

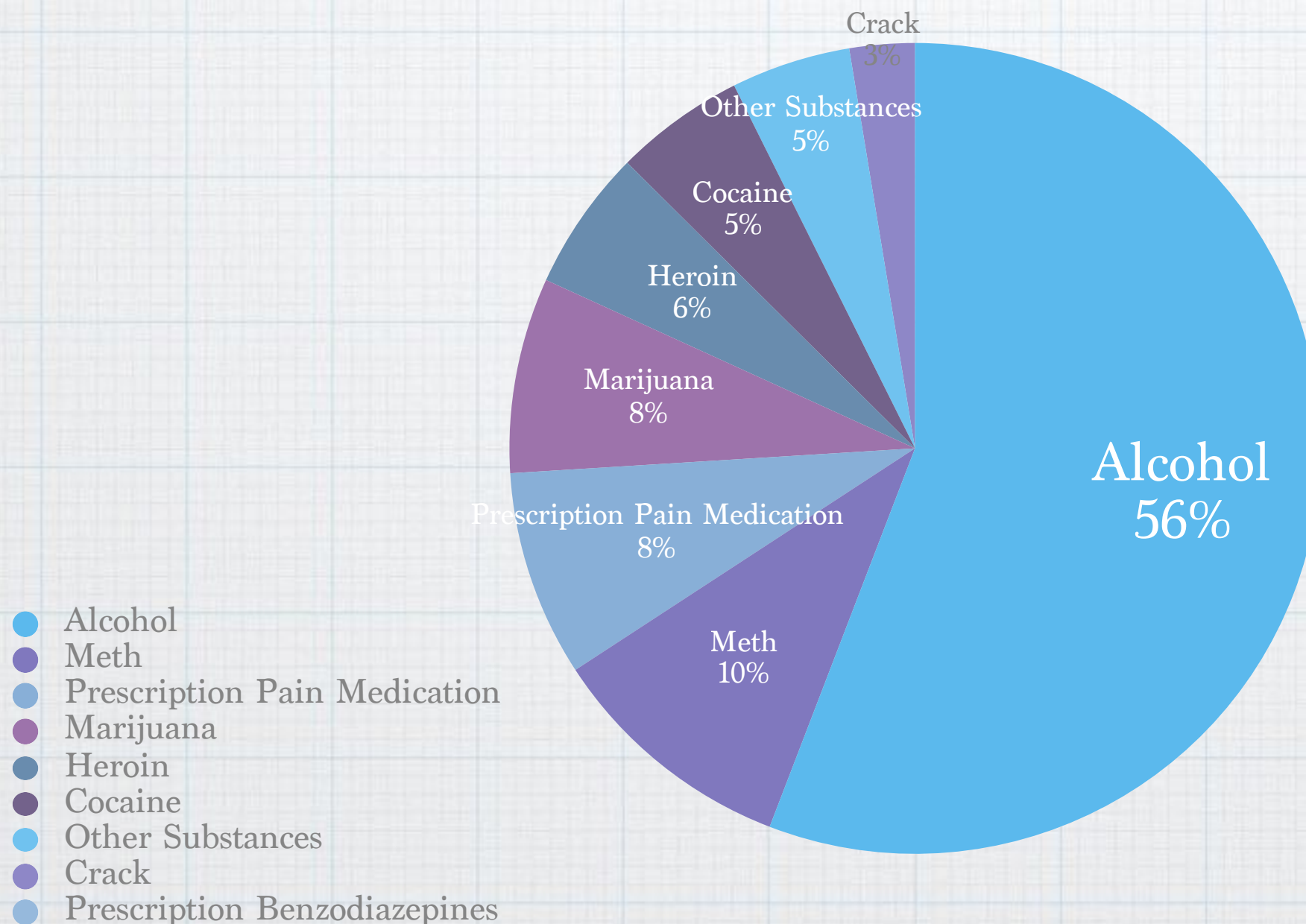
# Alcoholic Support System

Presented by Team 4:

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# Status Quo

- \* Alcohol is the most treated substance in the addiction treatment. (Recovery Brands, 2017)



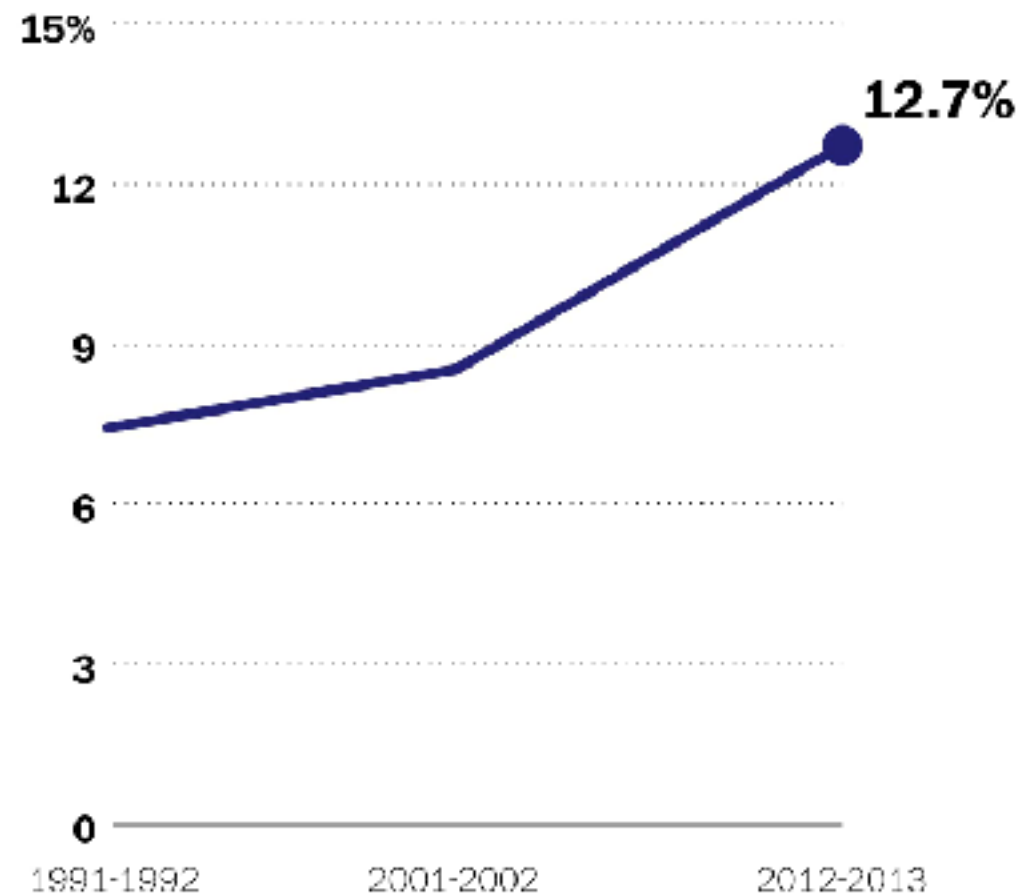


# Market Size

- \* Over 16 million Americans have an alcohol disorder.

## Alcoholism is on the rise

Rate of alcohol use disorder (alcoholism) among U.S. adults age 18 and older





# Traditional Treatment



Hospital visit



Alcoholics Anonymous



Rehab center



# Advantages of Traditional Treatment

<b>Hospital visit</b>	Professional treatment	Robust medical equipment	Authority
<b>Rehab center</b>	Peaceful environment	Concentrated therapy	Customized service
<b>Alcoholics Anonymous</b>	Totally free	Large customer base	Mental comfort

# Problems of Traditional Treatment

<b>Hospital visit</b>	Unnecessary expenses	Inconvenient	No privacy for everyone
<b>Rehab center</b>	Comparatively expensive	Spotty quality	Not-tested therapy
<b>Alcoholics Anonymous</b>	No professional treatment	Not individualized	No privacy for celebrities



# Details of Problems—Hospital

- \* **Unnecessary expenses**

- \* Registration fee, hospital stay fee, medical service fee and transportation fee

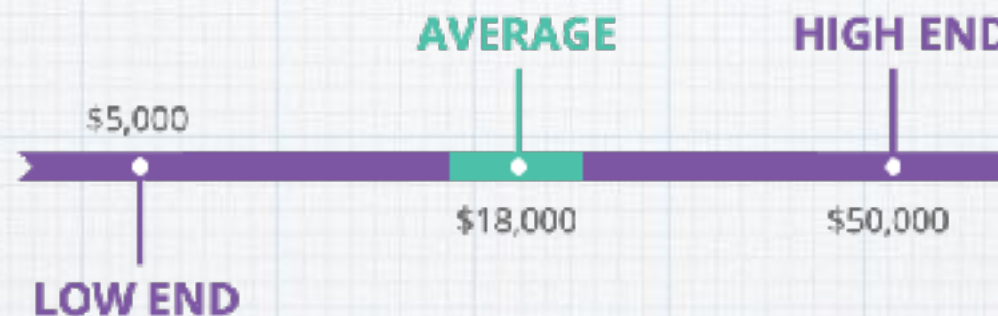
- \* **Inconvenient**

- \* Registration takes much time
  - \* Wait in line to make appointments with doctors



# Details of Problem—Rehab Center & Alcoholics Anonymous

- \* Expensive (Rehab center)



- \* No guarantee of professional treatment
  - \* Addiction counselors lack in training. In many states, they are not even required to have a college degree.
- \* No guarantee of individualized treatment
  - \* In some high end program, about 8 hours of day of seat time [in groups] when you are paying \$25,000-30,000 a month.
  - \* Some outpatient treatment have no individual sessions.



# The Key Problem - Privacy

- \* High rate of dropout

- \* The alcoholic patient dropout rate is 76% in hospital and rehab.

- \* 50% to 80% of people sent to [Alcoholics Anonymous] from treatment drop out within a year

- \* 1st reason is privacy!

- \* These people do not want to be seen by their colleagues, friends or even families in a rehab center or alcoholic treatment hospital.

- \* Privacy is a more severe problem among celebrities because of their high media exposure



# What do we solve?

- \* Unnecessary expenses
- \* Inconvenience
- \* No one-to-one counseling and treatment with certified doctor
- \* Privacy (Most important for celebrities)

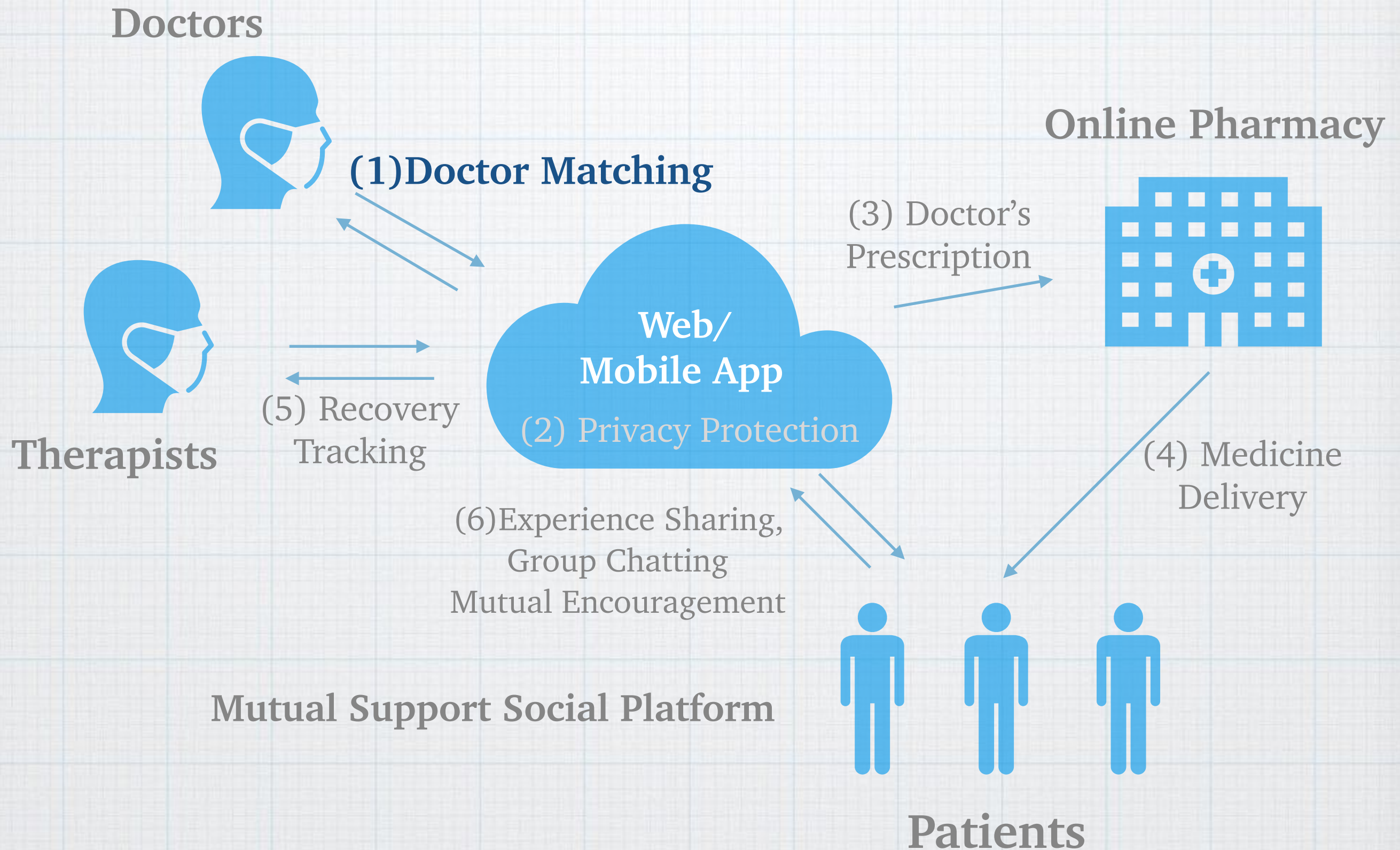


# How do we solve it?

- \* Abstract

- \* Provide an online platform for alcoholics to get prescriptions from doctors, get advice from therapists, get support from other alcoholics, privately and conveniently.





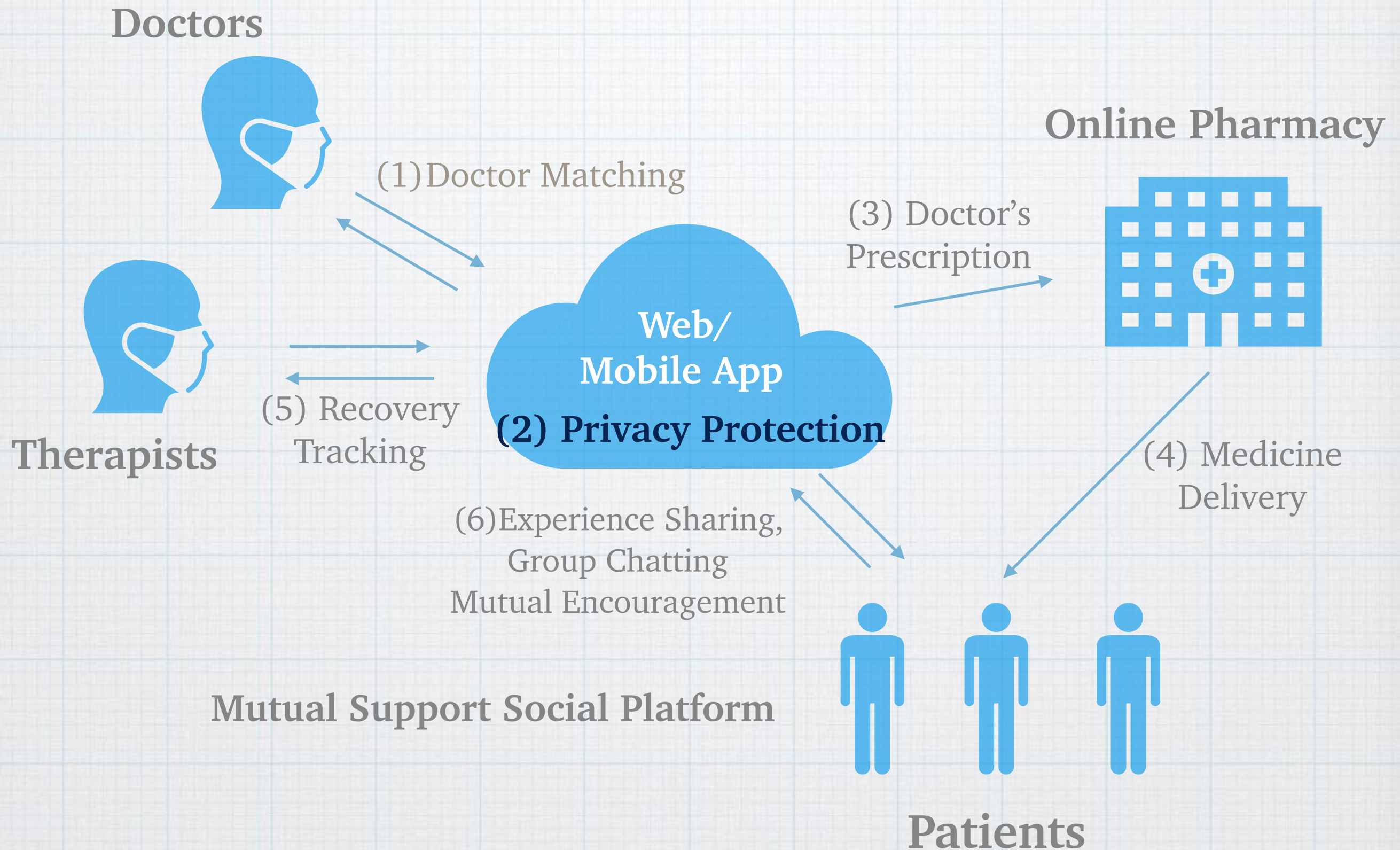


# How do we solve it?

- \* Doctor Matching

- \* Design a recommendation system for patients based on user information and doctor's background, i.e.,
- \* User info: gender, age, health insurance plan, preference of doctors' background, preference of treatment fees, symptoms, time and etc.
- \* Doctor info: education, current position and working place, experience of treating alcoholics, charging range, patient evaluation scores, time and etc.





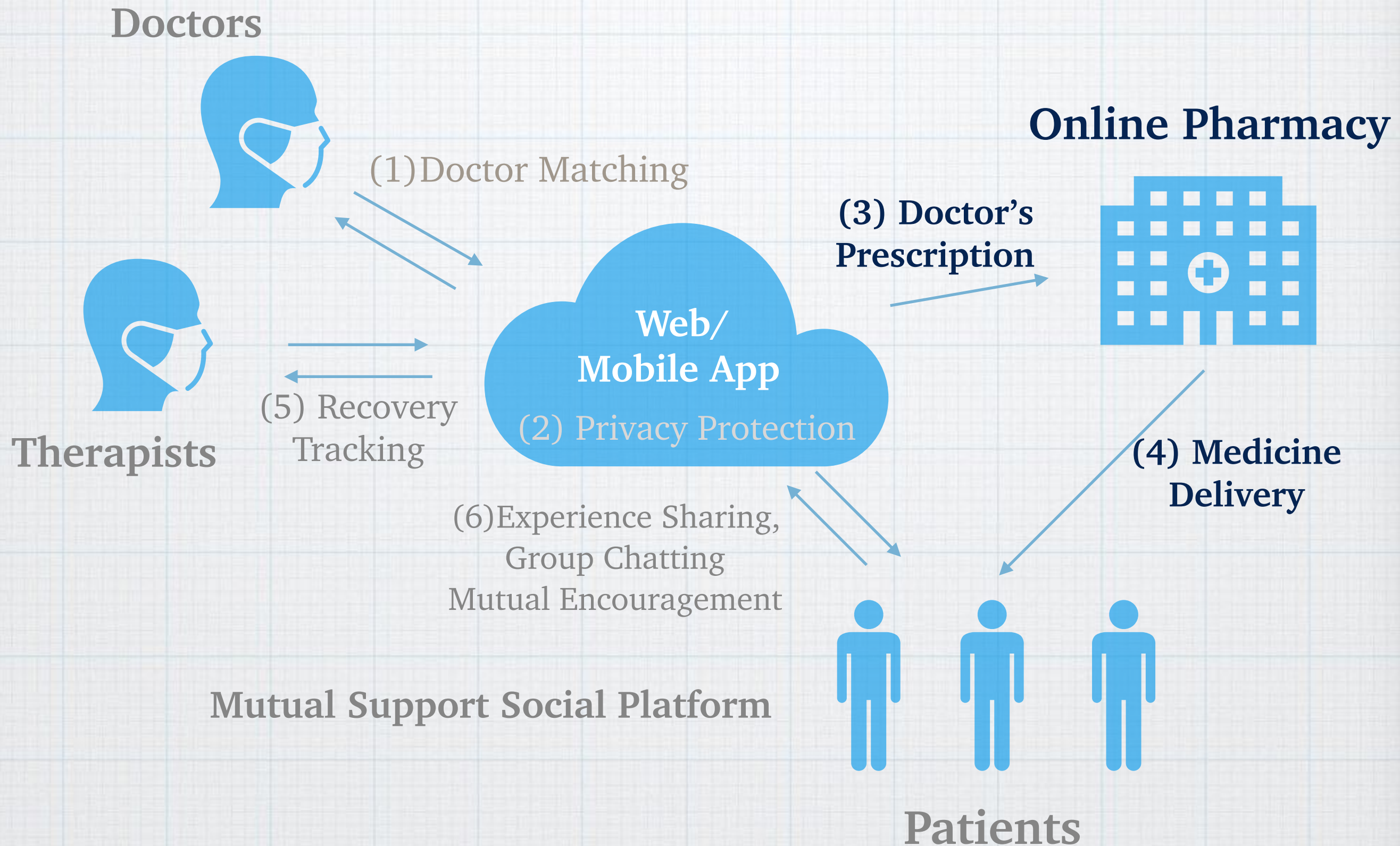


# How do we solve it?

- \* Privacy Protection

- \* Guarantee the safety of patient's private information.
- \* Use an alias of patient's name on the prescription signed by the doctor.





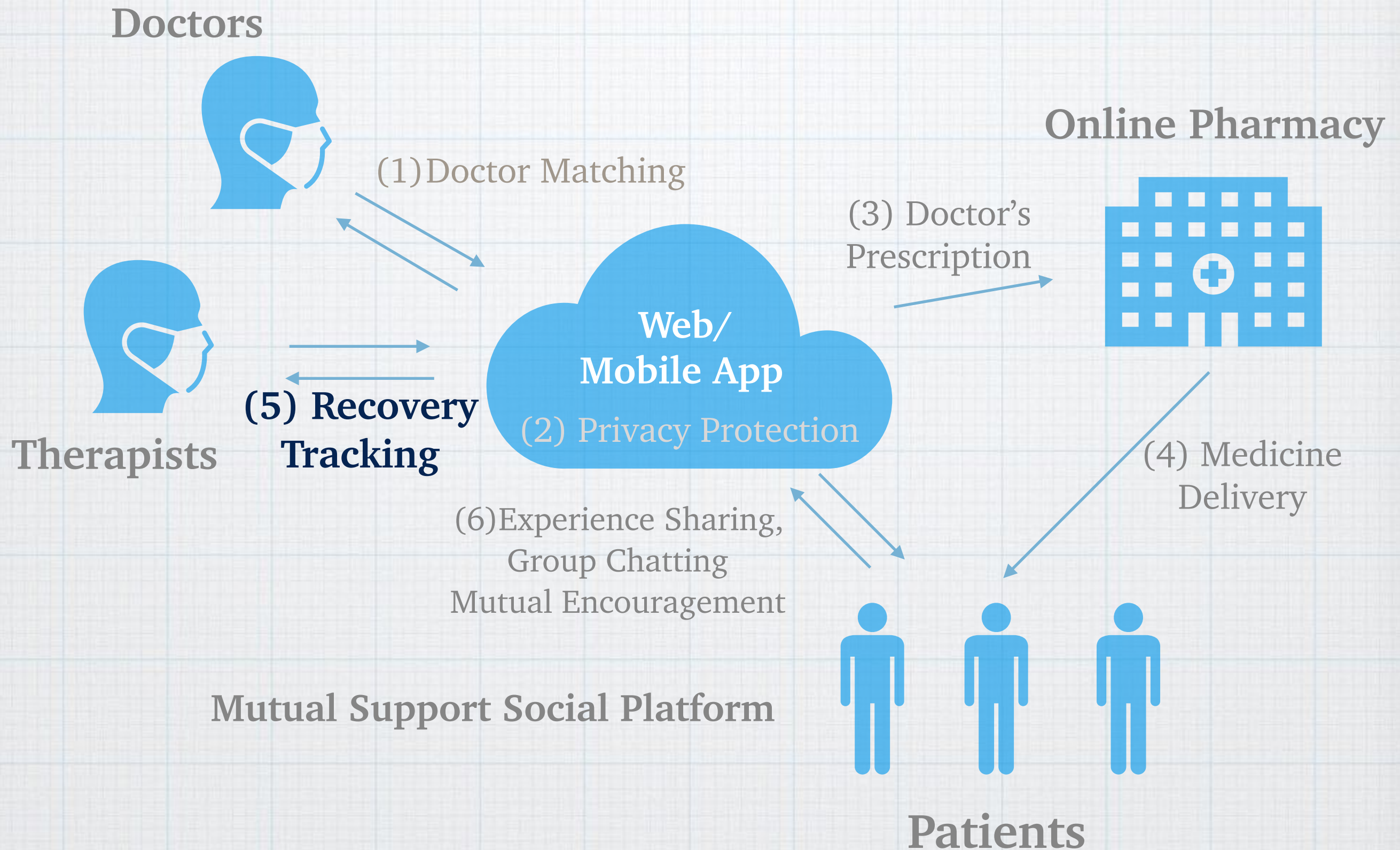


# How do we solve it?

- \* Online Pharmacy

- \* Cooperate with real pharmacies.
- \* Enable automatic drug order and delivery for patients as long as the doctor signs a prescription and submits it.





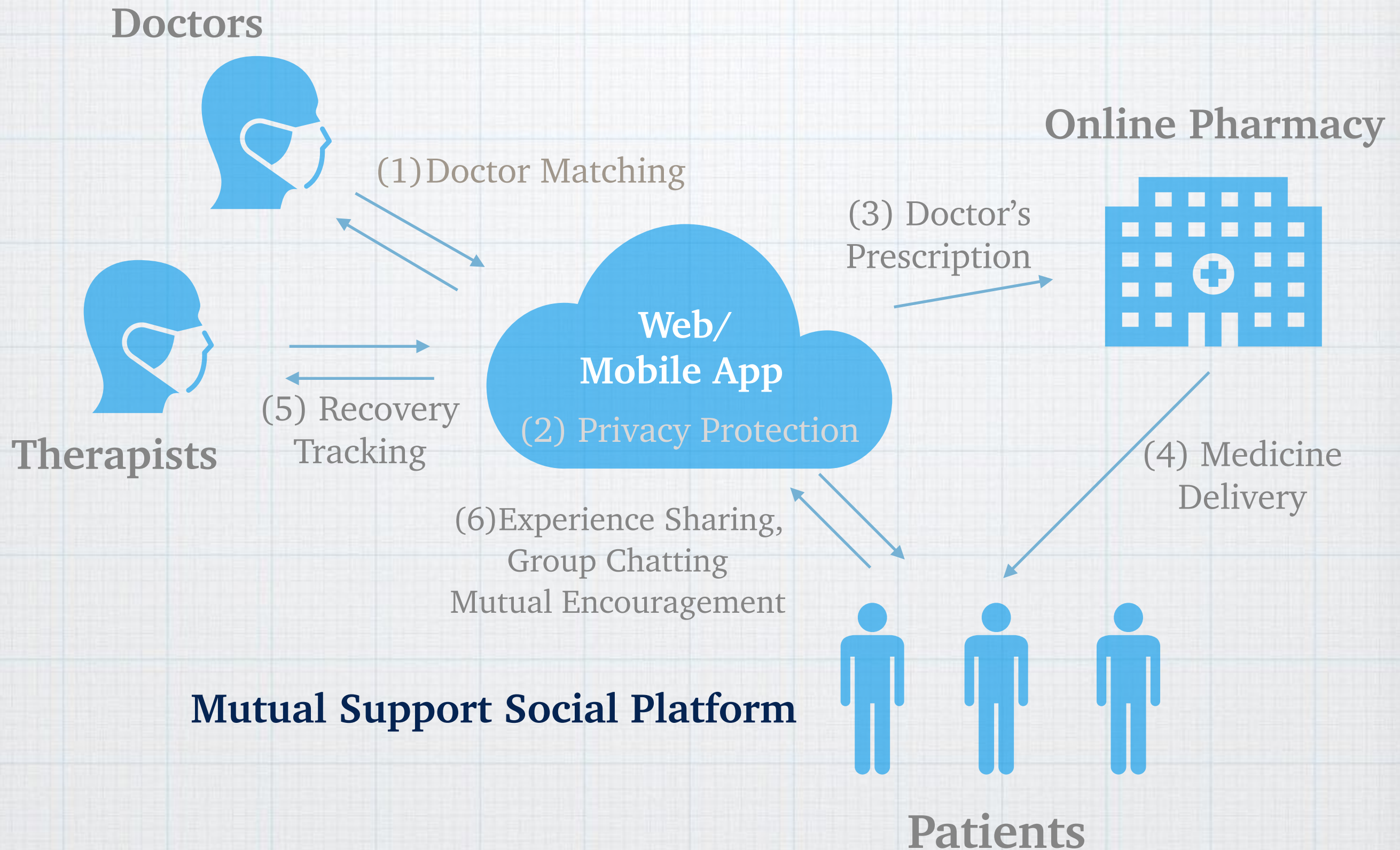


# How do we solve it?

- \* Recovery Tracking

- \* Therapists will keep track on the patient's recovery process twice a week, i.e.
- \* monitor his/her desire of drinking, give advice on how to overcome the anxiety and etc.







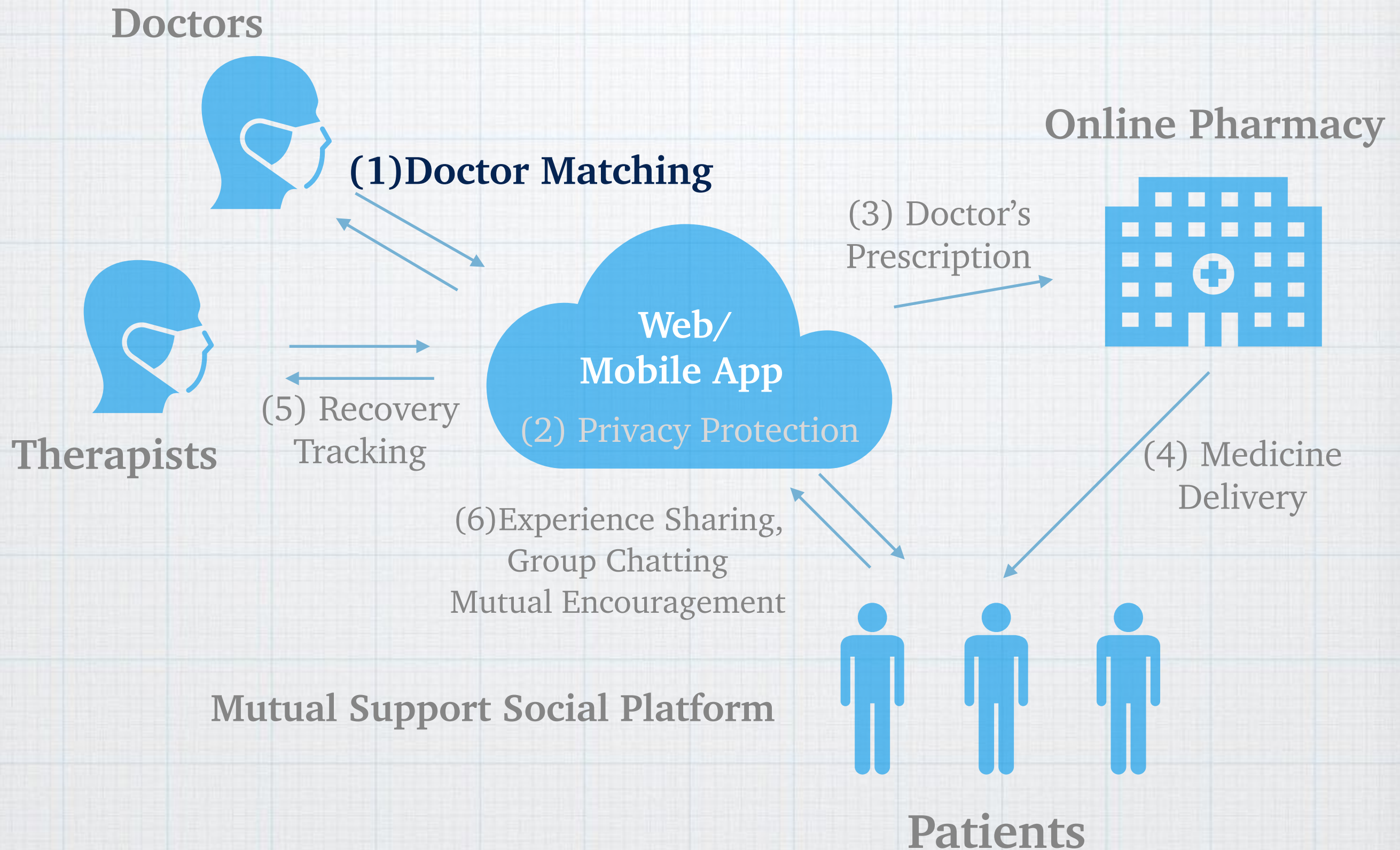
# How do we solve it?

- \* **Online Mutual Support Social Platform**

- \* Alcoholics need the support of other alcoholics.

- \* More convenient and private than A.A.







# How do we solve it?

## \* Text Mining

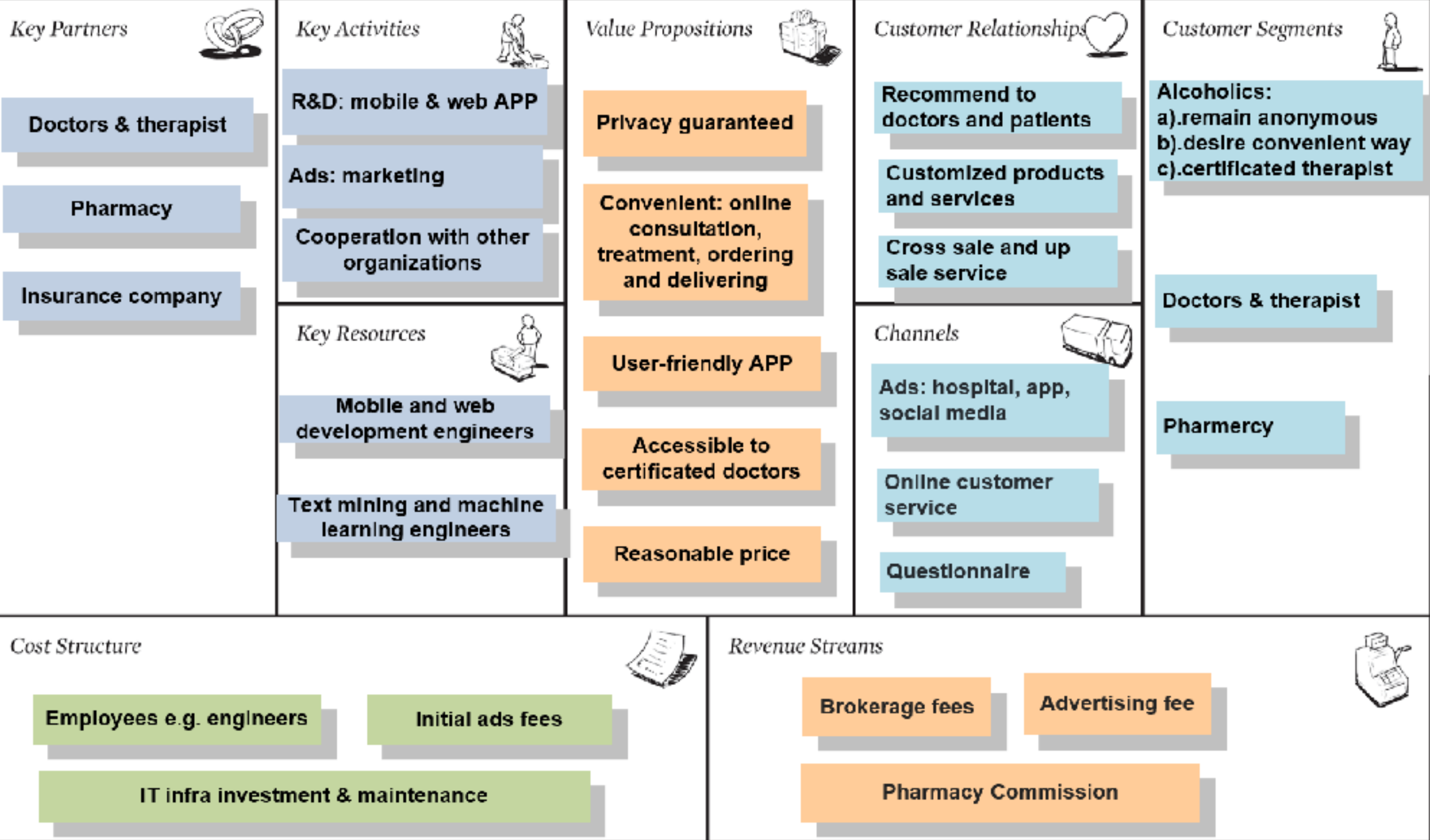
### \* Implement machine learning algorithms to analyze:

- chatting history between doctors and patients,
- public posts on social platform.

### \* Improve the recommendation system based on the results of text mining.

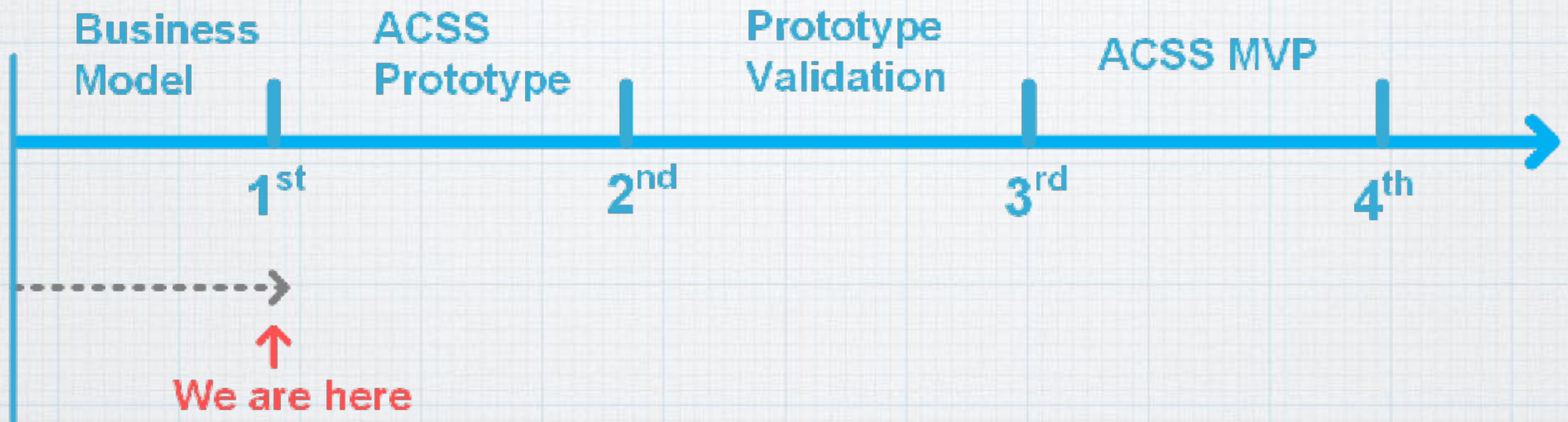


# Business Model





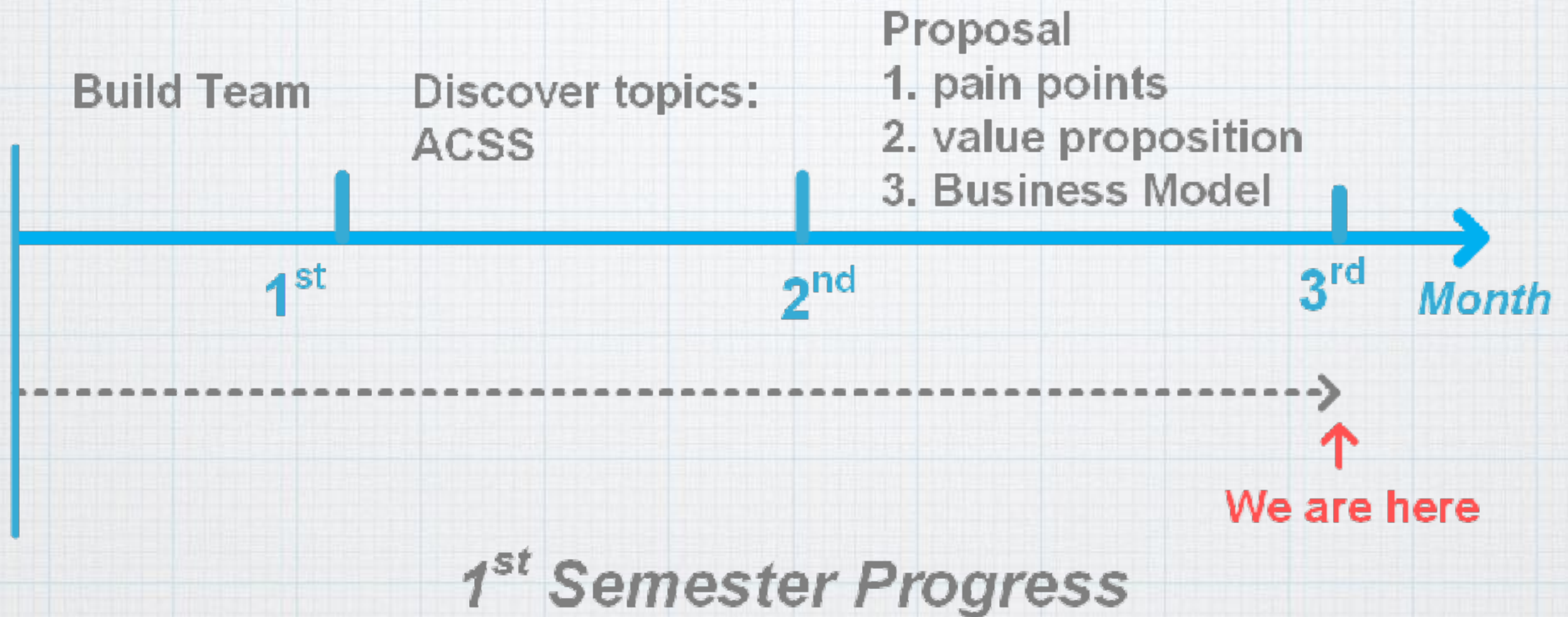
# Status



*Our Two Year Roadmap*



# Status (Cont' d)





# What's next in 2nd semester?

## — Prototyping

- \* Build an experimental model of our idea and solution.

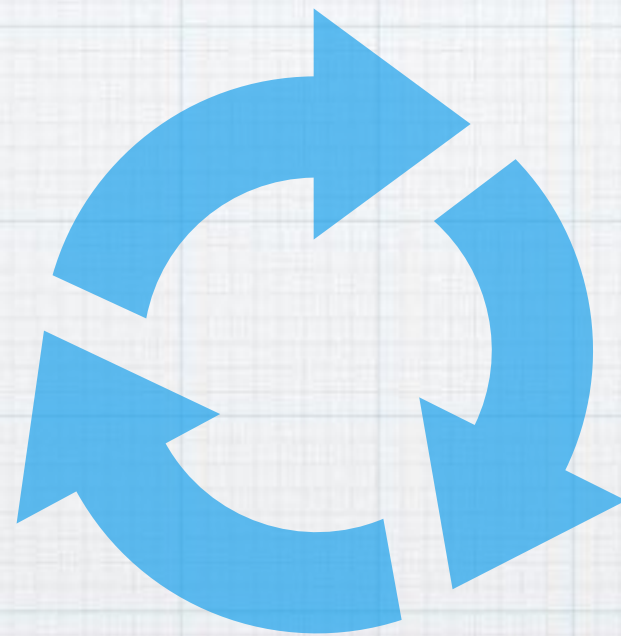


# What will we do?



# What will we do?

Investigate &  
Hypothesize



Test &  
Validate

Design &  
Prototype



# Investigate & Hypothesize

- \* Interview with therapists, doctors and employees in hospitals and pharmacists and employees in pharmacies.
- \* Talk to potential target customers, individuals or groups, as well as related social communities
  1. Alcoholics and their families or friends
  2. Ordinary families
  3. AA (an association of alcoholics who try, especially by mutual assistance, to overcome alcoholism)

# What will we do?





# Design & Prototype

## \* Technology Exploring

- Platforms: web, mobile(Android & iOS)
- Techniques: Text Mining, Machine Learning, etc
- Frameworks: Django, Materialize, Bootstrap, AngularJS, Node.js, etc.
- Devices: PC/Mac browsers, mobile phones

# Design & Prototype

## \* Prototype

- (40% of total time) Sketching & Paper Prototyping
- (20%) Digital Prototyping
- (40%) Native Prototyping



# What will we do?



# Test & Validate (Early Stage)

- \* Demonstration of prototypes to target customer segments
- \* Going through the complete business logic
- \* Examination of whether the solution solve or very much improve the original experience, efficiency or effectiveness



# Delivery

- \* High-Fidelity Digital Prototypes & Rudimental Native Prototypes of web app and mobile app
- \* Detailed report including flaws, validations, refinements and future improvements

# Thanks!

- Team 4