



Connecting Compassionate, Quality, and Inclusive Care to All Communities

Substance Use Disorder as a Medical Illness: Applying the Lessons of Clinical Integration to MAT and Opioid Treatment

Gian Stefano Varbaro, MD MBA
Michael J Paoletto MA, LCADC, CSW
NJ DMHAS 2019 Opioid Summit

About the Speakers

- Gian Varbaro, MD MBA is the Chief Medical Officer at Bergen New Bridge Medical Center in Paramus, NJ and is an Assistant Professor at Rutgers New Jersey Medical School. He graduated undergraduate from Brown University and received his MD from New York University. He completed his residency in Internal Medicine at UMDNJ Robert Wood Johnson. He earned his MBA from Yale School of Management. He has helped to start teaching programs and systems to improve quality, safety, and integration of care.
- Michael Paoello is the Chief Clinical Officer of Addictions Treatment at Bergen New Bridge Medical Center. Michael joined the hospital in 2012 after 20 years at Hoboken University Medical Center. He has also managed EAP services for the Jersey City Board of Education. Michael is a member of the New Jersey DMHAS Professional Advisory Committee and Chairperson of the Local Advisory Committee. An approved instructor for the Certification Board he has been providing trainings for agencies throughout New Jersey since 2006. Michael holds his Master's degree in Educational Psychology.

Disclosures

- In addition to his duties at his previous employers and at Bergen New Bridge Medical Center and Rutgers New Jersey Medical School, Dr. Varbaro has worked as a consultant for medical systems looking to evaluate and improve medical systems and their quality of care

The Big Picture

- Traditional treatment of opioid abuse was based on treating like a “moral failing” or a complete choice
- But “Drug addiction is a brain disease that affects behavior. Drug addiction has well-recognized cognitive, behavioral, and physiological characteristics that contribute to continued use of drugs despite the harmful consequences.” -National Institute on Drug Abuse. (2014). National Institute on Drug Abuse (NIDA): Principles of drug abuse treatment for criminal justice populations – A research-based guide. National Institutes of Health, U.S. Department of Health and Human Services.
- In the last 20-25 years healthcare has undergone a massive transformation toward improved quality, integration, and specialization

The Big Picture

- Merging these together gives exciting possibilities to design a new vision for treatment and management of patients with substance use disorders.
- So let's start this journey with some of the history of the treatment of substance use disorders.

Opioid Crisis

Most people's image of a person with a heroin addiction was one who was easily spotted through a stereotyped appearance.



“New Faces of Addiction”



Mortality Rates

- 180+ overdose deaths every day, with the significant majority involving opioids.
- Ages 24 to 35 represent, by far, the highest number of fatalities.
- In fact, for the first time in our country's history, people are more likely to die from an accidental opioid overdose than a car crash.



Historical Perspective

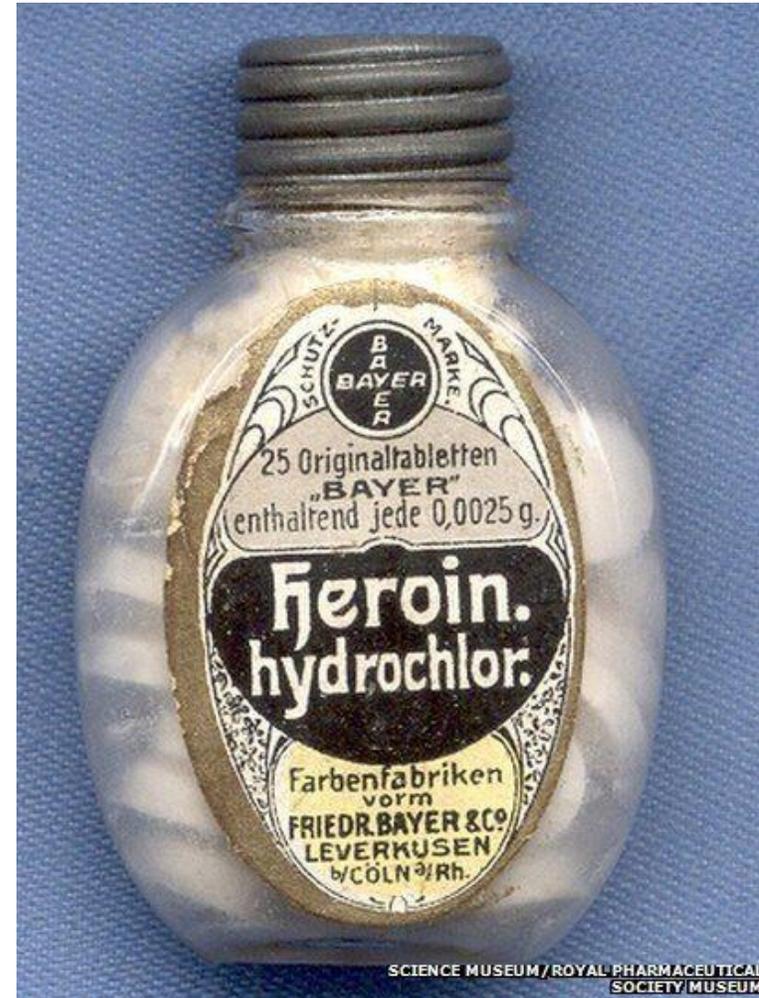
- This current Opioid Crisis is not unique to modern times.
- During the Civil War, morphine was an effective way of providing immediate relief from battle wounds.
- “Soldiers Disease”
- Interestingly, as the century went on, women began to make up the majority of morphine addicted people in the U.S.
- The number of people exposed to morphine sky-rocketed.

The Birth of the American Heroin Addict

- Unfortunately, the addictive properties of the drug, went virtually unnoticed and addiction increased dramatically.
- The United States was plagued with a major drug crisis.
- **Doctors became perplexed and were completely in the dark as to how to treat this new epidemic.**
- In 1898, AH BAYER, founder of the Bayer Company in Germany, introduced a new product that he claimed to be a 'heroic drug', which could cure addiction to morphine.

Bayer Heroin

- Bayer marketed the drug **UNDER THE TRADE NAME OF “HEROIN”**.
- The sales pitch that created an instant market to American doctors was that **“Heroin was a “safe, non-addictive” substitute for morphine”**



Changing Views

New England Journal of Medicine: January 1980:

"The development of addiction is rare in medical patients with no history of addiction."

New England Journal of Medicine: March 2016:

"We know of no other medication ... that kills patients so frequently"

How did we get to where we are today?

- Several factors are likely to have perpetuated the severity of the current Opioid epidemic.
- They include:
 1. Drastic increases in the number of prescriptions written and dispensed.
 2. Greater social acceptability for using medications for different purposes, and
 3. Aggressive marketing by pharmaceutical companies.

The Birth of OxyContin

- **1996** OxyContin hits the U.S. Market.
- Purdue Pharma took out ads for OxyContin in medical journals across the nation in 2000.
- **OxyContin was marketed as “safe, non-addictive drug”.**
- People quickly discovered that if they snorted or injected OxyContin, they could **remove the time release element** of the drug and receive a rapid, powerful high.

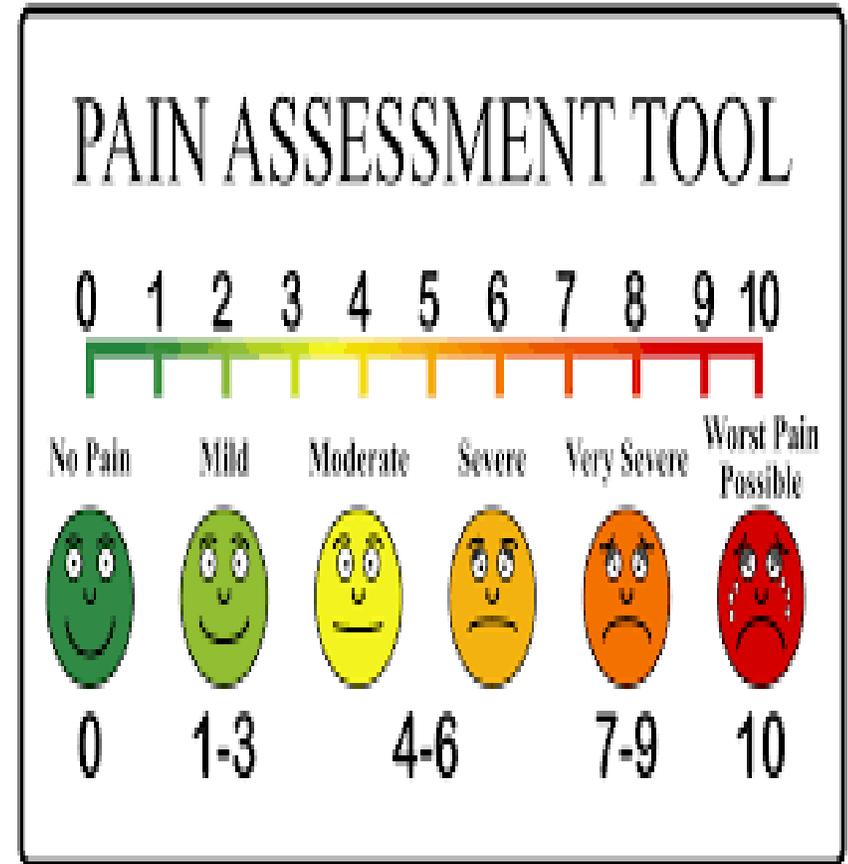
OxyContin

**The abuse of
OxyContin started
spreading like
wildfire across the
country.**



“Treat the Pain”

- In 2001 making pain treatment a priority came to the attention of Healthcare accreditation organizations.
- These standards required organizations to recognize the **right of patients** to appropriate assessment and management of pain: ***“Pain must be assessed in all patients”***



Treat the Pain!

- Medical centers and their doctors were mandated to examine their patients' pain levels – ***“surveyors will be assessing compliance”*** ...hospitals were warned they would be cited if they failed to meet this standard.
- The standards conveyed that *“pain is a condition that needs explicit attention and should be monitored with the same vigilance as blood pressure, pulse, temperature and respiratory rate”*.
- Doctors' concerns about addiction side effects were considered "inaccurate and exaggerated."

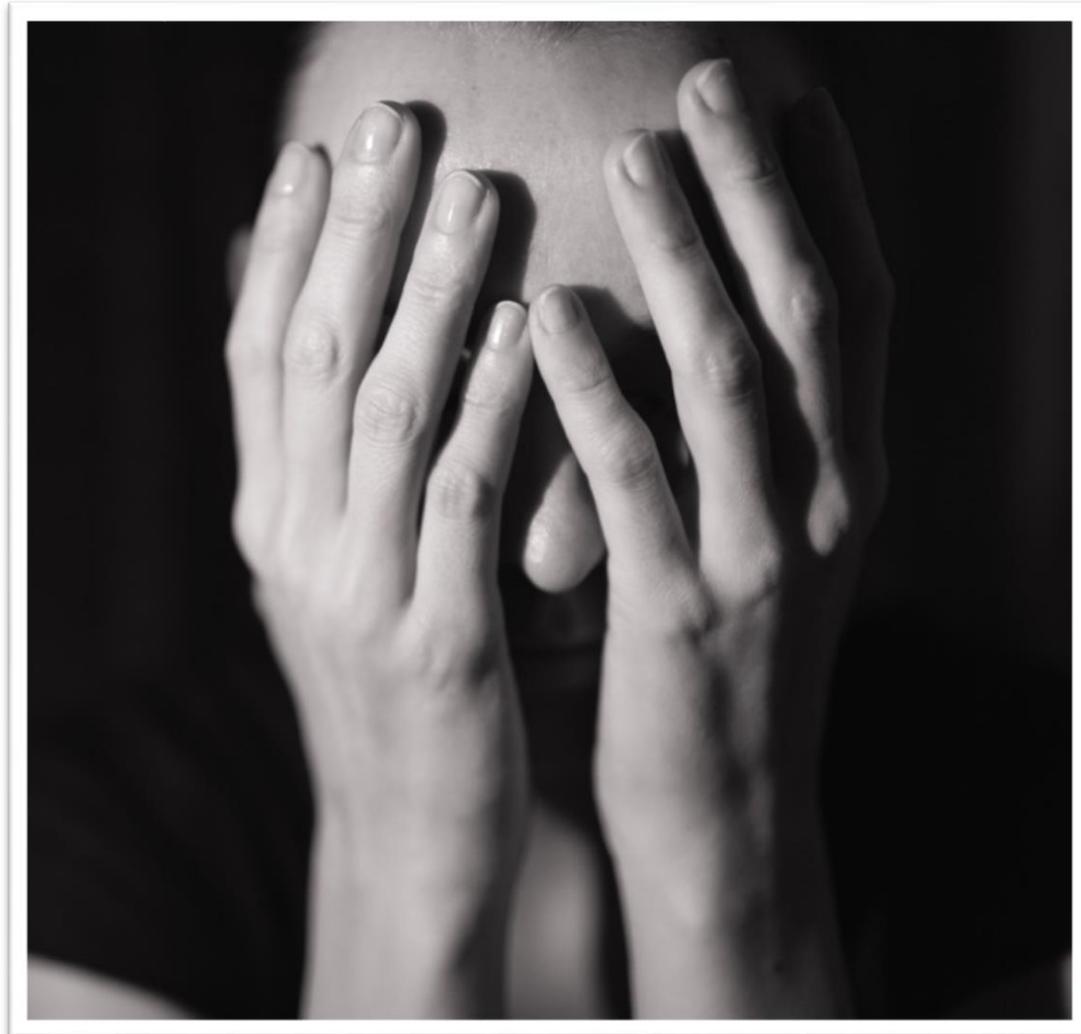
Did anyone see this coming?

- The Partnership for a Drug-Free America, best known for its "This is your brain on drugs" campaign of the '80s, became concerned that heroin would become the drug of the '90s and rolled out expensive publicity campaign specifically targeting heroin abuse.
- **NEWSWEEK August 25, 1996:** In this article it was noted that "most heroin users today are still old-timers, primarily inner-city men from minority groups. *However,* the article also pointed out a pattern of increasing heroin use is being seen in more suburban areas.

Did anyone see this coming?

- It was noted that the numbers of new, more affluent users are especially elusive, because they have resources and tend not to show up in jail or public treatment centers... *"Heroin may be flying below the radar"*
- However...a Yale researcher definitively stated, "It is too soon to say how high the current heroin wave will rise, or how long it will last. But that we shouldn't be alarmed ***"because in America we are much better informed about drugs now"***"

STIGMA OF ADDICTION



- Fear
- Embarrassment
- Shame
- Discrimination

STIGMA

- Many people don't understand why or how people become addicted to drugs.
- They often believe that those who use drugs simply lack moral principles...even those seeking treatment, are still too often looked down upon...
- ***Unfortunately, people often see the scars of the addiction but not the heart of the person seeking help.***

Early Treatment

- When science began to study addictive behavior in the 1930s, people addicted to drugs were thought to be flawed and lacking willpower.
- Those views shaped how society responded to addiction, treating it as a moral failing rather than a health problem, with an emphasis on punitive rather than prevention or treatment.
- Even as treatment evolved, the approach remained harsh, with the belief that to be successful required breaking down the “**ADDICT**” through what was referred to as “**brutal confrontation**”.

Additional Barriers

- Adding additional barriers, Medication Assisted Treatment, referred to as the gold standard for SUD treatment, is often rejected by many in the 12-step community.
- This non-acceptance contributes to the stigma of addiction and, subsequently, the stigma of medication-assisted treatment as a way of enabling a person with a substance use disorder.



The Surgeon General's report: Spotlight on Opioids, 2018

The Surgeon General's report acknowledges an undeniable truth:

“Unfortunately, stigma has prevented many people and their families from speaking about their struggles and from seeking help.

The way we as a society view and address opioid use disorder must change — individual lives and the health of our nation depend on it.”

The Good News...

- We are making progress!
- The Substance Abuse and Mental Health Services Administration (SAMHSA) has made it a priority to help remove the stigma for those seeking addiction treatment, with new initiatives and policy changes.
- Communities Partnerships...example: Operation Helping Hand
- Additionally, researchers now know more than ever about how drugs affect the brain and are exploring new approaches that can help people recover from drug addiction and lead productive lives.

Opioids and Neural Chemistry

- Opioid receptors are located in the central and peripheral nervous system
- Opioids activate specific neurotransmitter receptors (mu, kappa, delta) that couple G proteins (molecular intermediaries which initiate the intracellular communication process).
- Stimulation of G proteins begins the process of signal transduction
- Activation of mu opioid receptors results in the prototypic opioid effects of reward, withdrawal, and analgesia
- Mu receptor activation can mediate a variety of G proteins that lead to secondary effects on messenger-generating enzymes (such as adenylyl cyclase and phospholipase-C)

Opioids and Neural Chemistry

- Secondary messengers such as cyclic adenosine monophosphate (cAMP) are acutely decreased by opioid receptor activation
- Chronic opioid receptor activation results in molecular effects opposite to those of acute opioid administration.
- Long-term opioid use causes up regulation of cAMP along with changes in gene transcription.
- In other words, chronic opioid use leads to a change in the biochemistry of and the gene expression in the cells in the brain and neurons

Treatment

- Is multidisciplinary and multilevel
- There is treatment of underlying medical illness in acute detox
- There is treatment needed of the underlying socio-economic factors and the social factors through counselling and social work
- There is need for continuing support

Treatment

- There is also a need for addressing the underlying factors which predisposed a patient to a substance use disorder in the first place such as
 - Pain
 - Untreated Mental Illness
 - Other medical illness
 - Other social or family history
- So how do we do that?

Treatment

- There is also a need for addressing the underlying factors which predisposed a patient to a substance use disorder in the first place such as
 - Pain
 - Untreated Mental Illness
 - Other medical illness
 - Other social or family history
- So how do we do that?
- First, let's take a detour...

What Has Been Happening in Health Care in The Last 20-25 Years?

- Increase in Medical Knowledge
- Hyperspecialization
- Patient Centered Focus
- Evidence Based Medicine and Evidence Based Utilization



1981



1987



1991

What Has Been Happening in Health Care in The Last 20-25 Years?

- Hospitalist Movement

The Emerging Role of “Hospitalists” in the American Health Care System

Robert M. Wachter, M.D., and Lee Goldman, M.D.



The NEW ENGLAND
JOURNAL of MEDICINE

August 15, 1996

N Engl J Med 1996; 335:514-517

DOI: 10.1056/NEJM199608153350713

What Has Been Happening in Health Care in The Last 20-25 Years?

- To Err Is Human: Building a Safer Health System- a report issued in November 1999 by the U.S. Institute of Medicine

- Other Studies:

Medical Errors Related to Discontinuity of Care from an Inpatient to an Outpatient Setting

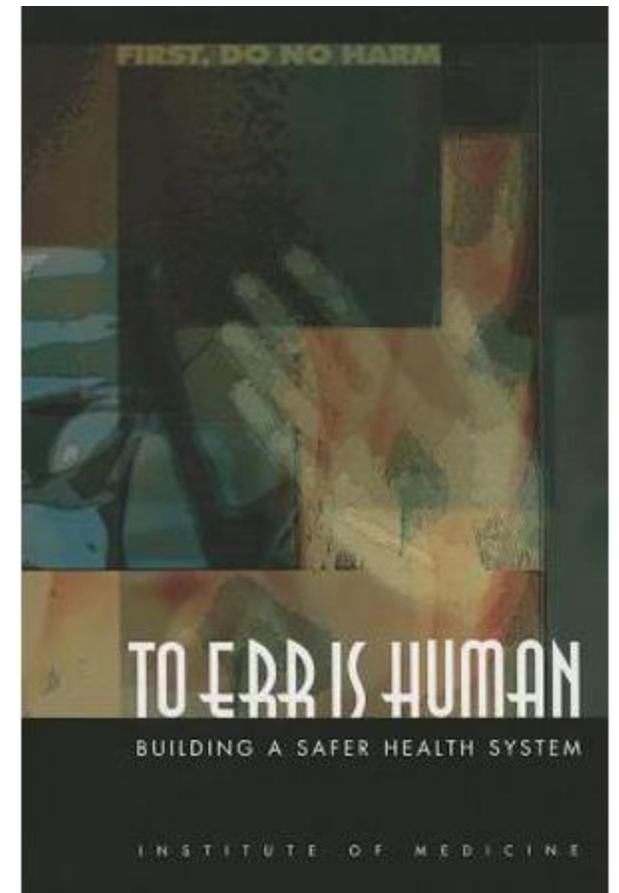
Carlton Moore, MD, Juan Wisnivesky, MD, Stephen Williams, MD, Thomas McGinn, MD

- J Gen Intern Med. 2003; 18: 646-51.

Rehospitalizations among Patients in the Medicare Fee-for-Service Program

Stephen F. Jencks, M.D., M.P.H., Mark V. Williams, M.D., and Eric A. Coleman, M.D., M.P.H.

- N Engl J Med. 2009; 360(14): 1418-28.



What Has Been Happening in Health Care in The Last 20-25 Years?

- Care Transitions
 - Care Transitions Intervention
 - Developed by Eric Coleman, MD, MPH at University of Colorado Health Sciences Center
 - Used Transition Coaches to work with patients
 - Transitional Care Model
 - Developed by Mary Naylor, PhD, RN at UPenn
 - Uses a Transitional Care Nurse- usually an APRN
- **And, of course, the biggest thing...**

Patient Protection and Affordable Care Act (PPACA)

- Signed into law March 23, 2010
- In addition to its most well-known components (individual mandate, insurance reforms including existing conditions, Medicaid expansion) it allows for the formation of Accountable Care Organizations (ACOs) and other quality reforms
 - Also Bundled Payments (BPCI)
- Also relevant for us today, it lists Substance Use Disorders as an Essential Health Benefit

What is an ACO?

- There are multiple similar types of organizations (there are more than what is listed)
 - Clinically Integrated Networks (CIN)
 - Patient Centered Medical Homes
 - Physician-Hospital Organization (PHO)
 - Independent Practice Association (IPA)
- While there are differences in structure and governance, and some are completely owned while others have multiple separate entities working together, for our purposes, the concept is generally the same- different providers and organizations (frequently across modalities) working together to improve care

How Has It Been Working?

- Centers for Medicare and Medicaid Services. (October 2017). *Pioneer ACO Model 2016 Performance Year 5 quality and financial results*. Washington, D.C.: Centers for Medicare and Medicaid Services.
- DeLia, D. M. (February 2017). *Year 1 of the New Jersey Medicaid Accountable Care Organization Demonstration Project: Assessment of Operations and Care Management Strategies*. New Brunswick, NJ: Rutgers Center for State Health Policy.
- Positive but some questions

How Does It Work?

- Palacio, A. e. (2016). Can Physicians Deliver Chronic Medications at the Point of Care? *American Journal of Medical Quality*, Vol. 31(3) 256–264.
- Frequent Follow up
- Titrating meds
- Home visits

An Example Case

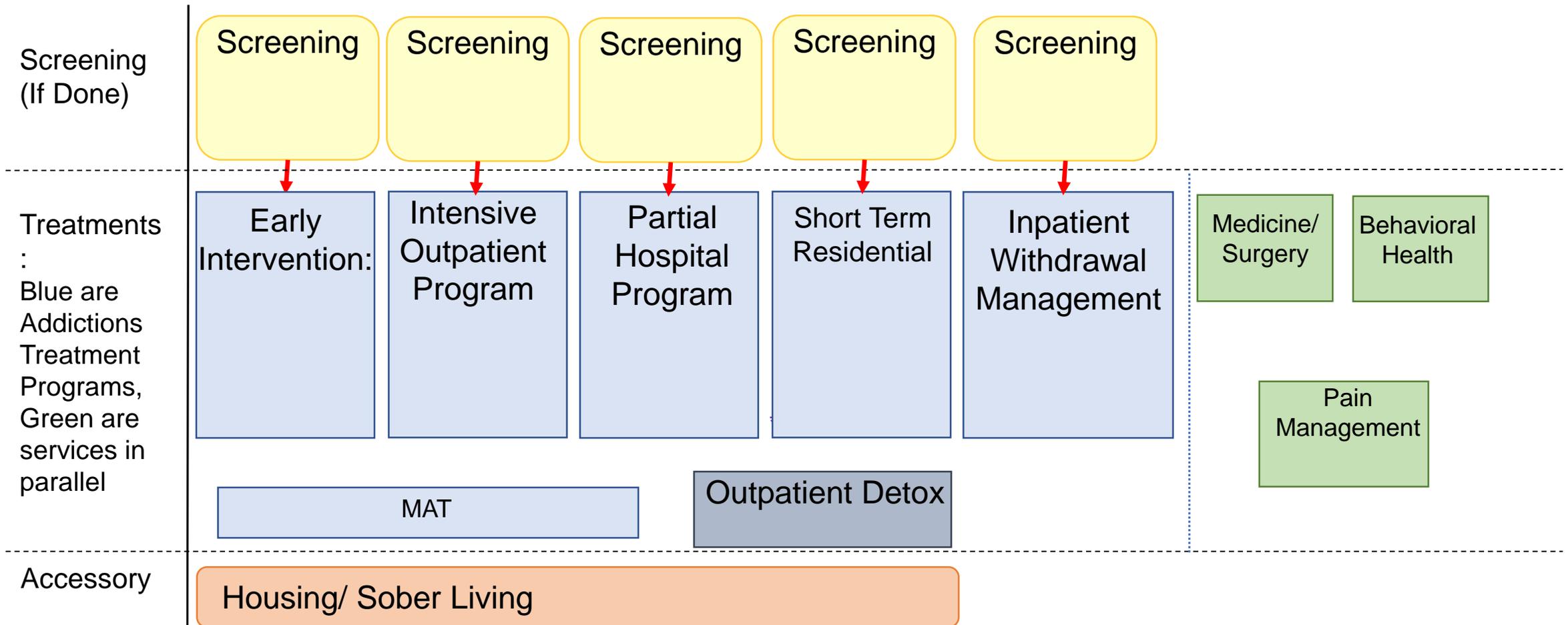
- Elderly CHF patient with multiple readmissions and frequent falls at home
 - Start on multiple medications which titrated
 - Follow up 3 days after hospitalization with weekly or more frequent follow ups
 - Home visits
 - Sub-Acute Rehab and Home PT
 - Social work help
 - THE CARPET!

An Example Case

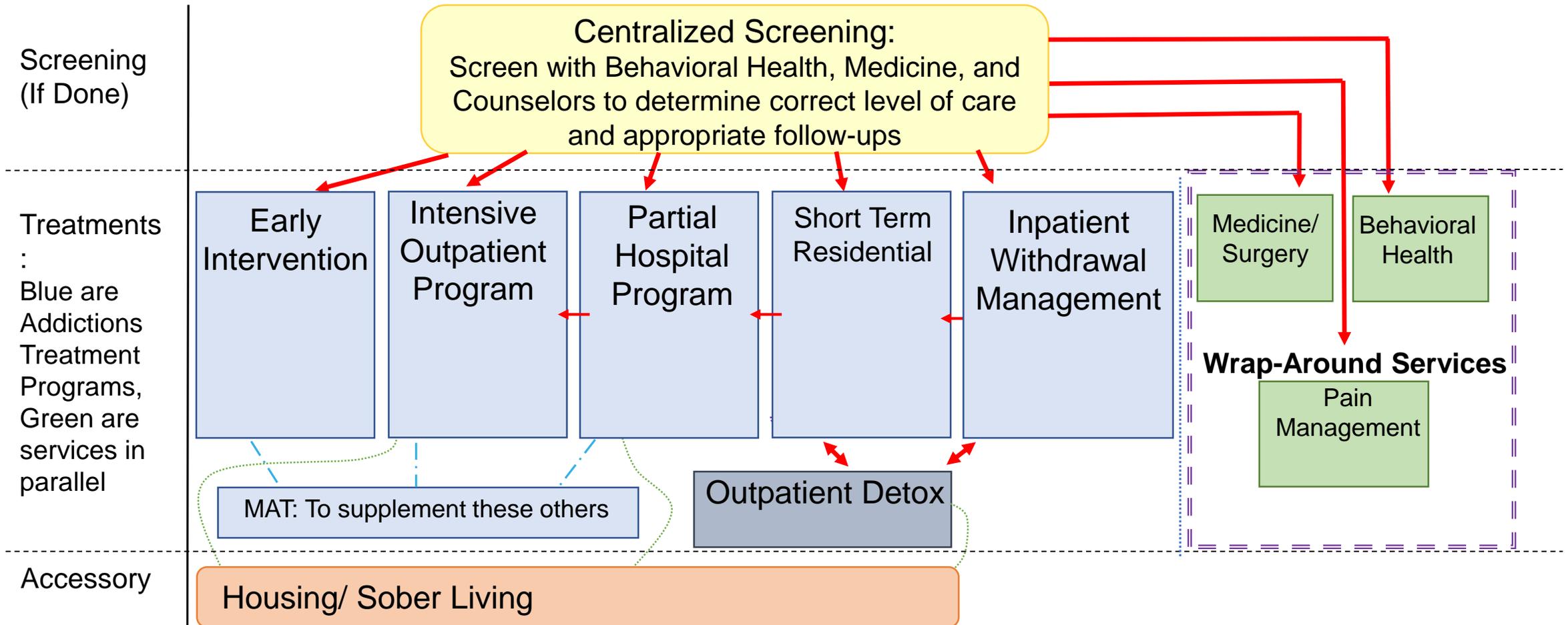
- Breaking It Down
 - Acute Medical Treatment
 - Multiple Levels Of Care
 - Need For Help On Social, Economic, and Emotional Level

- **WHAT DOES THIS SOUND LIKE?**

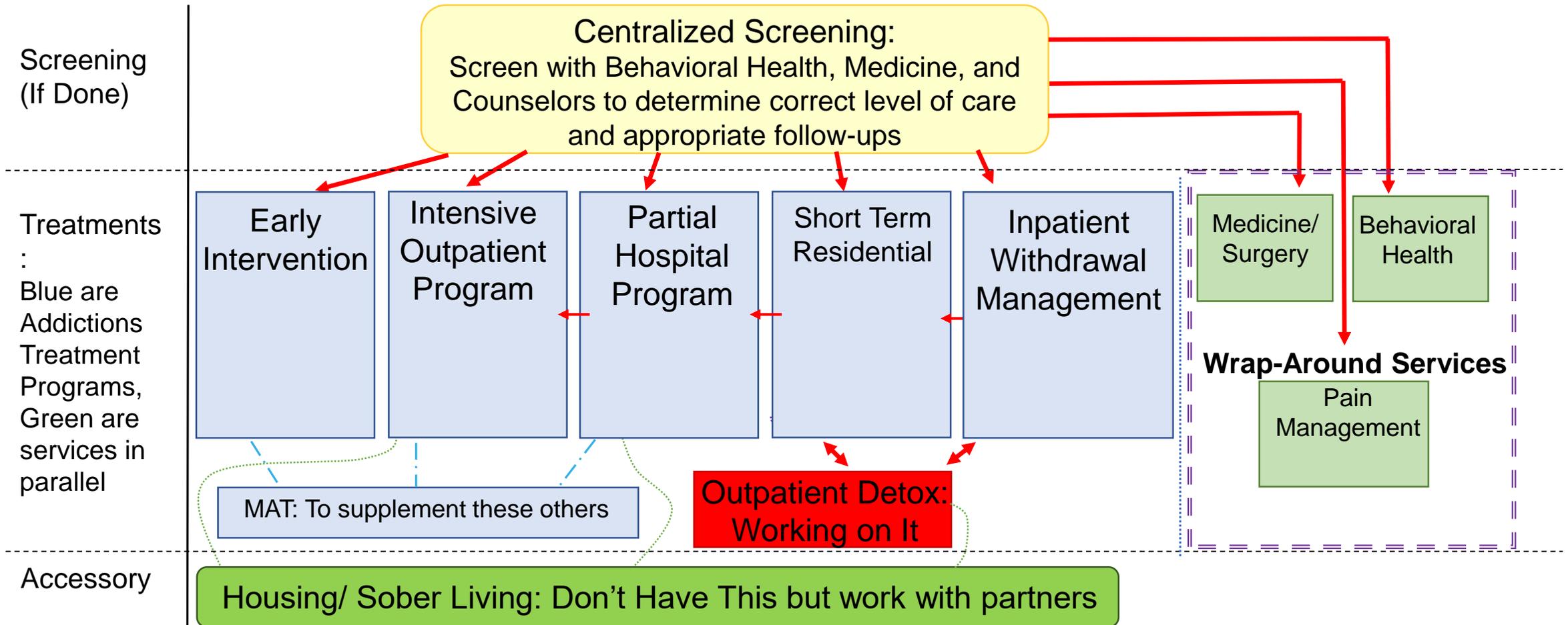
The Traditional Structure Of Substance Use Disorder Treatment



How It Could Look



What We Are Doing At Bergen New Bridge



How Is It Working?

- Some parts of the program are a few months old, some are a year old, but it continues to grow and build
- Placed a medical physician in our Partial Hospital Program area to see for medical issues
- 30-day readmission rate down over 55%
- Falls on unit down over 50% for last 7 months
- Over 8500% increase in Mental Health treatment for patients

Moving Forward

- Put the patient at the Center
- Partner as Needed
- Break down silos
- Keep re-evaluating and adjusting
- MAT is a strong support and adjunct to help patients treat the underlying medical illness so they can receive the other parts of the treatment they need

Moving Forward

- Since Substance Use Disorders are a medical illness, then we must apply the same principles that we have determined as best practices
 - Patient Centered
 - Appropriate Specialization
 - Evidence Based Medicine
 - Appropriate Utilization
 - Integrated Care
 - Improved Transitions of Care
 - Decreased Errors

Questions?
Comments?
Concerns?
Discussion



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Thank You

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