Patient Initiated Controlled Analgesic Recording Dispenser

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Why is it a Crisis?

Addictive

Accessible

Lethal

THE OPIOID EPIDEMIC BY THE NUMBERS

- 70,630 people died from drug overdose in 2019
- 1.6 million people had an opioid use disorder in the past year
- 745,000 people used heroin in the past year
- 1.6 million people misused prescription pain relievers for the first time
- 50,000 people used heroin for the first time
- 14,480 deaths attributed to overdosing on heroin (in 12-month period ending June 2020)
- 10.1 million people misused prescription opioids in the past year
- 2 million people used methamphetamine in the past year
- 48,006 deaths attributed to overdosing on synthetic opioids other than methadone (in 12-month period ending June 2020)

SOURCES
2. NCHS Data Brief No. 354, December 2019.

- There are over 150 deaths from opioid overdoses every single day
- Prescription opioid misuse has been increasing by the year since the 1990’s
What are the common problems of opioids?

**Over-Prescription** of medication is common and oftentimes leaves patients with extra, this increases the risk for post op addiction in youth and elderly:

- Children recovering from surgeries
- Athletes recovering from a sports injury
- Elders who suffer from chronic pain
Our Solution:

The PICARD bottle, making sure it's the:

- **Right** Dose
- **Right** Patient
- **Right** Time
Mechanical Design

- 3D printed using PLA
- Helix propelled
- Vibration motor to help facilitate pills dispensing
- Looking into more efficient ways to pack the helix
Account

Hi Patrick.
You're pain level is stable.

Things you can do

- Report Pain
- Calendar
- Prescription
Pain Insights

- Patient will self-evaluate pain level before dosage
- Pain level data will be categorized for analysis from patient or doctor
Future Plans

- Address points of malfunction with assembly
- Reduce bottle size
- Mechanical Locking System for cap
- Design fail safe for any blunt force impact
Thank you to our current and some previous members!

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