

# Healthduct

*Where Mental and Physical health meet*

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# Background & Significance

- Large disconnect between mental and physical health providers

A lack of opportunity to  
meet

A lack of understanding  
between provider types

Stigmas and  
misconceptions between  
provider types

# Background & Significance

## HealthDuct

Where physical and mental needs meet.

- ***Solution:*** An application that allows for simplified collaboration!
  - A centralized treatment plan
  - Automatic prescription information and labelling
  - Allows for easy patient consent in regards to HIPAA

# Implementation

## Sprint 3

Set Up Container &  
App Settings

Enable secure login  
and signup

Patient and  
Provider pages set  
up

## Sprint 4

Generate invite  
document for patient to  
submit to a provider

## Sprint 5

Provider page is  
completed with  
active patient list.

Providers accept  
new patients via  
invite code

Obtained FDA API  
key

# Implementation (Cont'd)

## Sprint 6

Pivot to not use  
FHIR; use  
openFDA instead

Use openFDA  
dataset to mock  
prescription data

## Sprint 7

Use openFDA drug  
label api to provide  
human readable data

## Sprint 8

Use openFDA to  
display surveyed  
drug symptoms

Add openFDA's  
disclaimer in every  
drug query

## Sprint 9

Major bug fixes

## Sprint 10

Deployment

# Implementation Status

- Currently a *proof-of-concept* with focus on the patient -> mental health provider workflow.
  - FHIR is not included, but prescription data is spoofed via FDA
- Currently ***not hosted***
  - Github pages cannot host a backend server
  - Heroku cannot support sub-domains, and the back & front end of the container cannot have the same ports.

# Research - Legality

- According to the U.S. Office for Civil Rights, in regards to HIPPA, patient data may be shared if:
  - a. The patient gives consent
  - b. The patient's provider deems it necessary for the betterment of the patient

Source:

<https://www.hhs.gov/sites/default/files/hipaa-privacy-rule-and-sharing-info-related-to-mental-health.pdf>

# Research - Need

- Articles and papers supporting that there's a need for the closure of the gap between providers from a mental health provider's perspective
  - a. [https://www.researchgate.net/publication/331314985\\_Communication\\_between\\_Primary\\_Care\\_and\\_Mental\\_Health\\_Providers](https://www.researchgate.net/publication/331314985_Communication_between_Primary_Care_and_Mental_Health_Providers)
- Not as many at all from a PCP's perspective



# Future Work & Development

- Implement FHIR
- More of a provider to provider workflow including recommending in-network providers to patients
- Find a hosting service that supports the architecture or learn how to restructure the architecture to support heroku better