

IT MATTTRs

Implementing Technology,
Medication Assisted Treatment,
Team Training, and Resources

PRIMARY CARE PRACTICE TEAM TRAINING

Module 1
Opioids, Receptors, Colorado, and You

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What is your role on your clinic team?

Clinician

Nurse

Medical Assistant

Front Office/Administrative

Behavioral Health

Other

Start the presentation to see live content. For screen share software, share the entire screen. Get help at polllev.com/app

What is IT MATTTRs™ Team Training?

IT MATTTRs

- Provides education, training, and facilitation support for the entire practice team in medication assisted treatment (MAT) with buprenorphine for opioid use disorder (OUD)
- Over the course of 4 modules, Team Training covers:
 - Module 1: Why we're here; what opioids are and how do they work; tolerance, dependence, and addiction; and an introduction to buprenorphine
 - Modules 2 and 3: Steps involved with providing MAT with buprenorphine – what your patients experience and what practices need to implement to provide buprenorphine for opioid use disorder
 - Module 4: Ongoing treatment activities; how MAT with buprenorphine works in special populations (youth, pregnant women, people with comorbidities)

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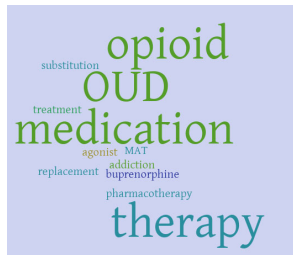
Where is your practice in regards to MAT for opioid use disorder? What could you use help with?

Start the presentation to see live content. For screen share software, share the entire screen. Get help at polllev.com/app

MAT for OUD: What's in a name?

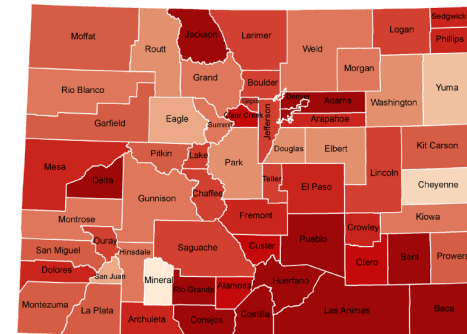
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- Be aware of terms that contribute to misconceptions about addiction and stigmatization of individuals dealing with addiction.



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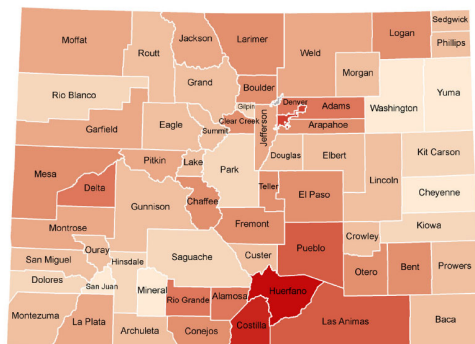
Colorado Counties: Drug overdose death rates: 2014

You can find county-level data by clicking on the county name in the map or by clicking on the county name in the table below.



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Colorado Counties: Drug overdose death rates: 2002

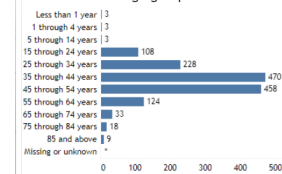


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Drug overdose death rates in Colorado

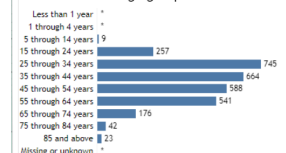
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Age groups



2002 - 2004

Age groups



2017 - 2019

Colorado Department of Public Health and Environment

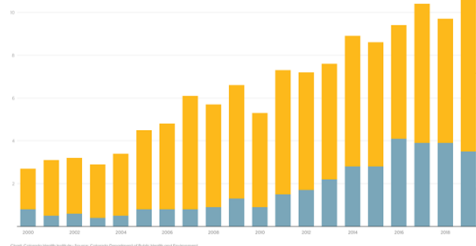


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Why are we here?

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Figure 3: Prescription Opioid- and Heroin-Related Death Rates Per 100,000 People in Colorado, 2000-2019



In Colorado (2019):

- 644 deaths from prescription opioids or heroin
- 596 deaths from car crashes
- 468 deaths from the flu

Chart Colorado Health Institute - Source: Colorado Department of Public Health and Environment

For updates, visit <https://www.coloradohealthinstitute.org/updates>



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COVID and Overdose Rates

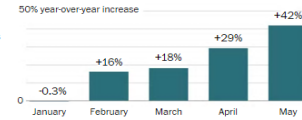
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Monthly overdoses grew dramatically during the pandemic

For every 10 suspected overdoses reported to ODMAP in May 2019 ...
... 14 overdoses were reported in May 2020.



Overdoses increased up to 42% per month during the pandemic, as compared to the same months in 2019.



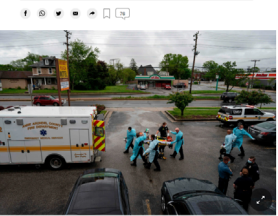
Note: Percent growth references the 1,201 agencies reporting to ODMAP by January 2019.
Source: ODMAP

ALYSSA POWERS/THE WASHINGTON POST

April 14, 2021

Overdose Deaths Have Surged During the Pandemic, C.D.C. Data Shows

The latest numbers surpass even the yearly tolls during the height of the opioid epidemic and mark a reversal of progress against addiction in recent years.



Emergency responders tended to a person who went into cardiac arrest after a drug overdose in Rockville, Md., last year. (AP Photo/Agence France Press - Barry Scheraga)

Fentanyl Use and Overdose

Figure 5. In Colorado, Fentanyl-Related Death Rates Per 100,000 People Have More Than Quadrupled Since 2016

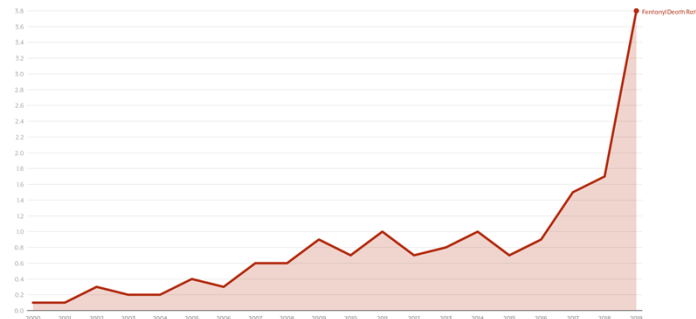
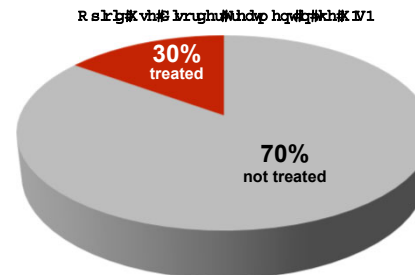


Chart Colorado Health Institute - Source: Colorado Department of Public Health and Environment

Why are we here? Treatment gap

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For what other condition is this acceptable?



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Why are we here? Because you can change this

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- Not only about mortality. Quality of life, crime rates, employment – all affected by opioid epidemic.
- There are effective, evidence-based tools for treatment for use in primary care – such as MAT – but they are severely under-used
- Legislation in 2000, 2016, and 2018 expanded buprenorphine prescribing rights to waived physicians, nurse practitioners, physician assistants, registered nurse anesthetists, and certified nurse midwives
- As a result of COVID-19, multiple factors associated with risk for substance abuse are now much more prevalent in our country
- You can change this treatment gap! But it takes a team...



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IT MATTTRs^{WP} Team Training Resources

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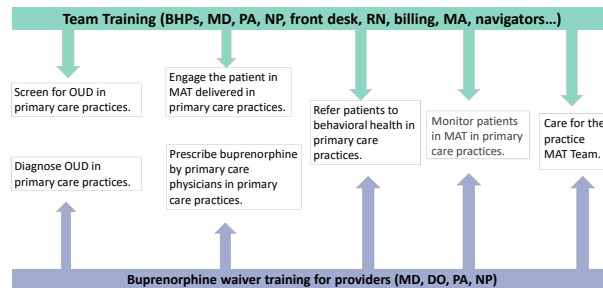
- Education for the entire practice team and facilitated implementation support
- IT MATTTRsTM MATERIALS Resource Toolkit
 - Hard copy and online at: <https://medschool.cuanschutz.edu/itmatttrs/materials>
 - Colorado MAT Virtual Help Desk
- MAT Consultant Panel (clinicians, staff, and others with MAT expertise)
- MAT Forums (twice a month, online, with Consultant Panel)



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Creating the practice environment conductive to care for OUD using MAT

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Practice Team Training Modules

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1. Opioids, Receptors, Colorado, and You
2. The Patient: Your role preparing the patient for MAT with buprenorphine
3. The Practice: Supporting and providing MAT
4. Stabilization and Maintenance and Special Populations



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MODULE 1

OPIOIDS, RECEPTORS, COLORADO AND YOU

- **Epidemiology:** Opioid and heroin misuse
- **Legislation:** Drug Addiction Treatment Act (DATA 2000)
- **Opioid Pharmacology:** What are opioids? Mu receptors?
- **Neurobiology of Opioid Use Disorders:** Tolerance, Dependence, Cycle of Addiction
- **Medication Assisted Treatment (MAT) with buprenorphine:** What is buprenorphine? How does it work? How effective is it? Is it safe?



Lauren



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dgg#brq#vwlqg#q#ghghhkhukw#
Vvdwhg#q#s#r#r#v#hkh#h#j#q#VDIG#v#gg#v#n#r#q#
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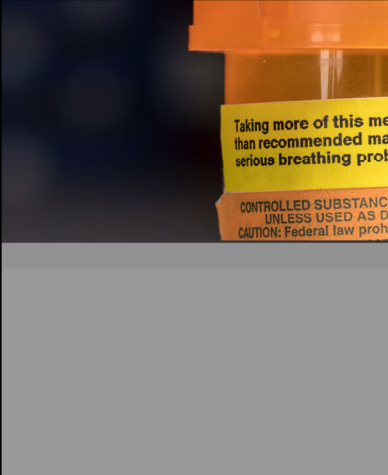
David


52 year old male former oil field worker, now on disability for back injury. Placed on fentanyl patch by worker's comp, began buying additional short-acting opioids from others to supplement. Workers Compensation physician learned of purchases and discontinued opioids. David now self-medicating by purchasing pills and smoking heroin.




QUESTIONS

- Duh#dyb#ru#Dxbhg#ehghlkq#urp #s#r#gvB
- Z kdw#Duh#kh#l#nv# #frqwb#lj #s#r#gvB
- Duh#khuh#dq #uhg#d#j #ehkdyl#wB#Gr#kh# #frqwl#w#B#xvh#j#vughB

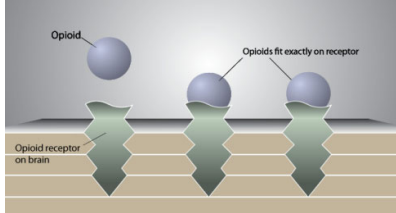






OPIOID PHARMACOLOGY



Mu receptors receive the opioid and facilitate the opioid's effects




- Mu receptor triggers:
 - Euphoria
 - Sedation
 - Relaxation
 - Pain relief
 - Anxiety relief
 - Sleepiness
- Opioids affect the central nervous system and:
 - Block pain
 - Slow breathing
 - Create a calming, anti-depressing effect
- Chemical opioids stimulate Mu receptor much more powerfully than the body's natural opioids




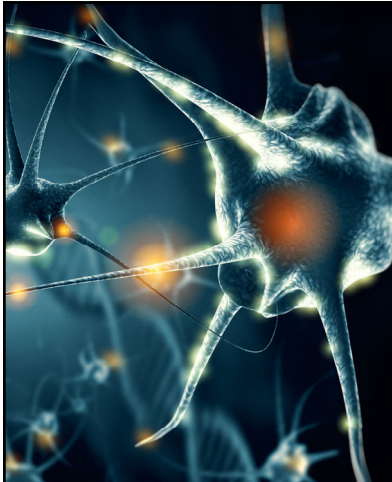
What are opioids?

- Drugs that bind to the opioid receptors in our bodies: Mu, Kappa, Delta receptors
- Can be naturally-occurring or a derivative
 - Morphine, Codeine
 - Heroin: 10x more potent than morphine
- Can be synthetic
 - Methadone
 - Fentanyl: 100x more potent than morphine





NEUROBIOLOGY OF OPIOID USE DISORDERS

Opioid tolerance & physical dependence

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Erw#oudqfh#qg#sk|vEdqghshqghqfh#h#
sk|vtr#jEdqghsdwvtrq#Ekrqf#srlgh{srvxh



TOLERANCE

- Increased dosage needed to produce specific effect
- Develops readily for central nervous system and respiratory depression



PHYSICAL DEPENDENCE

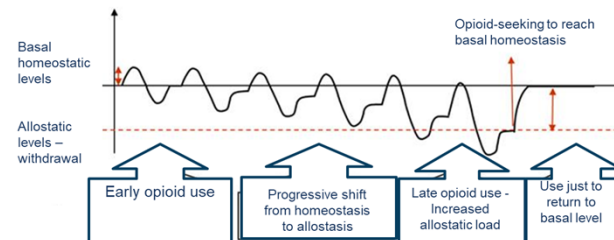
- Signs and symptoms of withdrawal by abruptly stopping the opioid, rapid dose reduction, or administration of antagonist



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How addiction hijacks the brain

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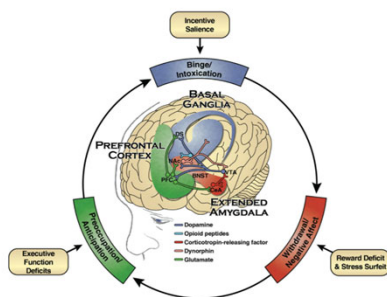
Koob GF. European Neuropsychopharmacology. 2003.



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The cycle of addiction

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- Dependence = biology (happens at a biological level)
- Addiction = dependence + behaviors to avoid withdrawal

All chemical opioids may cause physical dependence and addiction.

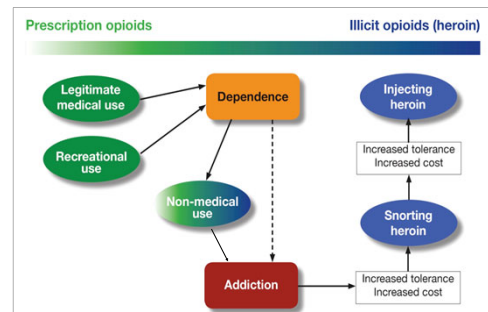
Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health. Nov 2016



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Why do some turn to heroin?

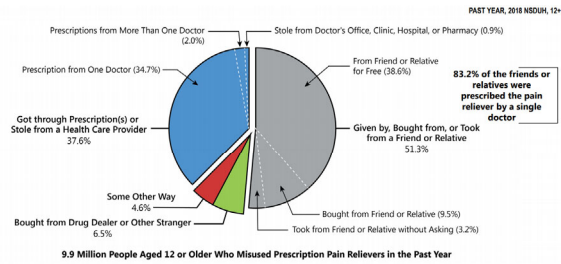
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Sources of diverted opioids

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SAMHSA



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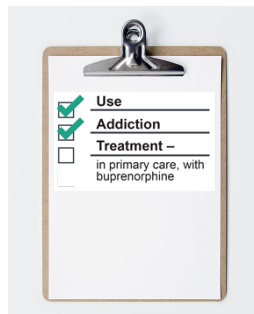
Treatment



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Primary care practice team members

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- Help identify patients with an opioid **dependence** (think of your patients with long-term, high-dose opioid use) and opioid **use disorder**
- Treat or refer your patients to treatment and behavioral health care
- KNOW what your patients will and are going through in treatment



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Medication Options for MAT

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"M" is for Medication: Three Types

Type	How it's taken	What it does	How often it's taken	Where it's available
Methadone	Liquid, edible wafer, or tablet	Long-acting opioid medication that reduces symptoms of withdrawal and blocks euphoric effects of other opioids	Daily	Certified Opioid Treatment Program (OTP), also known as methadone clinic
Buprenorphine	Tablet, oral dissolving strip, or implant	An opioid medication that weakens euphoric effects of many opioids until the effects eventually level off	<ul style="list-style-type: none"> Tablet or strip: daily Implant: every six months 	Doctor, nurse practitioner, or physician assistant with training to prescribe in office-based setting or some OTPs
Naltrexone	Tablet or injection	After mandatory seven- to ten-day withdrawal from all opioids, this non-opioid drug blocks effects of opioids and reduces cravings	<ul style="list-style-type: none"> Tablet: everyone one to three days Injection: monthly 	Doctor or pharmacist

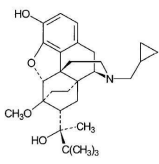


Website: <https://www.samhsa.gov/medication-assisted-treatment>
Printed: 2/28/2020 10:00 AM





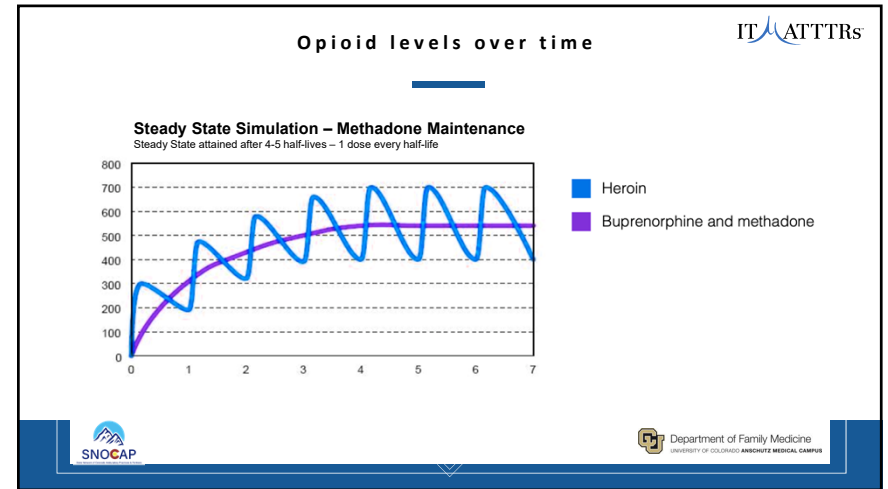
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Buprenorphine partial agonist




- Partial Agonist ★
- Elimination
 - Excreted in feces (70%) and urine (30%)
 - Mean elimination half-life = 37 hours ★
- Does NOT show as opiate positive on standard drug screen ★

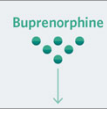






How does buprenorphine work?




Methadone




Buprenorphine




Naltrexone



Full agonist:
generates effect



Partial agonist:
generates limited effect




Antagonist:
blocks effect

Affinity = how tightly a chemical binds the Mu receptor

Activity = What does the chemical do – activate (agonist) or block (antagonist)?



Practical Pain Management <https://www.practicalpainmanagement.com/treatments/pharmacological/opioids/office-based-treatment-opioid-dependence>

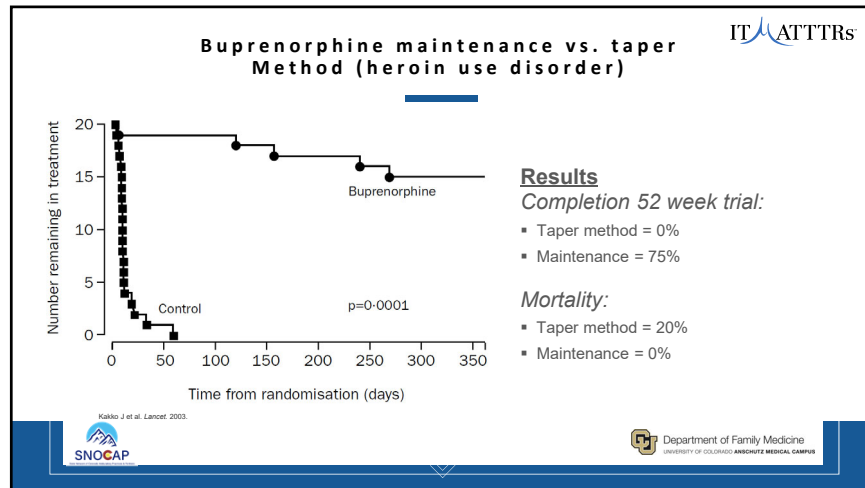


Buprenorphine efficacy summary

- Approved and effective for moderate to severe OUD
- Equally effective to methadone on primary outcomes of:
 - Abstinence from illicit opioid use
 - Retention in treatment
 - Decreased opioid craving

Johnson et al. NEJM 2000; Fudala PJ et al. NEJM 2003; Kakko J et al. Lancet. 2003; Mattick RP et al. Cochrane Database Syst Rev. 2014.



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Why use medications?

Because they work!

- Increased treatment retention
- 80% decrease in drug use, crime
- 50% decrease in mortality from OUD
- 70% decrease in death from any cause


NH Consensus Statement et al. JAMA. 1998


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MODULE 1 WRAP UP

- The opioid use disorder is an extraordinary public health risk.
- Addiction has a neurobiological basis. It is a chronic disease – not simply a lack of willpower or a personal weakness.
- Federal law allows office-based therapies, which are supported by decades of high quality evidence.
- Buprenorphine is the most effective treatment available to primary care providers and practices.
- And...it takes a team to support patients.





MODULE 2 Sneak Preview

THE PATIENT

- There is a standard process for identifying and diagnosing patients (just like diabetes).
- What does your patient experience on buprenorphine?
- How does the practice want to define success? Like diabetes, treatment is a lifetime.

The IT MATTTTrs Primary Care and Behavioral Health Team Training curricula were created with support from the Agency for Healthcare Research and Quality (grant number 5R18HS025056-02).














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