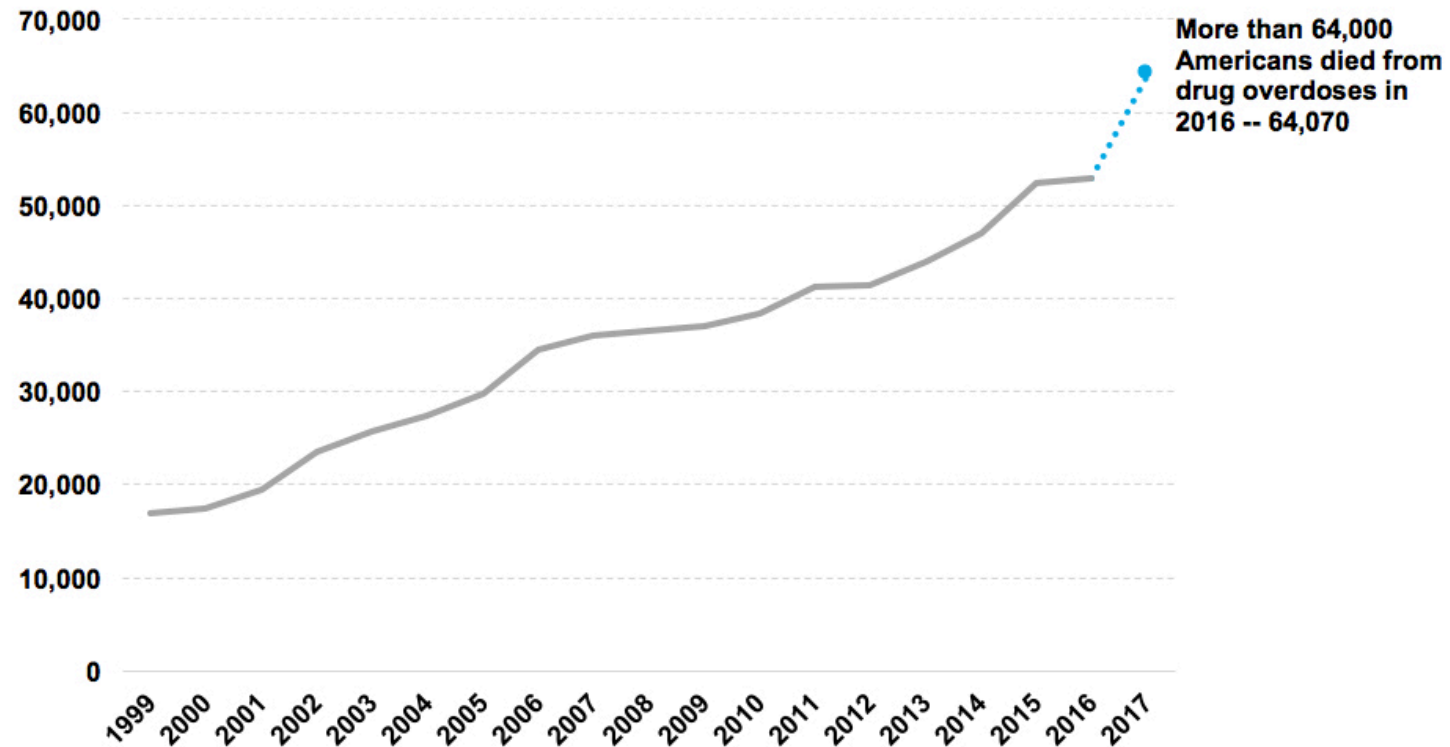


TEENS, OPIOIDS, AND THE
PATH TO ABUSE AND
ADDICTION PART 1B

BLAKE FAGAN, MD

Increase in Overdose⁹⁹

Total U.S. Drug Deaths



It doesn't take a lot to kill



OPIOID RECEPTORS

WHEN YOU FIRST START USING OPIOIDS
Enable us to achieve a goal (short term).^{23,24}

- Decrease pain.
- Increase motivation.
- Increase confidence.
- Increase reward.
- Reduce depression and anxiety.
- Increase pleasure in current activity.
- Increase “warmth-liking”.²⁵
 - Liking warm things.
 - Love.
 - Interpersonal bonding.

So how quickly does dependence on opioids occur?

Characteristics of Initial Prescription
Episodes and Likelihood of Long-
Term Opioid Use — United States,
2006–2015²⁷

FIGURE 1. One- and 3-year probabilities of continued opioid use among opioid-naïve patients, by number of days' supply* of the first opioid prescription — United States, 2006–2015²⁷

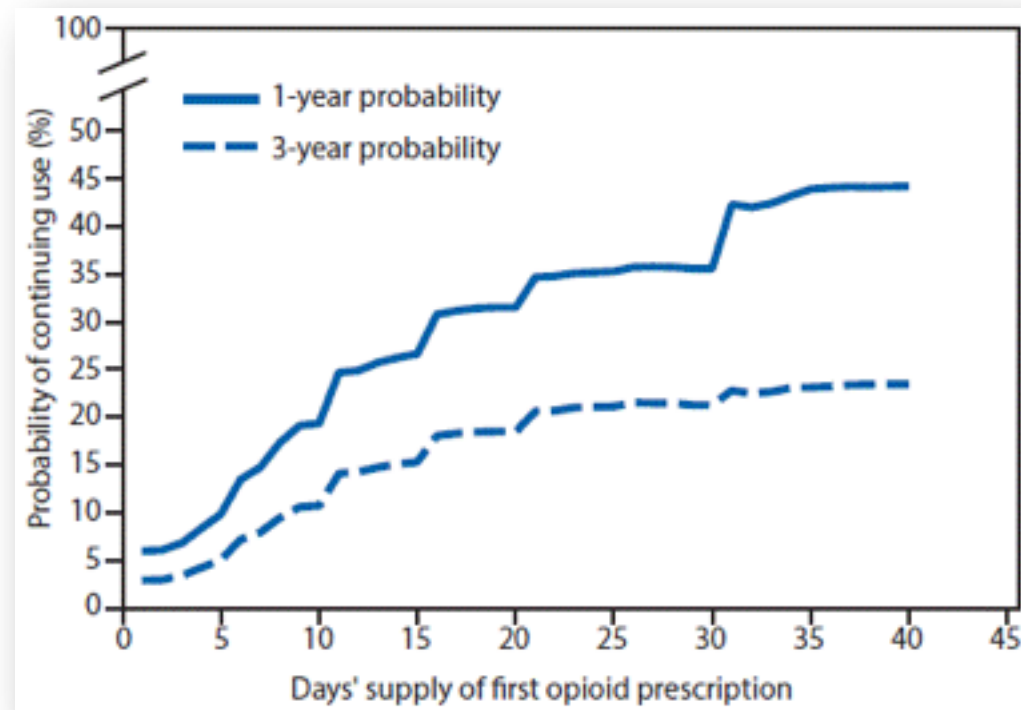
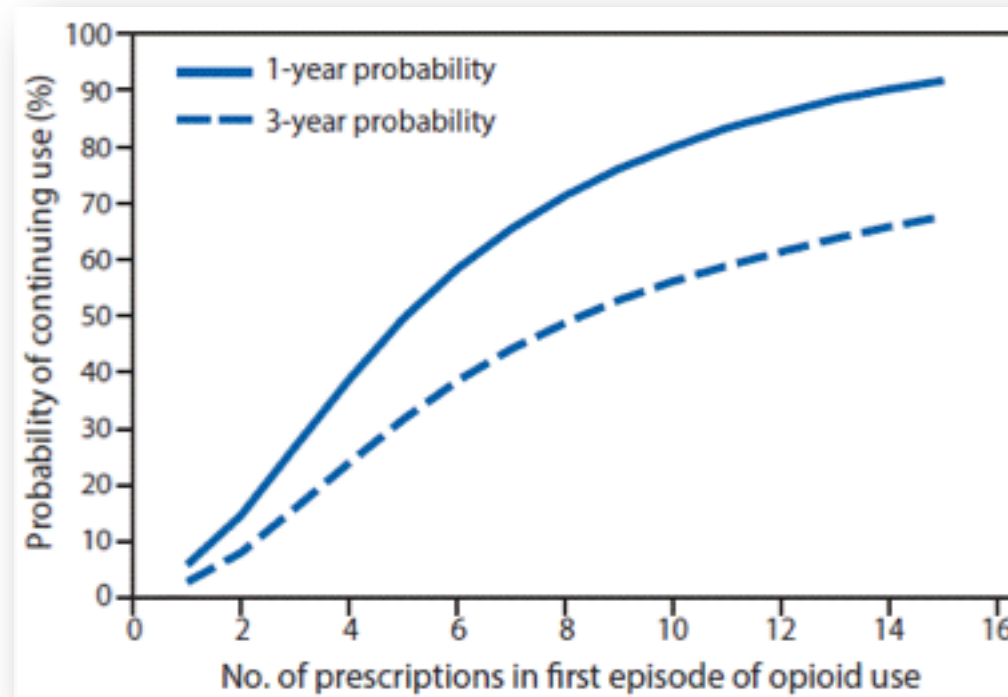
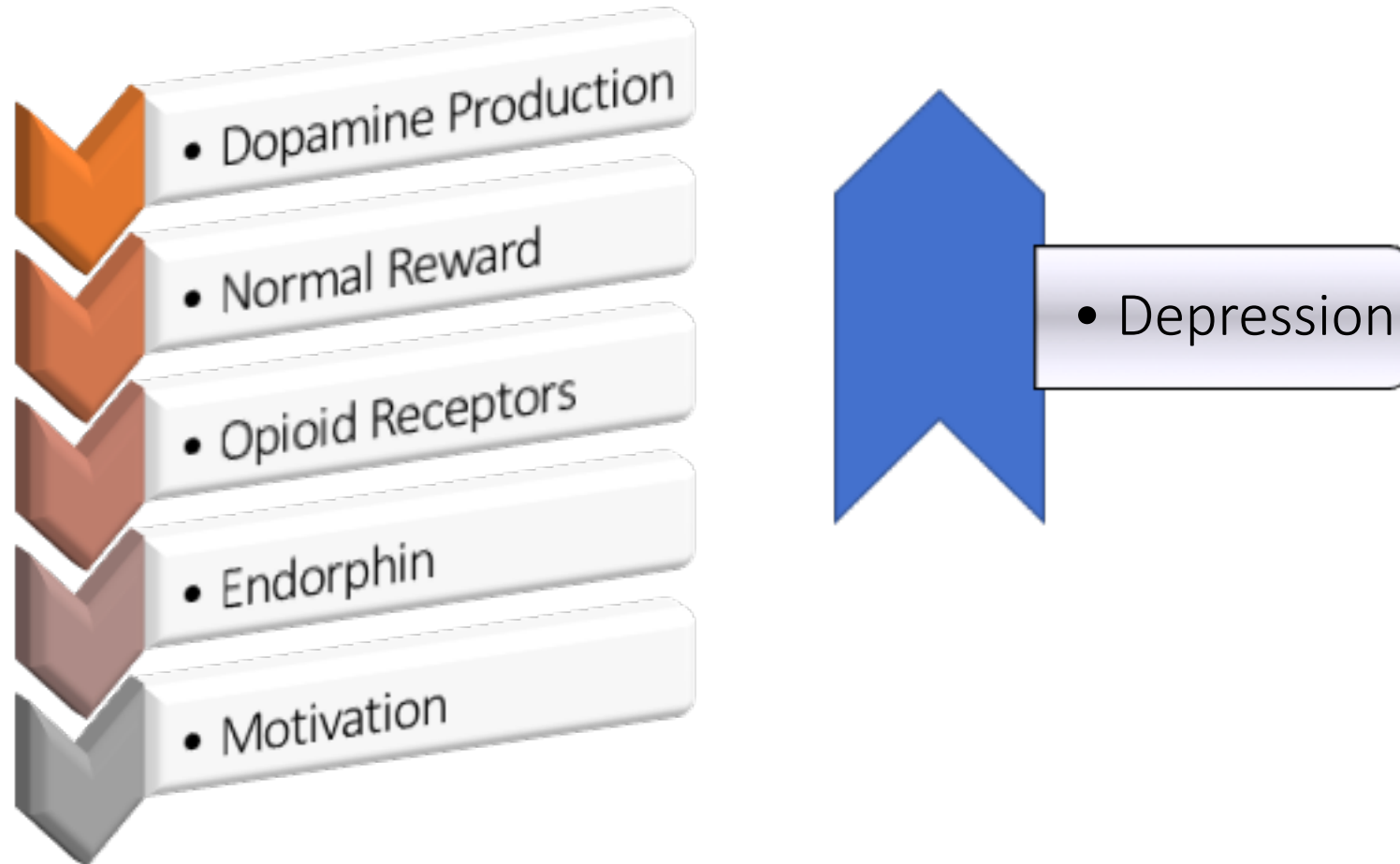


FIGURE 2. One- and 3-year probabilities of continued opioid use among opioid-naïve patients, by number of prescriptions* in the first episode of opioid use — United States, 2006–2015²⁷



CHRONIC OPIOID CONSUMPTION

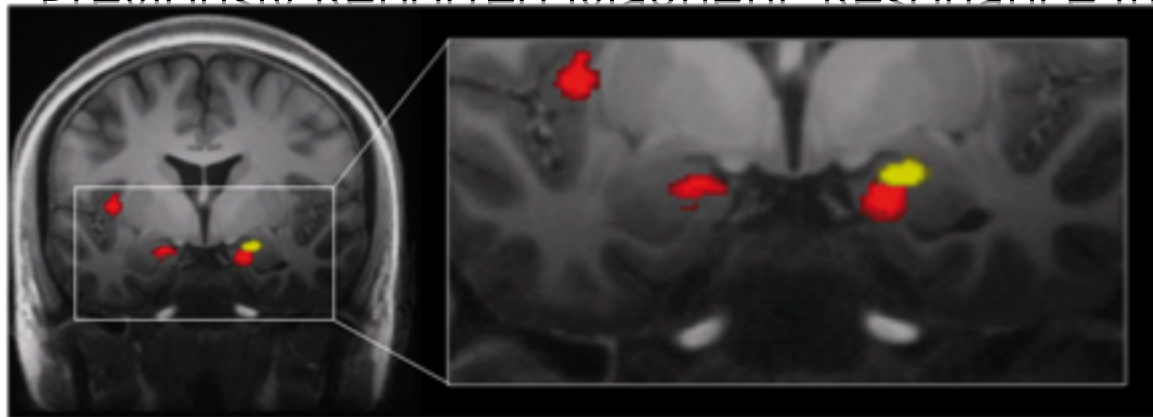


OPIOIDS

Side Effects:

- Mentally impairing.^{30, 31}
- Delay recovery.^{32,33}
- Increase medical costs.³⁴
- Opioid hyperalgesia.^{35,36}
- Double the chance of disability (if prescribed for 7 days or more).³⁷
- Increase falls.³⁸
- Cardiac, GI? ^{39,40}
- Treat depression.⁴¹
- Brain changes.⁴²
- **Addiction.** ^{43,44}

One Month of Oral Morphine Decreases Gray Matter Volume in the Right Amygdala of Individuals with Low Back Pain: Confirmation of Previously Reported Magnetic Resonance Imaging Results⁹⁵



Gray Matter Decrease in Right Amygdala

Gray Matter Increase in Pregenual Cingulate

