUD or OD Diagnosis
Maternal & Child Health	24. Percentage of infants with NAS born to mothers on MAT 25. Initial opioid prescription compliant with CDC recommendations for patients under 18y age (*composite*) 26. Prevalence of OD per 100,000 person-years under 18y age	27. Cases per 1,000 live births of infants born with neonatal abstinence syndrome (NAS) 28. New opioid filler per 1,000 enrollees under 18 years of age 29. Prevalence of OUD per 1,000 person-years under 18y age

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VII. REFERENCES

1. Prescription Drug Abuse Advisory Committee (PDAAC). Opioid Action Plan Update Factsheet. https://files.nc.gov/ncdhhs/Opioid%20Plan%20Fact%20Sheet_FINAL_6_27_17B.pdf
2. Deaths-N.C. State Center for Health Statistics, Vital Statistics, 2016, Unintentional medication or drug overdose: X40-X44 and any mention of T40.0 (Opium), T40.1 (Heroin), T40.2 (Other Opioids), T40.3 (Methadone) and/or T40.4 (Other synthetic opioid) Analysis by Injury Epidemiology and Surveillance Unit
3. Proescholdbell S, Cox M, Asbun A Death Rates from Unintentional and Undetermined Prescription Opioid Overdoses and Dispensing Rates of Controlled Prescription Opioid Analgesics – 2011-2015. N C Med J. 2017;78(2):142-143.
4. Opioid Dispensing – NC Division of Mental Health, Controlled Substance Reporting System, 2016/ Population- National Center for Health Statistics, 2016. Analysis: Injury Epidemiology and Surveillance Unit
5. N.C. State Center for Health Statistics, Vital Statistics-Deaths, 1999-2016. Unintentional medication/drug (X40-X44) with specific T-codes by drug type, Commonly Prescribed Opioid Medications=T40.2 or T40.3; Heroin and/or Other Synthetic Narcotics=T40.1 or T40.4. Analysis by Injury Epidemiology and Surveillance Unit
6. NC DETECT (statewide ED data), N.C. Division of Public Health and UNC Carolina Center for Health Informatics (CCHI); EMSpic- UNC Emergency Medicine Department, N.C. Office of Emergency Medical Services (OEMS), 2011-2016
7. N.C. State Center for Health Statistics, Hospital Discharge Dataset, 2004-2016 and Birth Certificate records, 2004-2016. Analysis by Injury Epidemiology and Surveillance Unit
8. Source: N.C. State Center for Health Statistics, Vital Statistics-Deaths, 1999-2016
9. Laverdiere, D., Pereyda, M., Silva, J., Tatar, M. Changing Course: The Role of Health Plans in Curbing the Opioid Epidemic. June 29, 2016. https://www.chcf.org/publication/changing-course-the-role-of-health-plans-in-curbing-the-opioid-epidemic/
10. Bohnert, A. S., Valenstein, M., Bair, M. J., Ganoczy, D., McCarthy, J. F., Ilgen, M. A., & Blow, F. C. (2011). Association between opioid prescribing patterns and opioid overdose-related deaths. JAMA, 305(13), 1315-1321.
11. Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016. MMWR Recommendations and Reports 2016;65(No. RR-1):1–49.
12. Samuels, E. A., Ross, J. S., & Dhruva, S. S. (2017). Medicare formulary coverage restrictions for prescription opioids, 2006 to 2015. Annals of Internal Medicine, 167(12), 895-896.
13. García, M. C. (2016). Declines in Opioid prescribing after a private insurer policy change—Massachusetts, 2011–2015. MMWR. Morbidity and mortality weekly report, 65.
14. Gatchel RJ, McGeary DD, McGeary CA, Lippe B. Interdisciplinary Chronic Pain Management. Past, Present, and Future. American Psychologist. 2014;69(2):119-130
15. Scascighini L, Toma V, Dober-Spielmann S, Sprott H. Multidisciplinary treatment for chronic pain: a systematic review of interventions and outcomes. Rheumatology (Oxford). 2008;47(5):670.
16. Wenger HC, Cifu AS. JAMA Clinical Guidelines Synopsis. Treatment of Low Back Pain. JAMA. 2017;318(8):743-744
17. Kamper SJ, Apeldoorn AT, Chiarotto A, et al. Multidisciplinary biopsychosocial rehabilitation for chronic low back pain: Cochrane systematic review and meta-analysis. BMJ 2015;350:h444.
18. Nahin, R. L., Boineau, R., Khalsa, P. S., Stussman, B. J., & Weber, W. J. (2016). Evidence-based evaluation of complementary health approaches for pain management in the United States. In Mayo Clinic Proceedings (Vol. 91, No. 9, pp. 1292-1306). Elsevier.
19. Skelly AC, Chou R, Dettori JR, Turner JA, Friedly JL, Rundell SD, Fu R, Brodt ED, Wasson N, Winter C, Ferguson AJR. Noninvasive Nonpharmacological Treatment for Chronic Pain: A Systematic Review. Comparative Effectiveness Review No. 209. (Prepared by the Pacific Northwest Evidence-based Practice Center under Contract No. 290-2015-00009-I.) AHRQ Publication No 18-EHC013-EF. Rockville, MD: Agency for Healthcare Research and Quality; June 2018.
20. Qaseem, A., Wilt, T. J., McLean, R. M., & Forciea, M. A. (2017). Noninvasive treatments for acute, subacute, and chronic low back pain: a clinical practice guideline from the American College of Physicians. Annals of internal medicine, 166(7), 514-530.
21. American Academy of Pain Medicine. 2011. Position Statement: Minimum Insurance Benefits for Patients with Chronic Pain. http://www.painmed.org/files/minimum-insurance-benefits-for-patients-with-chronic-pain.pdf
22. Heit, H. A., & Gourlay, D. L. (2004). Urine drug testing in pain medicine. Journal of pain and symptom management, 27(3), 260-267.

23. Dowell, D., Haegerich, T. M., & Chou, R. (2016). CDC guideline for prescribing opioids for chronic pain—United States, 2016. JAMA 315 (15).
24. Schulte, F., Lucas, E. Liquid Gold: Pain Doctors Soak Up Profits By Screening Urine For Drugs. November 2017. Kaiser Health News. https://khn.org/news/liquid-gold-pain-doctors-soak-up-profits-by-screening-urine-for-drugs/
25. Kerensky, T., & Walley, A. Y. (2017). Opioid overdose prevention and naloxone rescue kits: what we know and what we don't know. Addiction science & clinical practice, 12(1), 4.
26. Coffin, P. O., Behar, E., Rowe, C., Santos, G. M., Coffa, D., Bald, M., & Vittinghoff, E. (2016). Nonrandomized intervention study of naloxone coprescription for primary care patients receiving long-term opioid therapy for pain. Annals of Internal Medicine, 165(4), 245-252.
27. Behar, E., Rowe, C., Santos, G. M., Coffa, D., Turner, C., Santos, N. C., & Coffin, P. O. (2017). Acceptability of naloxone co-prescription among primary care providers treating patients on long-term opioid therapy for pain. Journal of General Internal Medicine, 32(3), 291-295.
28. Volkow, N. D., Frieden, T. R., Hyde, P. S., & Cha, S. S. (2014). Medication-assisted therapies—tackling the opioid-overdose epidemic. New England Journal of Medicine, 370(22), 2063-2066.
29. Connery, H. S. (2015). Medication-assisted treatment of opioid use disorder: review of the evidence and future directions. Harvard Review of Psychiatry, 23(2), 63-75.
30. Larochelle MR, Bernson D, Land T, Stopka TJ, Wang N, Xuan Z, Bagley SM, Liebschutz JM, Walley AY. Medication for Opioid Use Disorder After Nonfatal Opioid Overdose and Association With Mortality: A Cohort Study. Ann Intern Med. 2018 Jun 19.
31. Mohlman, M. K., Tanzman, B., Finison, K., Pinette, M., & Jones, C. (2016). Impact of medication-assisted treatment for opioid addiction on Medicaid expenditures and health services utilization rates in Vermont. Journal of Substance Abuse Treatment, 67, 9-14.
32. SAMHSA. Peers Supporting Recovery from Substance Use Disorders. https://www.samhsa.gov/sites/default/files/programs_campaigns/brss_tacs/peers-supporting-recovery-substance-use-disorders-2017.pdf
33. Rubin, R. (2018). As overdoses climb, emergency departments begin treating opioid use disorder. JAMA, 319(21), 2158-2160.
34. Babor, T. F., McRee, B. G., Kassebaum, P. A., Grimaldi, P. L., Ahmed, K., & Bray, J. (2007). Screening, Brief Intervention, and Referral to Treatment (SBIRT) toward a public health approach to the management of substance abuse. Substance abuse, 28(3), 7-30.
35. American Medical Association. Reimbursement for SBIRT. https://www.integration.samhsa.gov/sbirt/reimbursement_for_sbirt.pdf
36. Brooklyn, J. R., & Sigmon, S. C. (2017). Vermont Hub-and-Spoke Model of Care For Opioid Use Disorder: Development, Implementation, and Impact. Journal of Addiction Medicine, 11(4), 286–292.
37. Hilty, D. M., Ferrer, D. C., Parish, M. B., Johnston, B., Callahan, E. J., & Yellowlees, P. M. (2013). The effectiveness of telemental health: a 2013 review. Telemedicine and e-Health, 19(6), 444-454.
38. Hancock, et al. Treating the Rural Opioid Epidemic. February 2017. National Rural Health Association Policy Brief. https://www.ruralhealthweb.org/NRHA/media/Emerge_NRHA/Advocacy/Policy%20documents/Treating-the-Rural-Opioid-Epidemic_Feb-2017_NRHA-Policy-Paper.pdf
39. Michigan Surgical Quality Collaborative and Opioid Prescribing Engagement Network (OPEN). Opioid Prescribing Recommendations for Surgery. Updated March 2018. https://opioidprescribing.info/
40. Center for Opioid Research and Education. Johns Hopkins Post-Surgical Pain Management Guidelines. https://www.solvethecrisis.org/best-practices.

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