



Changing the Paradigm Around Addiction

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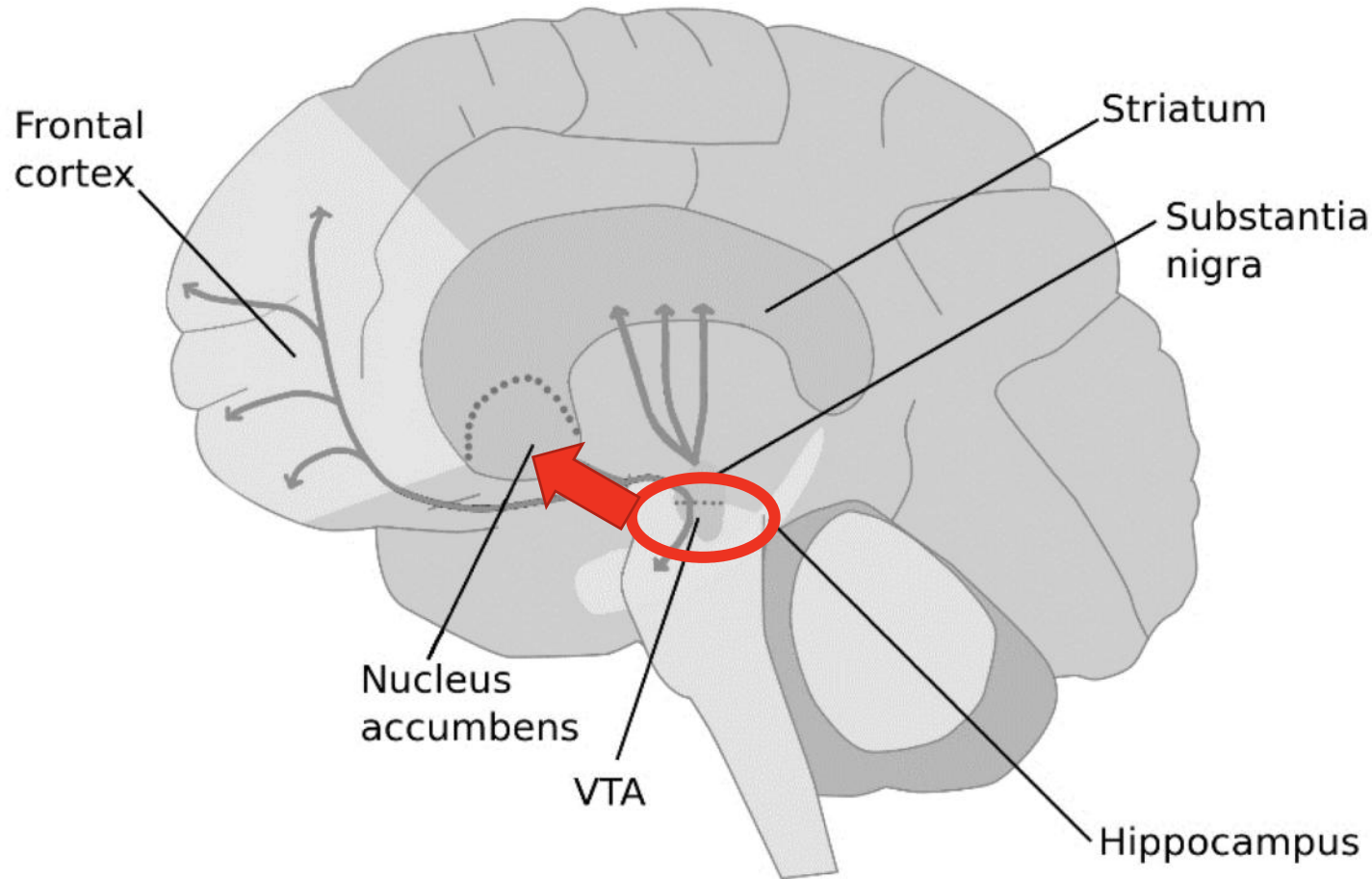
Addiction

Drug Addiction: How it happens

- Historically viewed as a weakness in character
- Research increasingly finds that it's *often a matter of brain chemistry*
- Addiction is related to how a drug increases levels of *dopamine*
- Dopamine controls the brain's ability to perceive *reward and reinforce behavior*
- Elevated dopamine levels cause pleasure that motivates us to proactively perform actions that are vital to our survival (like eating or procreation)

Dopamine is what *conditions* us to do the things we need to do.

Dopaminergic pathways in the brain



- Drugs stimulate ventral tegmental area (VTA)
- VTA axons release dopamine into the NAc the pleasure center
- Nicotinic receptors
- Opiates (including endorphins – short for “**endo**genous **mor**phine”)

Addictive substances/behaviors

Larger indulgence



Larger reward

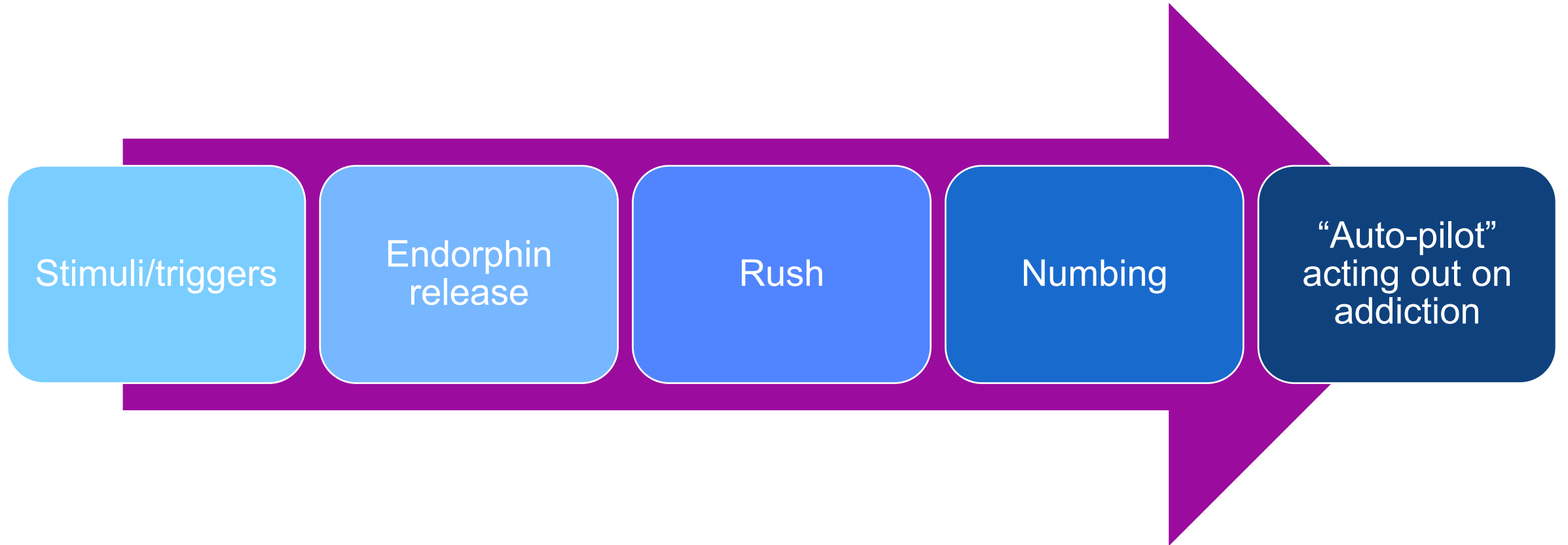


Larger dopamine levels

- Exogenous nicotine – tobacco
- Exogenous opiates – narcotics
- Endogenous opiates (endorphins) due to over-indulgence in behaviors
 - Food → eating addictions
 - Accomplishment → gambling
 - Sex → pornography/sexual addictions

Behavioral addictions are chemical addictions to endorphins!

Addictive Process



Addiction Treatment

Abstinence or decrease in frequency

- Decrease in frequency or intensity of behavior
- Drug tapering, antagonists, muting cravings

Behavioral

- Dealing with triggers
- Strategic planning to avoid triggers
- Plans on how to deal with triggers
- Mentor/Support system
- Professional counseling in many cases

New Guidelines and Recommendations

New Guidelines – New Push

- When to PAY ATTENTION
 - >50mg Morphine Equivalents per day
 - Used to be 90, now dropped to 50
 - Even greater risk in patients also taking a benzo



Recommendations – Some are *New*

- Avoid long-acting agents in non-cancer pain
 - May use after stable on opioid dose for SEVERE chronic pain
 - Use non-narcotics for pain syndromes
 - APAP, NSAIDs, gabapentin, amitriptylline
- Limit use of short-acting for acute pain
 - Some states limiting to 7 days of therapy
- Use Narcotic Contracts
- Prescribing opioid antagonists for patients on >50 morphine equivalents



Opioid Antagonists

Naloxone (think overdose)

Generic IV, IM – Inpatient use

NARCAN[®] Nasal

Easy-to-use spray that can be administered by someone else if patient is unconscious
~\$125

EVZIO[®]

Auto-injection for overdose situations by “buddy” system for drug addicts/ abusers
Has a speaker to guide “buddy” in giving injection
“Hidden needle” much like an Epi-Pen
Given in thigh (can be given through clothing)
~\$4,000

Naltrexone (think prophylaxis)

Generic po

For self-treatment or prophylaxis in addicts who are self-motivated
FDA approved for alcohol and narcotic addiction
Off label for gambling, binge eating

VIVITROL

Depot injection
Given once monthly to prevent relapse for narcotics/alcoholics

Using Naloxone

- Why?
 - 44 patients per day die of a narcotic overdose
- Who should get an antagonist?
 - Patients at risk for overdose – that doesn't just mean abusers
 - Patients taking >50 morphine equivalents/day
 - Patients with underlying respiratory problems (COPD)
 - Patients on other CNS depressants (alcohol, benzos, sedatives)
 - Elderly patients
- Which to use
 - Cost would steer towards nasal - \$125 vs. \$4,000
- Training for family/caregiver
 - How to administer nasal spray or injection
 - Call 911 immediately (opioids usually have longer t_{1/2} than naloxone)

Narcotic Contracts

- Components

- ✓ Use the medication as directed
- ✓ No dose escalation without confirming first with doctor
- ✓ No early fills for lost, stolen, wet, dropped in sink, etc.
- ✓ No refills by phone
- ✓ Will keep all follow-up appointments
- ✓ Will only get medications from one doctor and one pharmacy
- ✓ Will agree to any blood/urine tests requested
- ✓ Will not use alcohol or other drugs with narcotics
- ✓ Aware of side effects and withdrawal symptoms and that withdrawal is not life threatening
- ✓ Failure to abide by the contract will lead to no future prescribing

Take Home Message



- Limit narcotics for acute severe pain to 7 days
- For non-severe pain use non-opioid options if possible
- Avoid long-acting narcs in non-cancer, non-severe stabilized pain
- Providers should place patients >50 morphine equivalents on naloxone
- Ensure naloxone is a covered benefit on your plan!

Thank you.

