WHCHC Case Presentation

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MOUD Project ECHO

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Patient “Jack”

Family Hx

Dad - used "everything"
Grandma - alcohol
Mental illness (not intellectual disabilities)
Grandma - bipolar
Mom's side - dementia
Family history reviewed with patient on 08/08/19

Background

- 35-year-old male
- Married for 5 years, together for 13
- 3 children, ages 12, 9, 6

Employment

- He is been employed with the County for 4-1/2 years.
- A random UA brought him to treatment with us in 2019

Health Status

- No major medical diagnoses
- Generalized anxiety dx

Living Situation

- Lives on a coffee farm that his mom owns

Legal status:

- No current encumbrances
- He has had 2 DUIs in the past

Early life

- Parents divorced when he was very young
- First memory was when his brother was killed in the car accident when he was 4 years old.

Protective factors

- family and work

Risk factors

- Not taking MOUD
- Mother and wife both use alcohol and cannabis

Treatment goal

- maintain stability on the medication so he can work and be a good father and husband

Intake 8/2019

Patient was taking Suboxone for 4 years under Dr. Mandel (8 mg TID).

- The provider retired
- Patient couldn't find another provider on big island
- Attempt to titrate off bup

He began using opioids again

- Pills and IV Heroin

Unexpected positive result for opioids on a random work urine drug screen

Suspended from work for 30 days

- Engaged with outpatient treatment as terms of suspension
- Sought suboxone tx with WHCHC

Has had three IOP treatment episodes

- Each lasting 90 days

Has engaged with mutual support groups, but only when mandated

Substance Use History

OBJECTIVE

F1x.20 Substance Use Disorder

Specify Substance(s):

- [x] Alcohol
- [x] Opioids
- [x] Cannabis
- [x] Sedative/hypnotic
- [ ] Cocaine
- [ ] Other stimulants
- [ ] Hallucinogens
- [ ] Inhalants
- [ ] Other/unknown

Substance Use History (SUD criteria documented in Objective Section)
(may include substance, first/last use, amount, frequency, administration, duration, problematic use, etc.)

Opioids: First prescribed age 16 for gynecomastia surgery; first misuse age 19-20; use off and on throughout injuries; heavier use to morphine (100mg snorting) and then heroin (smoking) around age 25, stopped for 2-3 years then friend reconnected and use increased for a few months, increased to IV use (also IV use 100mg Morphine) and then started seeing Mandel. Early relapses with Mandel and then stable. Tried to wean himself; recent relapse to heroin when ran out and ran into old friend, IV use.

Heroin: See above - last heroin use 20 days; hx IV use.

Kratom: Denied

Tobacco: Smoke 1/2ppd; smoked regularly 6-7 years; prior quit attempts - longest for 3 weeks; interested in quitting; Chantix helped in past

Caffeine: 1 cup coffee per day

Alcohol: First use age 13; last drink 14 days; Heaviest drinking age 20-22 daily heavy use with other drugs; DUI age 22 with another one a month later (BISAC ordered); pt reports willingness to stop for program

Cannabis: First use age 12; last use 2-3 months ago. "adamant smoker for years" - denies concern with use but never tried stopping before; feels more motivated and clear in general and dreaming more

Cocaine: First use age 18; last use 24-25; denies SUD criteria; smoked and snorted only

Methamp: First use age 27; last use 27; used maybe 4 times with heavy heroin use

Other Amp: "Little bit of adderall" early 20s; denies SUD criteria

Benzos: First use 17-18; last use age 25; reports "few and far between" use during the bar scene, taking from friends, potential snorting; Later reports Mandel rx'd 5-10/month to deal with anxiety, reports Mandel stopped them a long time ago but inconsistent with PDMP; reports no longer access as wife cleared all that out; Reports last use of Valium 2016-2017; fills after that were to give out or stuff into drawers

Ecstasy: Early 20s in bars; denies concerns

LSD/Mushrooms: First use age 16, acid in 20s, none since

K-2/Spice/Bath Salts: Denied

Steroids/GHB: Denied

Inhalants: Denied

Other: Denied

Course of Treatment with WHCHC

- August 2019 to May 2021
- Met with treatment team regularly
  - BH, medical provider and case manager
- Had many slips and some challenges along the way
  - Mainly stayed in “phase 1” of treatment
  - Had a reoccurrence from October 2020 to February 2021
  - Trust and honesty was a huge challenge
- April 2021 recurrence (opioid pills)
  - Treatment recommendation was IOP and mutual support
- May 2021
  - Attended appt, provided urine and saliva sample

Laboratory Drug Screens

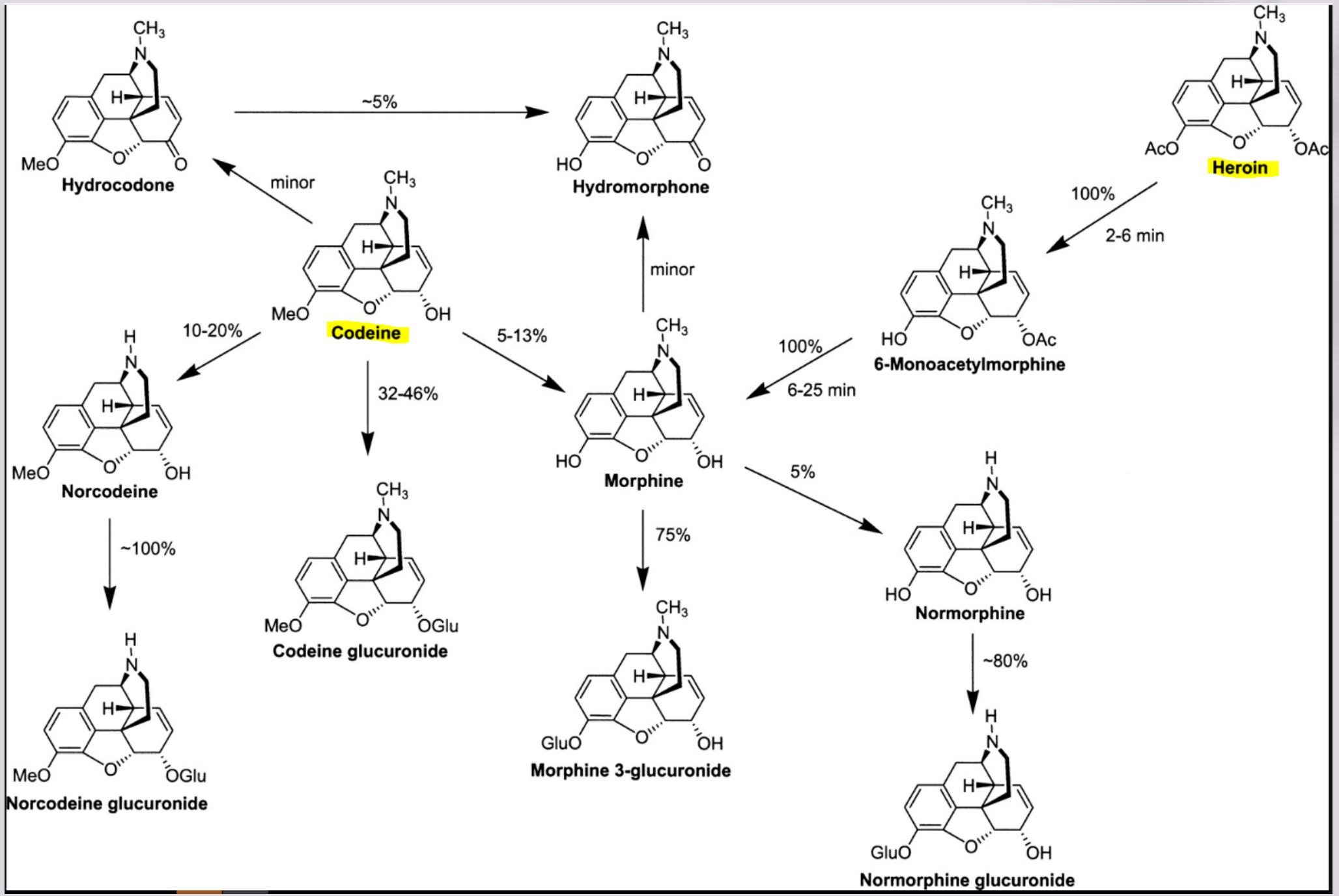
Urine Drug Screen

	10/18/21 01:00p	10/11/21 01:15p	10/08/21 07:30a	05/21/21 09:15a	05/07/21 09:45a	04/30/21 08:15a	04/23/21 08:15a	04/16/21 03:15p	03/05/21 01:30p	02/26/21 01:30p
All Items										
PDX Custom Panel - WHCHC - KUNZ_UA										
6-acetylmorphine	Negative	Negative	Negative	Negative	Negative	Negative	Negative	8 A	Negative	Negative
7-Aminoclonazepam	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Alpha-Hydroxyalprazolam	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Alprazolam	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Amphetamine	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Benzoylecgonine	Negative	Negative	Negative	Negative	104 A	Negative	Negative	Negative	Negative	Negative
Buprenorphine	95 H	41 A	Negative A	3742 A	98 A	93 A	Negative	Negative	415 A	23 H
Carisoprodol	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Clonazepam	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Codeine	Negative	Negative	Negative	Negative	Negative	Negative	Negative	3627 A	Negative	Negative
EDDP	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
EtG	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
EtS	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Fentanyl	Negative	Negative	4 A	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Hydrocodone	Negative	Negative	Negative	Negative	Negative	Negative	Negative	12 A	Negative	Negative
Hydromorphone	Negative	Negative	84 A	Negative	Negative	Negative	Negative	626 A	Negative	Negative
Morphine	Negative	Negative	992 A	Negative	Negative	74 A	Negative	43717 A	Negative	Negative
N-Desmethyltapentadol	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Norbuprenorphine	311 H	103 A	72 H	Negative	457 A	614 A	Negative	26 A	992 A	173 H
Nordiazepam	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Norfentanyl	Negative	Negative	239 A	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Norhydrocodone	Negative	Negative	Negative	Negative	Negative	Negative	Negative	21 A	Negative	Negative
Noroxycodone	Negative	Negative	375 A	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Oxazepam	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Oxycodone	Negative	Negative	23 A	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Oxymorphone	Negative	Negative	453 A	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Phencyclidine	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Phentermine	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Propoxyphene	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Tapentadol	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Temazepam	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
THCA	41 A	140 A	929 A	Negative	Negative	142 A	Negative	270 A	744 A	184 A

Oral Swab

	05/21/21 09:15a	03/05/21 01:30p
All Items		
PDX Custom Panel - PT CH...		
6-acetylmorphine	Negative	Negative
Alprazolam	Negative	Negative
Amphetamine	Negative	Negative
Benzoylecgonine	2.25 A	Negative
Buprenorphine	1335.88 A	0.92 A
Clonazepam	Negative	Negative
Codeine	Negative	Negative
EDDP	Negative	Negative
Fentanyl	0.36 A	Negative
Hydrocodone	Negative	Negative
Hydromorphone	Negative	Negative
Lorazepam	Negative	Negative
MDMA	Negative	Negative
Methadone	Negative	Negative
Methamphetamine	Negative	Negative
Morphine	Negative	Negative
Norbuprenorphine	27.01 A	6.97 A
Norfentanyl	Negative	Negative
Oxazepam	Negative	Negative
Oxycodone	Negative	Negative
Propoxyphene	Negative	Negative
Tapentadol	Negative	Negative
Temazepam	Negative	Negative
THC	Negative	2.78 A
Tramadol	Negative	Negative
Zolpidem	Negative	Negative
Phencyclidine	Negative	Negative
Oxymorphone	Negative	Negative
Diazepam	Negative	Negative

Opioid Metabolic Pathway



Opioid Metabolic Pathway

Interpreting UDT - BACKGROUND

- Buprenorphine metabolism and elimination
  - CYP 3A4 and glucuronidation – pregnancy, genetics, drug-drug interactions
  - Primarily excreted in feces
  - Minority in urine – metabolite > parent drug
- Substances detectable in urine
  - Buprenorphine
  - Buprenorphine-3-glucuronide (B3G)
  - Norbuprenorphine
  - Norbuprenorphine-3-glucuronide (N3G)

Interpreting UDT for Buprenorphine

- Majority test for total bup and nor-bup
- Buprenorphine dose and total urine levels do NOT correlate
- Total **norbup levels** should be **GREATER THAN** bup levels (ratio >1)
- Timing of urine testing
  - Results affected by time since last dose
  - Norbup:Bup ratio <0.5 may be result of close timing

Suspect Adulterated Urine

- Absence of parent drug (bup) in urine
- Bup level >700-1000ng/mL
- Norbup level <50ng/mL
- Norbup:Bup ratio < 0.02-0.26
- Naloxone, in general, should not be present in the urine

Jack 5/21/2021 - Buprenorphine only, level >1000ng/mL

Specimen Validity

- Influenced by
  - Hydration
  - Body habitus type
- SUSPECT ADULTERATION OR DILUTION IF:
  - Oxidant – should not be present (peroxide, bleach)
  - pH – suspect adulteration if <3 or >11
  - Creatinine <20mg/dL
  - Specific gravity <1.002 or > 1.030
  - Creatinine < 5mg/dL PLUS SG <1.001 is not consistent with human urine

Jack's Specimen Validity

	10/18/21	10/11/21	10/08/21 07:30a	05/21/21 09:15a	05/07/21 09:45a	04/30/21 08:15a	04/23/21 08:15a	04/16/21 03:15p	03/05/21 01:30p	02/26/21 01:30p
All Items										
pH										
pH	6.7	5.7	8	7	6.2	7	7.2	7.7	7.2	7.2

	10/18/21	10/11/21	10/08/21 07:30a	05/21/21 09:15a	05/07/21 09:45a	04/30/21 08:15a	04/23/21 08:15a	04/16/21 03:15p	03/05/21 01:30p	02/26/21 01:30p
All Items										
Creatinine										
Creatinine	Out Of Ra...	Out Of Ra...	249.05	37.03	50.46	88.93	60.2	63.72	102.45	Out Of Ra...

	10/18/21	10/11/21	10/08/21 07:30a	05/21/21 09:15a	05/07/21 09:45a	04/30/21 08:15a	04/23/21 08:15a	04/16/21 03:15p	03/05/21 01:30p	02/26/21 01:30p
All Items										
Specific Gravity										
Specific Gravity	1.004	1.004	1.022	1.01	1.008	1.024	1.022	1.014	1.02	Out of Ran...

No oxidants detected in any sample

Jack is Back (10/17/2021)

[redacted] is a 35 yo male with hx of Heroin use who was brought in by ambuloance due to Heroin OD. Patient was in a minor car accident as he drifted off the road. CPR was started by passerby's, and EMS arrived to the scene finding him with low O2 Sat and needing CPR. 1mg Narcan was administered en route, and pt's breathing significantly improved and he became alert and his O2 Sat returned wnl. He was brought to the ED and observed for several hours, during which time his O2 noted to fluctuate into the 80's and he required supplemental O2 with NC. Due to concerns for Hypoxia, he was admitted to the medicine service. Patient's O2 Sat remained wnl while on RA overnight and the following day. Psychiatry was consulted and their impression and plan consists of the following:

He admits he is willing to return back to Suboxone treatment with outpatient providers at Evolve Medical Center or West Hawaii. Per Evolve medical center receptionist, the follow up is up to the provider depending on the severity of the condition, but likely 1-2 weeks and meetings are only recommendations. Patient was not willing to go to methadone clinic.

Pt was discharge home, and case managers were contacted regarding setting up the above appointments.

Hospital Meds

40 MG = 0.4 ML Subcutaneous DAILY Pending Date: 10/07/2021 **OXYCODONE IR (ROXICODONE)** 5 MG = 1 TAB Oral Q4HP PRN FOR WITHDRAWAL SXS **METHOCARBAMOL (ROBAXIN)** 1000 MG = 2 TAB Oral Q6HP PRN MUSCLE STIFFNESS **DICYCLOMINE (BENTYL)** 10 MG = 1 CAP Oral Q12HP PRN FOR STOMACH CRAMPS, Clinician Dir:GIVE 30-60 MINUTES BEFORE A MEAL

Isolated incident?

(Patients with OUD being given opioids at the hospital)

- Nope

Diagnosis	Date Noted
• *Abscess of right forearm Complex intramuscalar abscess in the right antecubital region due to IVDU, s/p I&D by Dr. [redacted] on 10/3, Cultures with Streptococcus constellatus. Clinically improving -wound care, wound benefit from outpatient wound clinic follow up -pain control: PRN oxycodone, ibuprofenl and acetamionophen -ceftriaxone>transition to 10 days of keflex. -appreciate orthopedics, outpatient follow up with Dr. [redacted]	10/03/2021
• Cellulitis and abscess of upper extremity Cellulitis is resolved.	10/03/2021

Discussion

What would you do with this patient?

What level of investment (toward recovery) do you ask for?

Does your decision-making process vary patient to patient?

What influences the variability?

What do "no-barrier" programs do when patients are not engaging in recovery?

Questions?
Thoughts ?
Comments?
Constructive Criticism?

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