



# LehighHacks 2016

## Medication Adherence App

### Overview/Challenge:

It is estimated that three out of four Americans do not take their medication as directed. Taking medication correctly may seem like simple personal matter, but non-adherence is a complicated and common problem.

When patients with chronic conditions such as diabetes, do not take medication as directed, repercussions can be severe, like kidney failure.

Poor medication adherence takes the lives of 125,000 Americans annually (i.e. one life every four minutes), and costs the health care system \$300 Billion a year in additional doctor visits, ER visits and hospital readmissions

Develop a **Patient-Friendly** and **Smart** app that can help patients track medication compliance.

### Considerations:

- While medication adherence apps like Medisafe or MedHelper exists, they assume users to be smartphone savvy. However, the people who needs this the most are senior citizens / baby boomers, they need the app to be super simple and easy to use.
- It would be interesting to include the care manager in the app so they can monitor it on their side as well
- For advance features consider:
  - Gamifying to increase user engagement; however, gamifying should not take away from the simplicity of the app
  - Image Recognition / Text Analytics to scan the medication name and dosage
  - Use of data science to learn patient's behavior with ability to adapt to it.

Good Luck!