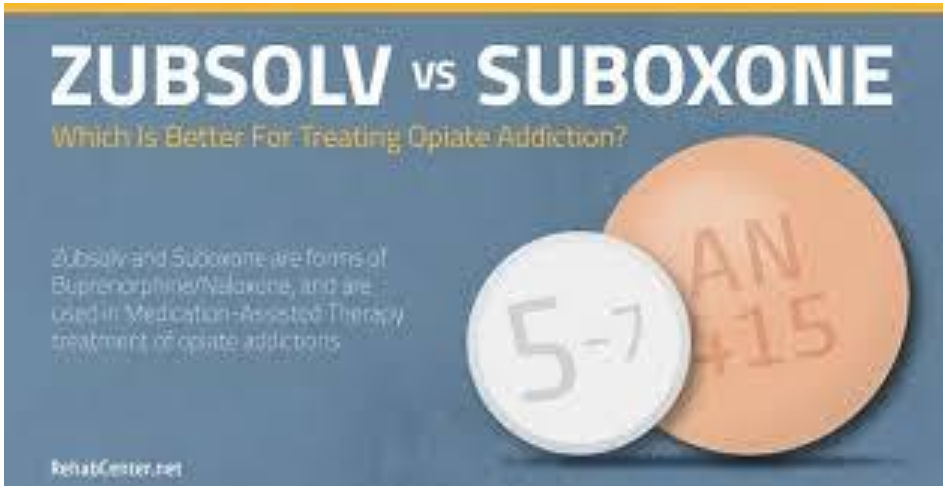
USE OF BUPRENORPHINE

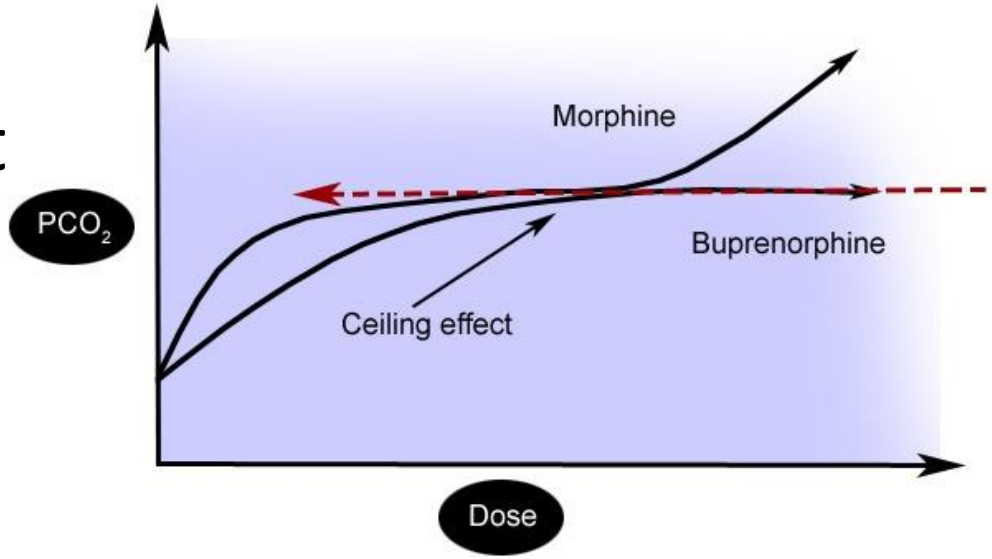
Current State of the Art in Humboldt

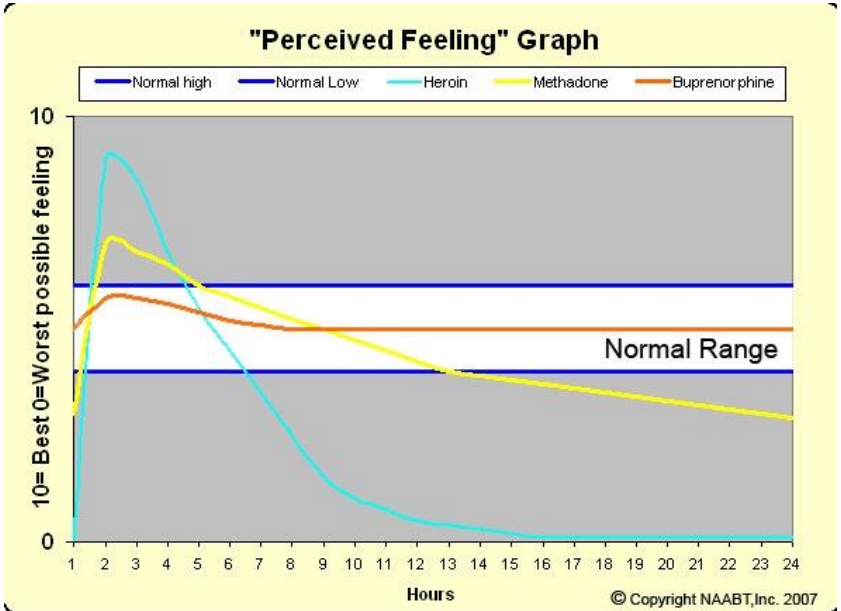
March 24, 2018



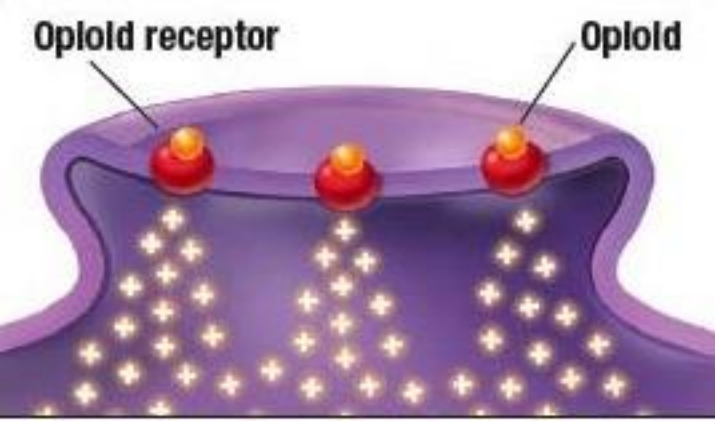
Basic Pharmacology of Buprenorphine

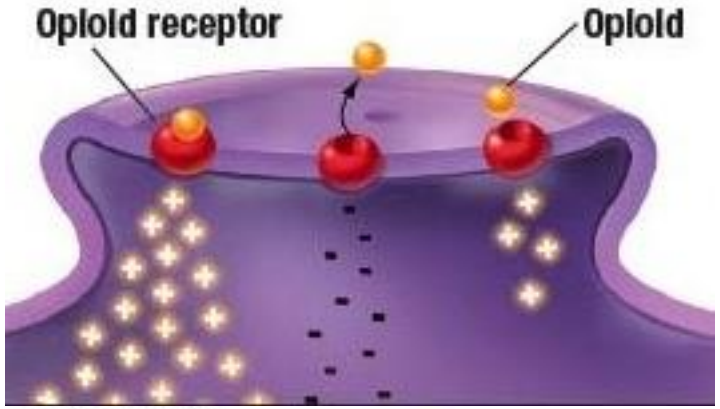
- Partial Opiate Agonist
  - Low risk of respiratory depression
  - Very little “self-reinforcement”

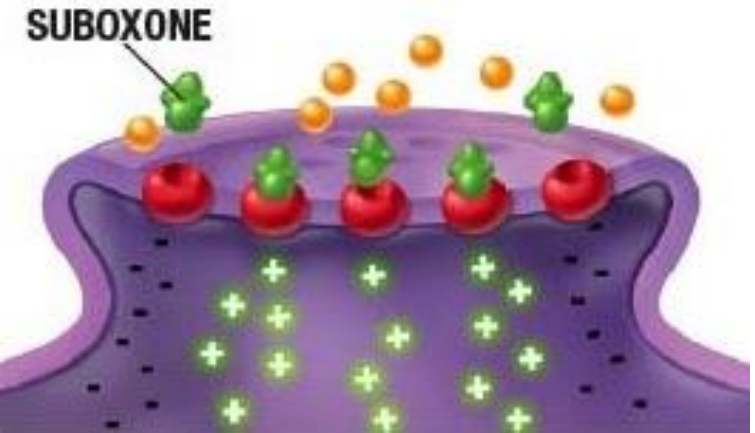




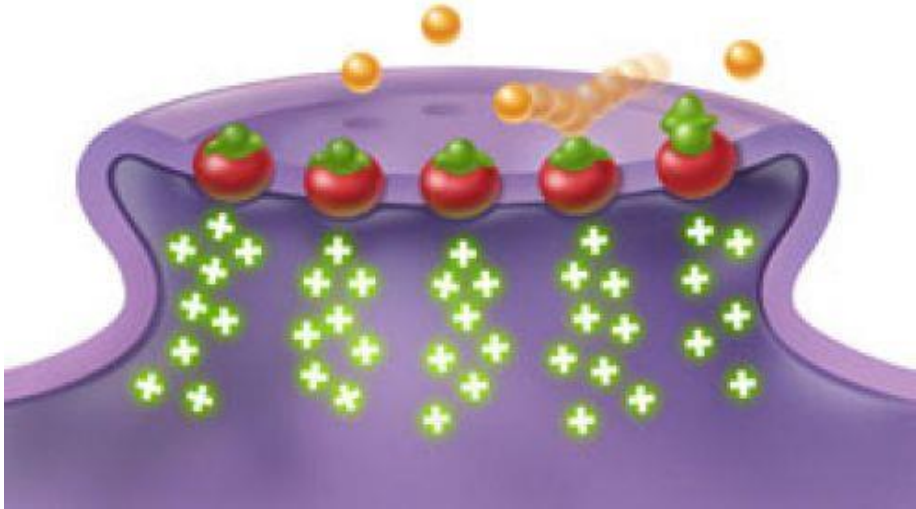
Pharmacology, cont.





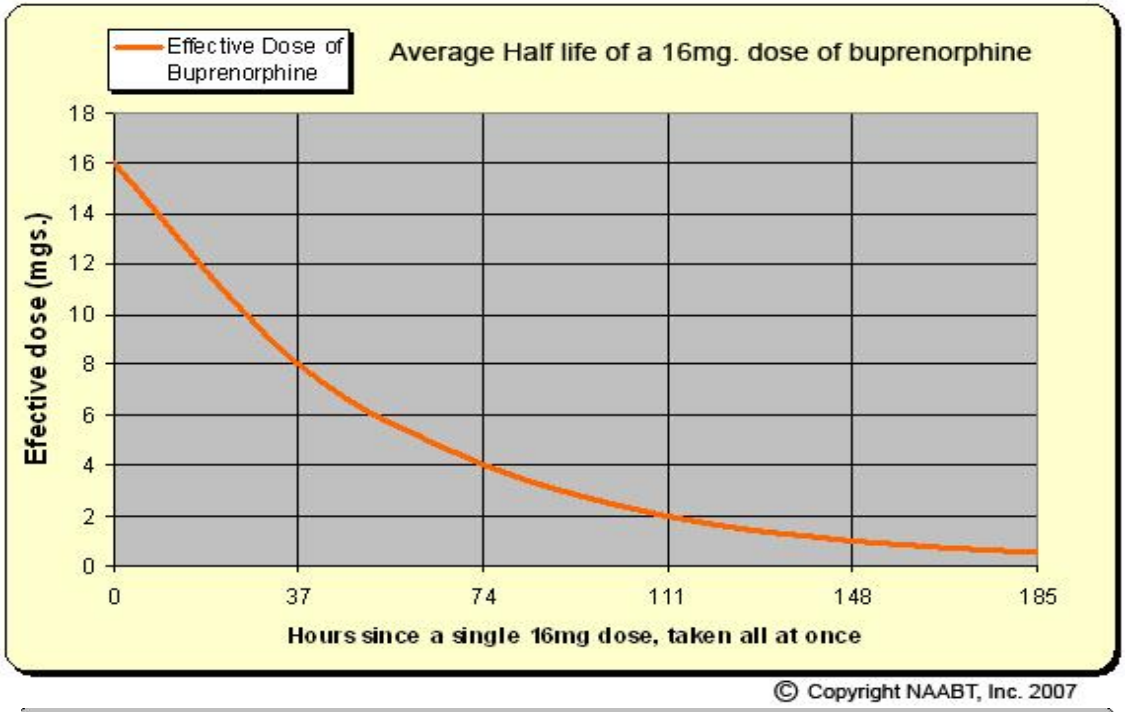


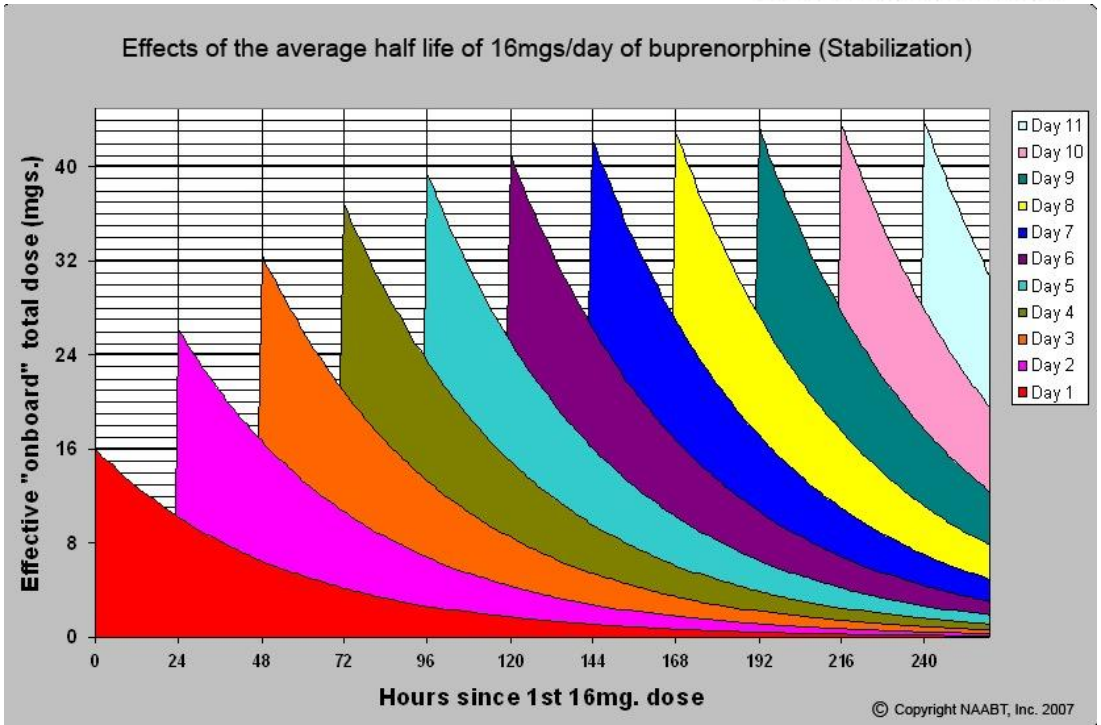
- Tight binder to the receptors
  - Diminished “high” when using other opioids
  - Risk of precipitating withdrawal in highly addicted patients



Pharmacology, cont

- Long half life
  - Daily or qod dosing theoretically feasible
  - Reduces cravings

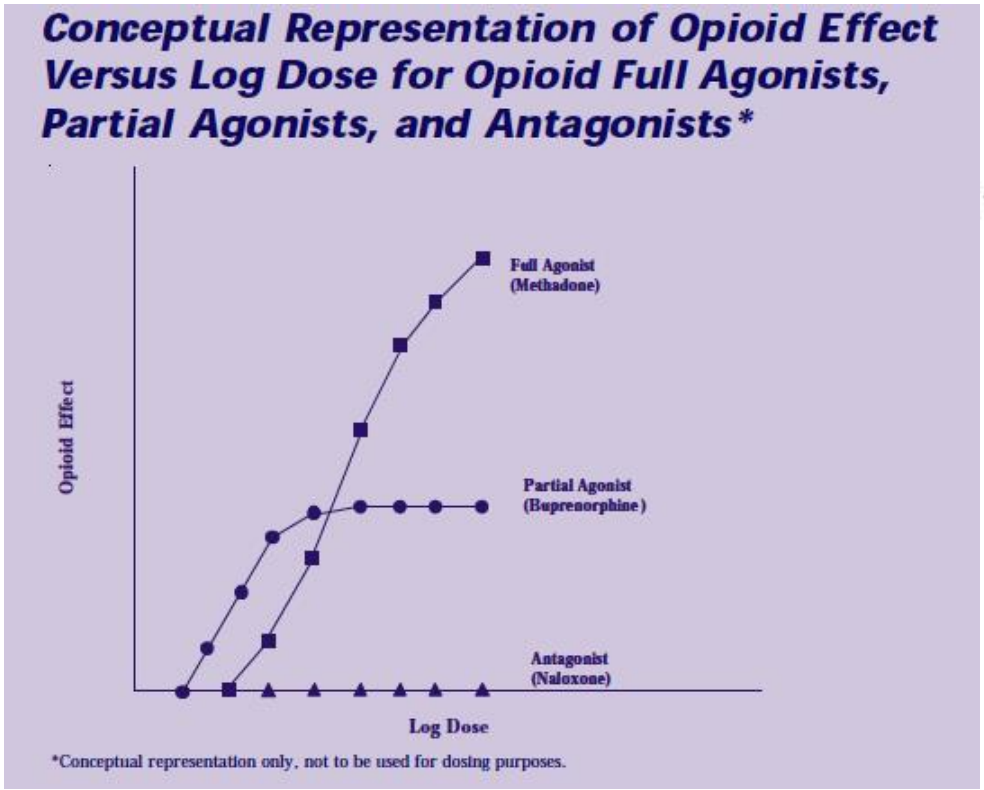


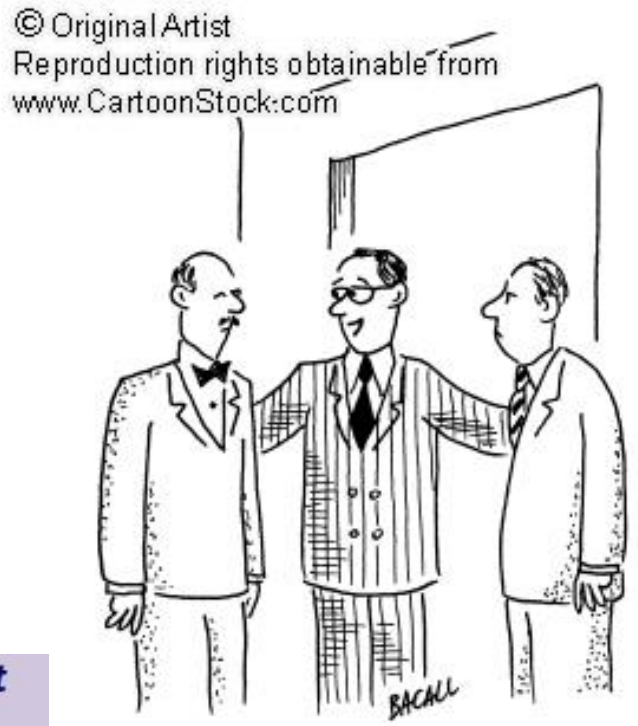


Pharmacology, cont

Rationale for combination drug

Naloxone is only a deterrent for abuse (injecting)





"Al, this is Jack. He's with the Committee to Eliminate the Board of Education. Jack, this is Al. He's with the Committee to Increase Funding for the Board of Education."

search ID: aba0849

opendoor Community Health Centers

History of Buprenorphine treatment at Open Door

- Began when FDA approved buprenorphine for office based treatment of opioid use disorder
  - No local methadone program
- Dramatic early success with a few patients
  - “miracle drug”
- Organic growth to current robust program
  - Case managing nurses and drug counselors
  - Now 600 – 700 patients in treatment
  - Gradual realization that it is maintenance for many patients

DEMOGRAPHIC RISK FACTORS PREDICTING SUBSTANCE USE TREATMENT OUTCOMES

A thesis presented to the faculty of the Graduate School of Western Carolina University in partial fulfillment of the requirements for the degree of Master of Arts in Clinical Psychology

By

Jade Vincent Quintero

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Associate Professor of Psychology
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Members: Dr. Norman Hoffmann, Psychology
Dr. Alvin Malesky, Psychology

January 2016

It is important to note that treatment for substance abuse produced positive results with regard to abstinence for majority of the sample, but when examining individual demographic risk factors and comparing those findings across race, gender, and program type, some discrepancies are revealed. An example of this is demonstrated when age is examined across race. When just race is examined there is 40.1% relapse rate for whites and a 48.2% relapse rate for nonwhites. When just age is examined subjects who are 25 years of age or older have a relapse rate of 39.4% compared to those who are under 25 years of age have a relapse rate of 56%. When race and age are examined together, findings suggest a compounding effect on subjects. Specifically, the compounding effect is demonstrated by subjects who are nonwhite and under 25 years of age having a relapse rate of 70.1% (the highest of any cross examined group). This compounding effect was shown for all demographic risk factors when examined across gender, race, and program type.

SUD is a chronic disease

- 6 stage model of behavior change
- 90-95% relapse rate
- sensitization in NAc & Amygdala of CRF receptors & dynorphin production

opendoor Community Health Centers

Current Program at Open Door

- 680+ patients; 11 providers over 4 sites
- Induction process
  - History and physical by provider
  - Nurse visit to explain program and expectations
  - Nurse visit for induction
- Three stages using counselors and groups
  - Phase 1
    - Weekly visits with group, tox screen, provider visit
  - Phase 2
    - Group visits every 2-4 weeks with provider visit
  - Phase 3
    - Group visit every 1-3 months with provider visit

  PTSD & addiction Lisa Najavits, PhD
    - https://www.treatment-innovations.org/seeking-safety.html

Current Program at Open Door (cont.)

American Journal of Therapeutics 12, 379–384 (2005)

Sublingual Buprenorphine Is Effective in the Treatment of Chronic Pain Syndrome

Herbert L. Malinoff,[1]* Robert L. Barkin,[2] and Geoffrey Wilson[1]

Many patients with chronic pain have less than optimal therapeutic outcomes after prolonged treatment with opiate analgesics. Worsening of pain perception, functional capacity, and mood often result. Medical detoxification is often undertaken in this situation. Ninety-five consecutive patients (49 men and 46 women, age range, 26–84) with chronic noncancer pain (maldynia) were referred by local pain clinics for detoxification from long-term opiate analgesic (LTOA) therapy. All patients had failed treatment as manifest by increasing pain levels, worsening functional capacity and, in 8%, the emergence of opiate addiction. Length of prior LTOA therapy ranged from 1.5 to 27 years (mean, 8.8 years). After a minimum of 12 hours of abstinence from all opiate analgesics, patients were given low doses of sublingual (SL) buprenorphine or buprenorphine/naloxone (Reckitt Benckiser). Maintenance dosing was individualized to treat chronic pain. Daily SL dose of buprenorphine ranged from 4 to 16 mg (mean, 8 mg) in divided doses. Mean duration of treatment is 8.8 months (range, 2.4–16.6 months). At clinic appointments, patients were assessed for pain reports, functional capacity, and mood inventory. Eighty-six percent of patients experienced moderate to substantial relief of pain accompanied by both improved mood and functioning. Patient and family satisfaction was robust. Only 6 patients discontinued therapy secondary to side effects and/or exacerbation of pain. In this open-label study, SL buprenorphine and buprenorphine/naloxone were well tolerated and safe and appeared to be effective in the treatment of chronic pain patients refractory to LTOA.

Keywords: chronic pain, buprenorphine, treatment, detoxification

- Evolving use of buprenorphine for chronic pain
  - Patients formerly on high doses of opioids who were struggling to wean

--Severe chronic pain in patients felt to be too high risk for other opioids

-- Primarily use Suboxone, but other formulations:

Butrans, Belbuca

- Special Case of Pregnancy
  - Using the mono-drug currently but this may change - Subutex
  - Evidence that neonatal outcomes are improved compared to other opioids (and methadone)
  - Research project to try to understand our outcomes in Humboldt

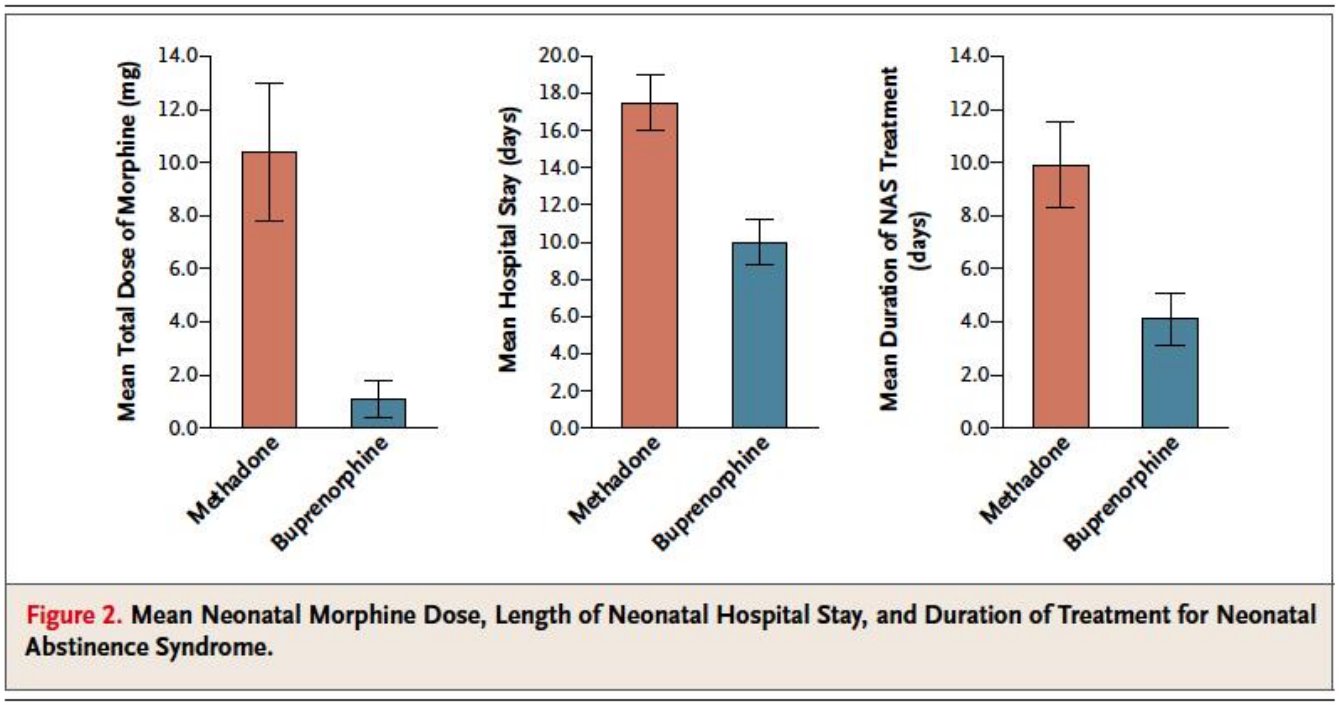

Figure 2. Mean Neonatal Morphine Dose, Length of Neonatal Hospital Stay, and Duration of Treatment for Neonatal Abstinence Syndrome.

Mother's Study
NEJ 363;24
Dec 2010

Use of buprenorphine in the hospitalized patient

- Patients on buprenorphine admitted with medical condition
  - Stopping buprenorphine causes a withdrawal syndrome that can complicated medical diagnosis and management
- Patients on buprenorphine hospitalized with acutely painful conditions
  - Stopping buprenorphine causes need for pain medication to be very high
  - Worry that buprenorphine will block effect of morphine is overstated
- Patients on buprenorphine admitted for elective surgery
  - Choice between staying on buprenorphine and treating and stopping ahead of surgery
  - Medical literature and our own experience is mixed

Future Directions

- Inductions in the ED
  - Local ER doc has her “X” and is looking for patients
  - Support from CHCF
- Inductions in inpatients
  - ODCHC doc is beginning to put together protocols and order sets with support from CHCF
- Usage of Naltrexone / Vivitrol, ? Sublocade

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Integrating buprenorphine maintenance therapy into federally qualified health centers: Real-world substance abuse treatment outcomes

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ABSTRACT

Background: Few studies have examined real-world effectiveness of integrated buprenorphine maintenance treatment (BMT) programs in federally qualified health centers (FQHCs).
Methods: Opioid dependent patients ($N = 266$) inducted on buprenorphine between July 2007 and December 2008 were retrospectively assessed at Connecticut's largest FQHC network. Six-month BMT retention and opioid-free time were collected longitudinally from electronic health records; 136 (51.1%) of patients were followed for at least 12 months.
Results: Participants had a mean age of 40.1 years, were primarily male (69.2%) and treated by family practitioners (70.3%). Co-morbidity included HCV infection (59.8%), mood disorders (71.8%) and concomitant cocaine use (59%). Retention on BMT was 56.8% at 6 months and 61.6% at 12 months for the subset observed over 1 year. Not being retained on BMT at 12 months was associated with cocaine use (AOR = 2.18; 95% CI = 1.35–3.50) while prescription of psychiatric medication (AOR = 0.36; 95% CI 0.20–0.62) and receiving on-site substance abuse counseling (AOR = 0.34; 95% CI 0.19, 0.59) improved retention. Two thirds of the participants experienced at least one BMT gap of 2 or more weeks with a mean gap length of 116.4 days.
Conclusions: Integrating BMT in this large FQHC network resulted in retention rates similarly reported in clinical trials and emphasizes the need for providing substance abuse counseling and screening for and treating psychiatric comorbidity.

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1. Background

Opioid dependence and abuse, including use of heroin or prescription pain killers, affects approximately 2.28 million Americans (SAMHSA, 2011). Opioid substitution therapy, such as methadone and buprenorphine, has documented effectiveness in treating opioid dependence (Connock et al., 2007; Mattick et al., 2008). Access to specially licensed and highly structured methadone maintenance programs, however, is limited, leaving 80–85% of the opioid-dependent population untreated (Friedman et al., 2007). The Drug Addiction Treatment Act of 2000 and the approval of buprenorphine in 2002 allowed certified physicians to prescribe buprenorphine in primary and specialty care settings, making opioid maintenance treatment more available and easier to access

In March 2010, the U.S. Congress passed the Affordable Care Act (ACA) to substantially reduce the number of uninsured Americans and the United States Supreme Court largely upheld the healthcare reform law in June 2012. The ACA seeks to increase access to affordable, high quality healthcare and thus supports expanded healthcare delivery in federally qualified health centers (FQHCs). FQHCs are public or private non-profit health centers governed by a community board that are grant-supported under the Public Health Service Act and provide comprehensive primary care services in communities where there is a need to provide care for the medically underserved. Those individuals who have lower education, are unemployed, live in metropolitan areas or who are on probation or parole have higher rates of substance dependence or abuse (SAMHSA, 2011) and many FQHCs serving these individuals

Important for FQHCs to provide Outpatient MAT services

- Our Population of patients
- ACA unknowns
- Evidence FQHCs can be successful in MAT programs

Primary Care is best setting for addiction care

- Chronic disease
- Outcomes is all about relationship with the patient
- Better outcomes for co-morbidities if receives PC in addiction care setting

Caring for Ms. L. — Overcoming My Fear of Treating Opioid Use Disorder

Audrey M. Provenzano, M.D., M.P.H.

Ms. L. always showed up 10 minutes early for her appointments, even though I always ran late. Her granddaughter would rest her cheek against Ms. L.'s chest, squishing one eye shut, and scroll through Ms. L.'s phone while they waited. After reviewing her blood sugars, which Ms. L. recorded assiduously in a dog-eared blue diary, we'd talk about smoking cessation. That was a work in progress. "There's just nothing like a cigarette," she'd sigh. "Don't you ever start," she'd admonish her granddaughter, kissing the top of her head.

One day, I knew something was wrong the moment I opened the door. Ms. L. was alone. Sweat dotted her lip and forehead. She closed her eyes and looked away, and tears fell onto her lap. "I need help," she whispered, and it all came out: she had taken a few of the oxycodone pills prescribed for her husband after a leg injury, then a few more from a friend. And like a swimmer pulled into the undertow, she was dragged back into the cold, dark brine of addiction. I tried to hide my shock. I'd known she was in recovery from opioid use disorder (OUD), but it had simply never come up. She hadn't used in decades.

"No one can know that I relapsed," she said. "If my kids find out, they won't let me see my granddaughter." She wanted to try buprenorphine and was frustrated to hear that I could not prescribe it. "Why not?" Annoyed, she rocked in her chair. "I just want to feel normal again, and I know you. I don't want to tell anyone else."

I evaded her question: "I don't have the right kind of license to prescribe it," I said. "Let me refer you to a colleague."

But my incomplete answer gnawed at me. In truth, the reason I didn't have a waiver to prescribe buprenorphine was that I didn't want one. As a new primary care physician, I spent every evening finishing notes and preparing for the next day. Every

Friday I left the office utterly depleted, devoid of the energy or motivation it would take to spend a weekend clicking through the required online training.

But more than not wanting to take on the extra work of prescribing a medication for OUD, I did not want to deal with patients who needed it. I knew that for some people with substance use disorders, the relationship with the drug can eclipse all other relationships, leading them to push away family, friends, and caregivers. I had witnessed patients waiting for prescriptions antagonize secretaries and nurses, seen patients try to manipulate toxicology screenings, and heard voices raised in exasperation at colleagues through thin clinic walls. Addiction, according to the American Society of Addiction Medicine, "is characterized by . . . impairment in behavioral control, craving, diminished recognition of significant problems with one's behaviors and interpersonal relationships, and a dysfunctional emotional response."[1] Already overwhelmed, I did not want to take on patients with needs that I did not know how to meet.

One of my colleagues started Ms. L. on buprenorphine treatment. When I saw her again for her diabetes, a space had opened between us. Then she didn't show up to her next appointment. I called her and sent a letter, but she didn't show up to the next one either. Months passed, and then a year.

The night I found out that Ms. L. had died of an overdose, a heavy, wet snow was falling throughout the city, dampening the sound of traffic. In the quiet,

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