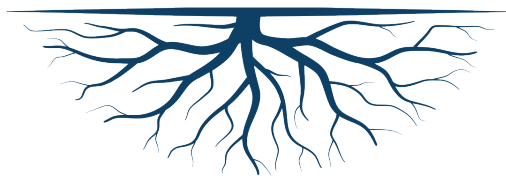




La Red

HEALTH CENTER

Rooted in Community



A Federally Qualified Health Center Rooted in Community

Fabricio Alarcon, MD, FACP

Chief Medical Officer

Board Certified in Internal Medicine

Board Certified in Addiction Medicine

Board Certified in Obesity Medicine

Let me tell you the Story of J.C.

- J.C. is now a 28-year-old male who initially presented to our office at La Red Health Center referred to us by his probation and parole officer after he was released from jail at age 27.
- J.C. was a victim of a MCA at age 16, and he broke his femur and shoulder. He was prescribed pain medications (Oxycodone).
- He liked the way the medicine made him feel.
- He started experimenting with illegal “pills” at age 17.
- He was also using nicotine (started smoking at age 11), marijuana and alcohol with his high school friends.

The Story of J.C.

- He finished high school and got a part time job at a grocery store. He spent all his money buying more “pills.”
- He missed work shifts multiple times, either because he was intoxicated or trying to buy drugs and was fired from multiple jobs.
- Pills became too expensive and harder to find. He started experimenting with heroin at age 20. Initially nasally.
- Over time, he needed more and more...not to get high but just to function. Switched to IV, up to 2-3 bundles/day.
- Started using cocaine at age 21 and crystal meth at age 22.



The Story of J.C.

- At age 23 his girlfriend got pregnant. She was using heroin too.
- They both tried to get treatment in our practice with Suboxone (Buprenorphine/Naloxone) but had multiple relapses, mostly from peer pressure.
- Baby girl was born and had to be in the ICU for opioid withdrawals.
- J.C.'s girlfriend stopped using heroin after her pregnancy under the fear that DFS will take her child away with our help. Treated at our office with Suboxone.
- Unfortunately, J.C. did not follow treatment at that time and kept using heroin. He came to his girlfriend's visits with her at times.

The Story of J.C.

- Could not keep a steady job. Ended up robbing a liquor store and got arrested.
- Stayed in jail for 30 days. Went through “terrible withdrawal.”
- Came out of jail and used heroin, IV, 6 bags....overdosed.
- Girlfriend called 911, resuscitated with Narcan.
- Girlfriend kicked him out of the house.
- Incarcerated again for DUI at age 26.
- Sent to us under court order to receive treatment for SUD.
- Started Suboxone and after several ups and downs, he stopped using all illicit drugs.



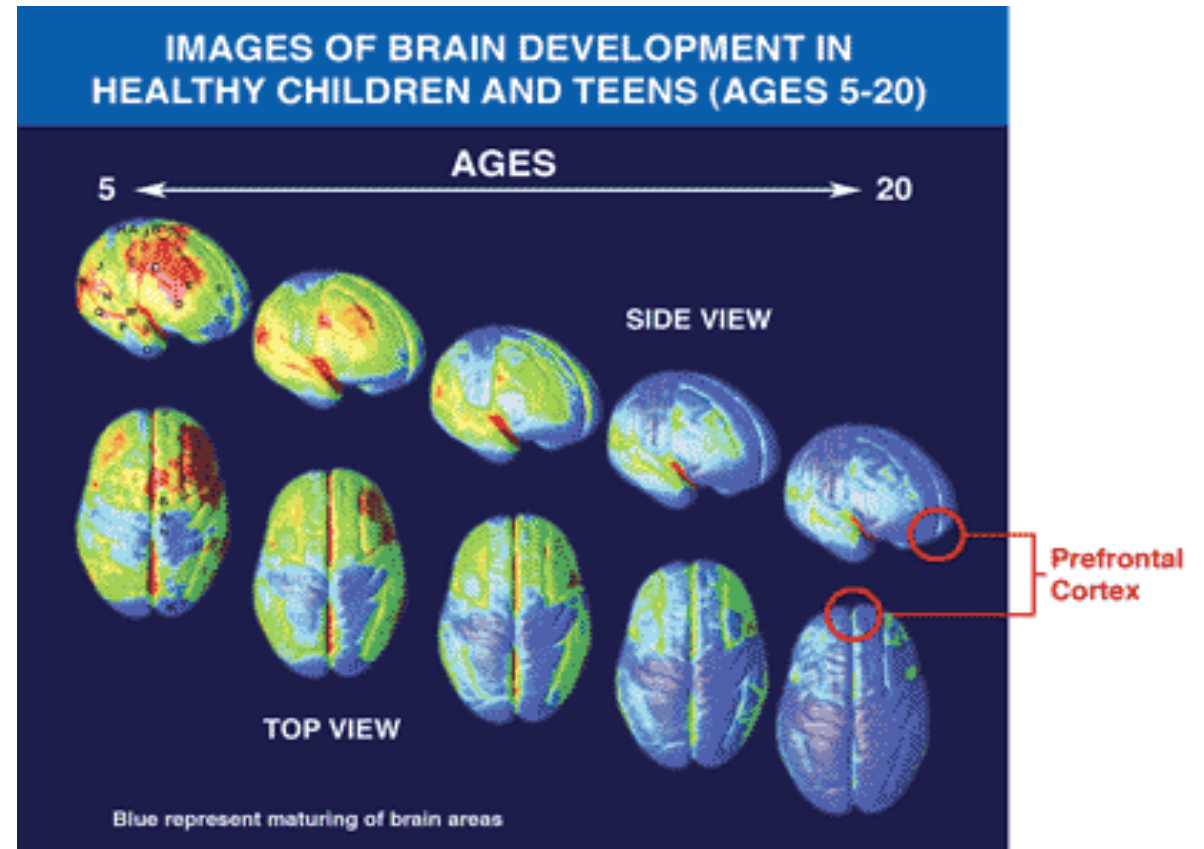
The Story of J.C.

- J.C. has just completed 1 full year free of drugs.
- He has a steady job and moved in with his girlfriend again.
- He is no longer hanging out with the wrong company.
- His baby girl is now 4 years old, healthy and happy.
- J.C. and his girlfriend are still on treatment at La Red Health Center and she is pregnant again.
- J.C. is also in training to become a peer support specialist to help other people that struggle with addiction.



The Prefrontal Cortex

- The prefrontal cortex (PFC) resides at the front of the brain.
- Primary functions of the prefrontal cortex involve planning a person's response to complex and difficult problems.
- It acts as an "executive" for the decision making process, weaving past events to present experiences in order to make the best choices.
- This part of the brain gives human beings much of their intelligence and problem solving ability.
- The PFC develops slowly, finally reaching maturity in a person's early to mid-20s



Source: Copyright PNAS ;101(21):8174-9. 2004

What is Substance Use Disorder?

Substance use disorder is a recognized chronic medical brain disorder.



What Happens In The Brain?



The Mesolimbic System

- In the 1950s, James Olds and Peter Milner implanted electrodes in the brain of rats.
- Rats were allowed to press the lever to receive a mild burst of electrical stimulation
- There were certain areas of the brain that rats would repeatedly press the lever to receive stimulation.
- They found a region known as the "septal area", which plays a role in reward.
- One of the rats in their experiment pressed a lever 7500 times in 12 hours to receive electrical stimulation here.



The Mesolimbic Reward System

Main Players:

Ventral tegmental area:

- Produces Dopamine
- Nucleus accumbens
- Dopamine release produces “Reward”

Prefrontal cortex

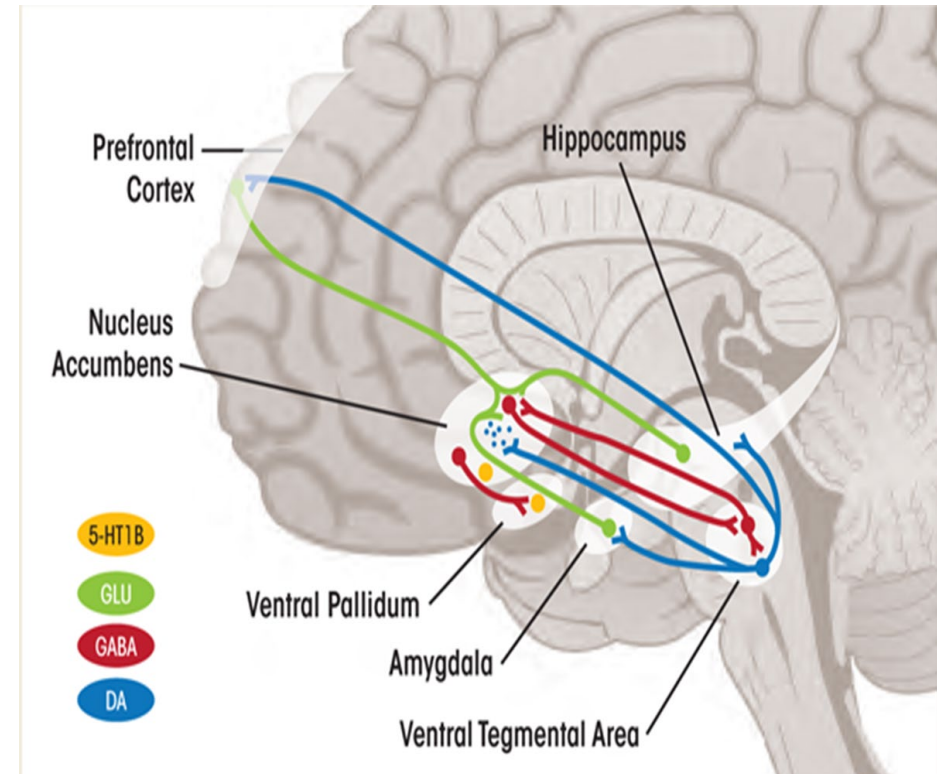
- Decision making, willpower, judgement
- “I will not do that”

Hypocampus:

- Memory
- “Last time I used that, I felt great. So, let’s do it again”

Amygdala:

- Stress, emotion, fear
- “If I use that I will feel so good”



Why is addiction to opioids worse?

- Other drugs (alcohol, cocaine, etc.) act on reward centers to create the “liking” and “wanting” effect
- Opioids also create “liking” and “wanting” effect
- BUT, they also suppress production of endogenous opioids, necessary to deal with every-day stress, pain, happiness
- So, patients are not only addicted/dependent to opioids, but they also need them to “function” in every day activities.
- It goes beyond cravings and withdrawals



What Causes Substance Use Disorder?

- Substance use disorder is caused by multiple factors:
- Genetic vulnerability
- Environmental stressors
- Social pressures
- Personality characteristics
- Behavioral Health Conditions

Source: Johns Hopkins University



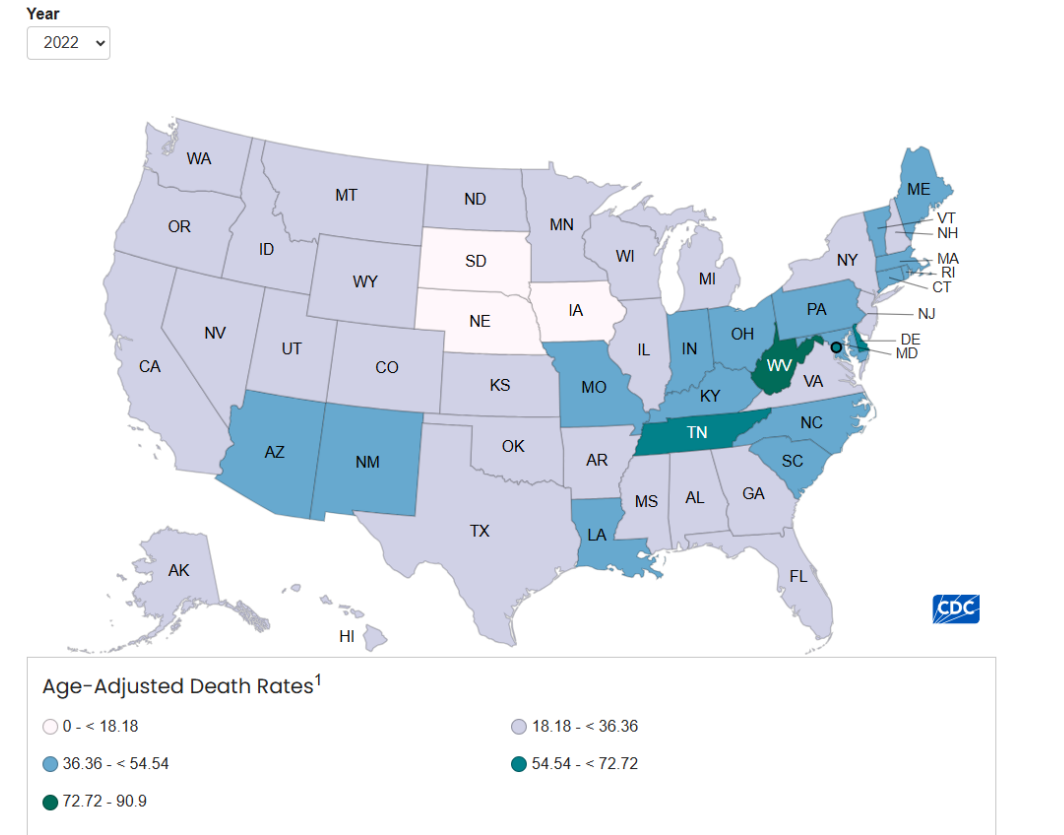
Is Substance Use Disorder an issue in Delaware?

- Yes. Delaware has been wrestling with the opioid epidemic for several years.
- Nationally, Delaware was ranked third in the nation for being the state with the highest fatal drug overdose death rate in 2022.
- For the first time in a decade, that number of people dying from fatal overdoses appears to be coming down in Delaware, but it is still way too high.
- According to data from the Delaware Division of Forensic Science, there were 527 accidental drug overdose deaths in 2023



Delaware Ranked 3rd In The Nation For Overdose Deaths in 2022

- In 2022, only West Virginia and Tennessee had higher rates of drug overdose deaths than Delaware, according to the CDC.



Why become a Primary Care Medical Doctor and/or Addiction Specialist?

- You change people's lives.
 - *It is very rewarding to do something important for yourself.....it is a bigger reward, a privilege and an honor to do something so important for someone else*
- As doctors, we become trusted partners in the path our patients walk to change their lives, to become healthier, to prevent illnesses, to save their lives.
- All this gets magnified when you help someone recover from substance use disorder (SUD).



A Brief Overview of How I Got Here

- Completed Medical School at the Universidad Cayetano Heredia in Lima, Peru
- Completed my Primary Care Residency at The Cleveland Clinic Foundation in Cleveland, Ohio
- Became board certified in Internal Medicine
- Served one additional year as Chief Resident at the Cleveland Clinical Foundation
- Moved to Delaware in 1999
- Initially joined a private practice, then joined La Red Health Center in 2001
- Now serve as the Medical Director
- Became board certified in Obesity Medicine in 2012
- Became board certified in Addiction Medicine in 2018
- Currently treat patients that need primary care, weight management or struggle with substance use disorder.

A Little bit of History: La Red Health Center

- Before La Red existed as a medical facility, it was part of a small group of local doctors that volunteered time to answer a phone line after hours to give medical advice to people with no insurance and/or no primary care doctor.
- Right away we recognized the need in this area to expand this service and opened a small medical office in Georgetown.
- Started by offering primary care and then added additional services:
 - Mental Health
 - Women's Health
 - Prenatal Services
 - Dental Health
 - Other services: transportation, translation, STD counseling, etc.
 - La Red now has three offices in Milford, Georgetown and Seaford
 - La Red recently added a county-wide mobile health unit that offers primary care.



Most Common Substance Use Disorders Treated at La Red

- Opioids (Heroin, Fentanyl, Oxycodone, etc.)
- Alcohol
- Stimulants (Cocaine, Amphetamines, Crystal Meth, Ecstasy)
- Sedatives (Alprazolam, Lorazepam, Diazepam, etc.)
- Nicotine
- Cannabinoids (Marijuana)

Other less common substances:

- Inhalants
- Hallucinogenics (Mescaline, LSD, Psilocybin, DMT)
- Dissociatives (PCP, Ketamine)



How Can Primary Care Providers and Community Health Centers Help?

- Primary Care Providers can offer treatment
- Referrals to behavioral health counseling
- Offer harm reduction tools, such as Narcan or Naloxone, which can reverse an opioid overdose and provide someone enough time to call 9-1-1.
- Educate patients with substance use disorder on lethal drug combinations, which can lead to drug overdoses.
- Educate patients on what an overdose looks like and if they observe someone experiencing an overdose to call 9-1-1 immediately.



Challenges

Stigma

Social barriers

Financial

Relapse triggers

Peer pressure



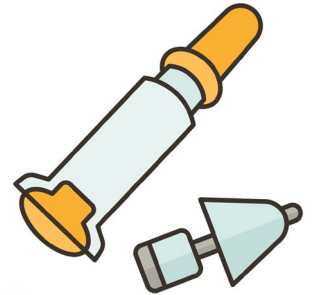
How SUD is Treated at La Red

- Medications for Opioid Use Disorder (MOUD) are offered in a primary care, out-patient setting.
- Behavioral Health Counseling is available.
- La Red also has a 340B Discount Pharmacy program.
- The Behavioral Health Unit also offers case managers who can assist with transportation if it is needed, and connection to other community resources.
- La Red is a safety net provider, we care for those who are uninsured or underinsured, making treatment accessible to all.



La Red Offers Naloxone That Can Potentially Reverse and Opioid Overdose

- La Red Health Center offers Naloxone or Narcan for free to our patients or members of the community.
- More than half of La Red's staff has been trained on how to train others to use naloxone and Narcan.
- Naloxone can potentially reverse an opioid overdose, which can give someone witnessing an overdose enough time to call 9-1-1 and possibly save a life.
- No matter how many times a person has overdosed. Recovery is always possible.



Career Advice & Outlook

Top benefits of specializing in Addiction Medicine

Value to employers: Addiction Medicine specialists requires certification in Addiction Medicine.

Career advancement: Having this certification improves your career prospects and opens up different opportunities. People look for experts, rather than medical generalists, when encountered with an addiction related problem.

Access to Federal Loan Repayment funds: Congress has appropriated funding for up to \$250,000 of student loan repayment for physicians who become addiction specialists and practice for 6 years in designated geographic areas.

Compensation: Generally, specialists have greater earning potential. It is estimated that physicians with board certification earn 67% more than those without it.

Source: American Society of Addiction Medicine



Benefits of Practicing Addiction Medicine

- Helping people stop using illicit drugs and get healthy
- Preventing transmissible diseases, such as Hepatitis C, hepatitis B, HIV
- Fighting a society epidemic
- Partner with patients as they rebuild their lives



Any Questions?



A stylized illustration of a tree where the trunk is a hand with fingers spread, holding a small pink heart. The foliage consists of many light green leaves. The text "Thank you!" is centered over the heart and hand.

Thank you!