AlesiaRx
Leveraging diverse data & artificial intelligence to improve medication adherence among patients

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50% of patients who take chronic medications are non-adherent\(^1\)

$290$ billion is spent on complications that arise due to nonadherence\(^1\)

81% of positive clinical outcomes depend on medication adherence\(^3\)

30% of clinical trials fail due to non-adherence\(^4\)
The Solution: AlesiaRx

A user-friendly mobile application that allows the patient to build a medication profile, syncs to their calendar, learns their behavior, and suggests a dosing schedule that works for them.
Lack of Understanding of Risks & Benefits of Medication

App communicates key information about the medication, with an emphasis on risks and benefits of taking it under the prescribed regimen.

Disruption of Lifestyle

Machine learning allows the app to adjust the regimen to the patient's lifestyle while balancing safety and effectiveness considerations.

Complexity of Dosing Regimen

Dosing schedule made simple and easy to follow with notifications sent in the event of missed dose and optional syncing with Google Calendar.

Why are patients non-adherent?

What does AlesiaRx do to help?
How Does It Work?
openFDA API Status

**Adverse Events**
api.fda.gov/drug/event
- Last Updated: 2018-04-19
- Total Records: 8,068,496

**Labeling**
api.fda.gov/drug/label
- Last Updated: 2018-04-19
- Total Records: 121,725

Continuously Updated

Current query:
https://api.fda.gov/drug/label.json?search=effective_time:[20090601+TO+20180419]+AND+Lamictal&count=dosage_and_administration

Type in a custom search parameter, and then press Enter to update the chart: dosage_and_administration
Scan QR Code From Prescription Bottle

Sync Dosing Schedule To Google Calendar

Track Adherence and Modify Dosing Schedule Accordingly
Receive Notification When You Miss a Dose

Warning Notifications Provide Scheduling Information and Possible Adverse Effects

Optional Widget Provides Daily Medication Overview
Population Health

Clinical Trials
Why do clinical trials fail?

Artifactual Non-Adherence  AlesiaRx  Clinical Trial Success
Partnerships

- Clinical Trial Leaders
  - Pharmaceutical companies
  - Academic/ research institutions
- FitBit
- Corporate chain pharmacy
- HIPAA-compliant facial recognition
- Population Health & Clinical Trials
- Visual confirmation of medication ingestion

vs.

- HIPAA-compliant motion monitoring
- Population Health & Clinical Trials
- **Motion tracking** of medication ingestion

**VALUE-ADDED BENEFITS:**
- **Non-disruptive:** patient doesn’t need to log on every time they take dose
- **Individualization:** patient-specific dosing schedule through machine learning
- **Communication:** regimen initiation & detailed missed dosing instructions
Goals

Improve Health Outcomes

01

Boost adherence

Engage patients

02

03

Raise awareness of risks of non-adherence
THANKS!

Questions?