Triage Through Discharge:
Leveraging the EHR in Tackling the Opioid Crisis

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Opioid Crisis:
How did wet get there?

- Insurers, healthcare providers, and pharmaceutical manufacturers
- Ways to positively impact and reverse this crisis
  - Partnerships
  - Leverage Technology
  - Recovery Programs
  - Data and Reporting

Outline

- Learning Objectives
- Overview:
  - RWJBarnabas Health
  - Institute for Prevention and Recovery
  - Peer Recovery Program (PRP)
    - Formerly known as the Opioid Overdose Recovery Program (OORP)
  - Opioid Crisis in New Jersey
- A rule-based CDS intervention in the Emergency Department
  - Implementation
  - Evaluation
- Recovery Specialist & Patient Navigators
- Expansion into the Inpatient units
  - Clinical Opiate Withdrawal Scale (COWS)
  - Order Sets
  - CDS intervention upon discharge
- Q&A

Learning Objectives:

- Increase awareness of opioid overdose prevalence in the State of New Jersey
- Discuss the implementation of a rule-based clinical decision support (CDS) tool as part of an interdisciplinary opioid-related recovery screening process inclusive of success metrics and effectiveness of the program
- Summarize recovery specialist and patient navigator roles and responsibilities, incorporating the EHR documentation for the position and current status at RWJBH
- Identify the significance of the Clinical Opiate Withdrawal Scale and Opioid Withdrawal order set
- Describe incorporation of rule-based CDS tool when opioid is added during the discharge medication reconciliation process.

RWJBarnabas HEALTH

Our Organization

- 11 Acute Care Hospitals
- 3 Acute Care Children's Hospitals
- A Freestanding 100-bed Behavioral Health Center
- State's Largest Behavioral Health Network
- Ambulatory Care Centers
- Geriatric Centers
- Medical Groups
- **RWJBarnabas Health and Rutgers University Launch The State's Largest and Most Comprehensive Academic Health System**

Institute for Prevention and Recovery | RWJBarnabas HEALTH

Overview

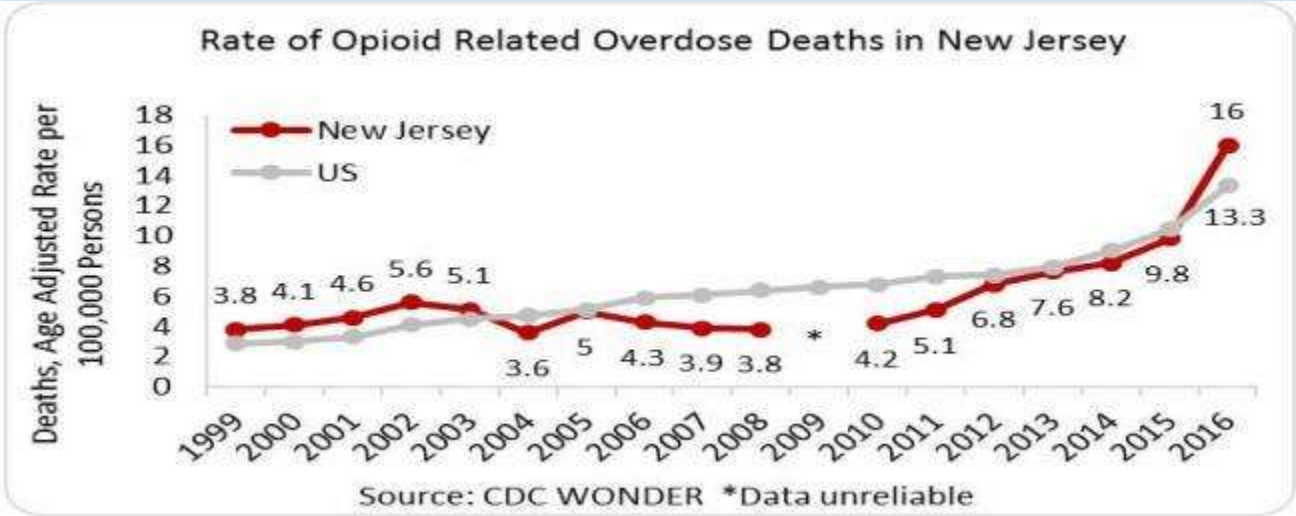
- RWJBH's Institute for Prevention and Recovery (IFPR)
  - Peer Recovery Program (PRP)
    - Formerly known as RWJBH Opioid Overdose Recovery Program (OORP)
    - Launched in 2016
    - Funded by The New Jersey Department of Health, Division of Mental Health and Addiction Services
    - Serves participating RWJBarnabas Health hospitals 24 hours a day, 7 days per week through full-time, hospital-based Recovery Specialists and Patient Navigators

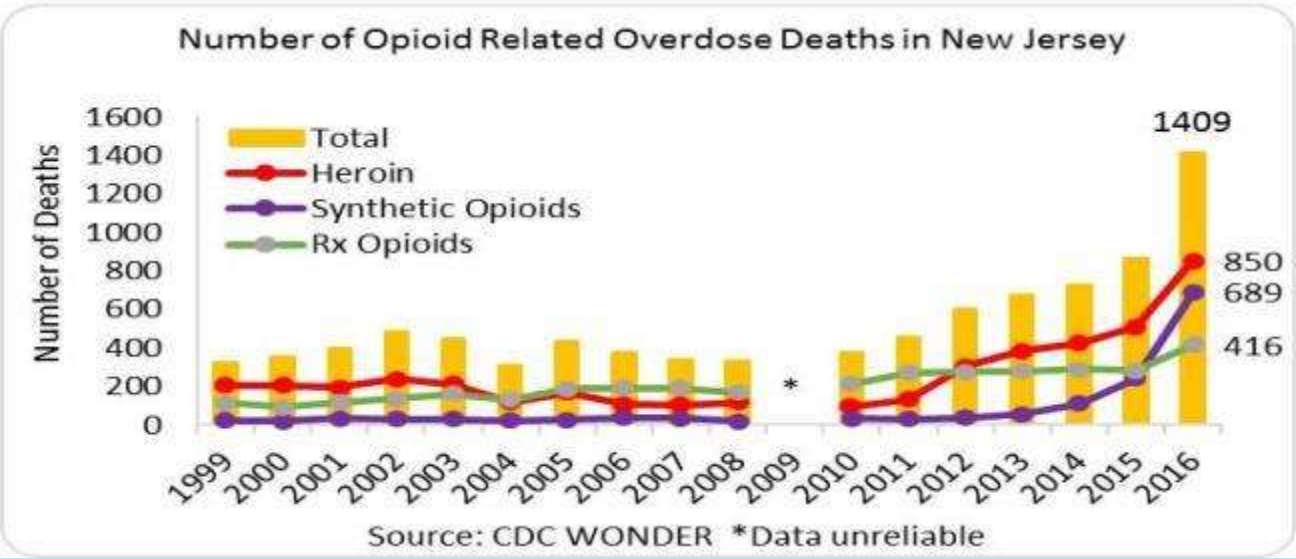
Stats: Opioid Crisis in New Jersey

- Opioids
  - Heroin
  - Synthetic opioids
    - Fentanyl
    - Oxycodone
    - Hydrocodone
    - Codeine
    - Morphine
- Heroin overdose is 3x the national average
  - 850 deaths in 2016, compared to 97 deaths in 2010
- Synthetic opioids rose from 35 to 689 deaths
- 1409 opioid overdose related deaths in 2016
  - 16 deaths per 100,000 in NJ
  - 13.3 deaths per 100,000 nationally
- NJ Providers prescribed opioids 55 per 100 persons (around 4.9 million prescriptions) in 2015

New Jersey Opioid Summary. (2018, February). Retrieved from https://www.drugabuse.gov/drugs-abuse/opioids/opioid-summaries-by-state/new-jersey-opioid-summary

Stats: Opioid Crisis in New Jersey





New Jersey Opioid Summary. (2018, February). Retrieved from https://www.drugabuse.gov/drugs-abuse/opioids/opioid-summaries-by-state/new-jersey-opioid-summary

STATS: NJ **2018**

- Overdose Deaths (January 1 – August 26, 2018)
  - 1,970
- Naloxone Administration (January 1 – July 31, 2018)
  - 9,162
- Opioid Prescriptions (January 1 – August 23, 2018)
  - 2,820,606

A Realtime Dashboard of Opioid-Related Data and Information. (2018, August 27). Retrieved from https://www.njcares.gov

Clinical Decision Support (CDS)

- Clinical Decision Support:

  "HIT functionality that builds upon the foundation of an EHR to provide persons involved in care processes with general and person-specific information, intelligently filtered and organized, at appropriate times, to enhance health and health care."

- The availability of data captured through the EHR allows the ability to automate workflow processes to aid in the patient care delivery.

Eligible Hospital and Critical Access Hospital Meaningful Use Core Measures Measure 5 of 16 . (2014, November). Retrieved from https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/downloads/Stage2_HospitalCore_5_ClinicalDecisionSupport.pdf

Clinical Decision Support (CDS)

- Computerized alerts or reminders
- Clinical guidelines
- Condition-specific order sets
- Focused patient data reports and summaries
- Documentation templates
- Diagnostic support
- Relevant reference information

Clinical Decision Support. (n.d.). Retrieved from https://www.healthit.gov/topic/safety/clinical-decision-support

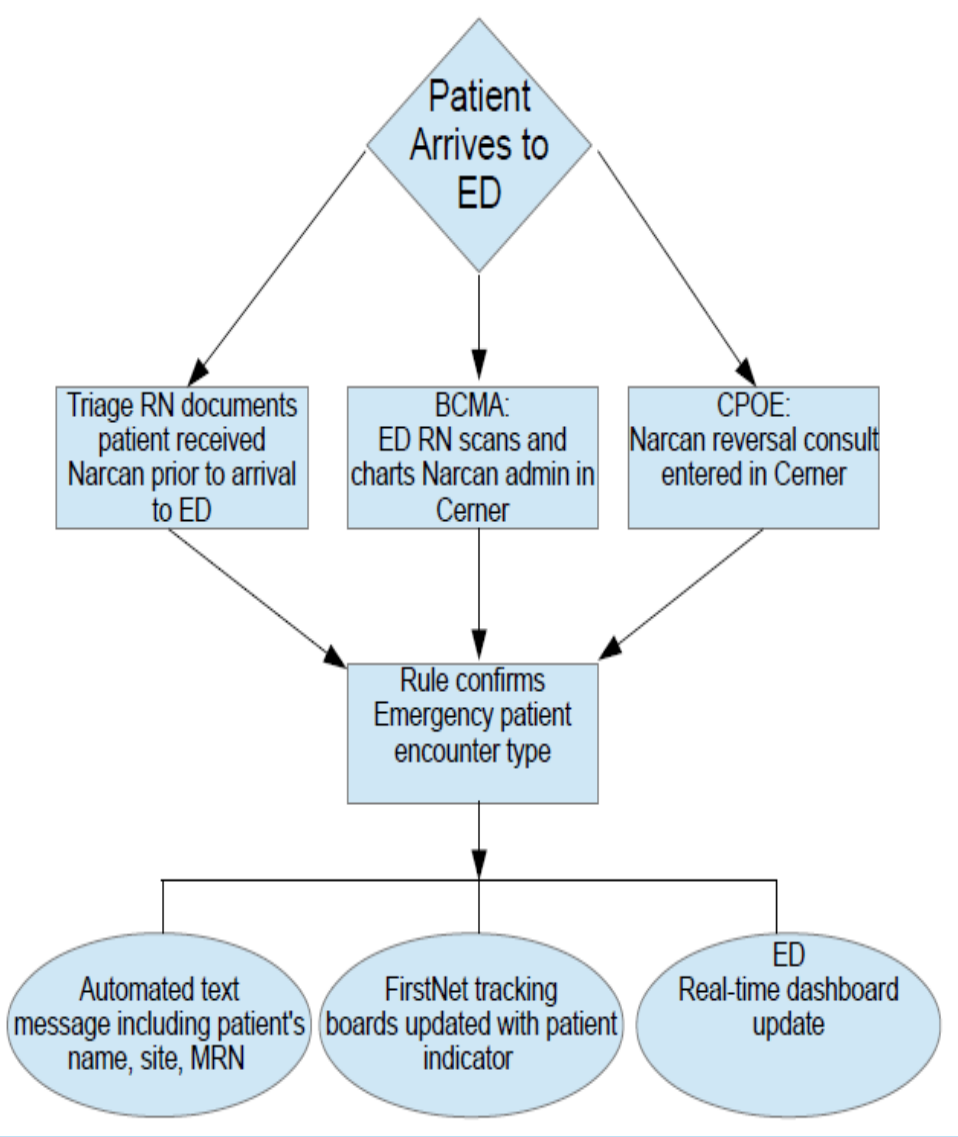
Project Timeline

- A collaboration between the Enterprise Clinical Information Systems (ECIS), Institute for Prevention & Recovery, and Tackling Addiction Task Force
- Project timeline:
  - Sept. 2017
    - Discuss need of the Institute of Prevention & Recovery
    - Current state analysis
    - Plan and design a rule-based CDS
  - Oct. 2017
    - Presented through ED Collaborative
    - ECIS corporate change control
    - Build and test the rule-based CDS
  - Nov. 2017
    - End-user education
    - 11/16 Go-live!

Current Workflow Analysis

- ED staff communicates through phone call process
- Recovery support coordinator (remote) fields calls
- Coordinator contacts and deploys recovery specialist to assigned site
  - Remote, Per diem
  - Full time, Hospital-based, 24/7 coverage within the last 6 months
- Recovery specialist provides bedside intervention
- Patient navigator provides screening and engages treatment providers

Future State Workflow

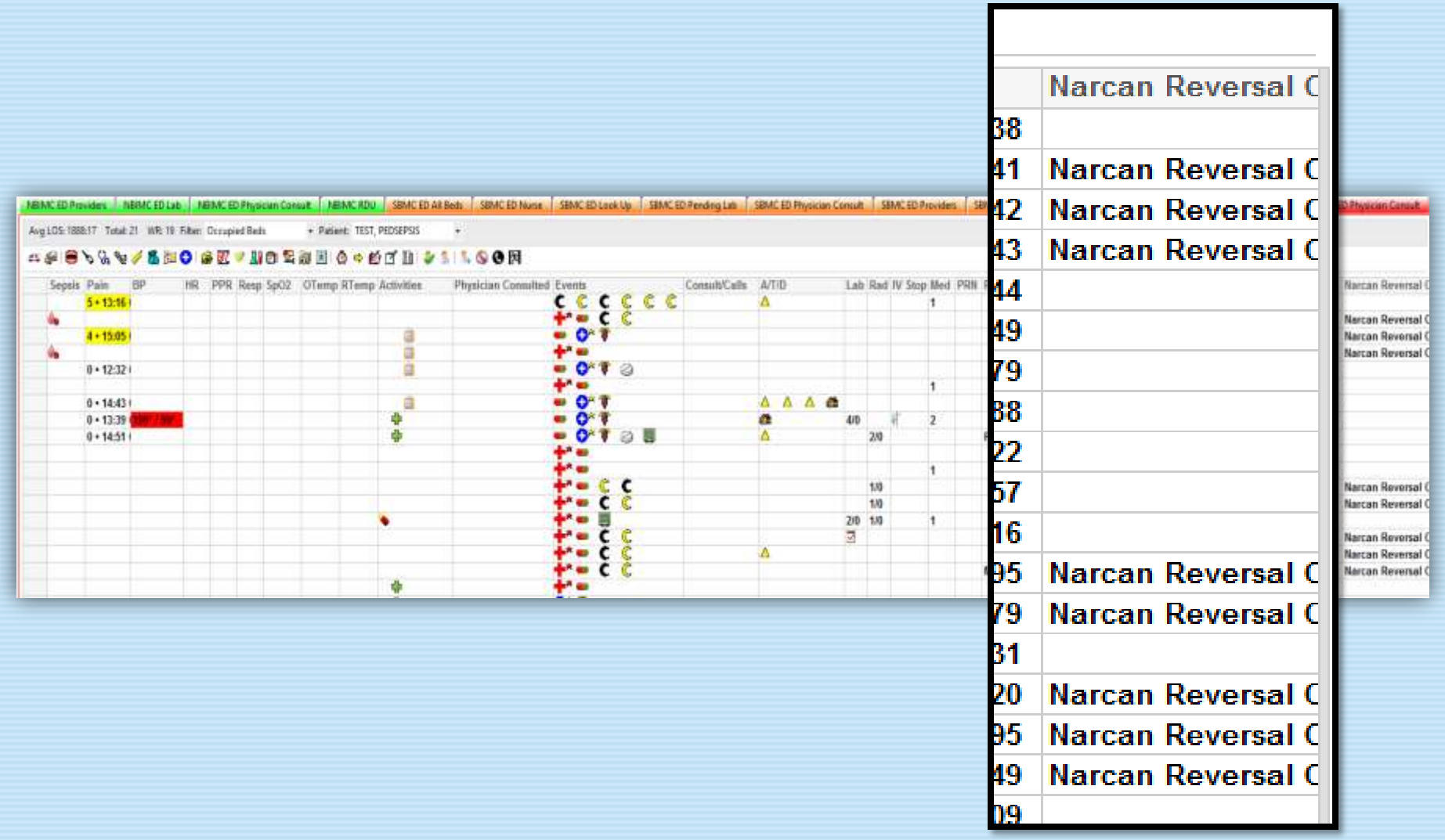


Automated Text Messaging

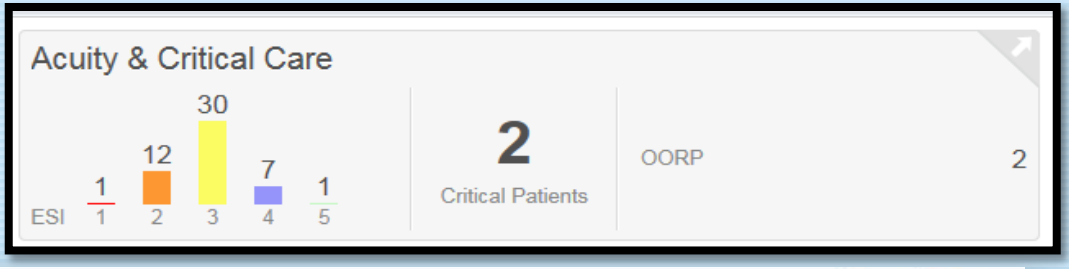
- Secured messaging
  - RWJBH issued mobile phones distributed to recovery specialists
  - Mobile Iron

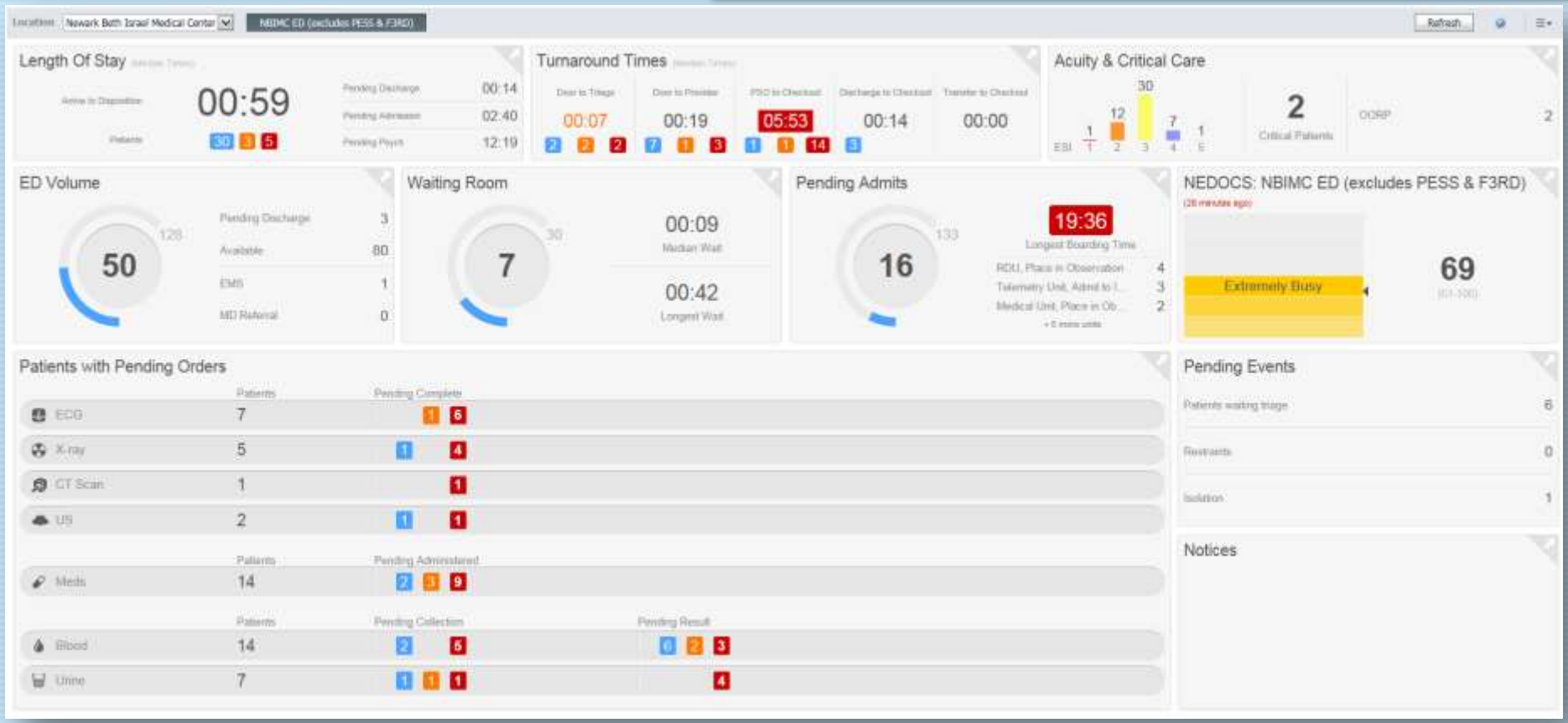
ED Narcan (Naloxone) reversal consult for TEST, TEST1 | JCMC | JCMC ED | | 000111111

ED Tracking Board



ED Real-Time Dashboard





Evaluation

- 4 months of pre- and post-implementation data
  - Number of patients seen
  - Accepted bedside intervention
  - Accepted OORP services

NBIMC

	Pre-implementation	Post-implementation	% change
Patients seen	78	105	**35%**
Accepted bedside intervention	59	75	**27%**
Accepted OORP services	39	53	**36%**

MSC

	Pre-implementation	Post-implementation	% change
Patients seen	36	66	**83%**
Accepted bedside intervention	28	51	**82%**
Accepted OORP services	26	36	**38%**

SBMC

	Pre-implementation	Post-implementation	% change
Patients seen	15	19	**27%**
Accepted bedside intervention	15	13	**13%**
Accepted OORP services	15	13	**13%**

JCMC

	Pre-implementation	Post-implementation	% change
Patients seen	46	75	**63%**
Accepted bedside intervention	37	38	**3%**
Accepted OORP services	31	29	**6%**

MMC

	Pre-implementation	Post-implementation	% change
Patients seen	24	47	**96%**
Accepted bedside intervention	19	38	**100%**
Accepted OORP services	17	31	**82%**

CMC

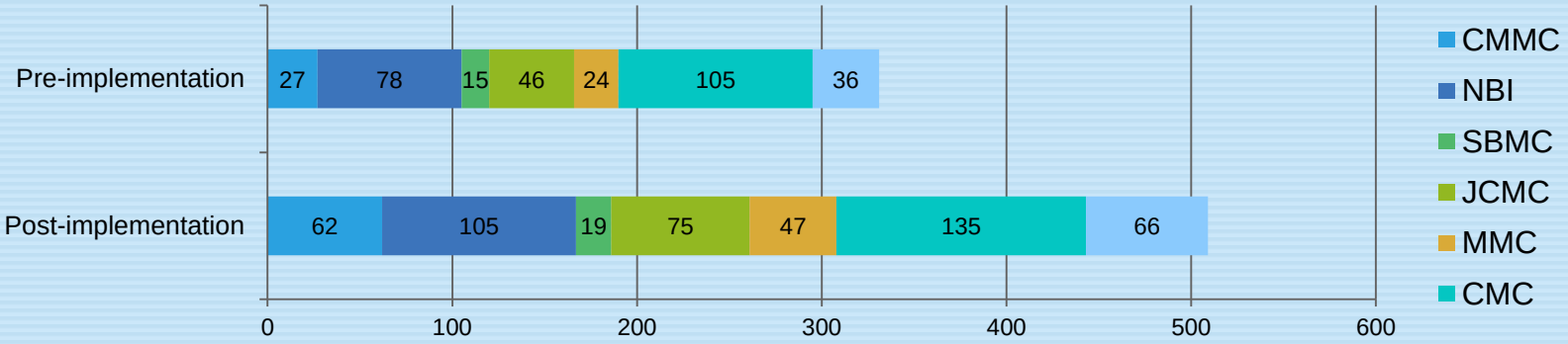
	Pre-implementation	Post-implementation	% change
Patients seen	105	135	**29%**
Accepted bedside intervention	96	113	**18%**
Accepted OORP services	85	90	**6%**

CMMC

	Pre-implementation	Post-implementation	% change
Patients seen	27	62	**130%**
Accepted bedside intervention	25	44	**76%**
Accepted OORP services	21	40	**90%**

System (BH) Total

	Pre-implementation	Post-implementation	% change
Patients seen	331	509	**54%**
Accepted bedside intervention	279	372	**33%**
Accepted OORP services	234	292	**25%**



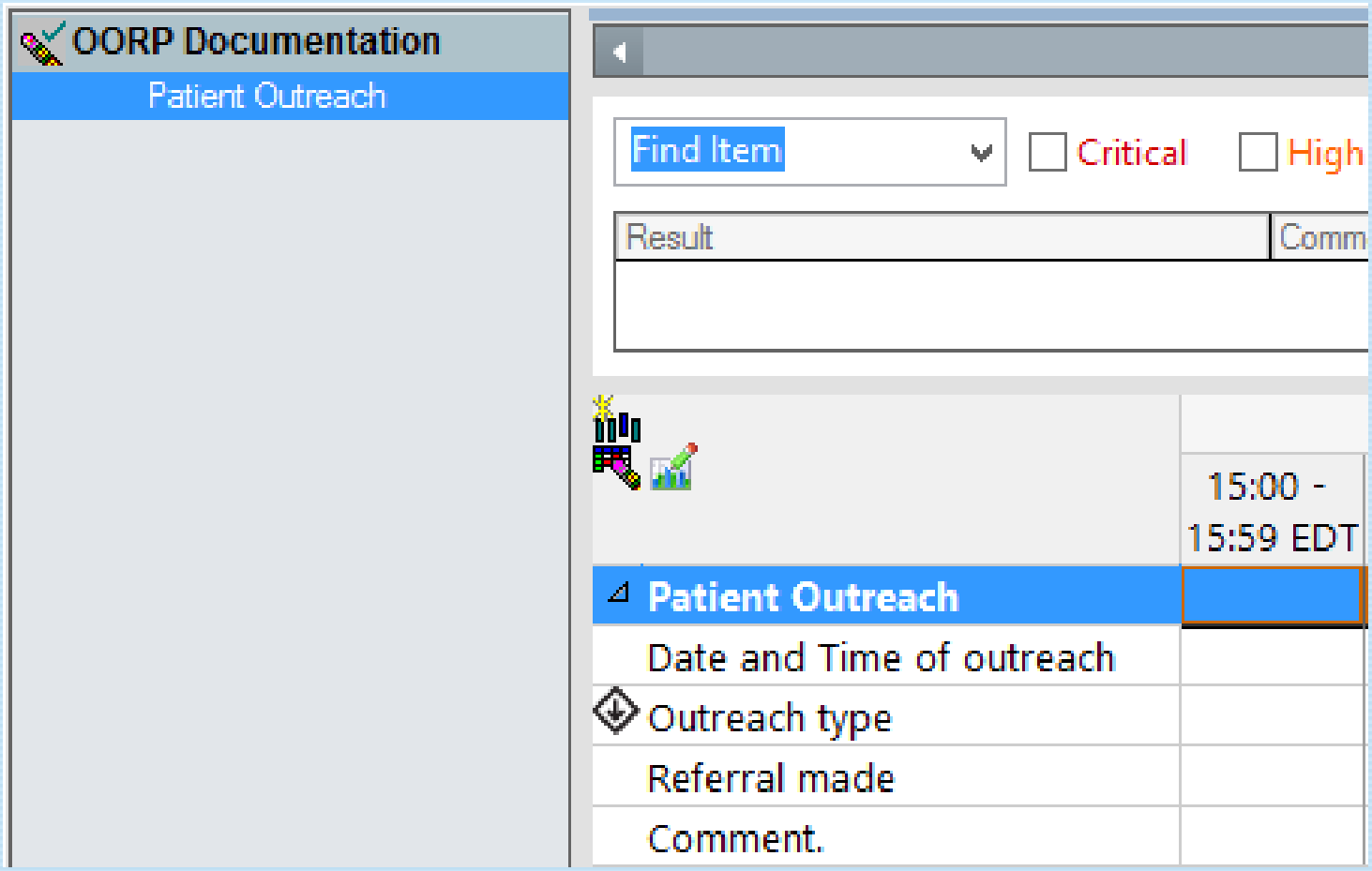
Recovery Specialist

- Long-term recovery from substance use disorder
  - Peer-to-peer level
- Deployed to the patient's bedside following a non-physician order in the EHR
- Provides bedside intervention
- Follow-up
- Goal: Refer the patient to the appropriate level of care and into long-term recovery

Patient Navigators

- Clinically-trained
- Links the individual to appropriate level of care
- Collaborates with:
  - Case Managers/Social Workers
  - Treatment and Detox facilities

Recovery Specialist/Patient Navigator Documentation

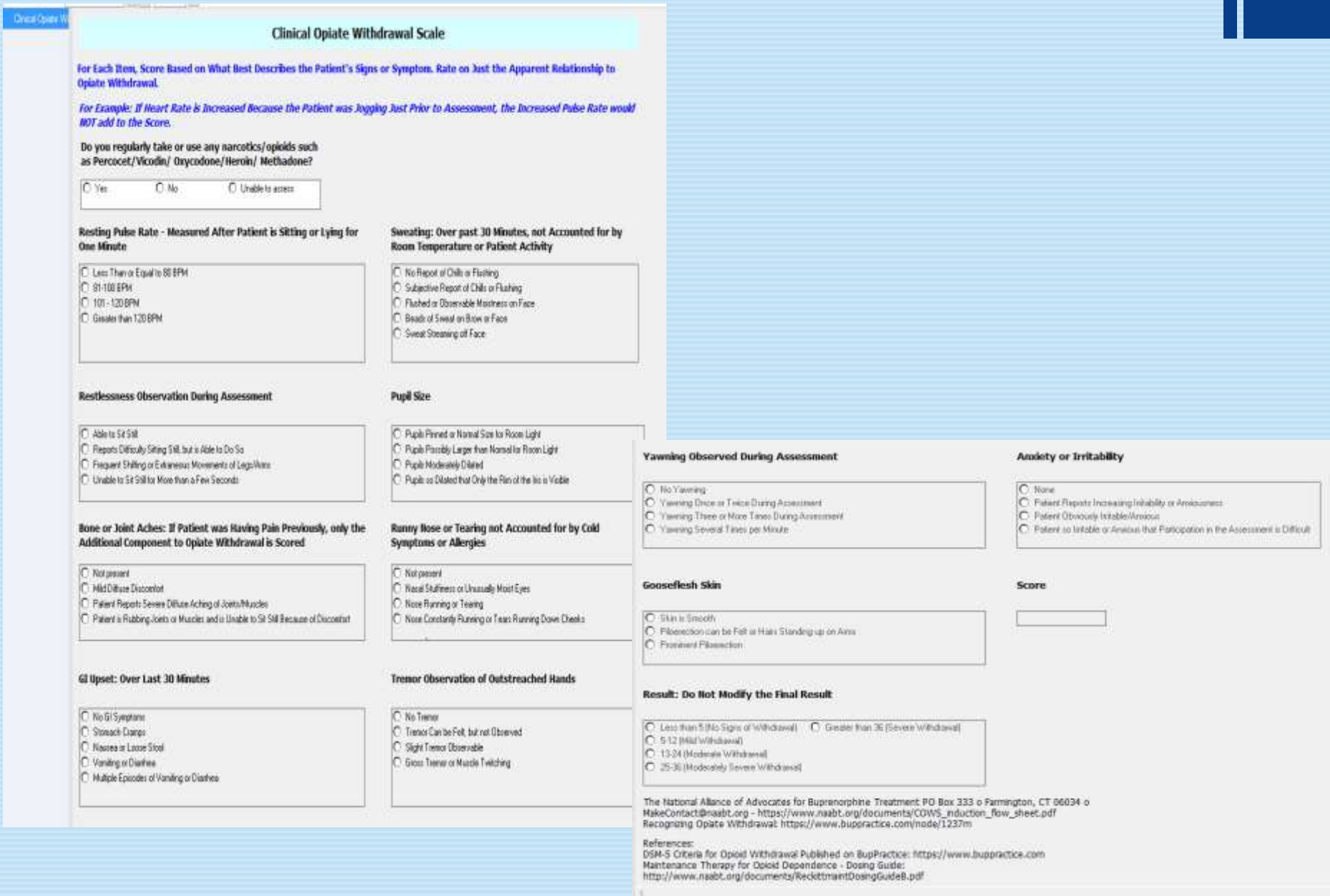


Clinical Opiate Withdrawal Scale

- “The Clinical Opiate Withdrawal Scale (COWS) is an 11-item scale designed to be administered by a clinician. This tool can be used in both inpatient and outpatient settings to reproducibly rate common signs and symptoms of opiate withdrawal and monitor these symptoms over time. The summed score for the complete scale can be used to help clinicians determine the stage or severity of opiate withdrawal and assess the level of physical dependence on opioids.”

Clinical Opiate Withdrawal Scale. (n.d.). Retrieved from https://www.drugabuse.gov/sites/default/files/files/ClinicalOpiateWithdrawalScale.pdf

Clinical Opiate Withdrawal Scale



Clinical Opiate Withdrawal Scale

For Each Item, Score Based on What Best Describes the Patient's Signs or Symptom. Rate on Just the Apparent Relationship to Opiate Withdrawal.

For Example: If Heart Rate is Increased Because the Patient was Jogging Just Prior to Assessment, the Increased Pulse Rate would NOT add to the Score.

Do you regularly take or use any narcotics/opioids such as Percocet/Vicodin/ Oxycodone/Heroin/ Methadone?

○ Yes ○ No ○ Unable to assess

Resting Pulse Rate - Measured After Patient is Sitting or Lying for One Minute

○ Less Than or Equal to 80 BPM
○ 81-100 BPM
○ 101 - 120 BPM
○ Greater than 120 BPM

Sweating: Over past 30 Minutes, not Accounted for by Room Temperature or Patient Activity

○ No Report of Chills or Flushing
○ Subjective Report of Chills or Flushing
○ Flushed or Observable Moistness on Face
○ Beads of Sweat on Brow or Face
○ Sweat Streaming off Face

Restlessness Observation During Assessment

○ Able to Sit Still
○ Reports Difficulty Sitting Still, but is Able to Do So
○ Frequent Shifting or Extraneous Movements of Legs/Arms
○ Unable to Sit Still for More than a Few Seconds

Pupil Size

○ Pupils Pinned or Normal Size for Room Light
○ Pupils Possibly Larger than Normal for Room Light
○ Pupils Moderately Dilated
○ Pupils so Dilated that Only the Rim of the Iris is Visible

Bone or Joint Aches: If Patient was Having Pain Previously, only the Additional Component to Opiate Withdrawal is Scored

○ Not present
○ Mild Diffuse Discomfort
○ Patient Reports Severe Diffuse Aching of Joints/Muscles
○ Patient is Rubbing Joints or Muscles and is Unable to Sit Still Because of Discomfort

Runny Nose or Tearing not Accounted for by Cold Symptoms or Allergies

○ Not present
○ Nasal Stuffiness or Unusually Moist Eyes
○ Nose Running or Tearing
○ Nose Constantly Running or Tears Running Down Cheeks

GI Upset: Over Last 30 Minutes

○ No GI Symptoms
○ Stomach Cramps
○ Nausea or Loose Stool
○ Vomiting or Diarrhea
○ Multiple Episodes of Vomiting or Diarrhea

Tremor Observation of Outstreached Hands

○ No Tremor
○ Tremor Can be Felt, but not Observed
○ Slight Tremor Observable
○ Gross Tremor or Muscle Twitching

Yawning Observed During Assessment

○ No Yawning
○ Yawning Once or Twice During Assessment
○ Yawning Three or More Times During Assessment
○ Yawning Several Times per Minute

Anxiety or Irritability

○ None
○ Patient Reports Increasing Irritability or Anxiousness
○ Patient Obviously Irritable/Anxious
○ Patient so Irritable or Anxious that Participation in the Assessment is Difficult

Gooseflesh Skin

○ Skin is Smooth
○ Piloerection can be Felt or Hairs Standing up on Arms
○ Prominent Piloerection

Score

Result: Do Not Modify the Final Result

○ Less than 5 (No Signs of Withdrawal) ○ Greater than 36 (Severe Withdrawal)
○ 5-12 (Mild Withdrawal)
○ 13-24 (Moderate Withdrawal)
○ 25-36 (Moderately Severe Withdrawal)

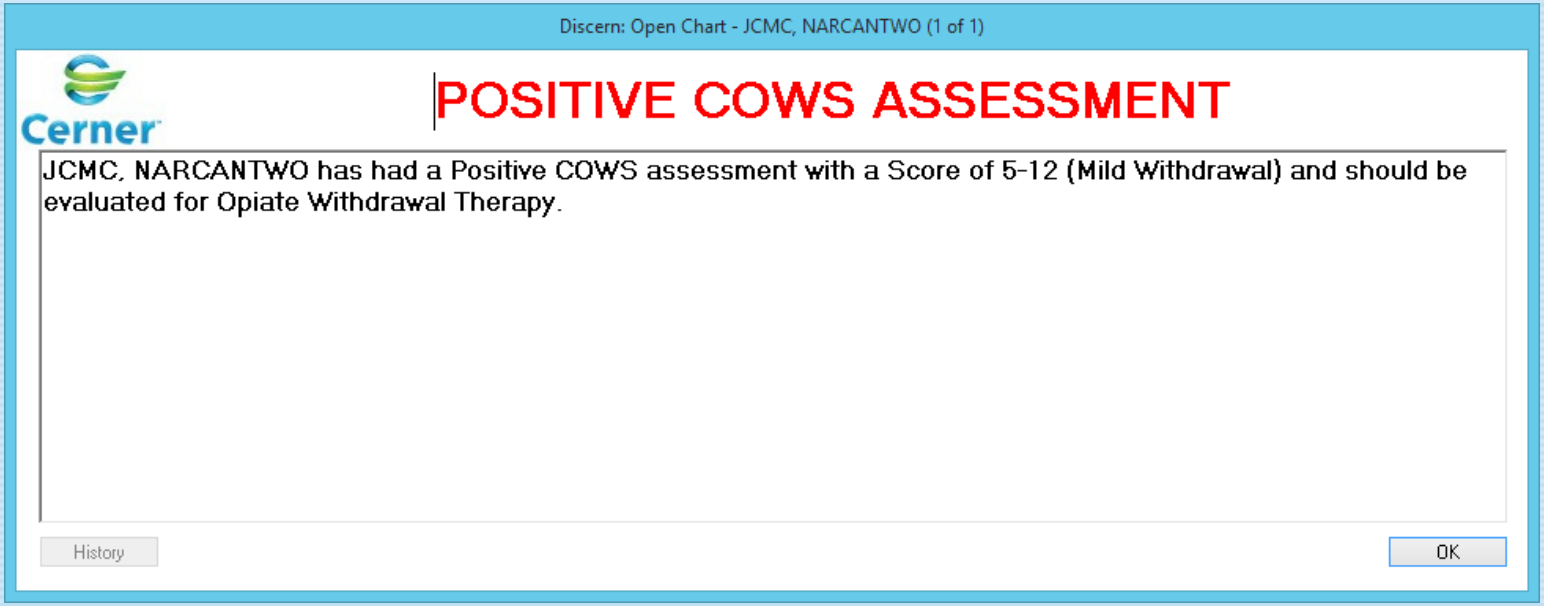
The National Alliance of Advocates for Buprenorphine Treatment PO Box 333 o Farmington, CT 06034 o MakeContact@naabt.org - https://www.naabt.org/documents/COWS_induction_flow_sheet.pdf
Recognizing Opiate Withdrawal: https://www.buppractice.com/node/1237m

References:
DSM-5 Criteria for Opioid Withdrawal Published on BupPractice: https://www.buppractice.com
Maintenance Therapy for Opioid Dependence - Dosing Guide:
http://www.naabt.org/documents/RecktitmaintDosingGuideB.pdf

Clinical Opiate Withdrawal Scale

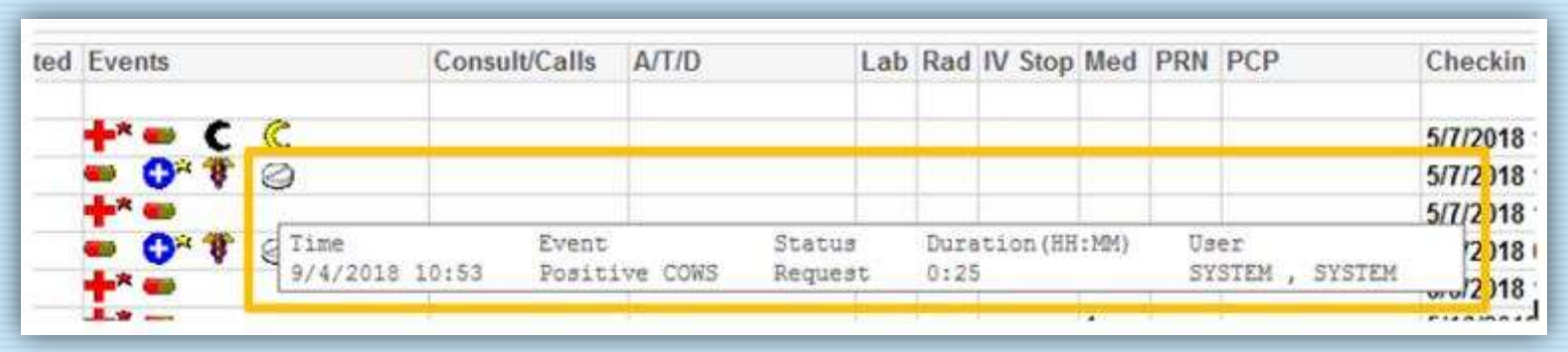
A rule to alert of a positive COWS assessment

- 5-12 = Mild
- 13-24 = Moderate
- 25-36 = Moderately Severe
- >36 = Severe



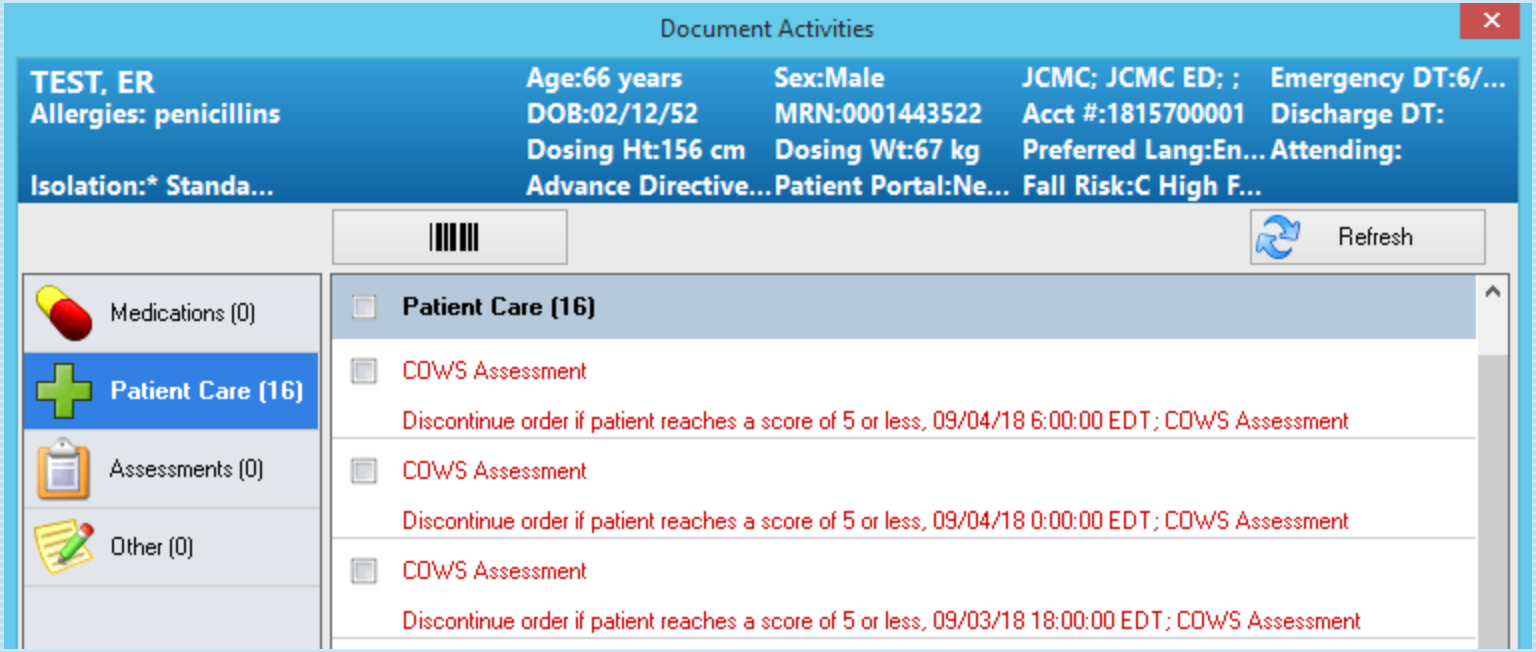
Clinical Opiate Withdrawal Scale

A rule to update the ED tracking boards



Clinical Opiate Withdrawal Scale

A rule to task the RN



Opioid Withdrawal Orderset

ss - Opioid Withdrawal (inpatient) (Planned Pending)

▲ Medications		
	Choose One; Acetaminophen or Ibuprofen	
☐	acetaminophen	650 mg, Tablet, Oral, Every 6 Hr, PRN Pain-Mild 1-3
☐	ibuprofen	400 mg, Tablet, Oral, Every 6 Hr, PRN Pain-Mild 1-3
☐	cloNIDine	0.1 mg, Tablet, Oral, Every 8 Hr Intrvl, PRN Other (See Comments), Opiate Withdrawal Symptoms Hold for SBP less tha
	Nausea- Choose 1- Trimethobenzamide or Ondansetron	
☐	trimethobenzamide	300 mg, Capsule, Oral, Every 6 Hr, PRN Nausea/Vomiting
☐	ondansetron	4 mg, Tablet, Oral, Every 12 Hr, PRN Nausea/Vomiting
	Abdominal Cramps-Dicyclomine	
☐	dicyclomine	10 mg, Capsule, Oral, Every 6 Hr, PRN Other (See Comments), abdominal cramps
	Diarrhea-Loperamide *or* Atropine-Dipenoxalate(Lomotil)	
☐	atropine-diphenoxylate	2 Tab, Tablet, Oral, Every 12 Hr, PRN Diarrhea
☐	loperamide	2 mg, Capsule, Oral, Every 2 Hr, PRN Diarrhea, ADULT Max 16mg/day
	Withdrawal Symptom Management	
☑	buprenorphine	8 mg, Tablet-Sublingual, SubLINgual, Once, Duration: 1 Dose, Buprenorphine 8mg PO Day 1 Only
☑	buprenorphine	6 mg, Tablet-Sublingual, SubLINgual, Daily, Start: T+1;0900, Duration: 1 Dose, Buprenorphine 6mg PO Day 2 Only
☑	buprenorphine	4 mg, Tablet-Sublingual, SubLINgual, Daily, Start: T+2;0900, Duration: 1 Dose, Buprenorphine 4mg PO Day 3 Only
☑	buprenorphine	2 mg, Tablet-Sublingual, SubLINgual, Daily, Start: T+3;0900, Duration: 1 Dose, Buprenorphine 2mg PO Day 4 Only
☑	cloNIDine	0.1 mg, Tablet, Oral, Every 6 Hr, PRN Other (See Comments), Withdrawal Symptoms COWS 5 to 24 or for breakthrough
☑	hydrOXYzine	50 mg, Capsule, Oral, Every 6 Hr, PRN Anxiety
▲ Laboratory		
	If not already done:	
☐	ALC (Alcohol Level Serum)	Blood, T;N
☐	Beta hCG Qual	Blood, T;N
▲ Consults		
☐	Referral to Substance Use Disorder Recovery Support (...	Opioid withdrawal, T;N
☐	Referral to Social Worker	Priority: Routine, Reason: opioid withdrawal, T;N

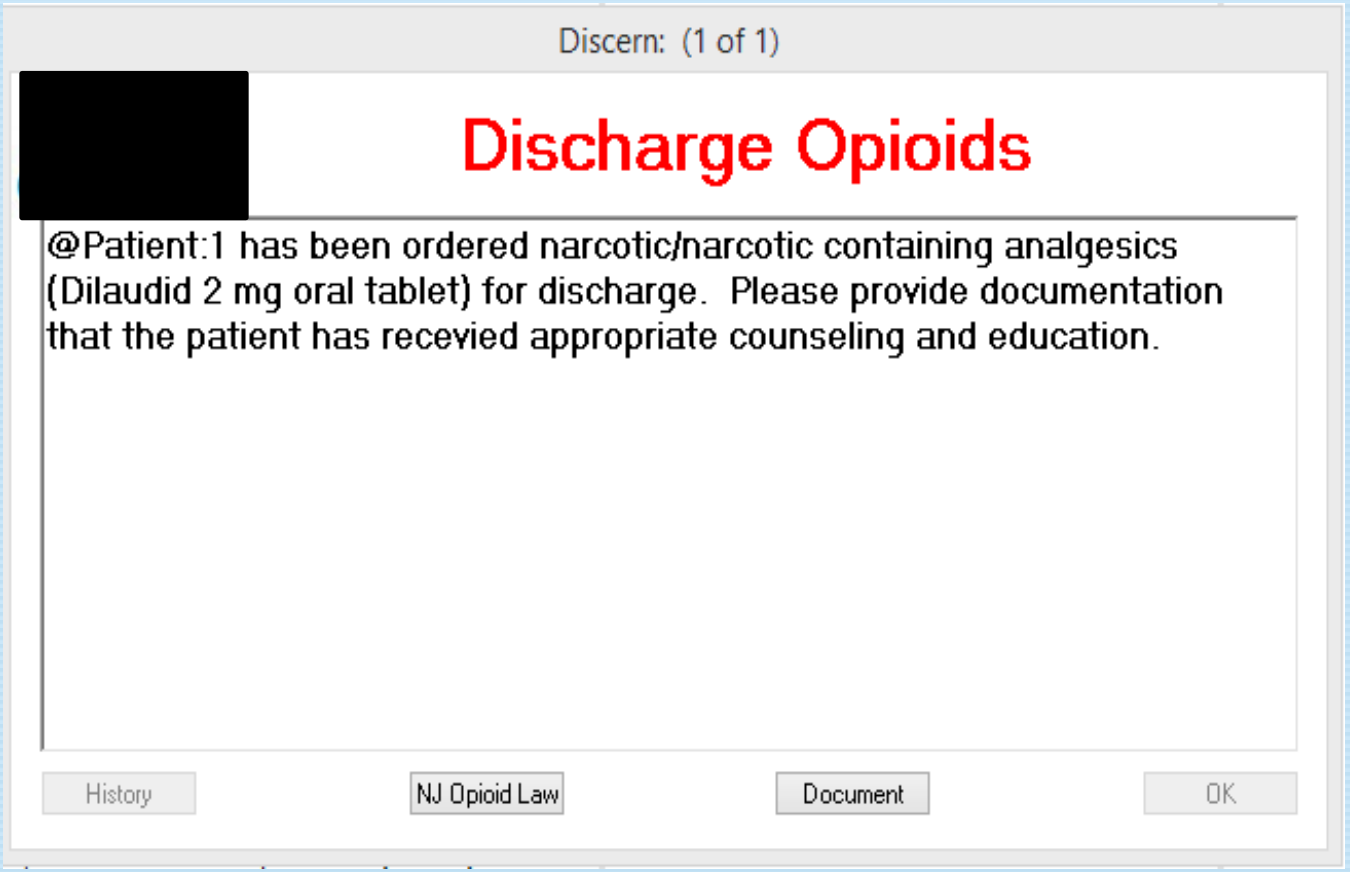
Buprenorphine

- It's an opioid medication used to treat opioid addiction
- At the correct dose, buprenorphine may suppress cravings and withdrawal symptoms and block the effects of other opioids

> "The goal of using buprenorphine for medically supervised withdrawal from opioids is to provide a transition from the state of physical dependence on opioids to an opioid-free state, while minimizing withdrawal symptoms (and avoiding side effects of buprenorphine)."

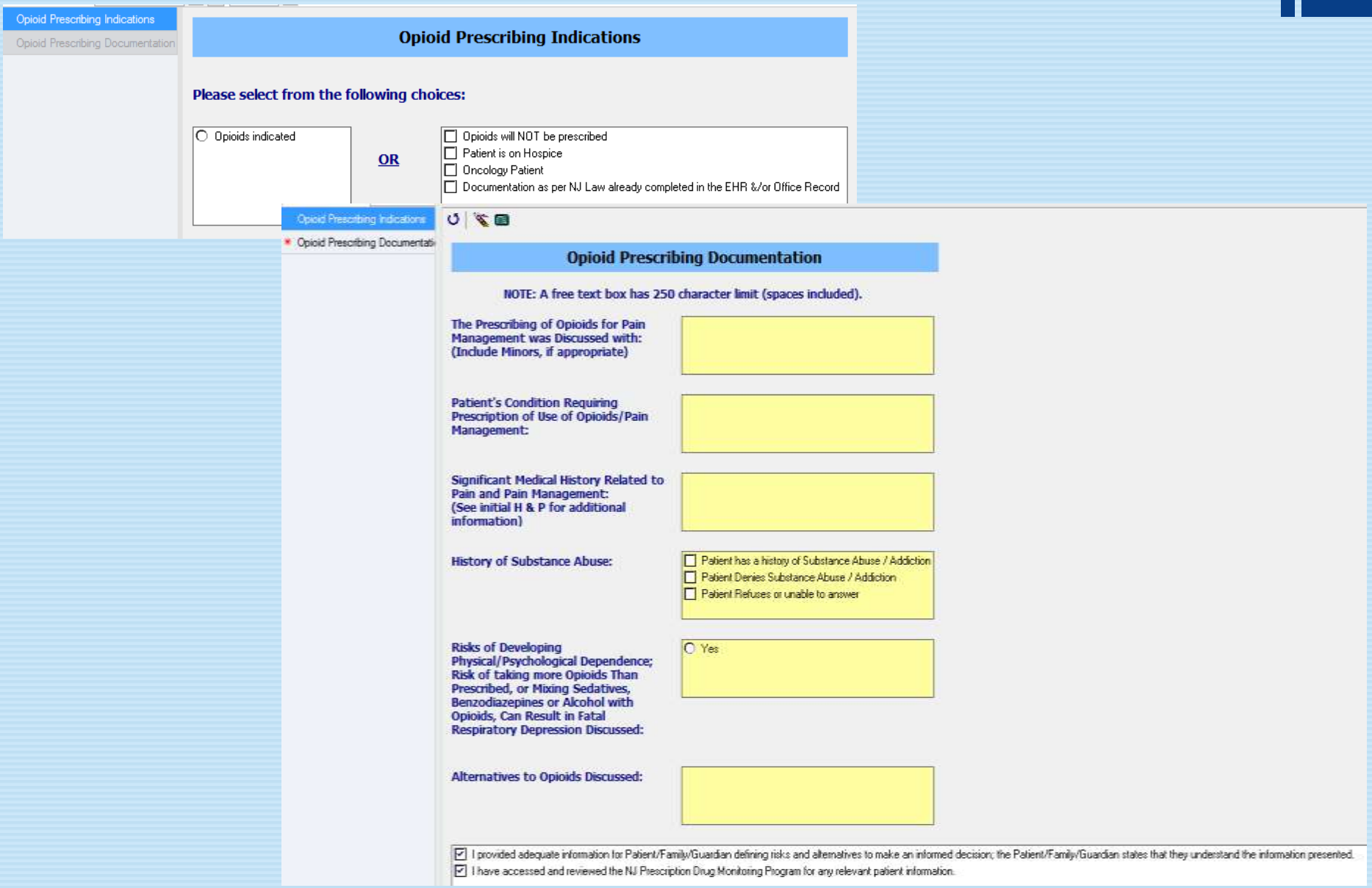
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Substance Abuse and Mental Health Services Administration Center for Substance Abuse Treatment (2004). *Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction.* Retrieved from http://www.naabt.org/documents/naabt_brochure%20Version%202.pdf

Discharge Medication Reconciliation



https://www.njconsumeraffairs.gov/prescribing-for-pain/Documents/Opioid-Law.pdf

Opioid Prescribing Documentation



What Can Be Done?

- Healthcare Providers can:
  - Prescribe opioids only when benefits are likely to outweigh the risk
  - Determine a patient's prescription drug history and level of risk by accessing data from the State's prescription drug monitoring program (PDMP)
  - Identify mental health, social services, and treatment options to provide appropriate care for patients who have opioid use disorder
- Everyone can:
  - Learn about the risks of opioids. https://go.usa.gov/xn6um
  - Learn about naloxone, its availability, and how to use it. https://go.us.gov/xn6uV
- CDC Rx Awareness Campaign:
  - https://www.cdc.gov/rxawareness/resources/video.html

Formula for Success

IFPR Joins Milken Institute Opioid Prevention Collaboration

RWJBarnabas Health Institute for Prevention and Recovery recently joined the Milken Institute Opioid Prevention Collaboration meeting focused on prevention, the opioid crisis and the DEA 360 Strategy efforts in Newark. The action-oriented meeting highlighted the efforts of Newark community leaders and DEA 360's three-pronged approach to fighting drug trafficking and opioid abuse. Michael Litterer, Director, Prevention and Recovery, RWJBarnabas Health Institute for Prevention and Recovery, moderated a prevention science executive roundtable for government officials, health care, education, business and faith-based leaders.

Michael Litterer, Director, Prevention and Recovery, RWJBarnabas Health IFPR.

RWJBH Behavioral Health Center

Peer Recovery Specialists Continue to Make an Impact at the BHC—Peer recovery specialists of the Peer Recovery Program, Institute for Prevention and Recovery, working directly with the Behavioral Health Center patients and collaborating with behavioral health staff and clinicians, continue to make an impact on patients who are admitted with substance use disorders. Kevin Murphy is the latest peer recovery specialist to be mentioned by name in a positive manner, with a direct correlation to the patient experience on the BHC inpatient Press Ganey surveys. The peer recovery specialists and navigator assigned to the BHC are integral parts of the patient's treatment team when called upon to engage the patient and link the individual with appropriate treatment and recovery services. In particular, they have been invaluable to the Voluntary Unit at the BHC.

Kevin Murphy, Peer Recovery Specialist, and Sheryl Schneider, Director Patient Care, Voluntary Unit, meet with a BHC patient to discuss treatment options.

“*It's not that some people have willpower and some don't. It's that some people are ready to change and others are not.*”

– James Gordon, MD

“Remember that just because you hit bottom doesn’t mean you have to stay there.”

- Robert Downey Jr.

Q&A