

---

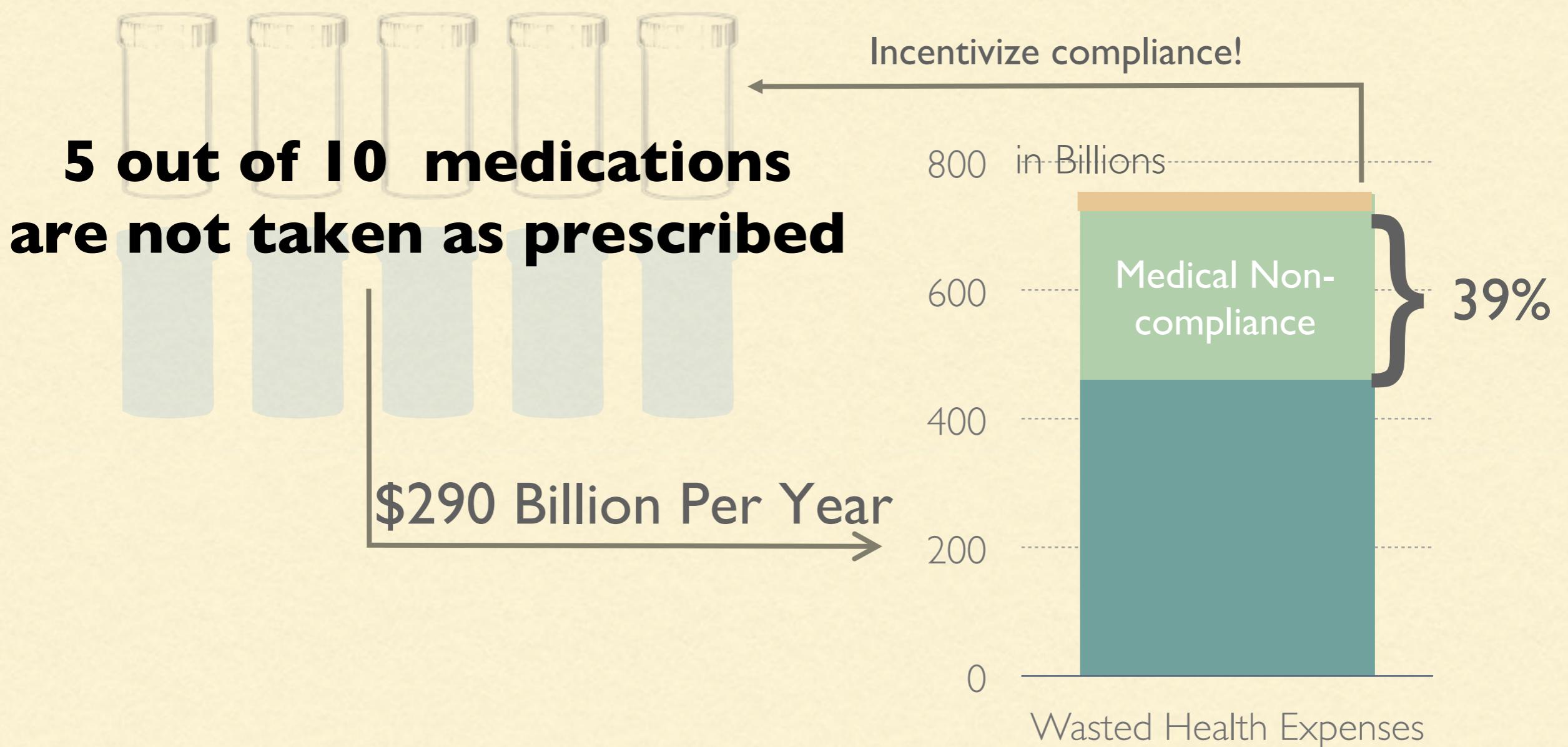
# PATHWAYS: MEDICAL ADHERENCE

---

A Rewards-Based Mobile Application to Promote Medical Adherence

---

# A PATH FORWARD



# TEAM



Josh Plotkin

Pharmaceuticals



Mayank Misra

Computer  
Science



Erin McMahon

Financial Services



Mandeep Singh

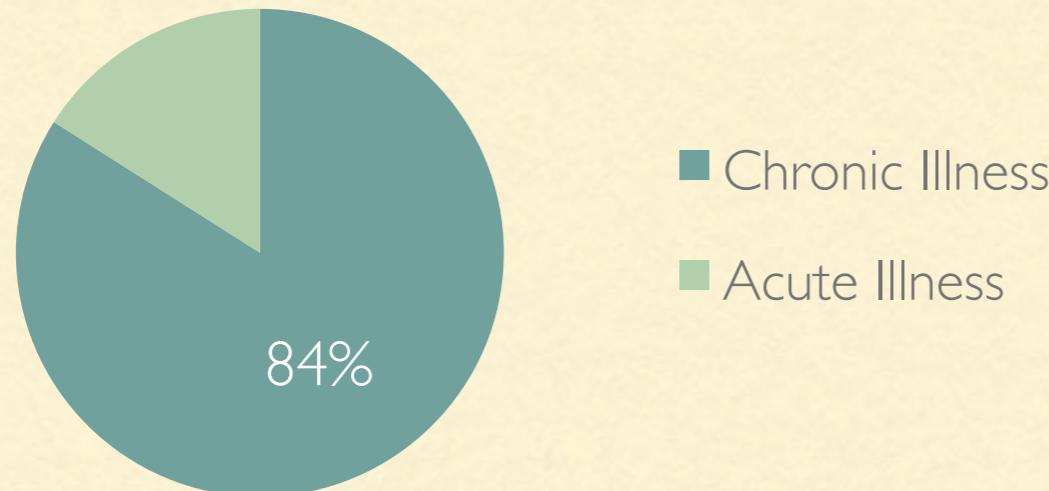
Data  
Science

# Pathways

# TARGET CHRONIC ILLNESS

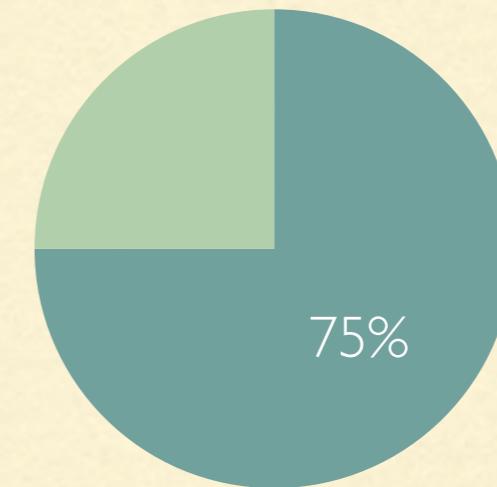
Total Direct Medical Costs

Percentage of Costs by Type of Illness

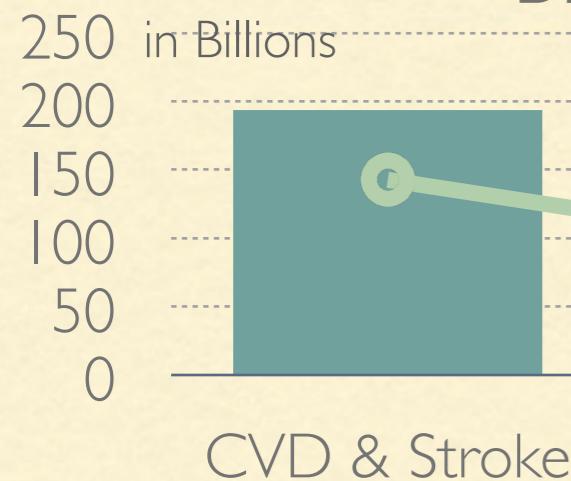


Medical Non-Adherence

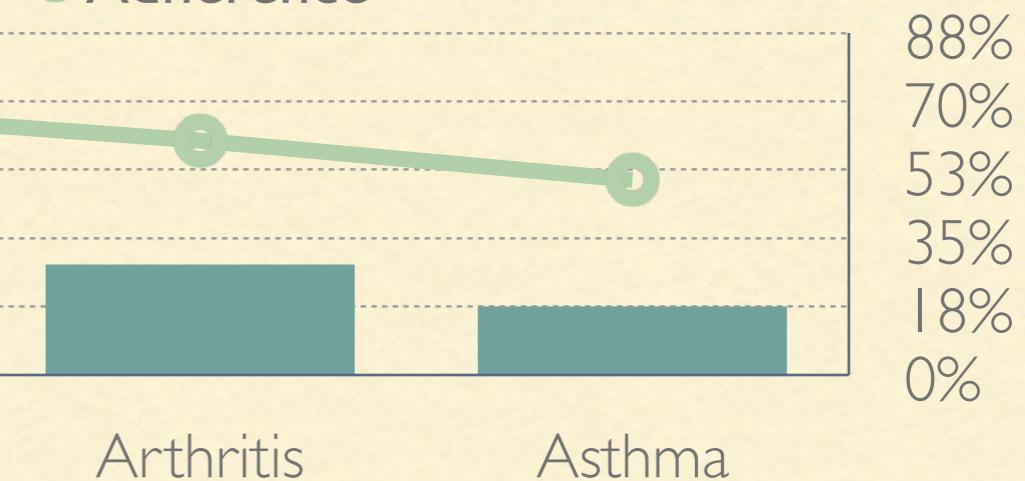
Percentage of Non-Adherence by Type of Illness



■ Direct Medical Costs



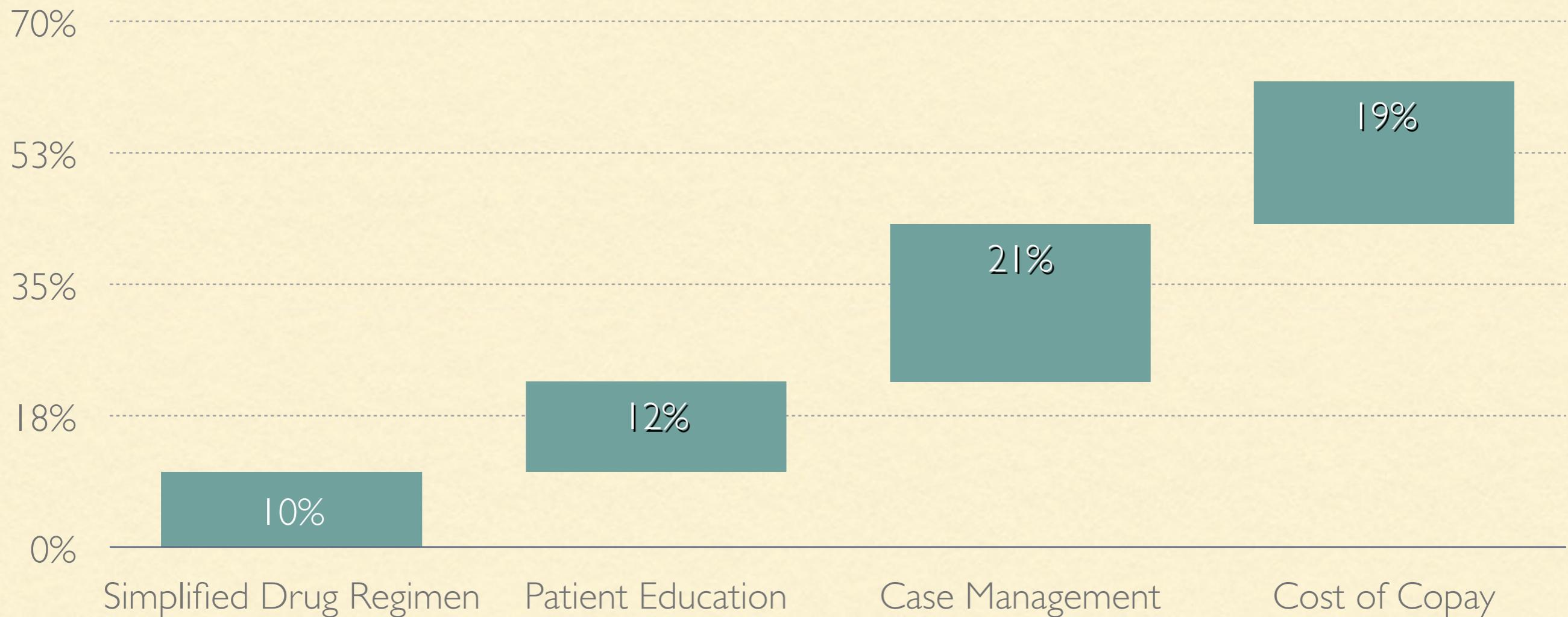
● Adherence



# NON-COMPLIANCE MITIGATION STRATEGIES

## Impact of Mitigation Strategies on Rates of Medical Adherence

United States, 2009\*

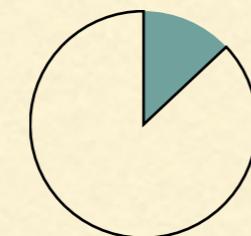


# CURRENT APP MARKETPLACE

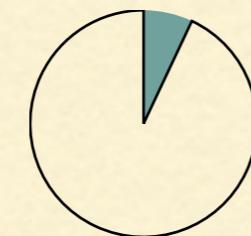
## Non-Compliance Issue

Simplified Process

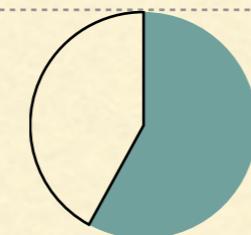
## Implementation in Market



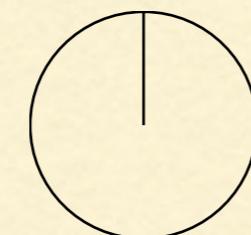
Patient Education



Case Management



Cost of Copay

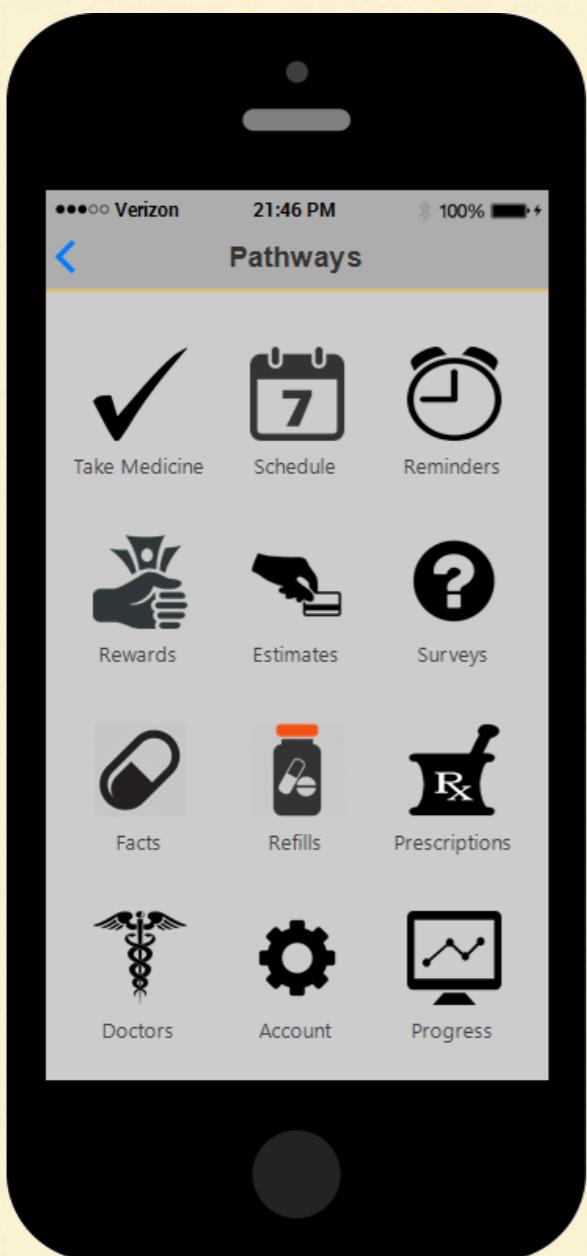


## Technology-Based Solution

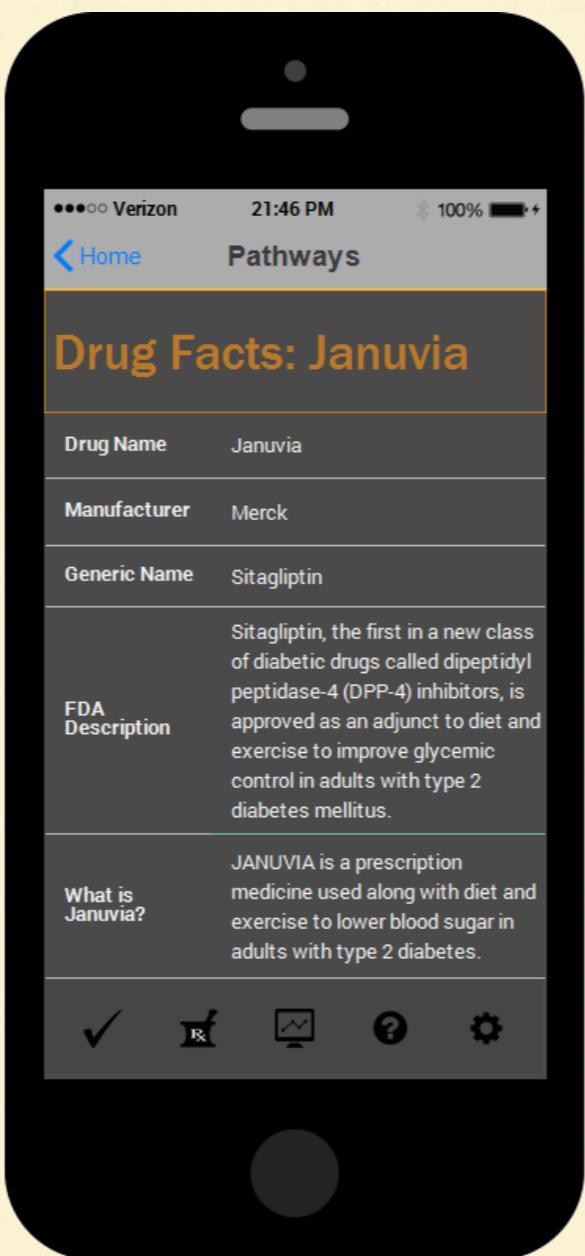
- Cloud Data Storage
- Sync/Export/Print Data
- Database of Medications
- HIPAA Compliant
- Provider Data Input Capable
- Complex Medical Instructions
- Online Data Entry
- Track Missed and Taken Doses
- Generates Reminders with No Connectivity

# PLATFORM & FUNCTIONALITY

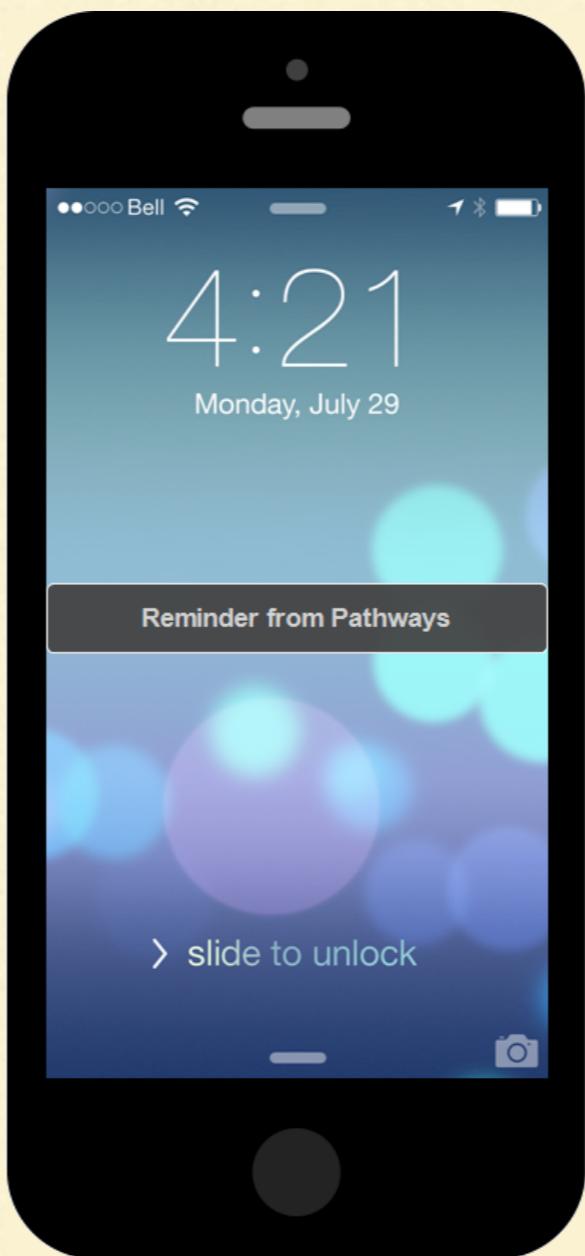
Navigate Pathways



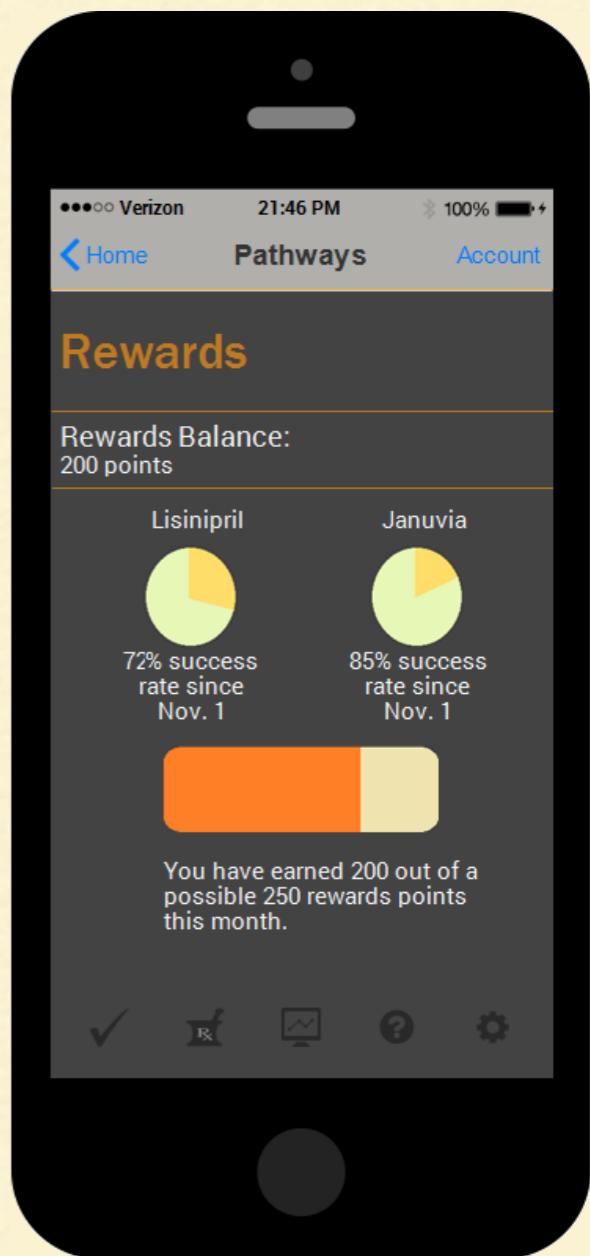
Understand Your Drugs



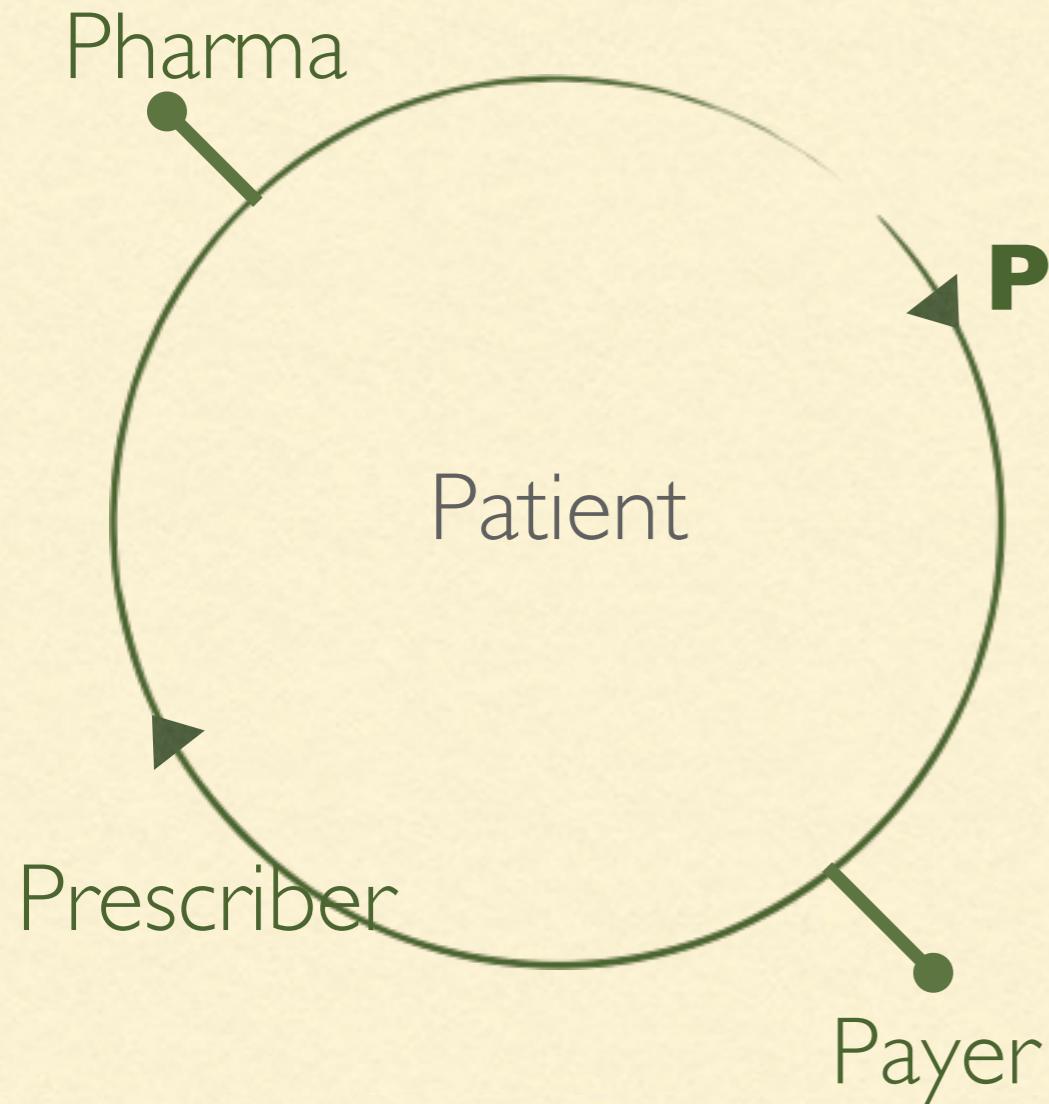
Customize Reminders



Verify and Get Rewards



# OUR ECOSYSTEM



## Pharmacy

Target  
Market:

Speciality Pharmacies such as:

- Accredo
- CareMark

Incentives:

- 1) Increased Rx sales
- 2) Better inventory management
- 3) Better bargaining and pricing strategies with pharma

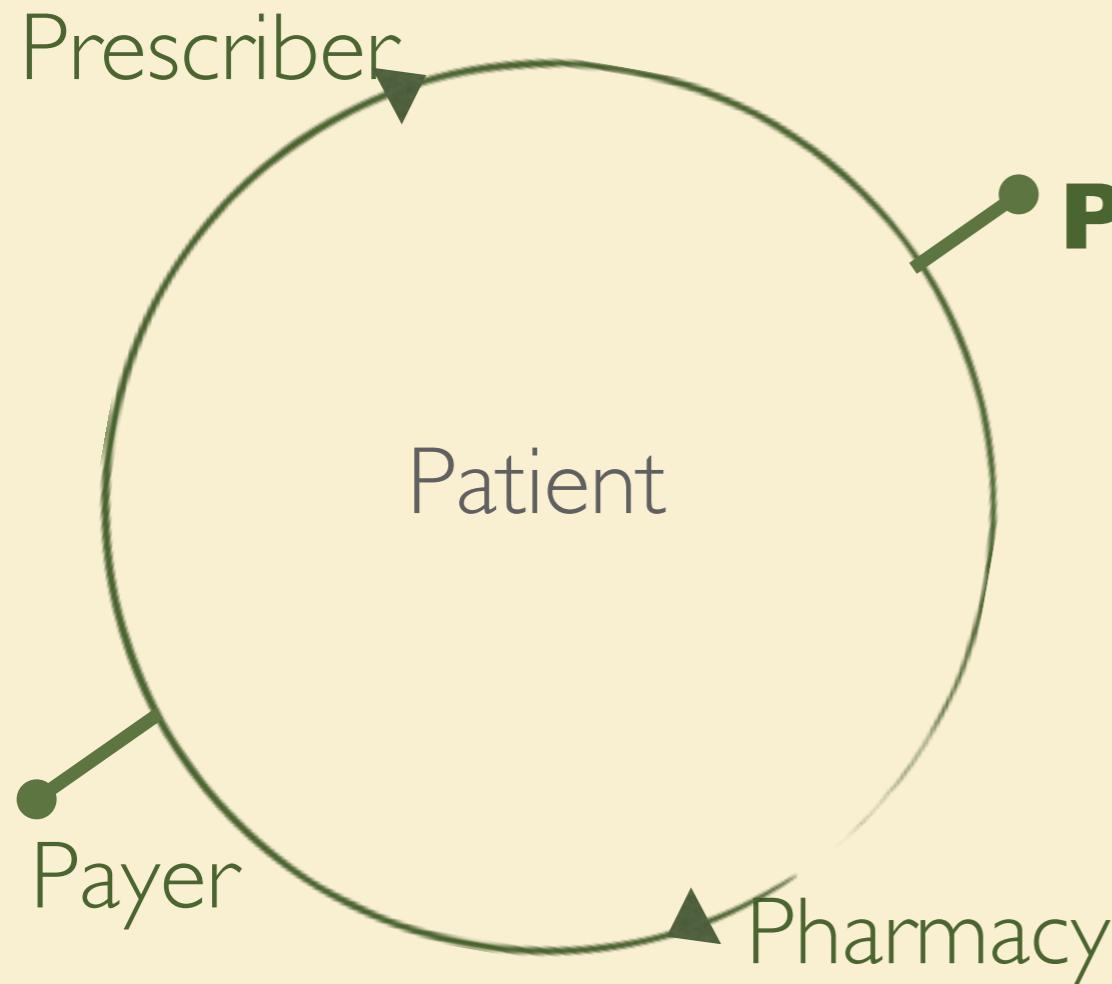
Data:

at patient level

Data Insights:

- 1) Adherence models & persistence ratios
- 2) Identifying patients in need of adherence counseling
- 3) Refill synchronization

# OUR ECOSYSTEM



## Pharma

Target  
Market:

Pharmaceutical Companies such as:  
- Pfizer  
- Celegen

Incentives:

- 1) Increased Rx sales
- 2) Pharmacy performance management
- 3) Pricing & payer strategies to negotiate with insurance companies

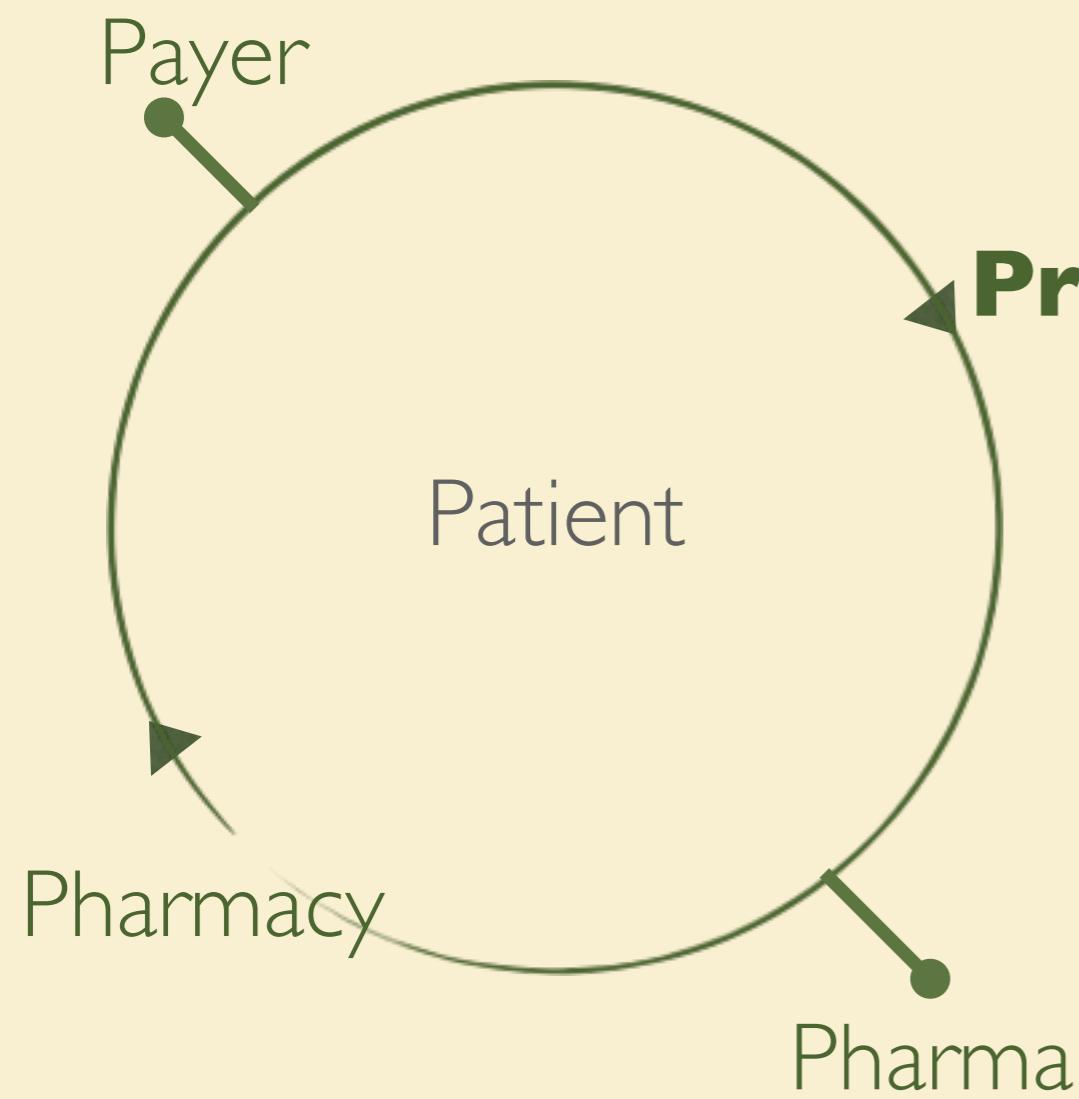
Data:

at pharmacy, prescriber, or payer level

Data Insights:

- 1) Real-world drug performance
- 2) Dispensing status of prescriptions in real-time

# OUR ECOSYSTEM



## Prescriber

Target  
Market:

Medical professionals associated with teaching or research hospitals such as:  
- Columbia Presbyterian Hospital  
- Memorial Sloan Hospital

Incentives:

- 1) Increased patient follow-ups
- 2) Pay-for-performance metrics

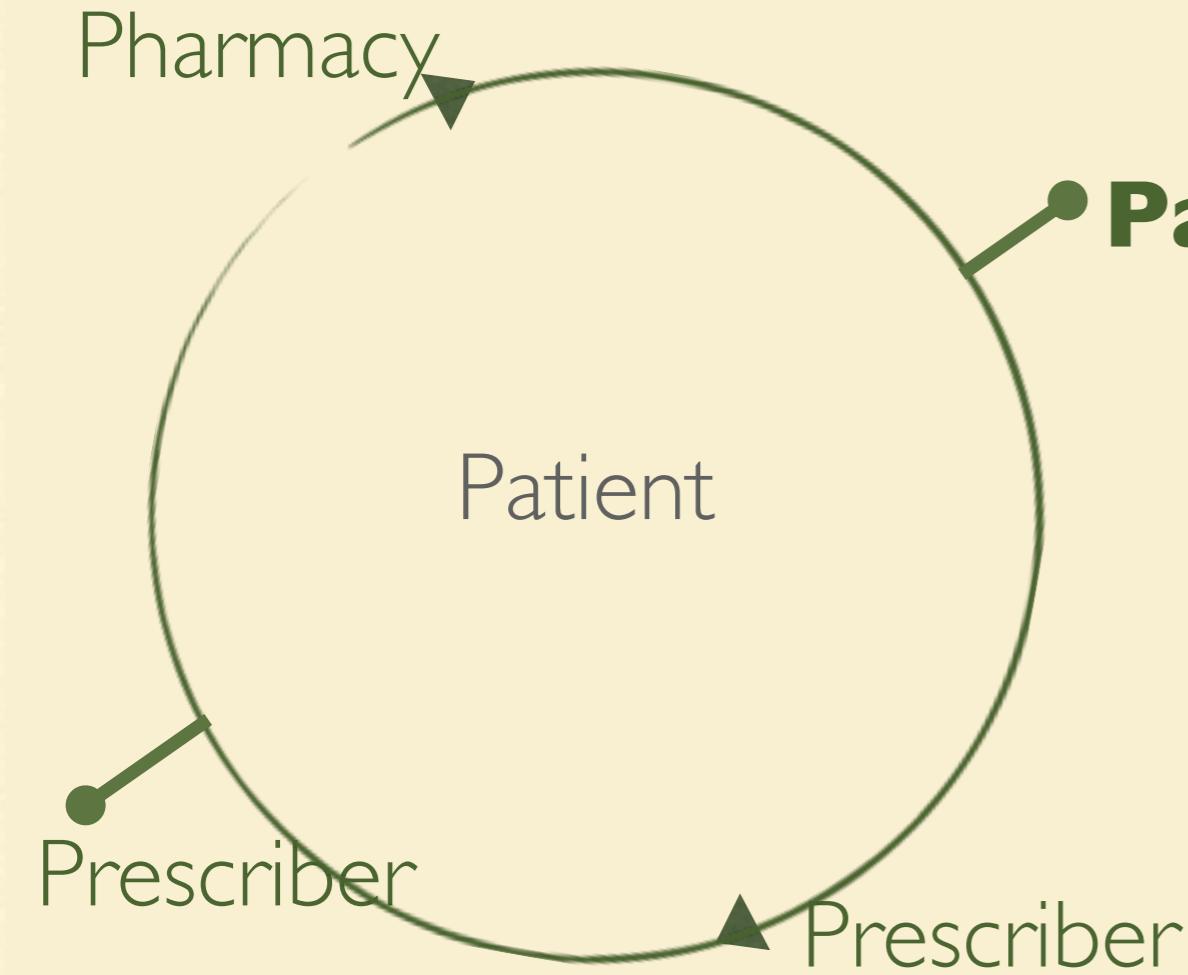
Data:

at patient level

Data Insights:

- 1) Identifying patients-at-risk for adherence counseling
- 2) Interactions and adherence by type and brand of drug
- 3) Insight into reasons behind non-adherence

# OUR ECOSYSTEM



Target  
Market:

Insurance companies such as:  
- Oscar Health  
- WellPoint

Incentives:

- 1) Decreased relapse rates and cost of care
- 2) Pricing & payer strategies to negotiate with pharma

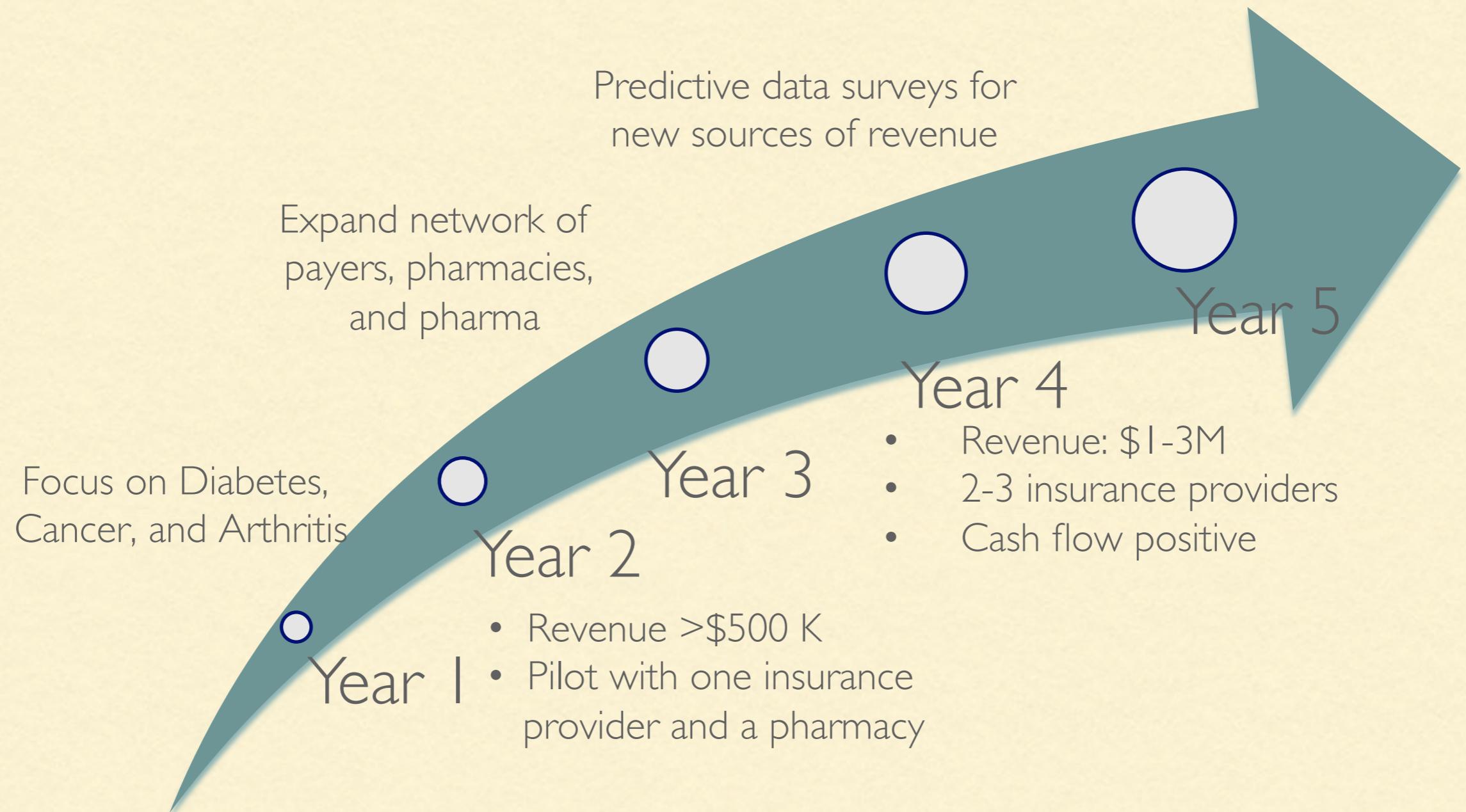
Data:

at pharmacy, prescriber, or payer level

Data Insights:

- 1) Real-time pay-for-performance metrics
- 2) Develop and evaluate cost containment strategies

# EVOLUTION



# RISKS & CHALLENGES



Critical mass for providers



Competition from pharmacies



Integration of patient prescription data

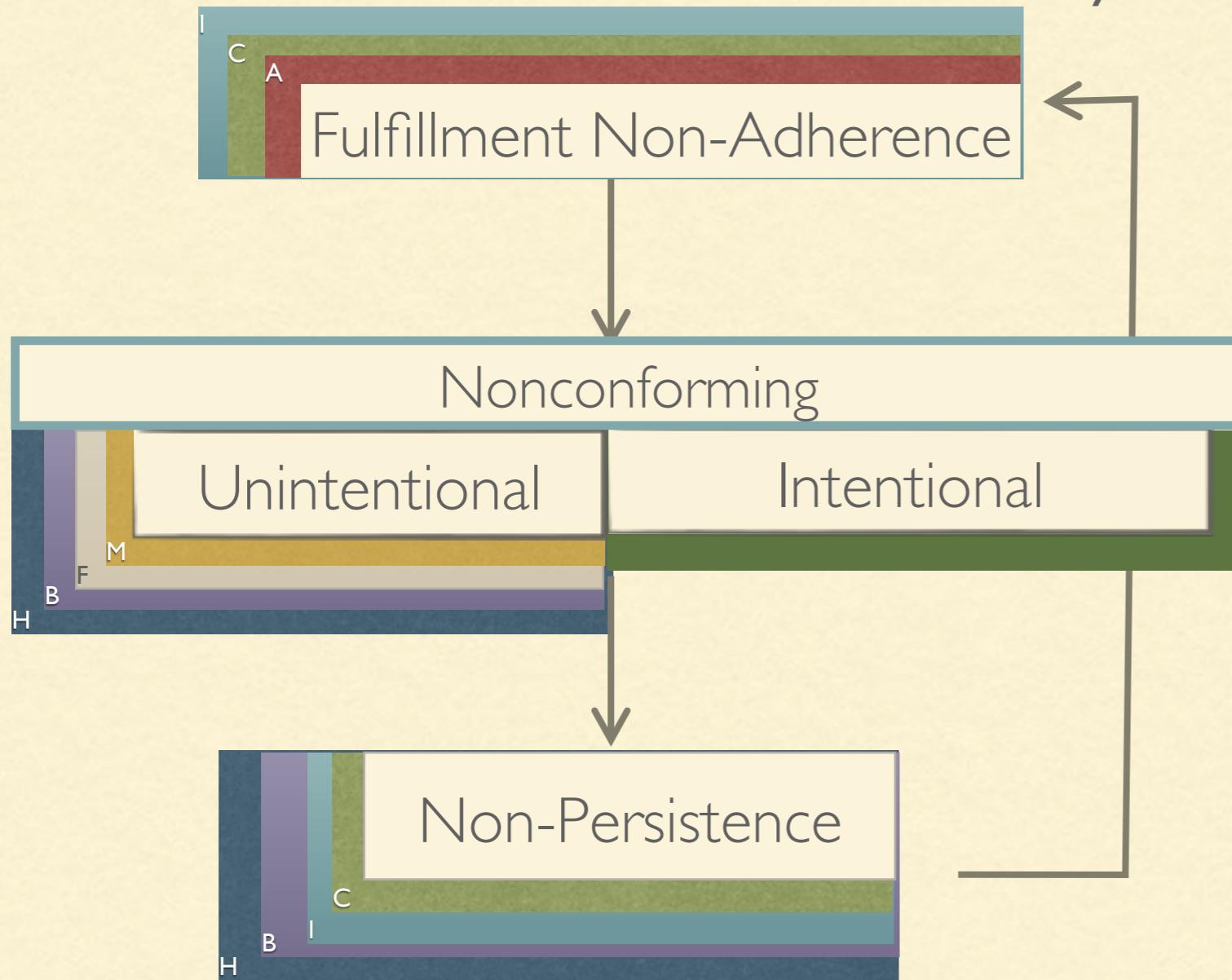


Compliance for sensitive health data

# APPENDIX I

## NON-ADHERENCE LIFECYCLE

### Patient Adherence Lifecycle



#### Reasons for Non-Adherence

- A** Access to Care
- C** Lack of Funds / Cost of Copay
- M** Patient-Dr Miscommunication
- E** Side Effects
- I** Inconvenience
- F** Forgetfulness
- B** No Short-Term Benefits
- H** Long-Time Horizons

# APPENDIX II

## FINANCIAL ASSUMPTIONS

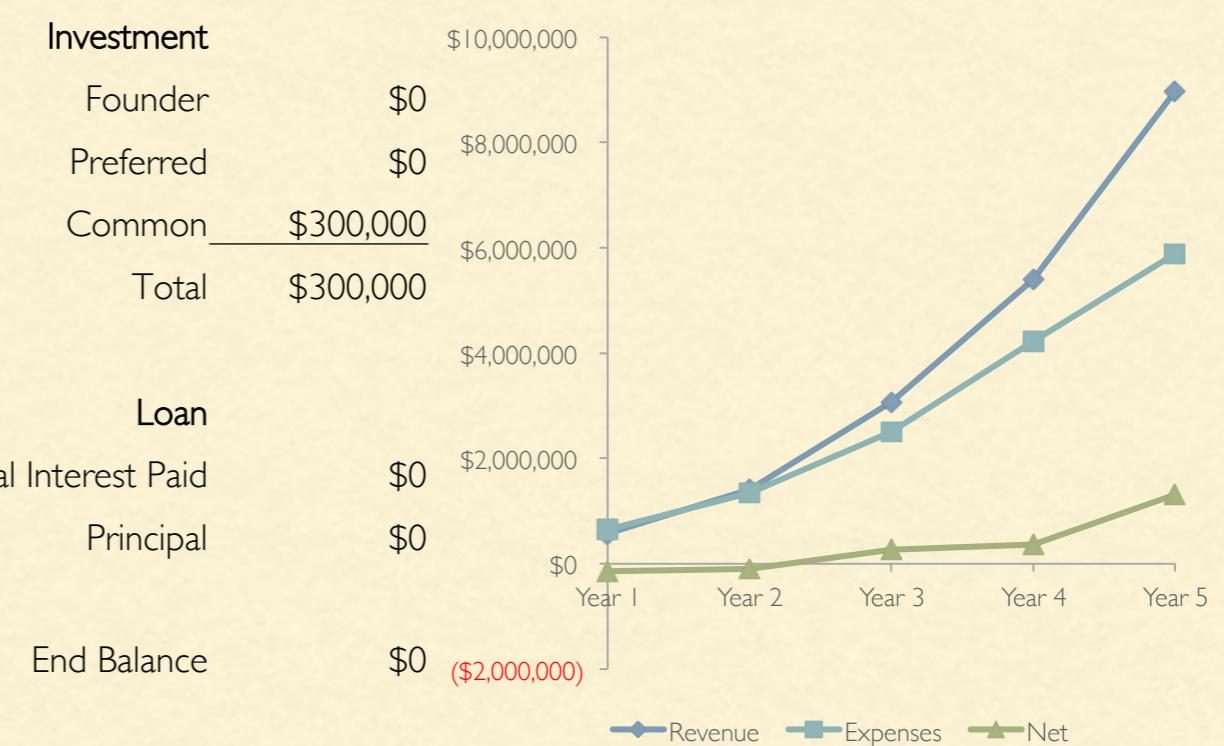
<u>Profit &amp; Loss</u>	Year 1	Year 2	Year 3	Year 4	Year 5
Net Sales	\$573,644	\$1,406,801	\$3,070,954	\$5,407,017	\$8,974,598
Gross Profit	\$316,822	\$770,900	\$2,022,452	\$3,643,809	\$6,004,020
EBITDA	-\$141,542	-\$103,255	\$282,453	\$652,878	\$2,213,964
Net Income	-\$141,542	-\$103,255	\$274,131	\$373,592	\$1,304,025

<u>Cash Flow</u>	Year 1	Year 2	Year 3	Year 4	Year 5	
Net Income	-\$141,542	-\$103,255	\$274,131	\$373,592	\$1,304,025	Total Interest Paid
Cash Inc. / Dec.)	\$195,958	-\$65,021	\$356,206	\$639,560	\$1,622,349	Principal
Beginning of Period	\$-	\$195,958	\$130,936	\$487,143	\$1,126,702	End Balance
End of Period	\$195,958	\$130,936	\$487,143	\$1,126,702	\$2,749,051	

<u>Balance Sheet</u>	Year 1	Year 2	Year 3	Year 4	Year 5	
Total Assets	\$195,958	\$130,936	\$487,143	\$1,126,702	\$2,749,051	Breakeven
Total Liabilities	\$37,500	\$75,733	\$157,809	\$423,776	\$742,100	Least Cash
Equity	\$158,458	\$55,203	\$329,334	\$702,926	\$2,006,951	Most Cash
Total Liab. & Equity	\$195,958	\$130,936	\$487,143	\$1,126,702	\$2,749,051	

Valuation      \$573,644      \$1,406,801      \$3,070,954      \$5,407,017      \$8,974,598

Revenue (1x Multiple)



Cash

Breakeven      March 2018

Least Cash      -\$567,508

Most Cash      \$2,749,051

# APPENDIX III

## PILOT STUDY

