

Medical Missions

New application goals

- Web based system
- Multiple people entering visits
- Enter new patient profile information in Belize

Primary Users

- Admin
- User
 - Shirley
 - Registration
 - Doctors

Patient ID

Would love to know initial location in Patient ID
Used to key details on patient at a later time

Location - Trip - Machine - AutoSync#

HC - AB - 01 - 0001

Date Component

Uses computer time/date settings for data entry of dates

04/10/2016



10/04/2016



When viewing dates, we will always print it out so it is fully legible.

April 10, 2016



10 April, 2016



Server

Login

Username

Password

[Cancel](#)

Trips

[+ Create a trip](#)

Name	Start Date	End Date	Open/Closed
Winter Belize Mission Trip	01/27/16	01/31/16	Open
Fall Belize Mission Trip	10/5/15	10/09/15	Closed
Summer Belize Mission Trip	07/10/15	07/15/15	Closed
Spring Belize Mission Trip	04/16/15	04/20/15	Closed

Business Rules:

- Only one trip open at a time. Must close trip before a new trip is started.
- Unable to close trip if all workstations have not been finished

Create Trip

Name

Date
 / to /

[Cancel](#)

Winter Belize Mission Trip

01/27/16 - 01/31/16

WS #1 - Began on 01/26/16 - Ended on 01/31/16
WS #2 - Began on 01/25/16 - Ended on 01/31/16
WS #3 - Began on 01/26/16 - **Due to Finish**

[Cancel](#)

Winter Belize Mission Trip

01/27/16 - 01/31/16

WS #1 - Began on 01/26/16 - Ended on 01/31/16
WS #2 - Began on 01/25/16 - Ended on 01/31/16
WS #3 - Began on 01/26/16 - Ended on 02/01/16

[Cancel](#)

Connected Client

Login

Username

Password

[Cancel](#)

Begin Trip

Winter Belize Mission Trip ▾

WS#2: 01/25/16

Main Program

Finish Trip

Winter Belize Mission Trip ▾

WS#2: 01/31/16

Winter Belize Mission Trip
Completed

Client: In the field

Login

Username

Password

[Cancel](#)

-  Search (Patient ID & Name sections)
 -  Add New Patient
 -  Finish Trip (only available when connected to Internet)
 -  Flagged Treatments

Patient ID First Name Last Name DOB Age
 Gov ID Next of Kin Gender Marital Status
 Print Save Hope Smoke Alchol
 Where do they live Phone 1 Phone 2 Church
 Medicine Allergies Past Medical History Past Surgeries Family Medical History
 Personal Life Notes Admin Notes Gyn GynG GynP

<< >>

Overall Treatments

Date of Visit <input type="text" value="04/10/16"/> <input type="button" value="Calendar"/>	Reason for Visit/Chief Complaint <input type="text"/>	Diagnosis <input type="checkbox"/> Wrist Pain <input checked="" type="checkbox"/> Abscess <input type="text"/>	Referral <input type="text"/>									
Location <input type="text" value="Silk Grass"/>												
Vitals	Height <input type="text" value="60"/> <input type="button" value="▼"/>	Weight <input type="text" value="140"/> <input type="button" value="^"/>	Pulse <input type="text" value="70"/> <input type="button" value="^"/>	BP <input type="text" value="105/70"/> <input type="button" value="^"/>	Resp <input type="text" value="20"/> <input type="button" value="▼"/>	Temp <input type="text" value="98.2"/> <input type="button" value="▼"/>	Oxygen <input type="text" value="qq"/>	Glucose <input type="text"/>	Hemoglobin <input type="text"/>	Preg Test <input type="text"/>		
Urine Labs	Blood-H <input type="text"/>	Blood-N <input type="text"/>	Urobilin <input type="text"/>	Bilirubin <input type="text"/>	Protein <input type="text"/>	Nitrite <input type="text"/>	Ketones <input type="text"/>	Ascorbic <input type="text"/>	Glucose <input type="text"/>	pH <input type="text"/>	SpGrav <input type="text"/>	Leuk <input type="text"/>

18

Save Cancel

Main Program - Top of Screen

Q + F Print Save

	Patient ID [Text Box]	First Name [Text Box]	Last Name [Text Box]	DOB [Text Box] / [Calendar Icon] / [Text Box]	Age [Text Box]	<input type="checkbox"/> Translator <input checked="" type="checkbox"/> Hope <input type="checkbox"/> Smoke <input type="checkbox"/> Alcohol
Gov ID [Text Box]	Next of Kin [Text Box]	Gender Tiffany Flowers [Dropdown: Female]	Marital Status Common Law [Dropdown: Common Law]			
Where do they live [Text Box]	Phone 1 [Text Box]	Phone 2 [Text Box]	Church [Text Box]			
Medicine Allergies [Text Box]	Past Medical History [Text Box]	Past Surgeries [Text Box]	Family Medical History [Text Box]			
Personal Life Notes [Text Box]	Admin Notes [Text Box]	Gyn			GynG [Text Box]	GynP [Text Box]

Business Rules:

- If DOB is entered, calculate Age. Allow age field for text to be entered.
- Next of Kin: enter Patient ID of other patient. Show name of Next of Kin patient based on Patient ID entered
- Marital Status: Married, Single, Divorced, Common Law
- Gender: Female, Male

Main program - Overall

Q
+
-
Print
Reset

« 04/10/16 » + Add a New Visit X Delete Visit

Overall Treatments

Date of Visit Reason for Visit/Chief Complaint Diagnosis Referral

04/10/16 April 10, 2016 [Reason for Visit/Chief Complaint] Wrist Pain X Abscess X [Referral]

Location: Silk Grass

Vitals

Height	Weight	Pulse	BP	Resp	Temp	Oxygen	Glucose	Hemoglobin	Preg Test
60	140	70	105/70	20	98.2	qq			

Urine Labs

Blood-H	Blood-N	Urobilin	Bilirubin	Protein	Nitrite	Ketones	Ascorbic	Glucose	pH	SpGrav	Leuk

Save Cancel

Business Rules:

- Up and down arrows per vital and urine lab fields shows if the number went up or down from previous visit.
- Hover shows previous numbers

Main program - Treatments

Q
+
F
D
C



« 04/10/16 » + Add a New Visit ✖ Delete Visit

Overall Treatments

+ Add a treatment

General Note

Ed Behling
April 10, 2016

Injection

Insulin
Mark Hucks
April 10, 2016

Prescriptions

Medication and Dose	Quantity	Directions
Nitofurantin 100mg	30	PRN as directed
Ibuprofen Elixir 100/5ml	1	PRN as directed
Diphenhydramine Elixir 12.5/5ml	1	PRN as directed

Save Cancel

Business Rules:

- Filter icons include Treatment types and individual users

Prescriptions

- When a new visit is created the prescriptions from previous visit are automatically added to new visit. Only copy over refilled and new prescriptions added. Do not copy over discontinued or did not dispense medications.
- TO DO: Figure out the best way to handle marking prescriptions to be refilled, discontinued or did not dispense

Treatment types:

- General Notes, Injection, Nebulizer Treatments, Procedure, Biopsy, Pap Smear, IND, Chiropractor Treatment, Laceration

Treatment

Type

General Note

Description/Instruction

- Medical Follow up
 Spiritual Follow up

Save Cancel

Follow up



Follow up



Anne Adam

03/12/77 (37 years)

Female

678

Medical



Resolve

General Note

Lorem ipsum dolor sit amet, pretium mauris a. Eu fames ac eget hendrerit nec, maecenas eget ac consectetuer, nulla euismod ante nulla ridiculus sit non, magna amet porta eget et pretium.

Ed Behling
April 10, 2016



Cade Brown

03/12/78 (36 years)

Male

468

Spiritual



Resolve

General Note

Lorem ipsum dolor sit amet, pretium mauris a. Eu fames ac eget hendrerit nec, maecenas eget ac consectetuer, nulla euismod ante nulla ridiculus sit non, magna amet porta eget et pretium.

Ed Behling
April 10, 2016

Business Rules:

- List in alphabetical order
- Include treatment that was flagged
- If multiple treatments are flagged repeat individual with unique treatment
- Filter on Follow up types of medical and spiritual
- Select Resolve. Enter in note. Remove flag from treatment. Remove from Follow up listing.

Resolve Follow Up

- Type is Treatment Type
- Save: Saves as a new treatment, removes flag from original treatment, remove from follow up listing
- Cancel: Remains in follow up listing

Resolve Follow Up

Type

General Note

Description/Instruction

Save Cancel

Search

Q
+
-
Print
Refresh

Search on Patient ID, Name or DOB

	Anne Adam 03/12/77 (37 years) Female	678	
	Cade Brown 03/12/78 (36 years) Male	468	
	Rene Crown 03/12/77 (37 years) Female	234	
	Sam Dunn 03/12/77 (37 years) Male	780	
	Zan Edwards 03/12/77 (37 years) Male	643	

Business Rules:

- Search on Patient ID, Name & DOB
- Name search is phoenic field
- Return next of kin, too if searching on patient ID

Print



Patient List

Patient ID, Name, Birthdate and Notes



Full Patient History with Meds

Patient ID, Name, Visit History and Medications



Blank New Patient Form

Blank New Patient Form



Patients per Doctor

List of patients by doctor for trip



Admin: Main Program - Settings

Settings

Users Locations Diagnosis Treatments Prescriptions

Username Password Role User Add

anne@gmail.com X
Field User
Last logged in: 02/02/2016

cade@gmail.com X
Administrator
Last logged in: 02/02/2016

sam@gmail.com X
Field User
Last logged in: 02/02/2016

Settings

Users Locations Diagnosis Treatments Prescriptions

Location Name Location Code Add

Dangriga - HC X

Hope Creek - HC X

Light of the Valley - LOV X

Settings

Users Locations Diagnosis Treatments Prescriptions

Category Code Medication Name and Dose Add

Pain

PA1 - Acetaminophen (Tylenol) 325 mg X

PA2 - Acetaminophen (Tylenol) 500 X

PA5 - Acetaminophen Elixir (Childrens) 160mg/5ml X

PA6 - Acetaminophen (Tylenol PM) 500mg/25mg X

Settings

Users Locations Diagnosis Treatments Prescriptions

Category Code Name Add

Respiratory

R01 - Upper Respiratory Infection X

R02 - Nasal Congestion X

R03 - Sinusitis X

R04 - Pharyngitis X

Settings

Users Locations Diagnosis Treatments Prescriptions

Name Add

General Notes X

Nebulizer Treatments X

Injection X

Pap Smear X

Business Rules:

Users

- Roles: Admin and User
- Admin: Access to everything
- User: Access to search, patients, print, flag and finish trip

Treatments

- General Notes, Nebulizer Treatments, Injection, Procedure, Biopsy, Pap Smear, IND, Chiropractic Treatment, Laceration
- Include prescriptions

Prescriptions

- Medication field include Medication Name and Dose

Notes

- Prescriptions per trip will be managed through maintaining the prescription list in settings

Questions

- Any changes to current reports
- New report: Medications for trip
- Specific fields to show up & down indicator
- Does Chronic illness need to be a new field
- Is the description field enough for Pap?
- What is referral used for?
- Do we need to change the Church's field to a dropdown?

Version 2

- Identify duplicate people and give ability to merge
- Attached scanned documents
- Barcodes for pharmacy inventory
- Pharmacy labels

Technical Details

Server

- CouchDB for database
- Node.js application language
- Linux
- Nginx

Client

- Node.js application language
- Electron
- SQLLight + PouchDB

Technical Details

Reporting

- To be decided

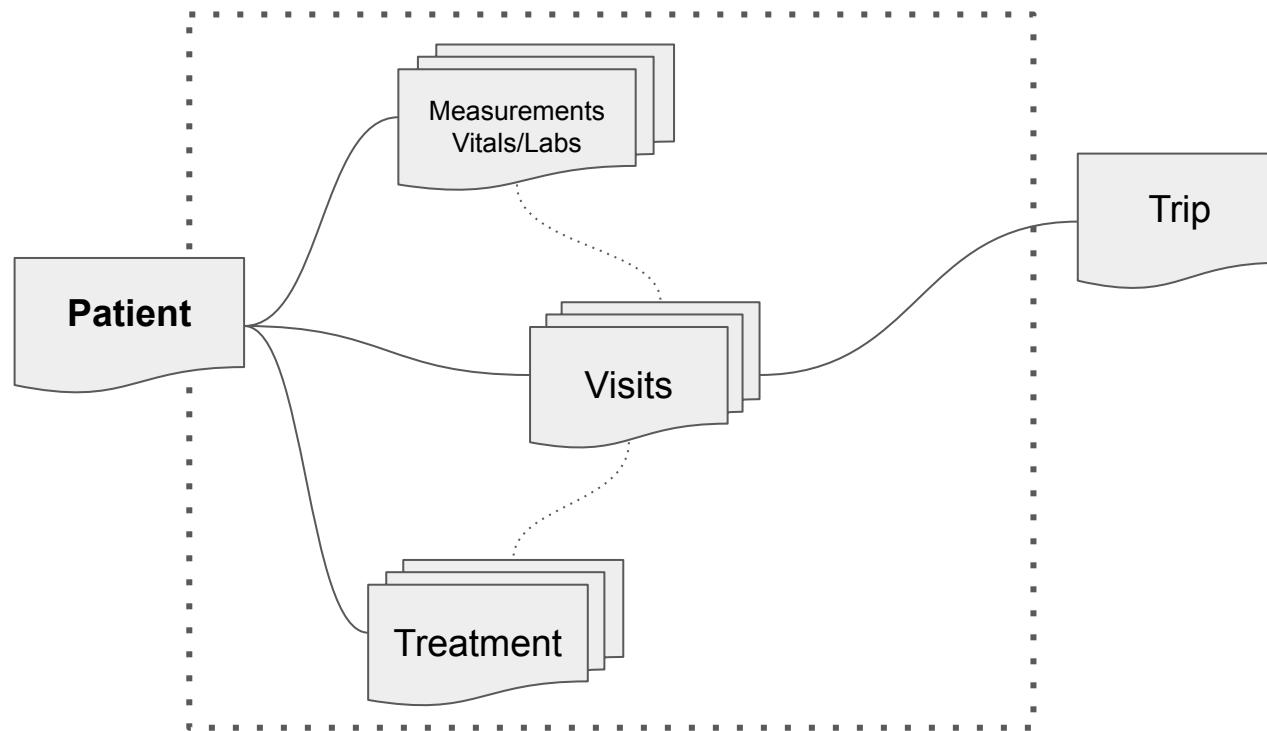
Hosting

- Digital Ocean (dev)
- Any Linux host

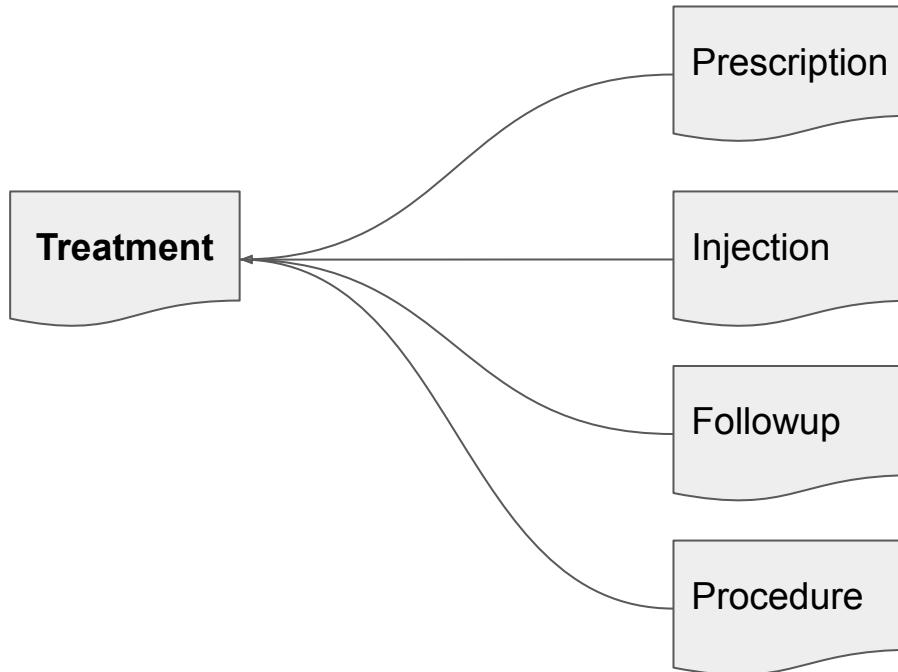
Source control

- GitHub
- Organization MissionMedical.github.io

Information Architecture



Information Architecture



Next Steps

- Follow up: April 10, 2016
- Darci and Jamey meet with technical team to walk through designs and estimate how long programming will take
- Schedule mock session
- Mock session
- Beta trip with backup plan
- Complete Launch