ED-initiated buprenorphine

expanding the scope of emergency care during an addiction epidemic

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ED management of pain and misuse during an epidemic

1. prevent opioid naive patients from becoming misusers by your prescription

calculate benefit: harm whenever opioid Rx considered if opioid Rx, small number of low dose, lower-risk pills

2. for existing opioid users

2a. revealed, willing "I'm an addict, I need help" aggressive move to treatment ED-initiated buprenorphine arranged speciality followup

2b. revealed, unwilling "I overdose

harm reduction, LowThreshBup supportive stance, open door

2c. partially revealed

"I have chronic pain and need meds" avoid opioids in ED or by prescription opioid alternatives for pain express concern that opioids are causing harm

2d. unrevealed
"I have acute pain and need meds"
risk stratify with red & yellow flags
PDMP - move positives to willingness

MAT: medication assisted treatment is the best treatment for opioid addiction

OAT: opioid agonist treatment
OST: opioid substitution treatment
is the treatment for opioid
addiction

abstinence does not work

abstinence does not work for opioid addiction

detox does not work rehab does not work 12-step does not work NA does not work counseling does not work

27% relapse on day of discharge from rehab 65% relapse at one month 90% relapse at one year

very dangerous

abstinence. does not work. for opioid addiction.

maltrexone

MAT: methadone
buprenorphine

MAT: medication assisted treatment buprenorphine

partial opioid agonist ceiling effect: much safer, less euphoriant

higher receptor affinity than almost any other opioid will precipitate withdrawal if not in withdrawal

less abuse-prone and blocks more abuse-prone opioids

bup is uniquely suited to treat opioid addiction: less dangerous, less abuse-prone vs. methadone, more likely to abolish craving, protects users from OD by more dangerous opioids

MAT: medication assisted treatment buprenorphine

buprenorphine + naloxone = Suboxone naloxone additive is inert unless injected naloxone component only prevents IV abuse

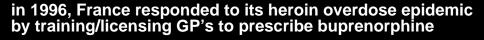
slow acting & long-acting

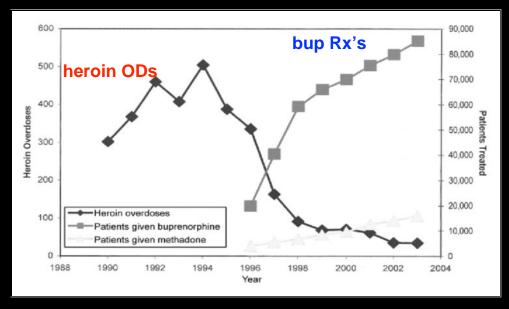
reduces abuse potential

+ceiling effect = long dosing intervals

everyone can use buprenorphine to treat withdrawal but an X-waiver is required to prescribe for addiction

ACEP X Waiver course for emergency docs





Auriacomb 2004

opioid addiction

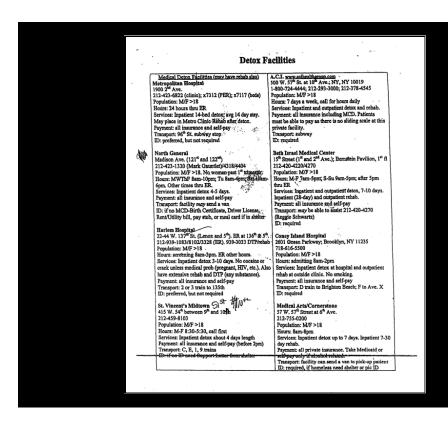
prescribed opioid agonist

desperate need to avoid withdrawal constant debilitating cravings perpetual cycling of highs/lows normal functioning impossible

acquisition harms: poverty, crime, frantic behavior injection harms: local infections, HIV/Hep C, endocarditis street drug harms: accidental overdose/death

opioid dependence

scheduled opioid consumption freedom from addiction harms normal life possible



"A great part of the tragedy of this opioid crisis is that, unlike in previous such crises America has seen, we now possess effective treatment strategies that could address it and save many lives, yet tens of thousands of people die each year because they have not received these treatments."

Volkow 2018

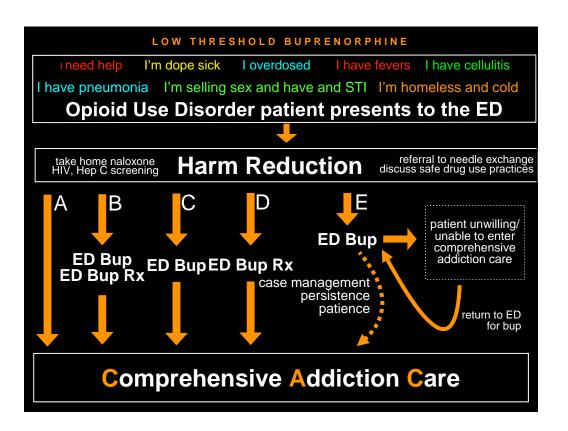
Discharging a person addicted to opioids who is in withdrawal is more dangerous than any discharge we would ever consider in any other context

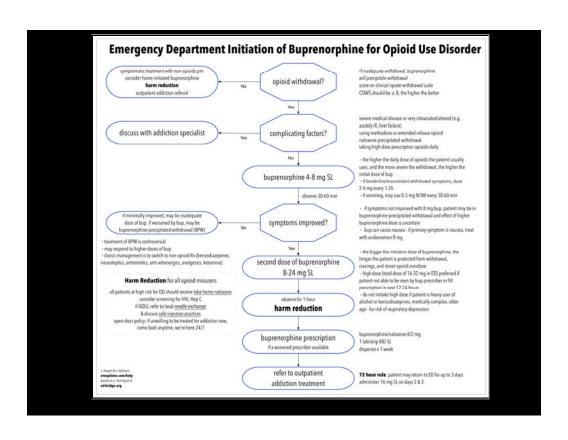
"The history of medicine is, in part, the history of physicians stretching the scope of their practice to answer the pressing needs of their times."

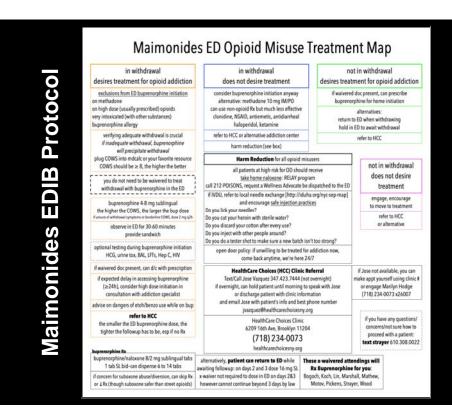
Rapoport & Rowley, NEJM, 2017

I need help
I'm dope sick
I overdosed
I have fevers
I have cellulitis
I have pneumonia
I was assaulted
I was arrested
I was in jail
I'm selling sex and have an STI
I'm homeless and cold

the emergency department is where these patients are







we don't want to be a suboxone clinic / suboxone abuse

EDs that have started bup programs have not seen significant bup abuse bup is not nearly as abuse prone as full agonists patient visits may **decrease** - these patients are coming to the ED anyway non-prescribed bup exposure potentiates successful treatment buprenorphine overdose is comparatively safe even diversion may not be a bad thing, in an era of superfentanyls high dose bup initiation: prescription less important

CHS Opioid Prevention Program

Christopher C. Raio, MD MBA FACEP Chief, Emergency Medicine CHSLI Chairman, Emergency Medicine GSHMA



Catholic Health Services of Long Island

- Integrated Health Care Delivery System serving Eastern Queens, Nassau and Suffolk Counties
- Mission driven organization under the sponsorship of the DRVC & leadership of Bishop John Barres and President & CEO Dr. Alan Guerci
- 6 Hospitals, 3 SNF's, Home Care, Hospice, Palliative Care Substance Abuse/ Detox and Rehabilitative Services
- 1,928 certified hospital beds
- 790 nursing home beds
- Approximately 17,500 employees
- More than 4,300 medical staff
- More than 4,000 nursing staff
- Almost 3,000 volunteers
- More than \$2 billion in revenues
- *2017 statistics



Multifactorial Complex Issue:

Social and Economic Factors

- Economic variability across long island with some communities experiencing loss of social capital
- Economic Distress
- Work related injuries
- · Increase in illicit drug trafficking

Initial Incongruent Public Policy and Awareness/Education

- Excellent changes made in NYS medical prescribing and tracking policies/requirements (I-STOP)
- · Initial lack of additional legislation to increase criminal charges against criminal illicit drug traffickers
- Lack of Effective Public Health education and campaigns
- Education failures and risks in schools

Clinical, Big Phamra and Payor

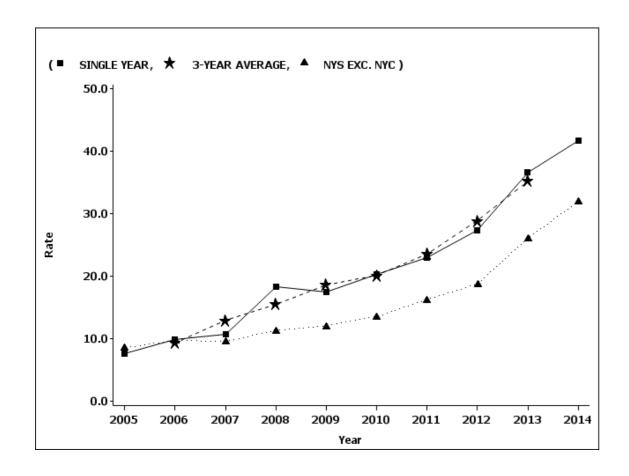
- Irresponsible marketing of opioid medications to providers. (Oxycontin, Purdue Pharma)
- Irresponsible prescribing by health care providers
- Pain is the 5th vital sign
- Center for Medicare and Medicaid Services Patient Experience "Pain" Domain and penalties

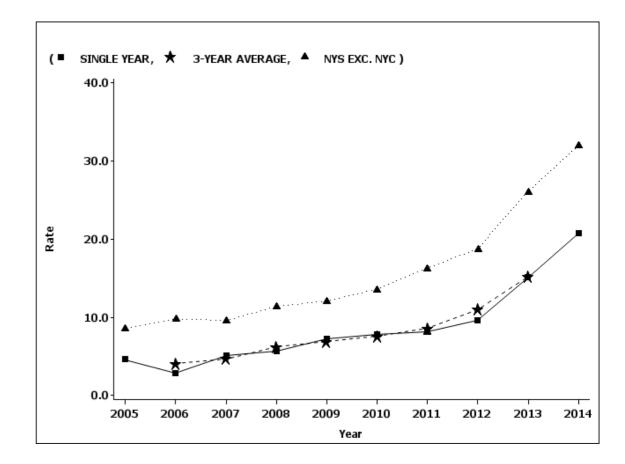


Opioid Overdose ED Visit Rates – Suffolk/Nassau County

Suffolk County Outpatient emergency department visits involving any opioid overdose, age-adjusted rate per 100,000 population

Nassau County Outpatient emergency department visits involving any opioid overdose, age-adjusted rate per 100,000 population





Source: NYSDOH - https://www.health.ny.gov/statistics/opioid/data/e2_47.htm

Source: NYSDOH - https://www.health.ny.gov/statistics/opioid/data/e2 28.htm

We have a tough climb ahead......





CHS Internal Data Why MAT/Sherpa (CHS:FCA Joint Program) and why GSHMC?

Source: Epic Reporting

CHS: Catholic Health Services

FCA: Family and Children's Association

GSHMC: Good Samaritan Hospital Medical Center

2016-2017 Naloxone Doses Dispensed from Pyxis*

2016	SFH	GSH	SCS	ММС	SCH	SJH	System Total
Naloxone doses dispensed from Pyxis	80	283	35	69	48	1	516
Excluding ED department	49	97	35	28	17	1	227
ED Department	31	186	0	41	31	0	289
							System
2017	SFH	GSH	SCS	MMC	SCH	SJH	Total
Naloxone doses dispensed from Pyxis	79	GSH 358	SCS 60	82	SCH 63	18	
Naloxone doses dispensed							Total
Naloxone doses dispensed from Pyxis	79	358	60	82	63	18	Total 660

Naloxone doses dispensed N/A -1.3% 26.5% 71.4% 18.8% 31.3% 27.9% from Pyxis Excluding ED department 18.1% -8.2% 22.7% 11.4% -35.7% 70.6% N/A N/A **ED Department** 9.7% N/A 56.1% 9.7% 35.6% 28.5%

Total

^{*}SJH does not dispense Naloxone from Pyxis System. System data does not include medication dispensed from sources other than Pyxis (crash cart, etc.).

Overview

- High priority initiative: engaged CHS leadership
- Collaborative: across disciplines, service lines, departments, specialties
- Resourced: Administrative, Education, Staffing, etc.
- Multiple overlapping programs



Current Processes

- CHS Opioid Prescribing Guidelines
- Narcan distribution program (Suffolk County)
- Increased availability of social work at some sites
- SBIRT
- NYS Mandatory Training
- ED Peer/Family Navigator Program (SHERPA)
- ED Buprenorphine



CHS Opioid Prescribing Guidelines

- Guidelines for ED prescribing of controlled substances
 - Adresses prescriptions
 - Adresses in-ED pain management
 - Adresses medication selection
 - Adresses care coordination
 - Adresses substance abuse screening/Narcan
 - Clearly states CHS support of provider professional judgement



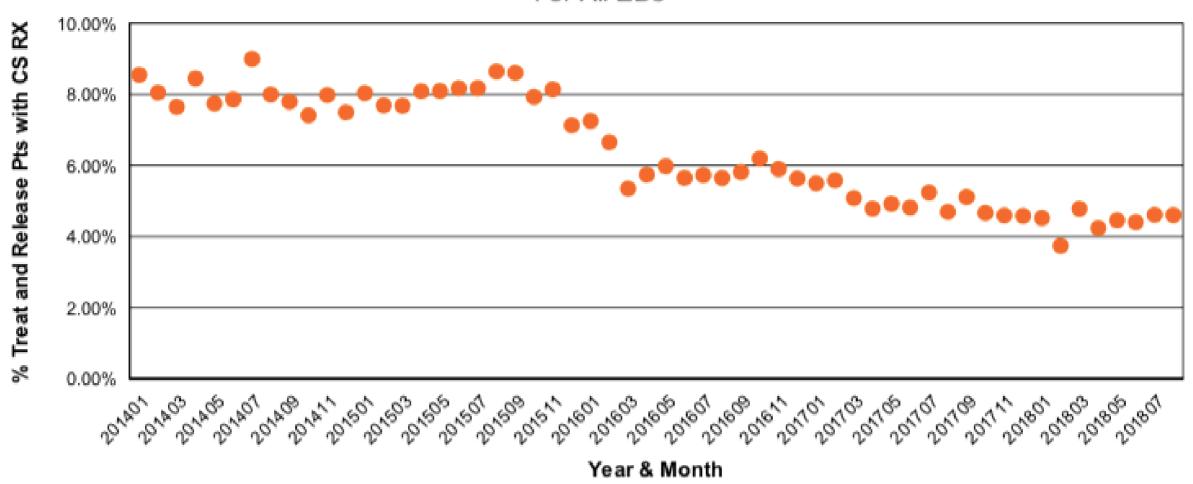


CHS_RX Controlled Substance Treat and Release Patients

For contact dates from 1/1/2014 through 8/31/2018

Controlled Substance Patients

For All EDs





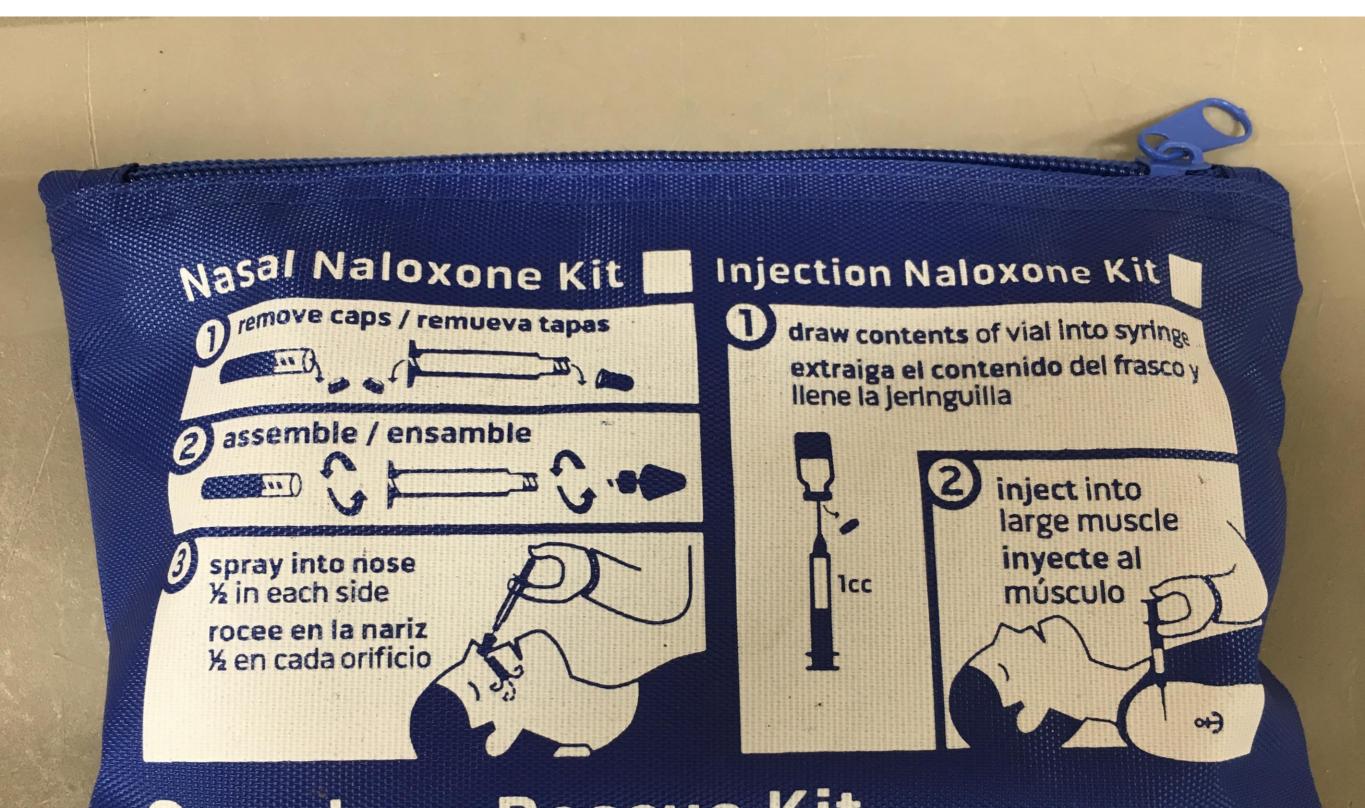


CHS_ED CS Prescribing in ED By Last Attending

For contact dates from 12/1/2017 through 12/31/2017

	For contact date	es from 12/1.	2017 through	12/31/2017	<i>T</i> :	
Facility Name [Number]			7-12-345-09-1-			
Last Attending Provider Name [ID]	Num Patients	CS Scripts	PerCnt CS	Awg Qty	Num Psyc DX	PerCnt Payo
GSH EMERGENCY GER[10:100097]						
	277	1	0.36%	2	1	0.36%
	207	8	3,86%	12	1	0.48%
	251	10	3,98%	9	. 8	3.19%
	198	10	5.05%	13	10	5.05%
	197	5	2.54%	14	3	0.51%
	334	41	12.28%	16	6	1.80%
	253	0	0.00%		1	0.40%
	158	17	10.78%	7	4	2.53%
	170		1.18%	11	2	1.18%
	195	2 9 12	4.62%	9	4	2.05%
	239	12	5.02%	10	7	2.93%
	200	16	8.00%	10	1	0.50%
	154	12	7.79%	10	3	1.95%
	107	4	3.74%	8	4	3.74%
	44	0	0.00%		0	0.00%
	331	15	4.53%	17	0 8	2.42%
	163	5	3.07%	6		0.00%
	110	0	0.00%	26	0 0	0.00%
	93	0	0.00%		0	0.00%
	125		0.80%	12		2.40%
	227	3	1.32%	10	3	1.32%
	236	0	0.00%			2.12%
	100	1	1.00%	10	5 3	3.00%
	138	6	4.35%	10	2	1.45%
	209	0	0.00%	2000	1	0.48%
	313	0	0.00%		2	0.64%
	69	5	7.25%	18	2 3	4.35%
	5,098	183	3.59%	12	83	1.63%
	5,098	183	3.59%	12	83	1.63%

Narcan Distribution Program



Good Samaritan Hospital Medical Center

Opioid Overdose Prevention Training Program

Good Samaritan Hospital Medical Center
Emergency Department

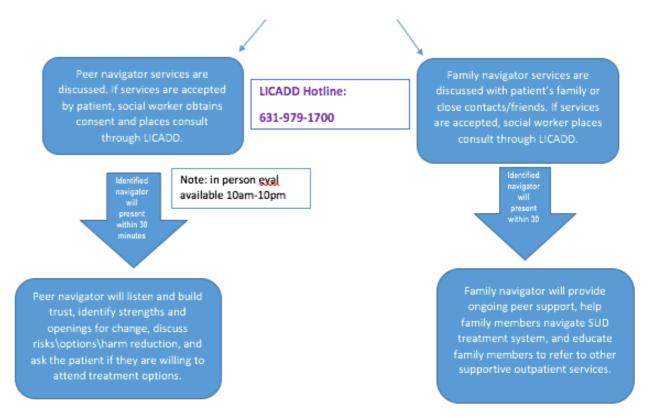


ED Peer/Family Navigator Program (SHERPA)

Good Samaritan Hospital Medical Center Sherpa Program Workflow

*The primary target for this program is opiate overdose survivors in the emergency department. Participants may also be at risk for overdose or misusing substances other than opiates.

Patient at risk of addiction or status post overdose is identified by emergency medicine physician or any member of the clinical team. CONSULT As per protocol social work and Psychiatry consult is placed in electronic medical record (EPIC). Social work evaluation is completed as per current protocols.

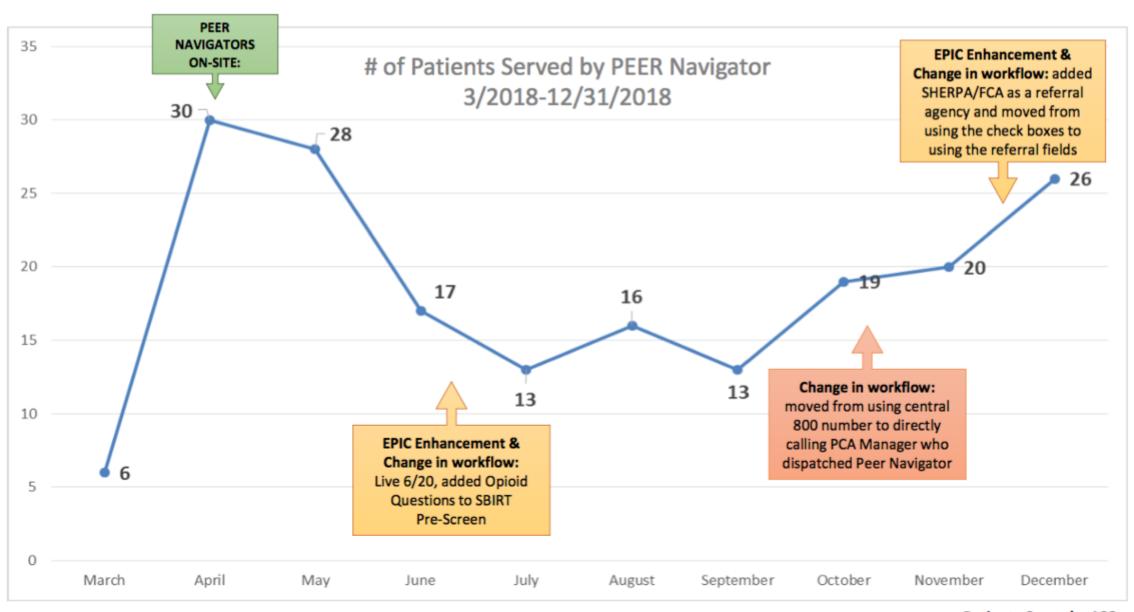


If peer navigator services are declined for any reason, traditional referral pathways and follow-up resources are given to the patient. If the patient is already engaged in addiction treatment, will refer patient back to outpatient provider. Narcan kits will also be provided when appropriate.





Outcomes Update: SHERPA – GSH Data Source: FCA



Patients Served = 188





Outcomes Update: SHERPA – GSH Data Source: Eligible Patients; EPIC / Enrollment Info; FCA

SHERPA Data: Total of 188 patients served by PEER Navigator from 3/19/2018 to 12/31/2018

- Eligible: 183 patients (Answered YES to Opioids)
 - 19/183 = ~11% have been enrolled
- Excluded: 4 patients (No Referral Needed)
- Enrolled: 184 patients (Consented to FCA)
- Primary SUD:
 - Alcohol: 111
 - Heroin: 44
 - Opioids: 13
 - Other: 16
- Secondary SUD:
 - · Alcohol: 8
 - Heroin: 2
 - Opioids: 4
 - Primary Alcohol/Secondary None: 71
 - Primary Heroin/Secondary None: 10
 - Primary Opioids/Secondary None: 5

- Diagnosed/Self Identified Mental Health Challenges:
 - Yes: 11
 - No: 3
- Other Data Collection Expanded to:
 - Admissions
 - Gender
 - Age Bracket
 - Race
 - · Ethnicity
 - · Overdose/Morbidity Rates
 - · Family Involvement
 - PEER Navigator
 - Volume / TAT (Call > Dispatch > Arrival)
 - Outcomes



Outcomes Update: SHERPA – SCS Data Source: FCA

Patients Served = 188 # of Referrals Accepted by Patients: 133 (~71% of Patients Served)

Referral Rates

	30 E	ays	60 D	ays	90 Days		
	Engaged in	Engaged	Engaged in	Engaged	Engaged in	Engaged	
	Treatment	with Peers	Treatment	with Peers	Treatment	with Peers	
Yes	38%	48%	11%	17%	6%	11%	
No	18%	8%	11%	5%	11%	6%	
N/A	26%	26%	42%	42%	50%	50%	
Unable to Reach	50%	50%	72%	71%	72%	71%	
Unkown	8%	8%	4%	4%	2%	2%	



Narcan Policy

- Morbidity and mortality post Narcan administration
- No clear guidelines
- Will allow for further engagement with high-risk patients

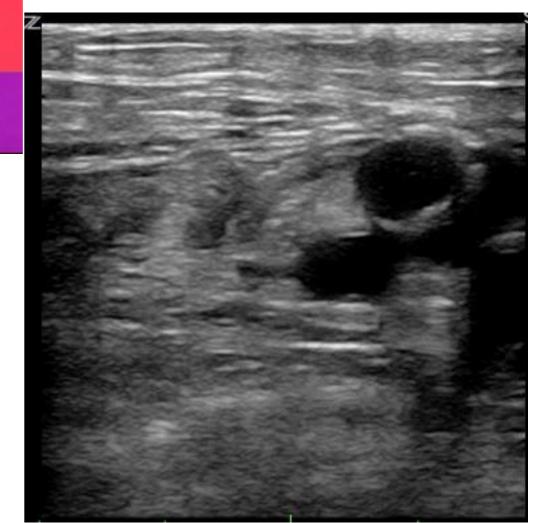


ALTO Program

Outpatient (at discharge) Oral Opioid Alternatives

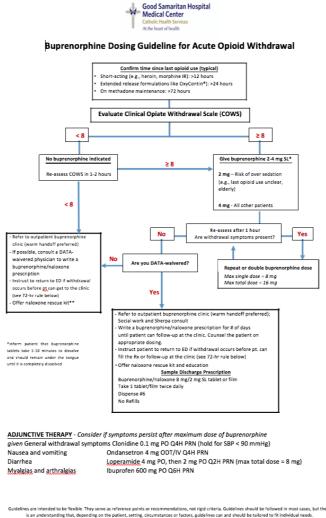
Abdominal Pain (non-traumatic)	1. IV Ketorolac 10-15 mg or IV Diclofenac 75 mg IV or IV Metamizole 1g (as a single egent OR in combination with number 2,3,4) 2. IV Acetaminophen (Paracetamol) 1g over 15 min* 3. IV Lidoceine -1.5 mg/kg of 2% Lidoceine (preservative free) over 10-15min (more data needed for patients with particle discour) 4. IV Ketamine-0.3 mg/kg over 10 min, + IV drip at 0.15 mg/kg /hr	PO lbuprofen 400 mg q8h x 3-5 days or PO Acetaminophen (Paracetamol) 1g q6h x 3-5 days OR a combination of two
Abdominal Pain (traumatic)	1, IV Acetaminophen(Paracetamol) 1g over 15 min* 2, IV Ketamine-0.3 mg/kg over 10 min + IV drip at 0.15 mg/kg /hr	PO lbuprofen 400 mg q8h x 3 -5 days or PO Acetaminophen (Paracetamol) 1g q6h x 3-5 days OR a combination of two
Back Pain (non-radicular)	1. IV Ketorolac-10-15 mg or Ibuprofen 400 mg PO or IV Dictofenac 75 mg IV or IV Metamizole 1g (a single agent OR in combination with number 2.3,4) 2. Trigger point injection 16 mil 0.5% Buptivicains or 20 ml of 1% Lidocains to site of maximal pain 3. IV Acetaminophen (Paracetamol) 1g over 15 min 4. IV Lidocains -1.5 mg/kg of 2% Lidocains (preservative free) over 10-15 min 5. IV Ketamino-0.3 mg/kg over 10 min. + IV drip at 0.15 mg/kg int	PO ibuprofen 400-800 mg q8h PO Acelaminophen (Paracetamol) 1g q6h PO Methocarbamol 500 mg-1500 mg q6h PO Diazepam-5 mg q8h Topical Dictofenac Gel 3% q8h Physical Therapy Acupuncture
Burns	1. IV Ketamine-0.3 mg/kg over 10 min, + IV drip at 0.15 mg/kg /hr 2. IV Lidocaine 2% 1.5 mg/kg (preservative free) over 10-15 min, + continuous infusion at 1.52.5 mg/kg /hr 3. IV Dexemedetomidine 0.2-0.7 mcg/kg/hr drip OR 4. IV Clonidine-0.3-2 mcg/kg/hr drip	Lidocaine 5% cream PO libuprofen 400 mg q8h x 3 -5 PO Acetaminophen (Paracetamol) 1g q6h

Pain Syndrome Inpatient (in the ED) Parenteral Opioid Alternatives



MAT in the ED

- 96% ED Attendings waiver trained at GSHMC
- Initiative will go system-wide





Challenges...Pre

- Volume
- Resources-within hospital and outpatient
- Expertise, waiver training



Challenges...Post

- Individual beliefs re:MAT
- MAT education
- Confidence in connection to longitudinal care
- Lack of appropriate patients for MAT
- Momentum with Sherpa program
- Data
- Transportation



Thank You

Christopher C. Raio MD MBA

- Chairman EM GSHMC, Chief EM Service Line CHS
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ED Opioid Collaborative

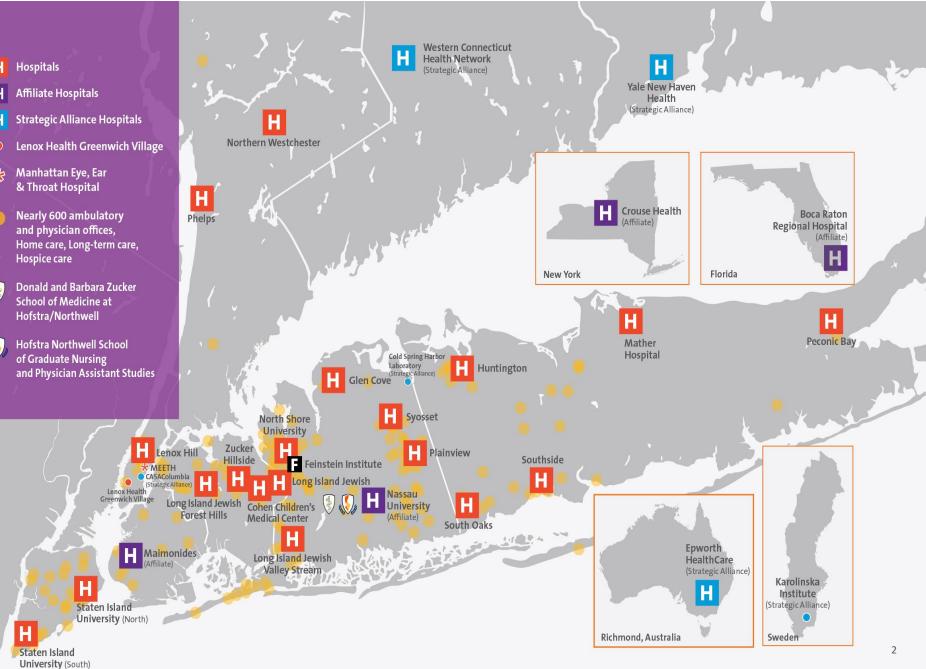
John D'Angelo, MD, FACEP

Executive Director & Senior Vice President
Emergency Medicine Service Line
Northwell Health

January 30, 2019



Northwell Health



Our Strategy

layered fashion – setting a foundation and utilizing it as a framework to continually enhance our clinical offerings







MAT in the ED

Project CONNECT



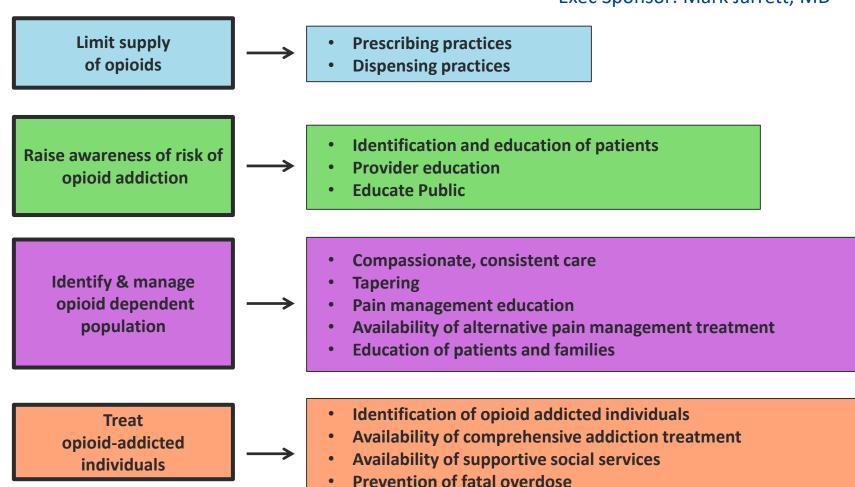


Northwell Health Opioid Management Steering Committee

Addressing the Opioid Crisis

Chair: Jay Enden, MD

Exec Sponsor: Mark Jarrett, MD





There is Help



With the mindset that Addiction is a CHRONIC Illness, like so many others we are familiar with, treatment <u>can</u> start in our EDs



Initiating Addiction Treatment

MAT in the ED

- Relied on experiences and support from others
 - Yale study
 - Maimonides ED (Dr Motov and team)
 - Buffalo Matters (Dr Lynch)
 - NYS OASAS, NYS DOH, Northwell SUD, Community Based Organizations
- Dynamic layer requiring more Action and Ownership
- Similar approach as other Northwell initiatives (SBIRT/NAL-SAT)
 - Multiple Stakeholders and Collaborators
 - SUD Services, Toxicology, EM, IM, Psychiatry, SBIRT, Administration, Legal, etc.
 - Team-Based clinical workflows
 - Wide-spread training and education



Initiating Addiction Treatment

MAT in the ED

3 Northwell ED sites identified (Suffolk, Nassau, Staten Island)

- 2 pilots began in July 2018 (LIJ and SIUH)
- 3rd pilot to begin in Feb 2019 (Southside Hospital)

Emergency Department process:

- Team-based identification, assessment, education (SBIRT/NAL-SAT)
 - Confirming if patient is motivated, willing, & agreeable to treatment initiation and handoff
- Potential induction with Bupenorpherine 4mg + 4mg (if needed)
- In-house team-based care navigation to ensure "handoff" is completed

Northwell Health SUD Treatment Provider process:

- Acceptance of referral and OUTREACH Protocol initiated
- Confirmation of arrival + Re-Navigation if deemed necessary
- Longitudinal collection of data for 120 days → shared with whole team



Initiating Addiction Treatment

MAT in the ED

Current Model:

Inductions and confirmed warm-handoff

Status:

62% pts induced in ED engaged to care in our SUD Tx Center

Of those patients who met the <u>30 day</u> and <u>60 day</u> mark:

- @ 30days, 52% pts engaged to care in our SUD Tx Center
- @ 60days, 45% pts engaged to care in our SUD Tx Center

Important to note that patients may have engaged into care in other non-partner SUD Tx facilities, may have been transferred, and/or discharged



Thank You



