

## Palliative Care Rounds

# Managing Nonmedical Opioid Use Among Patients With Cancer Pain During the COVID-19 Pandemic Using the CHAT Model and Telehealth



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### Introduction

The U.S. has made some progress in combating prescription opioid overdoses, with a 13.5% decrease in prescription opioid-related deaths in 2018.<sup>1</sup> Unfortunately, the COVID-19 pandemic has now created a perfect arena for relapses and maladaptive coping for vulnerable populations.<sup>2</sup> Recently, 40 states in the U.S. reported a rapid increase in opioid overdoses, with a significant shift from the urban population to underserved and rural areas.<sup>2,3</sup> Overall, there is nearly an 18% increase in opioid-related overdoses since the pandemic.<sup>3</sup>

Chronic opioid therapy requires careful periodic evaluations and revisions in the light of the patient's response to ongoing treatments, adverse effects, risk for nonmedical opioid use (NMOU), and other clinical findings. Recent reports indicate that NMOU is more common among patients with cancer receiving opioid therapy than was previously thought.<sup>4,5</sup> Clinical teams in oncology settings continue to develop innovative and effective strategies to manage patients who engage in those behaviors.<sup>6</sup> In 2015, Our Supportive Care Center (SCC) established an Opioid Safety Program to care for patients receiving opioids for cancer pain. All patients undergo universal screening using risk assessment tools such as the Cut-down, Annoyed, Guilty, Eye-opener- Adapted to Include Drugs, and Screener and Opioid Assessment for Patients with Pain. They may also be randomly selected to undergo urine drug screens (UDS) to verify the use or nonuse of prescribed opioids and ensure patient safety. Providers routinely review patients' opioid prescription history in the prescription drug monitoring program database.

As a part of the program, the center developed a specialized interdisciplinary team model called the Compassionate High-Alert Team (CHAT) to manage the subset of patients who engage in NMOU.<sup>7,8</sup> With the onset of the COVID-19 pandemic, it became increasingly challenging to utilize this important intervention because of unintended disruptions in patient care. This resulted in the modification of the intervention to suit the current environment. We report on two cases in which the CHAT model was modified to navigate the disruptions from the COVID-19 pandemic. We further describe the CHAT model, discuss the evidence surrounding it, and explain the necessary changes that were made to adapt to the current healthcare environment.

### Case Descriptions

#### Case 1

A man in his 50s with recurrent metastatic parotid gland cancer was referred to our SCC to manage uncontrolled facial pain. His medication regimen during the initial consultation included extended-release oxycodone 30 mg every 8 hours and hydrocodone/acetaminophen 10/325 mg every 4 hours as needed, in combination with pregabalin, zolpidem, carisoprodol, dronabinol, and cannabidiol oil. During his subsequent follow-ups, we started to wean off some of the sedative medications and prescribed naloxone nasal spray because of his high-risk profile. Unfortunately, he had disease progression, which worsened his preexisting emotional and financial distress and resulted in an escalation of his opioid use. He had an episode of opioid overdose requiring administration of naloxone

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at home and an emergency room visit. As a result, the CHAT intervention was initiated during his SCC visits. During the COVID-19 pandemic, he continued to follow-up with us frequently with in-person visits integrated with virtual care, and with full participation of the interdisciplinary team during virtual visits as a result of the modified CHAT model. Currently, the patient is on both extended-release and immediate-release oxycodone as needed. We have prevented further opioid dose escalation, successfully discontinued zolpidem, decreased pregabalin, and we are currently working to discontinue carisoprodol, albeit with some difficulties. The patient continues to receive care with the modified CHAT approach every other week at the SCC.

### Case 2

A woman in her 50s with metastatic vulvar sarcoma and a known history of substance use disorder (SUD) presented to our clinic with worsening pelvic pain. The patient displayed behaviors concerning NMOU. She once reported that her opioids were stolen without providing a police report and requested for early refills of her opioids. Her UDS tested positive for cocaine, cannabis, and unprescribed tramadol, in addition to her prescribed opioids of extended-release morphine and immediate-release oxycodone. She was therefore identified to receive the CHAT intervention during her SCC visits. During the COVID-19 pandemic, the team would sometimes meet with the patient in her room while observing proper physical distancing and wearing appropriate personal protective equipment. With the gradual transition of most SCC visits to a virtual video-based platform, her in-person clinic visits alternated with virtual visits whereby CHAT team members could participate remotely. The in-person visits allowed for UDS, pill counts, and a closer evaluation of the patient's adherence to the plan. Her immediate-release oxycodone was replaced with celecoxib for breakthrough pain. We worked with her to gradually taper opioids. Her subsequent UDS results were negative for cocaine. Since the patient continued to adhere to the plan, our team eventually restarted interval supplies of short-acting opioids for better pain control. We continue to see the patient every 2 to 4 weeks with alternating in-person and telemedicine visits.

### Discussion

The two cases described previously illustrate an effective model developed by our team to manage patients who engage in NMOU. The CHAT model or intervention follows concepts from well-established

behavioral therapies such as Screening, Brief Intervention, Referral and Treatment, and Motivational Interviewing techniques. The team consists of a physician, a registered nurse, and  $\geq 1$  of the other team members, including a pharmacist, psychologist, counselor, social worker, and patient advocate. All team members are aware of their predefined roles during the delivery of the intervention. During a CHAT intervention, the team members have an open and nonjudgmental conversation with the patient and/or caregiver discussing their findings of NMOU behavior, explore possible reasons for those behaviors, express concerns about patient safety, and may set clear boundaries and limitations regarding their opioid use. They also motivate and self-empower the patient to change or modify such behaviors. Extensive patient education on safe opioid use, storage, and disposal is usually provided. They may reduce or slowly wean off opioids where possible and ensure adherence to agreed-upon rules to promote safety. Patients receive closer follow-ups when necessary.<sup>9</sup> All patients at high risk for NMOU receive a prescription for intranasal naloxone spray based on established criteria.<sup>10</sup>

The clinic visits are supported by the proper documentation and guided by standardized criteria internally defined by our group (Table 1). These efforts have proven to be quite effective in managing patients with cancer pain and NMOU. We assessed the outcomes of this intervention in a follow-up study and found that it was associated with a significant reduction in the frequency of NMOU-related behaviors from a median of 3 per month prior to the intervention to 0.4 postintervention ( $P < 0.0001$ ). The morphine equivalent daily dose decreased significantly from a median of 165 mg/day during the initial intervention visit to 112 mg/day during the last follow-up visit ( $P = 0.02$ ) although pain intensity remained unchanged.<sup>7</sup>

The two cases further underline the need for clinical teams to adapt to the rapidly changing status quo because of the impact of COVID-19. Our SCC provides interdisciplinary palliative care to many vulnerable and immunocompromised advanced cancer patients. The center initiated virtual visits and offered those to patients expressing fear or reluctance in attending in-person visits. Centers for Medicare and Medicaid Services and President Trump's announcements regarding the relaxed policies for reimbursements and Health Insurance Portability and Accountability Act (HIPAA) regulations for virtual visits during the pandemic helped our rapid transition to virtual care.<sup>2,11-13</sup> Furthermore, the U.S. Drug Enforcement Administration and State Medical Boards offered flexibility in prescribing necessary medications such as opioids for some patients who

are seen virtually.<sup>14</sup> The SCC started its telehealth service on March 26, 2020 and has gradually transitioned to over 90% virtual care. The transition to the virtual care platform did not decrease our capability to ensure that opioids are prescribed safely.

We continued our interdisciplinary CHAT model with necessary modifications to suit the virtual environment. The modified CHAT intervention entails a hybrid strategy of in-person and virtual clinic encounters (Table 1), as demonstrated in the two cases described previously. Any newly detected or persistent NMOU behavior requires an in-person evaluation and activation of the CHAT team during subsequent visits. This allows us to minimize virtual prescription of opioids for prolonged periods of time without close physical oversight for patients who continue to demonstrate NMOU behaviors. The in-person visits allow the clinicians to perform otherwise unachievable procedures during virtual encounters such as UDS, the occasional need for a physical examination, and real-time in-person meetings with the interdisciplinary team for difficult conversations.<sup>7</sup> It is mandatory to practice physical distancing, wear personal protective equipment, and decrease patient-clinician contact duration as much as possible during those encounters. Usually, no more than two team members go into the patient's room at a time, with the rest of the team members joining via telephone or video interphase. Occasionally, when an in-person CHAT intervention is not feasible for team members and the patient, the team will provide the full intervention virtually via video. Careful considerations are made before a CHAT patient is scheduled to ensure that multiple team members can attend the video visit. Every so often, it becomes necessary to make medical and logistical modifications on a case-by-case basis.

The two cases support emerging evidence that NMOU may be more prevalent among patients with cancer pain than was previously thought to be.<sup>8,15</sup> Opioids are the gold standard for treating cancer-related pain.<sup>10,16</sup> An increase in disease burden, chronicity of cancer, poor prognosis, and early access to opioids, are a few of the many factors that can lead to chemical coping or NMOU (Table 2) among advanced cancer patients.<sup>7,10,16</sup> The risk increases among those with a pre-existing history of SUD.<sup>7,16</sup> A study by our group found that approximately 1 in every 4 patients receiving chronic opioid therapy for cancer pain had an abnormal UDS concerning for NMOU.<sup>4</sup> In another study, clinicians felt that 18% of patients with advanced cancer that they saw were chemically coping.<sup>17</sup> Screening for NMOU among cancer patients is now even more critical during the COVID-19 crisis because the risk is heightened by stressful conditions.

Table 1  
Categories of Patients' NMOU Behavior Status and Recommended Approach to Care

Patient Category	Recommendations
CHAT-watch <sup>a</sup>	<ul style="list-style-type: none"> <li>• Continue virtual visits every 2–4 weeks</li> <li>• Consider one in-person visit after every 4th virtual visit</li> <li>• Increase vigilance (e.g., lookout for NMOU behaviors, frequently check PDMP)</li> <li>• If high suspicion for NMOU during a virtual visit, schedule an in-person visit for the patient's next appointment</li> </ul>
CHAT-active <sup>b</sup>	<ul style="list-style-type: none"> <li>• In-person visit every 1–2 weeks if possible</li> <li>• Once adherent for ≥ 3 in-person visits (or ≥ 4 virtual visits), then transition to virtual visit every 2–4 weeks</li> <li>• At least 1 CHAT intervention, then thereafter as determined by the clinician</li> <li>• Consider one in-person visit after every 4th virtual visit</li> </ul>
CHAT-adherent <sup>c</sup>	<ul style="list-style-type: none"> <li>• Continue regular virtual visits every four weeks</li> <li>• Increase vigilance (look out for NMOU behaviors, check PDMP)</li> <li>• If high suspicion for NMOU during a virtual visit, schedule an in-person visit for the next appointment</li> </ul>

NMOU = nonmedical opioid use; PDMP = prescription drug monitoring program; CHAT = Compassionate High Alert Team.

<sup>a</sup>CHAT-watch (Unclear or less suggestive NMOU behavior, High-risk factors for NMOU, High suspicion but unclear evidence).

<sup>b</sup>CHAT-active (Explicit or highly suggestive NMOU behavior, Definitive abnormal UDT or inconsistent PDMP result).

<sup>c</sup>CHAT-adherent (No observed NMOU behaviors for ≥ 3 months).

Table 2  
Examples of Behaviors Suggestive of Nonmedical Opioid<sup>16</sup>

Nonmedical Opioid Use-related Behaviors
<ul style="list-style-type: none"> <li>• Frequent unscheduled appointments or telephone calls for early opioid refills</li> <li>• Self-escalation or request for excessive increase in the opioid dosage not consistent with patient's pain syndrome</li> <li>• Reports of lost or stolen opioid prescription/medication</li> <li>• Frequent emergency room visits for opioids</li> <li>• Seeking opioids from multiple providers ("doctor shopping")</li> <li>• Requests for a specific opioid</li> <li>• Resistance to changes in the opioid regimen even when clinically indicated</li> <li>• Use of nonprescribed restricted medications or illicit drugs</li> <li>• Requesting opioids for its euphoric effect or for symptoms such as anxiety or insomnia</li> <li>• Reports of impaired functioning in daily activities due to opioid use</li> <li>• Family members/caregivers expressing concern over patient's use of opioids</li> <li>• Reports of hoarding drugs</li> <li>• Obtaining opioids from nonmedical sources</li> <li>• Reports of stealing, tampering, or forging opioid prescriptions</li> <li>• Discrepancy in pill counts without good explanation</li> </ul>

Patient 1 was taking opioids together with multiple other sedating medications which likely contributed to the occurrence of opioid-related overdose. The co-prescription of intranasal naloxone by our team prevented potentially devastating opioid-related complications including death. This underscores the importance for clinicians to carefully screen and co-prescribe naloxone for patients receiving opioids for cancer pain who are at risk for opioid overdose including the concurrent use of other sedating medications.<sup>10</sup> There is evidence that concurrent use of opioids and benzodiazepines<sup>18</sup> or gabapentinoids<sup>19</sup> are associated with a dose-dependent significant increase in opioid-related deaths compared to the use of opioids alone.<sup>19</sup> The Centers for Disease Control and Prevention clinical practice guidelines on opioid prescribing recommends naloxone coprescription for patients who have a history of drug overdose or SUD, require high opioid doses (median morphine equivalent daily dose of  $\geq 50$  mg/day), or use benzodiazepines concomitantly.<sup>20</sup> Although these recommendations were made for patients with noncancer pain, they can reasonably be applied to patients with cancer pain because they have a similar risk profile.

### Conclusion

COVID-19 pandemic has resulted in numerous disruptions in the delivery of care for patients with cancer pain. As this pandemic evolves into an endemic state, clinical teams will need to evolve their approach to care accordingly to maintain best practices. Our innovative patient-centered modified CHAT model provides safe and effective care for patients with cancer pain and NMOU while maintaining physical distancing and other safety precautions. We hope that our experience will help other clinical teams to develop virtual strategies to manage NMOU among patients with cancer pain.

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