

 **YouTube** <https://youtu.be/1kvrpz1zv8w>

Leverage Population Health Data to Improve Patient Adherence in Community Referral

Deliverable 2, Team Technical Presentation

Team Name: Devs on FHIR

Team Members:

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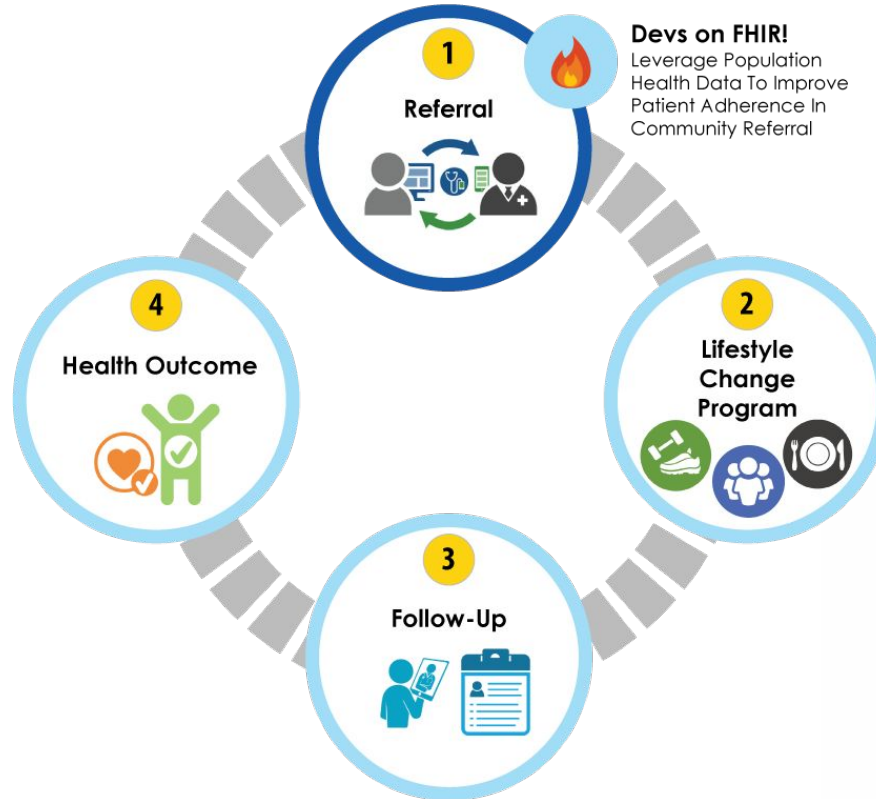
Elizabeth Coviello, ecoviello3, ecoviello3@gatech.edu (Dev)

Venu Shankar, vshankar33, vshankar33@gatech.edu (QA, narrator)

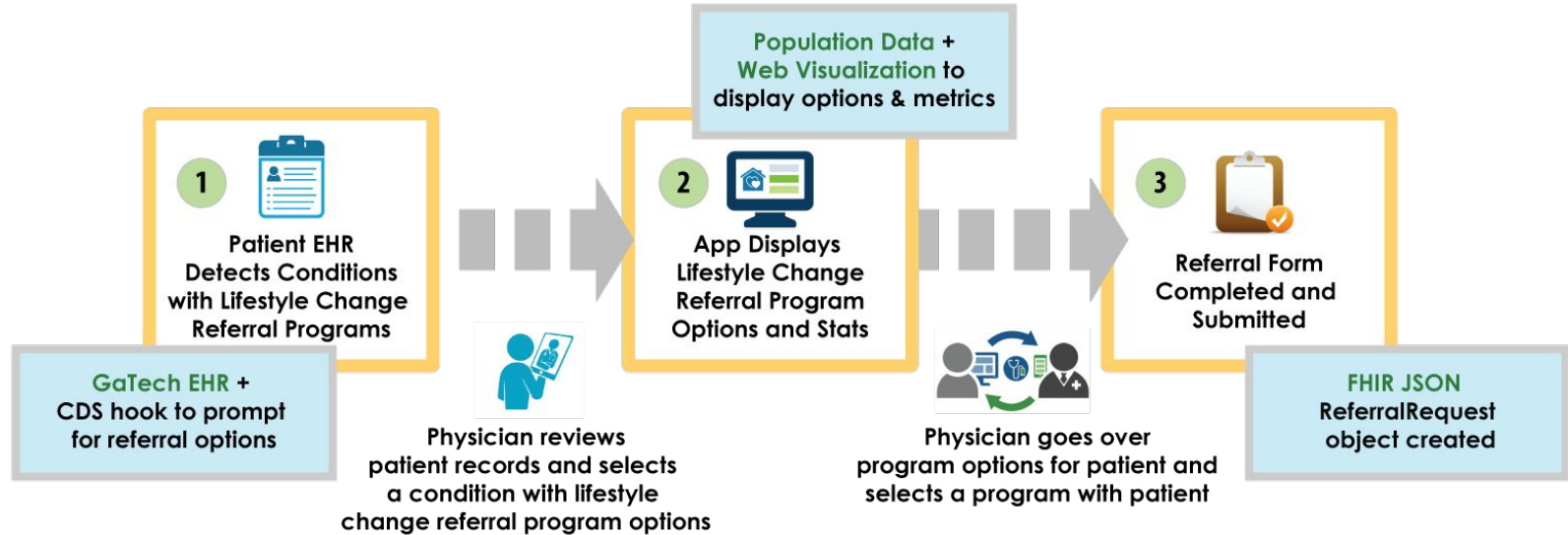
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Clinical Workflow



Proposed Workflow



Proposed Architecture & Tools



GA Tech Sample
EHR Server



Triggered
by CDS Hook

Web-Based
Front-End Client
Javascript, [D3](#), HTML5



Back-End
Web Server
Python, Flask



Population
Health Database
MySQL



Mockup (1)



← → ✕ 🏠

GaTech EHR

http://ehr.gatech.edu


🔍

Georgia Tech

EHR

Patient Help

🔍 Search a patient by name



Name: John Doe
Age: 41 yrs
Weight: 193 lbs
Height: 6'1"
Ethnicity: Asian

Blood Type: A+
Pressure: 130/90
Exercise: None
Allergies: None

Condition	Since	Lab Results
Diabetes	08/31/2001	Not Available
Smoking	11/13/1991	Not Available
High Blood Pressure	10/02/2012	Not Available

Check Referrals

* This is a temporary mockup. Once we have more information, it will be replaced with GaTech's EHR site


Mockup (2)

GaTech EHR

http://ehrgatech.edu

Georgia Tech EHR Patient Help

Search a patient by name



Name: John Doe
Age: 41 yrs
Weight: 193 lbs
Height: 6'1"
Ethnicity: Asian

Blood Type: A+
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Condition	Since	Lab Results
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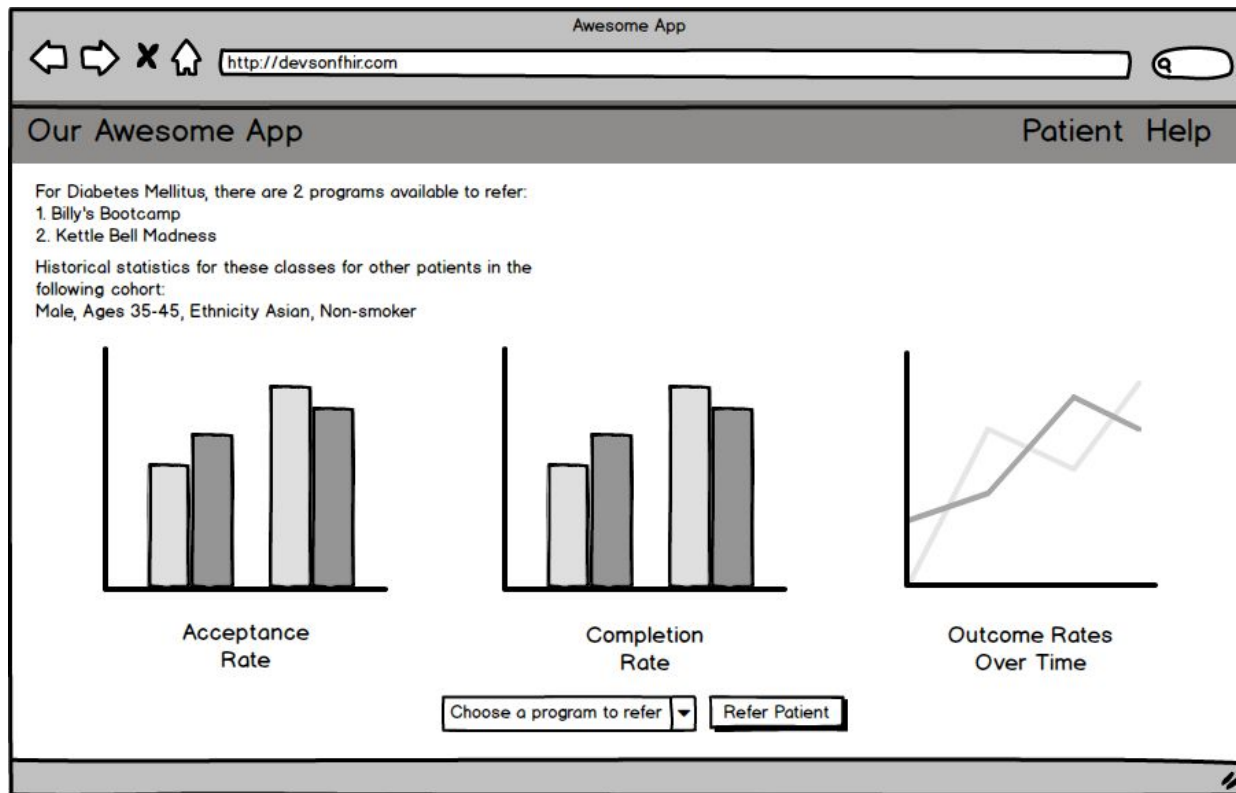
Do you want to see the available Lifestyle referral programs?

NoYes

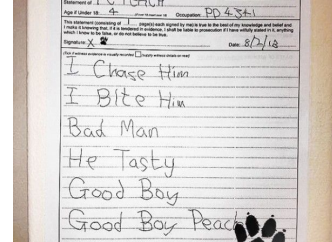
Check Referrals







Mockup (3)




Mockup (4)



Awesome App



http://devsonfhir.com



Our Awesome App

Patient Help

Referral Request Form

REFERRING PROVIDER INFORMATION:
Referred by (MD): Dr. John Appleseed
Medical Group: Private
Phone: XXXXXXXXXX Fax: _____ PCP: Dr Mary Appleseed
Address: 1 Sean Drive City: San Jose ZIP: 23341
This form completed by: John Appleseed Phone: (123) 456 78090

PATIENT INFORMATION (Please provide copy of patient demographics/face sheet):
Last Name: Appleseed First Name: John MI: _____
DOB: 01/01/1976 Phone: (123) 456 7891 Gender: ☒ Male ☐ Female
Patient's Address: 1 Abracadabra Street
City/State/Zip: San Jose, CA 12412
Needs interpreter? ☐ Yes ☒ No Language: _____

REASON FOR REFERRAL:
Diagnosis/ICD: E11 Type 2 diabetes mellitus
Service/Specialty Requested: Kettle Bell Madness
Physician Requested: _____
☐ **Contact referring provider if requested physician is unavailable**
Type of Service Requested: ☐ Consultation ☐ 2nd Opinion ☐ Radiology Services ☐ Lab Services
☐ Follow up ☐ Surgery ☒ Other (please specify): _____
Reason for Referral: Lifestyle change program

Submit

Further Research Done

- ✓ Referral process
- ✓ Visualization packages
- ✓ FHIR data
- ✓ CDS Hooks



Next Steps



- ✓ Research GATech sample EHR server. **Pending TA input*
- ✓ Continue learning about [CDS hooks](#) integration.
- ✓ External mentor feedback mockups.
- ✓ Model and mockup population health data. **Pending external mentor input*
- ✓ Setup development environment
- ✓ Test communication between development environment and EHR via CDS hooks

https://drive.google.com/file/d/0B1G7l_jLI8LCT2dVMHZVN214V3c

[illegible]

Trello Dashboard

[Trello Board Link](#)

Devs on FHIR ☆ Private

To Do

- Create Team Final Project Presentation (Deliverable 4)
🕒 Dec 3
- Testing
🕒 Dec 3
- Bug fixing and rework
🕒 Dec 3
- Demo
🕒 Dec 3
- Create Project Status Report 5
🕒 Nov 26
- Update Gantt Chart for D5
🕒 Dec 1
- Final Project Submission (Deliverable 5)
🕒 Dec 2

Add a card...

Current tasks

- Set up environment
🕒 Oct 29

Add a card...

In Progress

- Research FHIR capabilities relevant to project
🕒 Oct 18
- Update Gantt chart for D2
🕒 Oct 21
- Create Team Technical Presentation (Deliverable 2)
🕒 Oct 22

Add a card...

Done

- Create team topic presentation (Deliverable 1)
🕒 Oct 8
- Create Trello project board
🕒 Oct 15
- Create Project Status Report 1
🕒 Oct 15
- Create list of functional requirements
🕒 Oct 18
- Create list of technical requirements
🕒 Oct 18
- Create wireframe mockups
🕒 Oct 21
- Create design and architecture diagrams
🕒 Oct 21

Add a card...



Thanks!

