



Opioid Patient Safety Tool Kit

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-NewYork-Presbyterian

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Executive Summary

Weill Cornell Medicine Guidelines and **Tools for Opioid Prescribing**

- The WCM Opioid Prescribing Policy states that providers should consult I-Stop, choose a low-risk opioid, prescribe the lowest clinically effective dose, develop a tapering plan, and have patients sign the Opioid Contract for therapy greater than 7 days.
- All opioids are now detectable in urine toxicology tests performed at NewYork Presbyterian-Weill Cornell, so prescribers should order random urine screens depending on the patient's risk category to confirm treatment adherence.
- Prescribers should set realistic pain management expectations with patients, focusing on reducing pain, improving quality of life, and minimizing side effects.
- The recently developed Opioid Report can compare opioid prescribing among departments or among individual providers within a department.

Low-Risk Opioid Prescribing



- The benefits of opioids for treatment of chronic pain are uncertain, but the risks of abuse and overdose increase with higher prescribed doses.
- When de-escalation is attempted, clinicians should taper doses by 10% per week and treat withdrawal with adjuvant agents.

- Discharge prescriptions of opioids after surgery should not exceed a 7-day supply.
- Many pharmacies throughout New York can dispense naloxone without a prescription and have drop-boxes available for disposal of unused opioids.
- For patients receiving high opioid doses, concurrently using benzodiazepines, or with a history of substance use disorder, prescribing a naloxone rescue kit can prevent deaths from overdoses.



Non-Opioid Pain Management

- Consider non-opioid painkillers, such as acetaminophen, NSAIDs, anticonvulsants, and antidepressants before opioids as a last resort for acute and chronic pain.
- Offer comprehensive chronic pain treatment by referring patients to Physical Medicine and Rehabilitation, Pain Management, Integrative Health and Wellbeing, and Psychiatry.



Addiction Treatment

- Medication-Assisted Treatment is a safe, evidence-based method to treat opioid use disorder.
- Refer patients for MAT at the Vincent P. Dole Institute and the WCMC Midtown Center.



- Providers can gain buprenorphine prescribing certification by attending free training sessions.

The Opioid Epidemic in the United States and New York

The United States is facing an opioid misuse and overdose epidemic. Between 1999 and 2016, opioid overdoses killed more than 350,000 people. In 2016 alone, more than 42,000 people died from opioids. Since 1999, the number of opioid overdose deaths has increased 5-fold. Among young adults, opioids are responsible for one in five deaths. These opioid overdose deaths involve a prescription opioid 40% of the time¹.

Greater prescription drug sales parallel the increase in overdose death rates and opioid abuse. From 1999–2016, the amount of prescription opioids prescribed increased 4-fold. In 2016, over 61M patients filled at least one opioid prescription, accounting for over 214M opioid prescriptions and over 193B MME dispensed by pharmacies². The same year, 11.5 million people misused prescription opioids and more than 2 million abused or were dependent on them³.





Prescription Painkiller Sales and Deaths



(Axeen, 2015)

The opioid crisis has caused significant harm in New York State and New York City. The rate of all opioid overdose deaths per 100,000 New York residents has doubled between 2010 and 2015. In 2015, more than two-thousand New York State residents died from opioid overdoses, while over eight thousand visited the emergency room and over three thousand were hospitalized. In New York City, 665 people died from all opioid overdoses and over one thousand were hospitalized in 2015. Non-Hispanic whites had disproportionately higher rates of overdose death⁴.

Weill Cornell Medicine's Approach to Address the Crisis

Weill Cornell Medicine has launched a multipronged approach to address this crisis. WCM has developed an official Opioid Prescribing Policy directed toward all WCM outpatient practices. The Quality and Patient Safety (QPS) team has created an Opioid Report to compare prescribing data across departments and individuals. The Department of Anesthesiology has produced an Opioid Prescribing Monitoring Tool as an opioid prescribing checklist and auditing instrument. Furthermore, this resource toolkit produced by the QPS team will serve as a valuable guide for providers looking to reduce opioid prescribing risk and treat patient pain and substance abuse more effectively.

This resource toolkit will cover 5 major approaches for providers to address the opioid crisis. First, it will discuss the WCM Guidelines for prescribing opioids and tools to encourage low-risk prescribing. Second, it will describe pain management techniques to encourage providers to consider non-opioid approaches to treat pain. Third, it will propose specific strategies to help providers prescribe opioids more safely. Fourth, it will explain treatment and referral options for patients struggling with opioid use disorder and abuse. Fifth, it will inform providers of community resources and projects dedicated to treating opioid addiction and addressing the opioid crisis.



- 1. WCM Guidelines
- 2. Non-Opioid Pain Management
- 3. Low-Risk Opioid Prescribing
- 4. Addiction Treatment
- 5. Community Resources





Weill Cornell Medicine Guidelines & Tools for Opioid Prescribing

- WCM Opioid Prescribing Policy
- Urine Toxicology Screening
- Setting Realistic Patient Expectations
- Opioids Report
- Opioid Prescribing Monitoring and Auditing Tool and Checklist
- Substance Use Stigma

Weill Cornell Medicine's Opioid Prescribing Policy

The WCM Opioid Prescribing Policy outlines the process for the safe prescribing of opioid medications in the non-cancer outpatient setting. Remember that non-pharmacologic and non-opioid treatments are considered first line treatment for chronic pain5. All physicians and clerical staff employed by Weill Cornell Medicine who prescribe controlled substances are responsible for complying with these guidelines. The Policy contains guidelines concerning requirements prior and after placing opioid orders, obligations for urine drug testing, monitoring clinical response, and questioning medical orders. It is available at **qps.weill.cornell.edu**.

0

Consult: I-Stop Prescribing

Choose: A low-risk opioid

Count: <7 days for acute pain <30 days for chronic</p>

Consider: How to taper opioids

Sign: Have patients sign the WCM Opioid Contract

Prior to Prescribing Opioids, Providers Should Complete 5 Steps:

Ist Prescribers should consult the I-Stop Prescription Monitoring Program to view dispensed controlled substance prescription histories for the patient. A hard copy of the I-Stop report or the I-Stop encounter number must be documented for the encounter.

2nd Providers should choose a low-risk opioid, such as tramadol or buprenorphine. While still opioids, these medications have a lower risk of dependence, abuse, and overdose. Clinicians should also consider a pain consult.

3rd In compliance with NY state law, providers should prescribe less than a 7-day supply for acute pain. For patients with chronic pain, providers should not give opioids in quantities greater than a 30-day supply and are encouraged to give smaller quantities.

4th | Prior to ordering controlled substances for chronic conditions, doctors must consider how the patient will be weaned or discontinued off the medication. This step should include setting appropriate expectations with patients for treating their pain and establishing a plan to taper the medications.

5th | Patients must sign the Weill Cornell Opioid Contract when opioids are first prescribed for greater than 7 days. The contract establishes guidelines to protect the doctor's ability to prescribe for the patient. It is available at **qps**. **weill.cornell.edu**. After prescribing opioids, the WCM Opioid Policy states that doctors should follow 6 important regulations:

1st | The same prescriber should be the only physician providing monthly refills.

2nd Refills without follow-up are notrecommended and should be limited to less than7 days with a follow-up scheduled.

3rd Providers should prescribe the lowest MME/ day dose possible. Patients taking dosages below 50 MME/day have a decreased risk of complications including breathing interruptions and opioid craving.

4th | For patients prescribed greater than 90 MME/ day, providers should co-prescribe a naloxone rescue kit, which reverses opioid overdoses.

5th | Prescribers should use extreme caution when ordering opioids for patients currently using benzodiazepines. Combined use can trigger respiratory depression, coma, and death.

6th | Prescribers must perform urine toxicology screens for compliance according to patient risk.





Do

Don't

Transcribe I-Stop reference number or upload report to Epic.



Check off I-Stop without reviewing report.



Same Prescriber for Refills



Refills Only with Follow-Up



Lowest MME/day Dose Possible



Co-prescribe a Naloxone Rescue Kit



Caution with Concurrent Benzodiazepines



Urine Toxicology Screens

Urine Toxicology Screening

Random urine drug testing is required to identify aberrant behavior, undisclosed drug use or abuse, and confirm treatment adherence. The NewYork Presbyterian-Weill Cornell laboratory now has the capacity to detect all opioids in urine screens and will be anticipating an increase in urine testing orders. An initial baseline toxicology screen should be ordered within the first two visits to establish patient risk level. Then, the number of urine drug screens ordered yearly depends on

Risk Category	MME/day	Urine Screen Frequency
Low	<50	1/year
Medium	50-90	2/year
High	>90	4/year

risk category.

Use MME/day prescribed to determine patient risk factor as outlined above. Factors that elevate risk category include presence of mental health disorders, family or personal history of substance use disorder, co-morbid medical conditions that could increase side effect sensitivity, and current benzodiazepine use. Patients at low, medium, and high risk should receive urine screens at frequencies of 1/year, 2/year, and 4/year, respectively.

Patients on chronic opioids should be monitored monthly and simultaneously treated or referred for alternative treatments, such as adjuvants, injections, or interventional therapies. If pain fails to be adequately controlled, opioid use should be deemed a treatment failure and should be discontinued through tapering. Patients on opioids should be evaluated with a functional assessment, including obtaining a history and physical at initial encounter and at least every 90 days. The decision to continue opioid treatment should depend on documented pain reduction of at least 30% and clear demonstrable functional improvement. Consider discontinuation if no improvement despite escalation and rotation.

Support staff, nurses, advanced practice providers and trainees are professionally and legally responsible to question medical orders with the ordering clinician if the patient's welfare or safety are in question. They are urged to speak up regarding concerns about the appropriateness of the medication or the dose/route. This policy of questioning medical orders helps to establish a culture of accountability and safety regarding opioid prescribing.

Concept Check:

Only continue opioid treatment if pain is reduced by at least 30% with functional improvement!

Setting Realistic Patient Expectations

When treating chronic pain, it is critical to inform the patient that the goal of treatment is to help them return to a dynamic, fulfilling life. For many patients, complete pain relief may not be an achievable goal. Education is critical to set realistic patient expectations. Three important concerns to address with patients when setting expectations are improving function, reducing pain, and minimizing side effects.

1. Improving Function



The ultimate goal for improving function is to improve patients' quality of life. Pain affects quality of life differently in each person. Patients with higher pain tolerance can function reasonably well with significant pain. In other patients with lower pain thresholds, any pain at all may significantly diminish quality of life. Clinicians should measure functional improvement with a quality of life scale to compare the effect of pain management to baseline levels.

2. Reducing Pain

20-30% Pain Relief

2-3 Point Pain Score Reduction

For reducing pain, clinicians should explain to patients that total pain relief is rare. Patients should understand the goal of pain management to ease pain by 20-30% and help take the "edge off". Rather than expecting pain scores to reach 0, clinicians should encourage patients to expect a 2–3 point reduction on a 10-point pain scale. Providers can advise patients to expect pain to be a small but manageable part of their life. But consistently reassure them that you want to help them live better with pain.

3. Minimizing Side Effects



Pain management therapies, particularly pharmaceutical treatments, have many potential side effects and risks. These may range from mild side effects including nausea, constipation, and headache to life-threatening events, such as respiratory depression and overdose. Providers should educate patients about these risks and encourage patients to take medications only as prescribed. The goal of therapy should be to maximize pain relief while minimizing side effects.

Opioid Report

The Quality and Patient Safety team has developed an Opioid Report, which tracks and measures providers' opioid prescribing patterns. Included in the report is the number of patients with opioid prescribed without start or end dates. Writing start and end dates is an important component of prescribing opioids to ensure that the minimum number of days is prescribed. The provider summary report can be used to compare opioid prescribing among departments or among individual providers within a department. The report can thus help reduce practice variation.

QPS—Opioid Project Academic Department Provider Sumnmary November 2017 to April 2018 Medicine/Adult Internal Medicine					
	463	162	100	76	
Physician #2	621	198	101	143	
	881	205	110	132	
Physician #4	512	114	76	54	
	310	231	165	154	
Physician #6	130	103	62	45	
	98	87	53	17	
Physician #8	543	310	248	163	
	462	292	176	177	
Physician #10	300	73	44	31	

The provider detail report provides absolute numbers of prescriptions and patients along with the corresponding percentages. The goal is to determine where strategies to de-escalate opioids and reduce prescribing risk may be appropriate.

QPS—Opioid Project

Medicine/Adult Internal Medicine Provider Detail

November 2017 to April 2018

Measure Percentage **Opioid Prescriptions** 15.54% Percentage of all prescriptions prescribed by provider that are opioid prescriptions **Patients with Opioid Prescribed** 19.57% Percentage of unique patients with any prescriptions from the provider that have opioids prescribed by that provider 77.16% Patients with Opioid Prescribed >7 Day Supply Percentage of unique patients with opioid prescribed by provider in which the prescriptions are for more than a 7 day supply based on start and end dates Patients with Opioid Prescribed >30 Day Supply 61.73% Percentage of unique patients with opioid prescribed by provider in which the prescriptions are for more than a 30 day supply based on start and end dates 64.81% Patients with Opioid Prescribed without Start or End Dates Percentage of unique patients with opioid prescribed by provider in which the prescription is without start or end dates Patients with Opioid Prescribed and Benzodiazepine in Current Meds 46.91% Percentage of unique patients with opioid prescribed by provider while benzodiazepine is active in patient's current medications Patients with Opioid Prescribed >3 Consecutive Months 39.51% Percentage of unique patients with opioid prescribed by provider that have opioid prescribed in each month for more than 3 consecutive months

Physician #1

Opioid Prescribing Monitoring and Auditing Tool and Checklist

Another tool to analyze opioid prescribing is the Opioid Prescribing Monitoring and Auditing Tool developed by the Department of Anesthesiology. This tool can be used for patient safety as well as compliance auditing purposes, to determine how closely prescribers are adhering to the official WCM Opioids Prescribing Policy. Departmental auditors typically conduct 3 chart reviews per month.

Reviewer Name, Title:	Date:	Opiola Pr	escribing M	ionitor	ing
Department, Location:		PatientYN	2 NA	Patien Y N	t 4 NA
Date of Review					
Patient Initials					
MRN #					
Provider					
Likely diagnoses/ICD10 prescribed	codes for which opioids				
Specific Opioids Presci	ribed				
MME/day prescribed (use opioid conversion	calculator)				
I-Stop monitoring prog prescribing or dispensi	ram cansulted prior to				
I-Stop reference numb scan of I-Stop review u	er listed or screenshot/ Iploaded				
Weill Cornell Opioid Co	ntract signed by patient				
Supply prescribed was was the patient's first provider for opioids for	no more than 7-days if this prescription written by any r pain conditions				
Urine drug screen was chronic, non-cancer pa more frequently for me	obtained for patients with ain at least once a year or edium or high risk patients				
Patient on opioid was e assessment with H&P o and every 90 days	evaluated with a functional obtained at initial encounter				
Supply prescribed for 1 was no more than 30 d	refill opioid prescription ays				
A Naloxone rescue kit v above 90 MME opioid	was prescribed for patients				
Comments					

The Opioid Prescribing Checklist can help providers follow the Opioid Prescribing Policy pro-actively.

Reviewer Name, Title: _____ Date: _

Department, Location: _

Date of Visit

Patient Initials

Diagnosis for which opioids prescribed

Provider

Likely diagnoses/ICD10 codes for which opioids prescribed

Specific Opioids Prescribed

MME/day prescribed

(use opioid conversion calculator)

I-Stop monitoring program cansulted prior to prescribing or dispensing

I-Stop reference number listed or screenshot/scan of I-Stop review uploaded

Weill Cornell Opioid Contract signed by patient

Risks for opioid abuse considered (family or personal history of substance abuse, age between 16–45 years, and history of mental illness)

Supply prescribed was no more than 7-days if this was the patient's first prescription written by any provider for opioids for pain conditions

Urine drug screen was obtained for patients with chronic, non-cancer pain at least once a year or more frequently for medium or high risk patients

Patient on opioid was evaluated with a functional assessment with H&P obtained at initial encounter and every 90 days

Supply prescribed for refill opioid prescription was no more than 30 days

A Naloxone rescue kit was prescribed for patients above 90 MME opioid

Opioid Prescribing Checklist

Comments

Substance Use Stigma

NewYork-Presbyterian has produced a video and information resource called "Behind the Stigma: Stories of Addiction and Recovery" <u>http://www.substanceusestigma.com</u>. Created by psychiatrists Jonathan Avery, MD and Daniel Knoepflmacher, MD, Behind the Stigma shares the stories of individuals in recovery from substance use disorder⁷.

Undertreatment of Addiction...

Alcohol and drug disorders are chronic brain disorders that alter brain circuitry, leading to compulsive craving. However, only 10% of individuals with substance use disorder receive treatment. Many pharmacologic and psychotherapeutic treatments are available, but often physicians won't prescribe them or patients don't have access to them.





...Because of Clinician Stigma

Clinical attitudes towards

individuals with substance use disorders worsen over time. Repeated negative interactions with active users may cause clinician sensitivities to erode. This can lead to lower quality

care and less empathy for patients struggling with substance use disorder.

...Can be Solved.

To reduce stigma,

clinicians should pursue positive experiences with individuals in recovery. Specifically, providers can engage local addiction specialists, ask current patients about substance use, and visit 12-step meetings. Learn more by visiting resources provided on the website such as the National Institute on Drug Abuse (NIDA) and American Academy of Addiction Psychiatry.



Non-Opioid Pain Management

- Non-Opioid Pharmacologic Pain Management
- Non-Pharmacologic Pain Management
- De-Escalation Resources



Non-Opioid Pharmacologic Pain Management

If a patient requires pharmaceutical management of pain, there are many non-opioid options to consider first. These non-opioid pharmacologic approaches include analgesics such as acetaminophen, NSAIDs, and COX-2 inhibitors; selected anticonvulsants such as gabapentin or pregabalin; and antidepressants such as tricyclic antidepressants and serotonin and norepinephrine reuptake inhibitors (SNRI)⁵.

Acetaminophen has been recommended in multiple guidelines as first-line drug therapy for low back pain and osteoarthritis. At recommended doses, acetaminophen safely provides clinically effective moderate pain relief. Providers must recognize that acetaminophen should be avoided in patients with liver failure and reduced in patients with hepatic insufficiency or alcohol abuse. Additionally, patients can be exposed to excessive amounts of acetaminophen if taken over-the-counter or in combination products, such as Vicodin or Percocet^{5,6}. NSAIDs are similarly recommended as firstline drug therapy for low back pain and osteoarthritis. Unlike acetaminophen, NSAIDs also have anti-inflammatory and antipyretic effects. Important side effects for physicians to be aware of for NSAIDs and COX-2 inhibitors include gastrointestinal bleeding and perforation. as well as renal and cardiovascular risks. Particular risk factors for GI toxicity include age > 65, history of GI bleed or peptic ulcer, use of steroids, anticoagulants or other NSAIDs, or helicobacter pylori infection. In patients with these risk factors, clinicians can co-prescribe a proton pump inhibitor, a high dose H2 blocker, such as ranitidine, or misoprostol. Selective COX-2 inhibitors may have a greater cardiac risk with cardiovascular side effects including hypertension, stroke, and myocardial infarction. As such, clinicians should avoid COX-2 inhibitors in patients with a history or high baseline risk of cardiovascular disease^{5,6}.

	Tylenol Extra Strength	Advil Aleve	Neurontin Lyrica	Cymalta
Non-Opioid Pain Reliever	Acetaminophen	NSAIDs	Anti-Epileptics	Tricyclic and SNRI antidepressants
Indications	First-line for lower back pain and osteoarthritis	First-line for lower back pain and osteoarthritis	FDA-approved for neuropathic pain	FDA-approved for neuropathic pain
Side Effects	Avoid in liver failure; Use caution in hepatic insufficiency or alcohol abuse	Gl bleeding and performation; Renal and cardiovascular risks	Sedation, dizziness, cognitive difficulties, and abuse potential	GI bleeding and perforation; Renal and cardiovascular risks

Anticonvulsants

Anticonvulsants such as gabapentin and pregabalin are FDA-approved for neuropathic pain. In patients with diabetic neuropathy, fibromyalgia, and post-herpetic neuralgia, these medications can be particularly effective. However, clinicians should recognize that these anticonvulsants are not an alternative to opioids for all forms of chronic pain. Few clinical trials have assessed the efficacy of these medications for common pain syndromes, for which they are often prescribed off-label⁵. These anticonvulsants can also have significant side effects, including sedation, dizziness, and even cognitive difficulties. Lastly, gabapentin and pregabalin have been shown to be misused or abused because of their euphoric effects in some patients. Therefore, providers must use caution when prescribing these anticonvulsants for indiscriminate off-label use for pain⁸.



Concept Check:

For neuropathic pain, anti-epileptics are very effective. But they are less useful to treat common acute or chronic pain.

Antidepressants

Antidepressants, particularly tricyclics and SNRIs, can provide effective neuropathic pain relief for patients with or without depression. Tricyclic antidepressants and SNRIs, such as duloxetine, have demonstrated efficacy and been FDAapproved to manage pain in diabetic neuropathy, post-herpetic neuralgia, and fibromyalgia. These antidepressants often

Relieve pain at lower dosages and shorter onset than for depression treatment. Pain and depression are often intertwined, such that patients with chronic pain frequently suffer from concurrent depression and depression can worsen physical symptoms including pain. Therefore, patients suffering from concurrent pain and depression are particularly likely to benefit from antidepressants treating both^{5,9}.

Non-Pharmacologic Pain Management

To treat pain comprehensively, clinicians should provide multi-modal care that encompasses medical, psychological, and social services. Non-pharmacologic physical and psychological approaches are effective and should be an integral part of treatment with or without pharmacologic treatments. Nonpharmacologic physical treatments include rehabilitation therapies, such as exercise,



Meta-analysis of pain outcomes at the earliest follow-up included 23 exercise groups with an independent comparison and adequate data. Pooled weighted mean improvement of 10.2 points (scale of 100) for exercise therapy vs. no treatment. At the earliest follow-up, an observed mean positive effect of 3.00 points was seen with exercise therapy vs. no treatment for functional outcomes.

Behavioral Therapy Apps



physical and occupational therapy; behavioral and complementary therapy, such as cognitivebehavioral therapy (CBT) and acupuncture; and interventional therapy, such as injections and nerve blocks^{5,6}.

These non-pharmacologic approaches have been shown to be effective in managing chronic pain. Patients with chronic pain who exercised experienced greater improvements in pain and functional outcomes than sedentary patients6. Evidence suggests that CBT reduces chronic pain, disability, and catastrophic thinking. By addressing the psychobiological mechanisms of pain, CBT helps patients identify and develop skills to change negative thoughts and behaviors around pain. Interventional pain therapies have been shown to deliver temporary relief from pain, particularly for patients with osteoarthritis or hip, back, or knee pain^{5,10}.

Weill Cornell Medicine and NewYork-Presbyterian offer many referral options for patients seeking specialty care in non-pharmacologic pain management.

Despite their efficacy, some of these therapies may not be reimbursed by insurance. However, there are covered, low-cost, or free alternatives available for patients that clinicians can suggest. For instance, integrating exercise into treatment plans can include free options available to all patients, such as brisk walks in public places or use of public recreational facilities. Free or low-cost apps, such as Headspace, Happify, and iCBT, use behavioral therapy techniques, such as meditation, cognitive reappraisal, and mindfulness, to address stress and anxiety commonly occurring alongside chronic pain¹¹.

" So Without Opioids How Do We Treat Pain? "

Non-Opioid Pharmacologic Pain Management

- Acetaminophen
- NSAIDs
- Anti-Epileptics
- Antidepressants

WCM Physical Medicine and Rehabilitation Center

For rehabilitative therapies, the Physical Medicine and Rehabilitation center at Weill Cornell Medicine can help patients alleviate back, joint, neck, and pelvic pain. The physical rehabilitation center offers several services for pain management,

including physical and occupational therapy and fluoroscopically guided spinal injections. The center also applies treatments from regenerative medicine, which utilize the body's natural healing ability to repair damaged tissue. Clinicians work alongside physical, recreational, and occupational therapists to design personalized treatment plans and offer comprehensive rehabilitative medicine care.

WCM Division of Pain Management

The Weill Cornell Medicine Division of Pain Management delivers multi-modal analgesia therapy to patients with acute and chronic pain.

Non-Pharmacologic Pain Management

- **Physical Medicine & Rehabilitation Center** Physical and occupational therapy, injections, regenerative medicine
- Division of Pain Management
 Nerve blocks, trigger point injections, spinal cord stimulation, transcutancous electrical nerve stimulation
- Integrative Health and Wellbeing Program
 Acupuncture, massage therapy, Pilates, meditation, yoga, guided imagery, mindfulness
- Psychiatry Department

Cognitive behavioral therapy, group or individual psychotherapy, support groups

A consultation with Pain Management is advisable before starting long-term opioid therapy, as there are frequently better alternatives available. The division's pain management specialists utilize evidence-based procedures and techniques to treat pain. These treatment options include nerve blocks, such as facet joint, peripheral nerve, and lumbar blocks; trigger point, epidural, musculoskeletal, and joint injections; spinal cord stimulation and spinal drug delivery systems; and transcutaneous electrical nerve stimulation. These interventions can provide relief from various pain conditions, including arthritis, back and neck pain, and fibromyalgia.

Integrative Health and Wellbeing Program

The Integrative Health and Wellbeing program at NewYork-Presbyterian, in collaboration with Weill Cornell Medicine, offers a complementary and behavioral approach to pain management. Addressing the physical, social and psychological sources of pain, the Integrative Health and Wellbeing doctors partner with patients' existing healthcare team. The center offers complementary services, including acupuncture, massage therapy, pilates, and nutritional counseling; and behavioral therapies, such as mind-body instruction and educational seminars. Mind-body instruction includes meditation, mindfulness training, guided imagery, and yoga. This integrative, holistic approach can relieve symptoms of chronic pain and reduce stress and anxiety.

Visit http://www.nyp.org/integrativehealth for more information.

WCM Psychiatry Department

For patients requiring more intensive behavioral therapy, the Weill Cornell Psychiatry Department offers many referral options. The Psychiatry Collaborative Care Center offers CBT as a covered service for many commercially insured and Medicare ACO patients. As part of the Multidisciplinary Pain Program at the Weill Cornell Brain and Spine Center, patients with chronic pain can receive CBT treatment alongside interventional therapies.

Patients can participate in the therapy individually or as part of a weekly psychotherapy support group. The group therapy program offers emotional coping strategies and shared support for patients confronting chronic pain. Additionally, the Cognitive Therapy Clinic offers focused outpatient psychotherapy specifically for chronic pain.

Ask an Expert: Dr. Alka Gupta

"Particularly for chronic low back pain, one of the top two reasons for primary care visits, evidence-based, clinical guidelines from the American College of Physicians recommed a first-line non-pharmacologic approach consisting of acupucture, massage, and mindfulness-based stress reduction, At Integrative Health, We prevent and treat chronic pain through a multimodal approach, targeting the many factors that contribute to pain, including stress and emotion."





Ask an Expert: Dr. Amanda Sacks-Zimmerman

"Opioid abuse can contribute to cognitive and emotional difficulties as well as higher rates of anxiety, depression, and bipolar disorders. Research indicates that manualized cognitive behavioral therapy—a type of psychotherapeutic intervention that examines the impact of thought patterns on behavior—is efficacious in treating opiate dependence and depression."

De-Escalation of Opioids Resources

For patients taking chronic opioids, de-escalation is an important step to transition them to nonopioid pain management. The CDC "Guideline for Prescribing Opioids for Chronic Pain" suggests that clinicians should consider tapering to a reduced opioid dosage or discontinuation when the patient:



- Requests dosage reduction.
- Does not have clinically meaningful improvement in pain and function defined by at least 30% improvement on the PEG scale.
- Shows signs of substance use disorder, such as work or family problems related to opioid use or difficulty controlling use.
- Experiences overdose or other serious adverse event.
- Shows early warning signs for overdose risk such as confusion, sedation, or slurred speech.

Tapering strategies should aim to minimize the symptoms of opioid withdrawal while maximizing pain treatment using non-pharmacologic and nonopioid treatments. Plans must be individualized for each patient as each patient's experience with opioids and psychological support will vary.

CDC guidelines recommend to go slow with tapering. An acceptable starting point is a decrease of 10% per week of the original dose. Slower tapers, such as 10% per month, may be more manageable for patients who have taken opioids for longer periods of time. The risk of overdose increases significantly if tapering patients suddenly return to a previously prescribed higher dose¹².



Ask an Expert: Dr. Neel Mehta

"First, I recommend and evaluation of why the patient is taking prescription opioids in the first place. Many times, these patients were

started inappropriately and have been on them for years. We have better options for pain management today." For certain patients particularly those at high risk of harm, clinicians should coordinate with specialists and treatment experts. Especially for pregnant women or patients with an opioid use disorder, consultation with experts or specialty withdrawal programs may be necessary. When prescribing tapered doses, providers must ensure that patients receive appropriate psychosocial support. Be mindful of signs of anxiety, fear, depression, and opioid use disorder during the taper.

Opioid Withdrawal Symptom	Adjuvant Agent to Treat
Sweating, Anxiety, Agitation	Clonidine or hydroxyzine
Depression and Sleep Disturbance	Antidepressants
Nausea and Vomiting	Zofran or promethazine
Abdominal Cramping and Diarrhea	Hyoscyamine
Increased Pain from Taper	Ibuprofen or Tylenol
Neuropathic Pain	Anti-epileptics pregabalin or gabapentin

If necessary, clinicians should partner with mental health providers, refer for treatment of opioid use disorder, and prescribe naloxone to protect against overdose. Clinicians should inform patients that most people achieve better function without worse pain after tapering opioids. Pain may briefly get worse at first, but some patients even have improved pain after a taper. It is important to reassure patients sharing encouragement such as "I know you can do this" or "I'll stick by you through this"¹³.

Adjuvant agents can help control the symptoms of opioid withdrawal. Antidepressants can help manage mood and sleep disturbance, α 2-Adrenergic Agonists such as clonidine or lofexidine can reduce sympathetic activity and

symptoms of withdrawal. Anti-epileptics, such as pregabalin or gabapentin, can be used to address neuropathic pain. Zofran can be used for nausea or vomiting and hyocosamine for abdominal cramping and diarrhea associated with withdrawal¹³.



"Withdrawal will not be easy..."

stick by you through it"





... And together we can do this."

Low-Risk Opioid Prescribing

- Opioid Prescribing for Chronic Pain
- Discharge Prescribing
- Safer Opioids to Prescribe
- Abuse-Deterrent
 Opioid Formulations
- Co-Prescribing of Naloxone
- Opioid Disposal Drop-Boxes

Opioid Prescribing for Chronic Pain

Chronic pain is tremendously prevalent in our society, with more than 50 million American adults having significant chronic or severe pain ¹⁴. The prevalence of chronic pain in older adults reaches 40% ¹⁵. Unsurprisingly, opioid analgesics used to treat chronic pain are the most commonly prescribed class of medications. In 2014, pharmacies dispensed 245 million prescriptions for opioids, with 3-4% of the adult population (9.6 to 11.5 million people) receiving chronic opioids ^{16,17}.



Short-term opioid therapy has been shown in clinical trials to reduce pain and improve function. However, the benefits of opioids for chronic pain are uncertain. Only a few studies have assessed the long-term benefits of opioids for chronic pain over 3 months. One recent 12-month study found 50 Million Adults with significant chronic or severe pain Chronic pain in older adults

that treatment with opioids for chronic back, hip, or knee osteoarthritis pain was not superior to treatment with non-opioid medications for improving pain-related function¹⁸. Long-term opioid therapy, however, has been associated with increased risk of opioid abuse, dependence, and overdose events. History of substance use disorder, younger age, major depression, and concurrent use of psychotropic medications were associated with increased risk of opioid misuse⁵.

The risk of opioid overdose is dose-dependent, with higher dosages of opioids associated with greater overdose risk. When compared to opioids prescribed at <20 MME/day, the odds of overdose among patients receiving chronic dosages of 20 to <50 MME/day was^{1,9}. For patients taking chronic dosages of 50 to <100 MME/day, odds of overdose increased to ^{4.6}. For chronic dosages of >100 MME/day, odds of overdose reached ^{8.9}. Patients who died of opioid overdoses were found to have been prescribed higher opioid dosages with a mean of 98 MME/day than controls⁵.

Dosage of Opioids (MME/day)	Odds of Opioid Overdose vs. <20 MME/day
20 to <50	1.9
50 to <100	4.6
>100	8.9

Discharge Prescribing of Opioids

Opioid prescribing after surgery is a common practice for controlling pain after discharge. Often the opioid scripts are written for many days, far exceeding the 7-day requirement for acute pain. However, many patients do not use all of the opioids that are prescribed to them. These excess pills are often not disposed of properly and may linger in homes well after surgery. Particularly when family members and friends visit patients after surgery, these excess opioids can easily be diverted and get into the wrong hands¹⁹.

Average # Percocet/Oxycodone 5 mg Tablets Prescribed Upon Discharge Following Cesarean



At Weill Cornell Medicine, two studies have been conducted to examine discharge prescribing of opioids:

1. The OB department revamped its pain medicine ordering policy to reduce in-hospital opioid prescriptions for Cesarean-sections. Before, the anesthesia team prescribed pain medications for the first 16 hours, followed by the OBs prescribing thereafter. This dual ordering led to duplicate orders and excess opioid prescriptions. The department changed its policy to allow only the anesthesia team to write orders. Additionally, the department adopted a "multi-modal analgesic regimen". Scheduled doses of acetaminophen, ibuprofen, and oxycodone at scheduled times were delivered instead of as-needed opioid-acetaminophen,. These changes resulted in decreased opioid delivered in the hospital, which led to decreased opioid prescribed upon discharge.

Concept Check:

Only prescribe 7 days or less of opioids for acute pain, upon discharge, or for opioid naive patients.



Ask an Expert: Dr. Jaime Aaronson

"Anecdotally, patients post-Cesarean section expressed wellcontrolled pain and gave positive feedback. The intervention reduced opioid prescribing so

much that currently women who deliver vaginally receive more opioid upon discharge than women who deliver by Cesarean section."

Post-Operative Pain and Opioid Usage After Cosmetic or Functional Rhinoplasty



Opioids only used for 4 Days Post-operative

Post-Operative Pain and Opioid Usage



94% Decrease Opioid use from post-op day 1–7 2. The Department of Otolaryngology examined the use of post-operative opioids. The study enrolled patients before common otolaryngologic procedures, such as rhinoplasty, sinus surgery, and skin cancer repair. Before the surgery, patients completed questions regarding pain management as well as the Hospital Anxiety and Depression Scale (HADS) and Pain Catastrophizing Scale Questionnaires. Following surgery, patients received a log to indicate their daily pain score and the number of opioid tablets used. The study examined whether patients use all the opioids prescribed after surgery.

Initial study results across these procedures suggest that patients use less opioid for fewer days post-operative than anticipated. For example, sinus surgery patients were prescribed an average of 30 opioid tablets and averaged 24 (80%) unused tablets. Patients reported rapidly decreasing pain scores after surgery and only used moderate or low amounts of opioid the first few post-operative days.



Ask an Expert: Dr. Anthony Sclafani

"We encourage other surgical departments to conduct your own opioid discharge analysis. A simple approach is urging your patients to bring their opioid prescription

bottles to the post-surgical appointment. If the patient has more tablets remaining than expected, the prescription was excessive."

Safer Opioids to Prescribe

Certain formulations and dosages of buprenorphine can be prescribed as a safer opioid to treat moderate to severe pain. Buprenorphine has partial agonist activity at mu-opioid receptors and antagonist activity at the kappa receptors. This pharmacology allows buprenorphine to provide pain relief at therapeutic doses without causing respiratory depression²⁰. Two formulations of buprenorphine approved for pain management are Butrans and Belbuca.

Drug	Formulation	Evidence for Pain Relief	Adverse Reactions
Butrans	Buprenorphine transdermal patch	Improvement in pain scores in opioid-experienced and opioid-naive patients compared to placebo	Nausea, headache, dizzieness, constipation, somnolence
Belbuca	Buprenorphine buccal film	Lower mean pain intensity scores in opioid-experienced and opioid-naive patients than placebo	Nausea, constipation, headache, vomiting, fatigue, and somnolence
Tramadol	Synthetic opioid tablet	Greater pain reduction when compated with placebo	Nausea, constipation, headache, dizziness

Butrans

A buprenorphine transdermal patch, provides pain relief for patients requiring continuous, long-term opioid treatment. In a double-blind, placebocontrolled clinical trial for 12-weeks, the Butrans 20 mcg/ hour patch demonstrated improvement in pain scores in opioid-experienced patients. Pain scores similarly improved in opioid-naïve patients as compared to placebo controls. The most common adverse reactions reported by patients in clinical trials were nausea, headache, dizziness, and constipation²¹.

Belbuca

A buccal film containing buprenorphine, is approved for around-the-clock treatment of moderate to severe chronic pain. The Belbuca film adheres to the cheek buccal mucosa where it dissolves to release the medication. In a 12-week double-blind trial, both opioidexperienced and opioid-naïve patients taking Belbuca reported lower mean pain intensity scores and consistent pain relief than placebo. The most common adverse reactions were nausea, constipation, headache, vomiting, and somnolence^{20,22}.

Tramadol

A synthetic opioid analgesic, effectively treats moderate to moderately severe pain²³. Multiple systematic reviews have showed that tramadol provides greater pain reduction when compared with placebo²⁴. Side effects of tramadol, such as nausea, constipation, and headache, are comparable to other opioids. As a Schedule IV controlled substance—unlike most other opioids which are Schedule II or III—tramadol has a lower potential for abuse. However, cases of addiction, overdose, and death have still been documented with tramadol²³.

Abuse-Deterrent Opioid Formulation

Prescribers can reduce the risk that opioids are diverted or misused by prescribing reformulated opioids designed to deter abuse. Tampering with standard formulations of opioids can allow drug abusers to inhale or inject these drugs to achieve a more intense drug effect. Abuse-deterrent formulations minimize the likelihood that opioids can be injected or snorted while still allowing for proper prescription use²⁵.

There are multiple abuse-deterrent opioid formulations that providers can prescribe. Combining the opioid agonist with an antagonist like naloxone or naltrexone blocks the effects if administered intravenously but not orally or sublingually. Embeda, which combines morphine and naltrexone, and Targiniq ER, which is oxycodone plus naloxone, are FDA-approved examples of this category^{17,25}.

Drug	Formulation	Mechanism of Abuse Deterrence
Emeda	Morphine ER/ Naltrexone	Combination opioid agonist with antagonist
Targiniq	Oxycodone ER/ Naloxone	Combination opioid agonist with antagonist
Hysingla	Hydrocodone ER	Resists crushing and breaking; Viscous gel when dissolves
Oxycontin	Oxycodone ER	Resists crushing and breaking; Viscous gel when dissolves
Lomotil	Diphenoxylate/ atropine	Unpleasant side effects in high doses
Acurox	Oxycodone/Niacin	Unpleasant side effects in high doses

Some deterrent formulations are delivered in a form that can't be crushed or extracted. The FDA has approved Hysingla (hydrocodone) and the new formulation of OxyContin (oxycodone) as abuse-deterrent formulations for this purpose. Some abuse deterrent drugs including Lomotil (diphenoxylate hydrochloride plus atropine) and Acurox (oxycodone plus niacin) combine opioids with a chemical that activates an adverse reaction. Therefore, if the drug is misused through tampering or excessive dosing, the formulations trigger adverse effects^{17,25}.

While these abuse-deterrent formulations may prevent intentional abuse of opioids, there are still significant concerns and risks associated with all opioid formulations. First, there is minimal evidence to suggest that opioids effectively treat chronic pain. Second, abuse-deterrent formulations can still precipitate addiction and don't prevent patients from taking higher doses than prescribed. Despite being abuse-deterrent, taking these formulations along with alcohol or benzodiazepines that depress respiration can cause an overdose. There is also a documented chance that patients prescribed abuse-deterrent formulations will shift their abuse pattern to other prescription opioids or heroin instead. Additionally, the price of deterrent formulations is nearly double that of a traditional formulation, causing many patients to pay more out-ofpocket²⁶.

Co-Prescribing of Naloxone Rescue Kits

The opioid antagonist naloxone (Narcan) can prevent death from overdose by reversing severe respiratory depression. Typically provided as an intranasal spray, it can easily be administered by bystanders, such as family and friends of people who experience opioid overdose. Naloxone blocks the opioid receptors and may also precipitate acute withdrawal. Naloxone has been shown to be effective to prevent opioid-related overdose death at the community level through community-based distribution⁵.



Clinicians should co-prescribe naloxone rescue kits when patients have an increased risk of overdose. Make sure to provide education on proper naloxone use and overdose prevention to patients and their family.

At doses required for opioid overdose, very few adverse events have been reported. Acute withdrawal can cause agitation, anxiety, and nausea, but these symptoms are minor compared to the life-saving potential of naloxone. Additionally, there are no harms of administering naloxone to individuals who have not overdosed on opioids. Giving naloxone to a person unconscious because of alcohol, diabetic coma, or heart attack will have no beneficial or harmful effect²⁷.



CDC Guidelines indicate that prescribers should consider co-prescribing naloxone rescue kits when patients are at increased risk for overdose. These risk factors include higher doses of opioids >90 MME/day, a history of overdose or substance use disorder, concurrent use of benzodiazepines, and reversion to prior high doses during tapering. When co-prescribing naloxone rescue kits, clinicians should provide education on overdose prevention and proper naloxone use to patients and their family. The educational website Get Naloxone Now (http://www.getnaloxonenow. org/online_training.html) offers free and easy training on naloxone administradtion⁵.

Myth

Naloxone encourages victims to take more drugs

Research has shown that naloxone decreases future use

Fact

Naloxone prevents victims from seeking treatment

Naloxone saves lives and gives victims a chance to get professional help

Naloxone makes people violent

At recommended does, naloxone rarely causes overdose victims to become combative

Naloxone causes serious side effects

The life-saving benefits of naloxone far outweigh the rare and minor side effects

Eastside Pharmacy Dispensing Naloxone

Walgreens Pharmacy 525 East 68th Street

Duane Reade Pharmacy 1187 First Avenue

Duane Reade Pharmacy 399 East 72nd Street

Duane Reade Pharmacy 1191 Second Avenue

CVS Pharmacy 1223 Second Avenue

Walgreens Pharmacy 1328 Second Avenue

CVS Pharmacy 1172 Third Avenue

Duane Reade Pharmacy 773 Lexington Avenue

Duane Reade Pharmacy 41 East 58th Street

In New York City, licensed pharmacists can dispense naloxone without a doctor's prescription. Naloxone is now available in more than 2,000 pharmacies throughout New York State and 720 in New York City. The state's Naloxone Co-payment Assistance Program (N-CAP) covers co-payments for naloxone up to \$40 per prescription. Many insurance companies will cover the cost of naloxone with little to no co-pay²⁸. Within a 5 block radius of NYP/Weill Cornell Medical Center, there are 8 pharmacies that stock and provide naloxone without a prescription. Visit **https://a816-healthpsi. nyc.gov/NYCHealthMap** for more locations of pharmacies dispensing naloxone.



Numerous NYC Health-sponsored community programs give naloxone kits away for free. Visit: https://wwwl.nyc.gov/assets/doh/downloads/ pdf/basas/naloxone-community-basedprograms.pdf.

Opioid Disposal Drop-Boxes

Many patients with unused opioid tablets left over from a prescription keep them just in case pain returns. But having unused opioids around the house can lead to dangerous consequences particularly if infants or pets accidentally ingest these drugs. Family members, friends, or house guests may also divert these opioids for individual use or sale to others. Properly disposing of these excess tablets greatly reduces the chance of accidental overdose or abuse²⁹.

To address this problem, the New York State department of Health has developed a drop box program throughout the state, county, and local law enforcement agencies. Thus far, 42 counties in the



state have medication drop boxes available for safe opioid disposal including New York City30. There are 40 Public Controlled Substance Disposal Locations within a 5-mile radius of NYP/Weill Cornell Medical Center. These disposal sites are primarily pharmacies, including multiple Duane Reade and CVS locations. Patients can use the Drug Enforcement Agency's Diversion Control app (https://apps.deadiversion.usdoj. gov) or the New York State Department of Environmental Conservation website: https://www.dec.ny.gov/ chemical/67720.html to find convenient locations.

Eastside Pharmacy with Diposal Drop-Box

Duane Reade Pharmacy 949 Third Avenue

CVS Pharmacy 1396 Second Avenue

CVS Pharmacy 630 Lexington Avenue

Duane Reade Pharmacy 1498 York Avenue

Duane Reade Pharmacy 51 West Avenue

CVS Pharmacy 241 West 57th Street



Addiction Treatment - Medication Assisted Treatment - Buprenorphine Certification - Behavioral Therapy and Counceling

Medication-Assisted Treatment (MAT)

Patients receiving methadone reduced their one-year mortality rate by 60%³³ and were 4.44x more likely to complete treatment³⁵.

Roughly 10% of patients treated with chronic opioids will develop opioid use disorder (OUD)³¹. The DSM-5 defines OUD as a problematic pattern of opioid use leading to clinically significant impairment or distress³². The clinical standard for

Treatment with buprenorphine reduced risk of death by 40%³³, and decreased opioid-positive drug tests by 14.2%³⁵.

treating OUD is medication-assisted treatment, which combines behavioral therapy and opioid agonist or partial agonist medication. Three medications approved for MAT are methadone, buprenorphine/naloxone (Suboxone), and

Naltrexone increased opioid-free abstinence by 2.6x and Reduced opioid cravings by 14.4x³⁶.

naltrexone (Vivitrol). Treatment with these medications along with psychosocial interventions has been shown to improve patient survival, treatment retention, illicit opioid use, patients' ability to gain and maintain employment, and birth outcomes among pregnant women with substance use disorder^{5,34}. Despite this evidence, MAT remains greatly underutilized. A large percentage of patients with OUD do not receive any addiction treatment. Only 16.7% of individuals hospitalized for opioid addiction receive any form of MAT within 30 days of discharge37. Stigma surrounding substance use disorder, misconceptions about replacing one addictive drug for another, and discrimination against "difficult" MAT patients all contribute to the low acceptance of MAT. High MAT costs, particularly for naltrexone treatment, limited insurance coverage, and insufficiently publicly funded MAT programs serve as additional barriers³⁸.

A key reason for underutilization of MAT is regulatory prescribing limitations. Providers can dispense buprenorphine and naltrexone in officebased settings, but only licensed opioid treatment programs can dispense

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Concept Check:

Only 16.7% of patients hospitalized for opioid addiction receive any form of MAT within 30 days of discharge.

methadone. Physicians must complete an 8-hour training course to become licensed to prescribe buprenorphine. Currently, physicians not licensed to prescribe buprenorphine themselves can refer patients for outpatient methadone maintenance treatment to the **Vincent P. Dole Treatment and Research Institute** and for intensive outpatient Suboxone treatment to the **WCMC Midtown Center for Treatment and Research**. Contact Kim Alexander (**kia2001@nyp.org | 212-746-1252**) Practice Administrator for MAT referrals.

Buprenorphine Training Certification

Physicians not yet certified can complete a training course to attain a licensing waiver from the Substance Abuse and Mental Health Services Administration (SAMHSA) to prescribe buprenorphine in an office-based setting. As only a small percentage of physicians are currently licensed to provide MAT, WCM physicians prescribing opioids should strongly consider obtaining the waiver. **Providers Clinical Support System** (**PCSS**) offers free waiver training for all practicing medical providers at https://pcssnow.org/. Physicians only require 8 hours of training, half of which can be completed online. Nurse practitioners and physicians assistants are able to apply for the license after completing 24 hours of free MAT waiver training through PCSS. **The New York City Department of Health and Mental Hygiene** (NYC DOHMH) launched the Buprenorphine Training and Technical Assistance Initiative, which provides free buprenorphine waiver training and technical assistance for physicians practicing in New York City. Physicians who are members of the **American Society of Addiction Medicine** (ASAM) can complete the waiver qualifying training course entirely online for free at https://www.asam.org/education/live-online-cme/buprenorphine-course. WCM in association with NYC Health and NewYork-Presbyterian is offering the in-person training for free on Thursday, September 13th. NYC Health and Hospitals is free in-person training sessions on Wednesday, June 27th with additional sessions each month. See flyers below for more information.

Free Buprenorphine Waiver Training For New York City Physicians, Nurse Practitioners, and Physician Assistants



Background:

Buprenorphine is an effective medication for treatment of opioid use disorder, and can be prescribed in office-based primary care settings. Any physicies, nume prectitioner, or physician assistant can prescribe buprenorphine after obtaining a weaver. Mysicians are required to complete an 8-hour training in order to apply for a weaver, nume practitioners and physician assistants must take 24 hours of training (inclusive of the 8-hour takes) in sources to apply. This course hour training in order to apply. This course fulfils the 8-hour training requirement.

NewYork-Presbyterian (

Training Format:

Participants will need to complete the online component <u>prior</u> to the inperson training

Training information:

Thursday, September 13th 2018 9:00am – 1:30pm 11th Floor, Room F1190 NYP/Weill Cornell Medical Center

Weill Cornell

Medicine

Registration:

Please email Arnab Ghosh, Division of General Internal Medicine, at akg9010@med.cornell.edu

with your name and title (i.e., MD/PA/NP) to register and for further information by Monday July 2nd 2018

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NYC HEALTH+ HOSPITALS

Free Buprenorphine Waiver Training

- Wednesday June 27th 10:00am-3:30pm
- 1901 First Avenue (at 97th Street) New York, NY 10029, 6th Floor Auditorium

Registration deadline: Wednesday June 20th

To register please email <u>buprenorphine@health.nyc.gov</u> by the registration deadline with the following required information:

- Full name
- Email address
- Title (i.e. MD, DO, NP, PA)
- Affiliation
- Practice address

Behavioral Therapy and Counseling

Along with medication, behavioral therapy and counseling are critical components of MAT. Evidence suggests that psychosocial treatments in conjunction with opioid addiction medications improves the health and wellbeing of patients with OUD39. The methadone maintenance program at the Vincent P. Dole Treatment and Research Institute and the Suboxone program at the Midtown Center for Treatment and **Research** offer intensive individual and group psychotherapy alongside medication treatment. Weill Cornell Medicine Psychiatry offers programs for psychosocial therapy through its Adult Addiction Recovery Services. Physicians can refer patients to these outpatient and inpatient services at both the NewYork-Presbyterian/ Weill Cornell Medical Center and the NewYork-Presbyterian/Westchester Division. Outpatient programs include three-phase intensive day and evening programs, intensive rehab day program, half-day program, dual-diagnosis group, and



Ask an Expert: Dr. Ann Beeder

"We understand that doctors need significant training and encouragement to initiate detox in practices that are not addiction focused.

That is why we in Addiction Psychiatry are here to help. Refer your patients struggling with opioid misuse to us at the Vincent P. Dole Institute or the Midtown Center for evaluation." an after-school adolescent program. Inpatient programs consist of the **Addiction Recovery Program at Westchester Division and the Substance Abuse Program at Payne Whitney.**

MAT Referral Options at Weill Cornell Medicine

- 1. Vincent P. Dole Institute for Treatment and Research
- Outpatient Methadone Maintenance Program
- Psychosocial, vocational, medical, and psychiatric services
- Structured continuing education programs
- Contact Practice Administrator Kim Alexander LCSW: kia2001@nyp.org, 212-746-1252

2. Midtown Center for Treatment and Research

- Intensive outpatient Suboxone Treatment Program
- Naitrexone (Vivitrol) therapy
- Individual and Group counseling and psychotherapy
- Contact Administrative Director
 Christopher Sturiano, PhD:
 chs2036@med.cornell.edu; 212-764-5178

3. Adult Addiction Recovery Services

- Intensive outpatient rehabilitative treatment
- Addiction Recovery Program at NYP Westchester Division
- Substance Abuse Program at WCMC Payne Whitney Clinic
- Contact Westchester Pyschiatry ACCESS
 Center (1-888-694-5700) or NYP/WCM Psychiatry (1-888-694-5700)

These programs feature a psychiatric and physical evaluation followed by various counseling options depending on patient preference and physician recommendation. These options include psychiatric care with medication management, individual counseling, group counseling, and family counseling. Each program includes education on addiction, medical consequences, and relapse prevention to promote recovery.



Community-Based Addiction Treatment Centers

If Weill Cornell Medicine is unable to provide addiction services for patients, clinicians should consider referring patients to communitybased treatment centers for MAT. There are numerous treatment centers in New York City and surrounding area offering outpatient and inpatient care for patients with substance use disorder and specifically opioid use disorder.

Outpatient Treatment



Community Healthcare Network, in affiliation with NewYork-Presbyterian, provides outpatient addiction services integrated with behavioral healthcare to all patients needing care. At CHN, patients abusing prescription opioids or heroin will receive Suboxone MAT to recover from their addiction. While receiving MAT, patients can be seen by their own primary care provider and a behavioral health therapist to treat the medical and psychological factors of substance abuse. With 13 health centers spread throughout Manhattan, Brooklyn, Queens, and the Bronx, most patients should find a CHN center nearby. CHN emphasizes that all patients, regardless of immigration status or ability to pay, are able to receive high-quality and affordable treatment.



The Parallax Center, located at 145 East 32nd Street in midtown Manhattan, offers outpatient services to

bridge the gap between an inpatient facility and community-based self-help programs. The center helps patients learn to live without drugs and substances in their current environment. Patients can continue to work or attend school while learning how to live a drug-free life. For opioid use disorder, the Parallax Center offers patients a non-opioid detox, allowing for complete opioid abstinence by the end of detox treatment. Then, patients can begin taking naltrexone for recovery of normal brain function and reduced cravings for opioids. In addition to medication therapy, patients receive psychosocial treatment consisting of individual and group therapy and involvement in self-help meetings. Medical staff provide support and care during detoxification and continuing care therapy to treat symptoms of opioid withdrawal as well as accompanying anxiety and depression. Most private health insurance plans, HMOs, managed care, and Medicaid plans cover Parallax services.



North American Partners in Pain Management

The North American Partners in Pain Management (NAPPM) created the first outpatient Pain Management Mental Health Center in Long Island. Located in Syosset, New York, the Second Chance Center helps patients at the intersection of pain, mental health, and addiction. The center offers an individualized, interdisciplinary treatment approach to patients suffering from chronic opioid dependence and addiction as well as fibromyalgia, migraine headaches, anxiety, depression, and other painrelated mental health conditions. Using multiple modalities in addiction medicine, the Second Chance Center helps patients reduce pain, recover from addiction, and regain control of their life. The center accepts most private and public insurances, including Medicare and Medicaid.



For executives and professionals, **Compass Health Group** provides integrated medical and psychological treatment for substance and opioid use disorder. Compass Health Group offers an in-home detox program that allows patients to withdraw from opioids while enjoying the privacy and comfort of home. Licensed physicians specialized in addiction treatment provide daily house visits to dispense Suboxone or naltrexone and manage withdrawal symptoms. All patients participate in individual or group therapy to help patients make the necessary changes to support recovery and prevent relapse. Compass Health does not accept any insurance plans and provides services exclusively on a self-pay basis. However, patients may be able to file for insurance reimbursement independently.

Inpatient Treatment



Arms Acres is a private, inpatient treatment facility in Putnam County, NY. The treatment program at Arms Acres offers medically supervised detoxification and counseling for patients experiencing withdrawal. Following detox, patients may be transferred to rehabilitation programs or outpatient therapy for medication assisted treatment and counseling. Rehabilitation programs for adults include nutrition education, relapse prevention, stress management, exercise, and art therapy. Once patients complete treatment, many participate in the Alkathon Program, in which recovering alumni return to share their experience, strength, and hope with individuals currently receiving treatment. Arms Acres is in network with most commercial insurance plans, managed-care programs, and Medicaid.



Caron Treatment Centers offers specialized inpatient treatment for patients suffering from opioid addiction. Caron's Opioid Program combines MAT therapy with family therapy to provide comprehensive care for patients and their families. Inpatient services located in Wernersville, Pennsylvania, allow patients to escape the commotion of New York City, but the Midtown Manhattan recovery center serves as an important continuing care resources for patients returning to their busy lives. Providing over 60 years of care, addiction treatment at Caron has a proven record of success. At completion of the one-year program over 67% of patients achieved abstinence. Caron accepts full or partial payment from many insurance plans.

SILVER HILL HOSPITAL

Silver Hill Hospital, located in nearby New Canaan, Connecticut, offers a three-level treatment approach for patients dependent on opioids, consisting of inpatient treatment, transitional living, and outpatient treatment. During their inpatient stay, patients receive safe detoxification, symptom reduction, MAT medications and counseling. The transitional living level involves patients residing in a home-like setting and developing behavioral skills to manage recovery. Outpatient treatment offers continued support for patients transitioning into recovery. Silver Hill Hospital participates in many insurance plans including Connecticut Medicaid, and Medicare.

	Community- Based Addiction Treatment Center	Services Offered	Location	Insurance Coverage	Contact Information
	Community Healthcare Network	 Outpatient integrated addiction and behavioral health services MAT with Suboxone 	Manhattan, Booklyn, Queens, Bronx	Medicaid, Medicare, most commercial plans	212-545-2417
	The Parallax Center	 Outpatient detoxification MAT with Suboxone, Naltrexone Psychosocial individual, group, family therapy 	Midtown Manhattan	Most private plans, HMOs managed care, Medicaid	212-779-9207
	The North American Partners in Pain Management	 Second Chance Center for addition, pain, and mental health conditions Pain relief treatments such as injections, CBT, nerve blocks 	Long Island Syosset, NY	Most private plans, Medicare, Medicaid	516-496-6447
-	Compass Health Group	 In-home opioid detoxification program MAT with Suboxone, Naltrexone Invividual, group therapy, relapse prevention 	Midtown Manhattan	Self-pay but may file for reimbursement independently	212-969-1899
2	Arms Acres	 Medically supervised detoxification Crisis counseling, relapse prevention, art therapy MAT with methadone, Suboxone, Naltrexone 	Putnam County, NY	Most private plans, managed-care, Medicaid	845-225-3400
	Caron Treatment Centers	 MAT family therapy education Recovery Center Located in NYC Technology-supported care 	Wernersville, PA	Full or partial payment from private plans	800-854-6023
	Silver Hill Hospital	 Inpatient, transitional living, outpatient treatment Detoxification, MAT, counseling 	New Canaan, CT	Many private plans, Medicaid, Medicare	866-542-4455

Inpatient Treatment

Additional NYS Opioid Treatment Programs

Community-Based Agency	Services Offered	Location	Contact Information
Project Renewal	BuprenophineNaltrexone	8 East 3 rd Street East Village	212-763-0596
The Bridge	BuprenophineNaltrexone	248 West 108 th Street Upper West Side	Susan Kaskowitz 212-663-3000
The Alliance for Positive Change	BuprenophineNaltrexone	25 Allen Street Lower East Side	212-226-6333
Carnegie Hill Institute	- Suboxone	116 East 92 nd Street Upper East Side	Irina Sheina 646-972-1105
Highbridge—START Treatment & Recovery Centers	- Suboxone	500 West 180 th Street Washington Heights	212-543-2782
Third Horizon—START Treatment & Recovery Centers	- Suboxone	2195 3rd Avenue East Harlem	212-543-2782
Kaleidoscope Clinic—START Treatment & Recovery Centers	- Suboxone	119 West 124 th Street Harlem	212-932-2810
Beth Isreal's Opioid Treatment Program	- Suboxone	1825 Park Avenue Harlem	212-774-3200
Harlem East Life Plan Ambulatory Outpatient	- Suboxone - Vivitrol	2369 2nd Avenue East Harlem	Sheryl Hunt 212-876-2300 Ext. 151
Montifiore Medical Center	- Suboxone	260 East 161st Street	Amy Greengrass 718-993-3397
Bronx Lebanon Hospital Center	- Suboxone	1276 Fulton Avenue	Priscilla Rivera 718-503-7750
Beth Isreal Medication Center —Vincent Dole	- Suboxone	25 Twelfth Street Gowanus	Meredith Zicht 718-574-1802
START—Bushwick	SuboxoneNaltrexoneMethadone	1149 Myrtle Avenue Bushwick	Sakiyah Wright 718-574-1802
South Brooklyn Medical	- Suboxone - Methadone	685 Third Avenue Park Slope	Alexis Bosco 718-788-2594
Samatitan Village	- Suboxone - Methadone	130 89 th Road	Roy Kearse 718-788-2594
St. Joesph's Hospital, Yonkers	- Methadone	175 Hillside Avenue Jamaica	Rose Scotman 718-558-7230
Staten Island University Hospital	- Methadone	111 Water Street	Lydia Ayinde 718-448-3976
Long Island Jewish Medical Center	- Suboxone	270 76 th Avenue	Patricia Hincken 718-470-8943
Nassau University Medical Center	- Suboxone	2201 Hempstead Turnpike	Kathy Plascyk 516-572-6305

Bronx

S long Island

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There are additional ways to find health care proiders who treat addiction with Suboxone or to find a methadone treatment program. Visit the OASES Provider and Program Search tool https://www.oasas.ny.gov/providerDirectory/index.cfm?search_type=2, search a map of buprenorphine and other treatment providers around New York City and the country https://www.findtreatment.samhsa.gov/locator?sAddr=10022&submit=Go or call the NYC's free, confidential 24/7 hotline at 888-692-9355 to seek support.

Additionally, the following primary care facilities offer buprenorphine treatment sponsored by NYC Health in addition to comprehensive primary care medical services.

	Community-Based Addiction Treatment Center	Contact Information
Manhattan	Sydenham Health Center	212-932-6500
	Community Healthcare Network South Bronx	718-320-4466
	Montefiore Comprehensive Family Care Clinic (CFCC)	718-405-8227
xuc	Montefiore Family Care Center (FCC)	718-405-8227
Brc	Park Avenue Family Health Center	718-684-9422
	Clay Family Health Center	718-684-9422
	Claremont Family Health Center	718-299-6910
	Community Healthcare Network Williamsburg	718-486-4589
oklyn	HealthCare Choices	718-234-0073
Broc	Sterling Avenue Health Center (Brightpoint)	855-681-8700
	Church Avenue Health Center (Brightpoint)	855-681-8700
Queens	Sutphin Health Center (Brightpoint)	855-681-8700
N	Bay Street Clinic (Brightpoint)	855-681-8700

Primary Care Clinics Offering Buprenorphine

Additional Resources

Centers for Disease Control and Prevention:

www.cdc.gov/drugoverdose/

- CDC Guideline for Prescribing Opioids for Chronic Pain
- Information for Patients and Providers
- National and Statewide prescribing and overdose data

U.S. Department of Health and Human Services:

HHS.gov/opioids

- National Helpline: 800-662-4357
- Addiction Treatment Center Locator
- Real Patient Stories

New York State Department of Health: Opioid Overdose Prevention

- Naloxone Rescue Kit Pharmacy Finder
- Opioid-related Data in New York State
- Buprenorphine Licensing Training

NYC Health: Opioid Addiction Treatment and Opioid Prescribing

- MAT Treatment Locator in NYC
- Provider Guides and Resources on Misuse and Overdose Prevention
- OpioidCalc app MME conversion and overdose risk

SAMHSA:

Opioids Resources

- Behavioral Health Treatment Locator
- Buprenorphine Licensing
- National Survey on Drug Use and Health

Scope of Pain Course:

https://www.scopeofpain.com/

- Educational Resource on Safe and Competent Opioid Prescribing

References

- Wide-ranging online data for epidemiologic research (WONDER). (2017). (Rep.). Retrieved June 13, 2018, from National Center for Health Statistics website: http://wonder. cdc.gov
- Centers for Disease Control and Prevention. (2017, August 31). Annual Surveillance Report of Drug-Related Risks and Outcomes — United States, 2017 (Rep.). Retrieved June 13, 2018, from Centers for Disease Control and Prevention, U.S. Department of Health and Human Services website: https://www.cdc.gov/ drugoverdose/ pdf/pubs/2017cdc-drug-surveillancereport.pdf
- Han, B., Compton, W. M., Blanco, C., Crane, E., Lee, J., & Jones, C. M. (2017).
 Prescription Opioid Use, Misuse, and Use Disorders in U.S. Adults: 2015 National Survey on Drug Use and Health. Annals of Internal Medicine, 167(5), 293. doi:10.7326/m17-0865
- New York State Department of Health. (2017). New York State (Rep.). Retrieved June 12, 2018, from New York State Department of Health website: https://www.health.ny.gov/statistics/ opioid/data/pdf/nys_opioid_annual_ report_2017.pdf
- Dowell, D., Haegerich, T. M., & Chou, R. (2016). CDC Guideline for Prescribing Opioids for Chronic Pain—United States, 2016. Jama, 315(15), 1624. doi:10.1001/jama.2016.1464
- U.S. Department of Veterans Affairs. (2014). Pain Management Opioid Safety. Retrieved June 12, 2018, from https://www.va.gov/ PAINMANAGEMENT/docs/OSI_1_ Tookit_Provider_AD_Educational_ Guide_7_17.pdf
- Avery, J., MD, & Knoepflmacher, D., MD. (2018). Substance Use Stigma. Retrieved June 12, 2018, from http:// www.substanceusestigma.com/
- Goodman, C. W., & Brett, A. S. (2017). Gabapentin and Pregabalin for Pain

 Is Increased Prescribing a Cause for Concern? New England Journal of Medicine, 377(5), 411-414. doi:10.1056/ nejmp1704633
- Lunn, M. P., Hughes, R. A., & Wiffen,
 P. J. (2014). Duloxetine for treating painful neuropathy, chronic
 pain or fibromyalgia. Cochrane
 Database of Systematic Reviews.
 doi:10.1002/14651858.cd007115.pub3

- Murphy, J.L., McKellar, J.D., Raffa,
 S.D., Clark, M.E., Kerns, R.D., & Karlin,
 B.E. Cognitive behavioral therapy for chronic pain among veterans: Therapist manual. Washington, DC: U.S. Department of Veterans Affairs.
- Anxiety and Depression Association of America. (2018). ADAA Reviewed Mental Health Apps. Retrieved from https:// adaa.org/finding-help/mobile-apps
- 12. Centers for Disease Control and Prevention. (2016, August 15). Pocket Guide: Tapering Opioids for Chronic Pain. Retrieved June 13, 2018, from https://www.cdc.gov/drugoverdose/ pdf/clinical_pocket_guide_tapering-a. pdf
- Weimer, M., DO, MCR, Gideonse, N., MD, Mauer, K., MD, & Stacey, B., MD. (2013). Guideline for safe Chronic Opioid Therapy Prescribing For Patients with Chronic Non-Cancer Pain. Retrieved June 13, 2018, from http://www.ohsu. edu/gim/epiclinks/opioidresources/ OHSU_Opioid Guideline_1 14.pdf
- Nahin, R. L. (2015). Estimates of Pain Prevalence and Severity in Adults: United States, 2012. The Journal of Pain, 16(8), 769-780. doi:10.1016/j. jpain.2015.05.002
- Johannes, C. B., Le, T. K., Zhou, X., Johnston, J. A., & Dworkin, R. H. (2010). The Prevalence of Chronic Pain in United States Adults: Results of an Internet-Based Survey. The Journal of Pain, 11(11), 1230-1239. doi:10.1016/j. jpain.2010.07.002
- Centers for Disease Control and Prevention. (2017, May 03). National Center for Health Statistics. Retrieved June 13, 2018, from http://www.cdc.gov/ nchs/fastats/drug-use-therapeutic. htm
- Volkow, N. D., & Mclellan, A. T. (2016).
 Opioid Abuse in Chronic Pain Misconceptions and Mitigation Strategies. New England Journal of Medicine, 374(13), 1253-1263. doi:10.1056/ nejmra1507771
- Krebs, E. E., Gravely, A., Nugent, S., Jensen, A. C., Deronne, B., Goldsmith, E. S., ... Noorbaloochi, S. (2018). Effect of Opioid vs Nonopioid Medications on Pain-Related Function in Patients With Chronic Back Pain or Hip or Knee Osteoarthritis Pain. Jama, 319(9), 872. doi:10.1001/jama.2018.0899
- Bartels, K., Mayes, L. M., Dingmann, C., Bullard, K. J., Hopfer, C. J., & Binswanger, I. A. (2016). Opioid Use and Storage Patterns by Patients after Hospital Discharge following Surgery. Plos One, 11(1). doi:10.1371/journal.pone.0147972

- 20. Walsh, L. (2015, June 15). Buprenorphine. Retrieved June 13, 2018, from https://www.samhsa.gov/ medication-assisted-treatment/ treatment/buprenorphine
- Gimbel, J., Spierings, E. L., Katz, N., Xiang, Q., Tzanis, E., & Finn, A. (2016). Efficacy and tolerability of buccal buprenorphine in opioidexperienced patients with moderate to severe chronic low back pain. Pain, 157(11), 2517-2526. doi:10.1097/j. pain.000000000000670
- 22. BELBUCA® (Prescribing Information). (2016). Raleigh, NC: BioDelivery Sciences International. Inc.
- 23. Ogbru, O. (2017, August 17). Tramadol (Ultram) for Pain: Side Effects, Dosage, Addiction & Withdrawal. Retrieved June 28, 2018, from https://www. medicinenet.com/tramadol/article. htm#is_tramadol_a_narcotic_is_it_ addictive
- 24. Canadian Agency for Drugs and Technologies in Health. (2015). Tramadol for the Management of Pain in Adult Patients: A Review of the Clinical Effectiveness. PubMed Health. Retrieved June 28, 2018, from https:// www.ncbi.nlm.nih.gov/pubmedhealth/ PMH0085780/.
- Becker, W. C., & Fiellin, D. A. (2017). Abuse-Deterrent Opioid Formulations — Putting the Potential Benefits into Perspective. New England Journal of Medicine, 376(22), 2103-2105. doi:10.1056/nejmp170155
- 26.Institute for Clinical and Economic Review. (2017, July). A Look at Abuse-Deterrent Opioids (Rep.). Retrieved June 13, 2018, from Institute for Clinical and Economic Review website: https://icer-review.org/wp-content/ uploads/2017/08/ADF_RAAG_080817. pdf
- Zucker, H., MD. (2018, April). Department of Health. Retrieved June 13, 2018, from https://www.health. ny.gov/diseases/aids/general/opioid_ overdose_prevention/directories.htm
- 28. Kennedy-Hendricks, A., Gielen, A., Mcdonald, E., Mcginty, E. E., Shields, W., & Barry, C. L. (2016). Medication Sharing, Storage, and Disposal Practices for Opioid Medications Among US Adults. JAMA Internal Medicine, 176(7), 1027. doi:10.1001/ jamainternmed.2016.2543
- 29. Zucker, H., MD. (2016, December). Department of Health. Retrieved June 13, 2018, from https://www. health.ny.gov/professionals/narcotic/ medication_drop_boxes/

- 30.Division of Water. (2018). Safe Medication Disposal for Households. Retrieved June 13, 2018, from https:// www.dec.ny.gov/chemical/67720.html
- Vowles, K. E., Mcentee, M. L., Julnes, P. S., Frohe, T., Ney, J. P., & Goes, D. N. (2015). Rates of opioid misuse, abuse, and addiction in chronic pain. Pain, 156(4), 569-576. doi:10.1097/01.j.pa in.0000460357.01998.f1
- 32. American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (p. 541, Rep.). Washington, DC: American Psychiatric Association.
- 33.Larochelle, M. R., Bernson, D., Land, T., Stopka, T. J., Wang, N., Xuan, Z., . . Walley, A. Y. (2018). Medication for Opioid Use Disorder After Nonfatal Opioid Overdose and Association With Mortality. Annals of Internal Medicine. doi:10.7326/m17-3107
- 34.SAMHSA. (2015, June 15). Medication and Counseling Treatment. Retrieved June 13, 2018, from https://www. samhsa.gov/medication-assistedtreatment/treatment
- 35.Breen, C., Kimber, J., Davoli, M., & Mattick, R. (2012). Methadone Maintenance Therapy Versus No Opioid Replacement Therapy for Opioid Dependence1. Alcohol and Drug Misuse, 110-112. doi:10.1002/9781118454503.ch42
- 36.Krupitsky, E., Zummo, J., & Gastfriend, D. (2014). Injectable extended-release naltrexone (XR-NTX) for preventing relapse to opioid dependence: Findings from differing cultures, populations & settings. Drug and Alcohol Dependence, 140. doi:10.1016/j. drugalcdep.2014.02.322
- Herbst, E., Zaman, T., & Rife, T. (2017). Prescriptions Filled Following an Opioid-Related Hospitalization. Psychiatric Services, 68(4), 422-423. doi:10.1176/appi.ps.68304
- 38.Barrett, J., Li, M., Spaeth-Rublee, B., & Pincus, H. A. (2017). Value-Based Payment As Part Of A Broader Strategy To Address Opioid Addiction Crisis. Health Affairs. doi:10.1377/ hblog20171130.772229
- 39.Dugosh, K., Abraham, A., Seymour, B., Mcloyd, K., Chalk, M., & Festinger, D. (2016). A Systematic Review on the Use of Psychosocial Interventions in Conjunction With Medications for the Treatment of Opioid Addiction. Journal of Addiction Medicine, 10(2), 93-103. doi:10.1097/adm.00000000000193