This is the homepage for Phase 3: HiFi Prototypes. If you hover over 'More,' it will give you a drop down menu for all 3 of the workflows (Medication Administration (David), Clinical Assessment and Documentation (Kevin), Patient Admissions (Tasfin), Data-types and Database for all three (Oladayo)). The Lead and Front-End Developer is David Liu, the database developer is Oladayo Olatubosun, and the user-experience developers are Tasfin Noisik, and Kevin Anrud.

WEBSITE/URL: Home | SUNY Downstate_EHR (davidliu203.wixsite.com)







Front-End Developer: David Liu

Database developer: Oladayo Olatubosun,

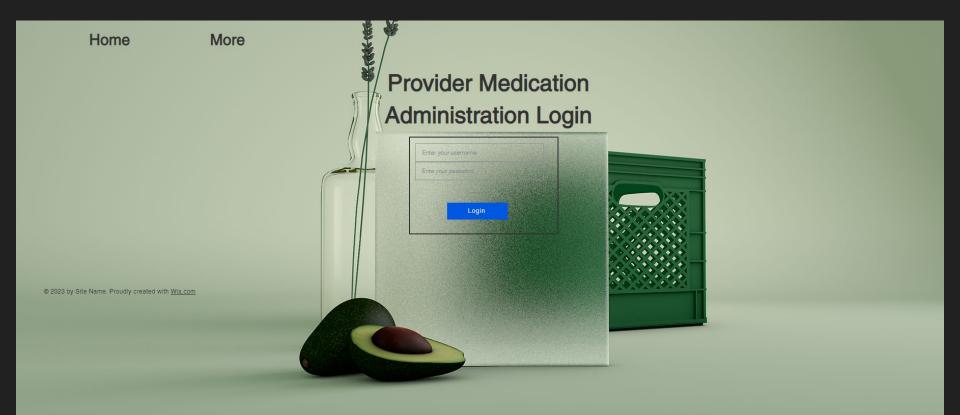
User-experience developers: Tasfin Noisik, Kevin Anrud

HIGH-FIDELITY PROTOTYPES

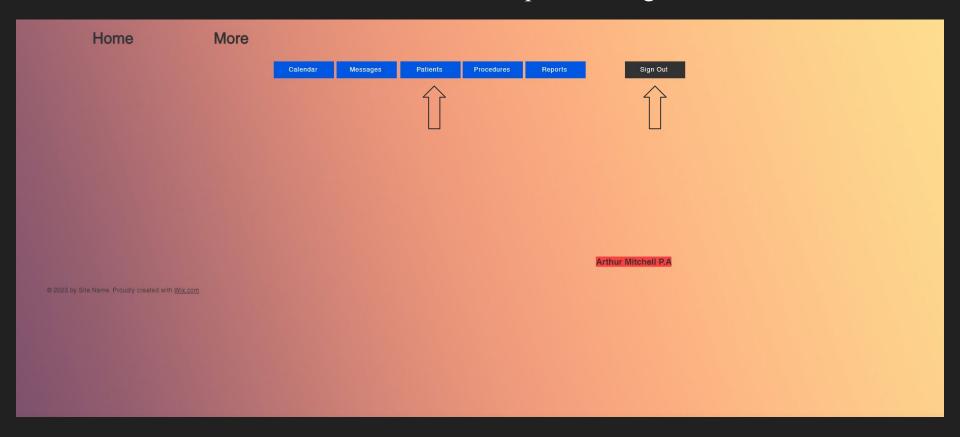
OF CLINICAL WORKFLOWS

Contact

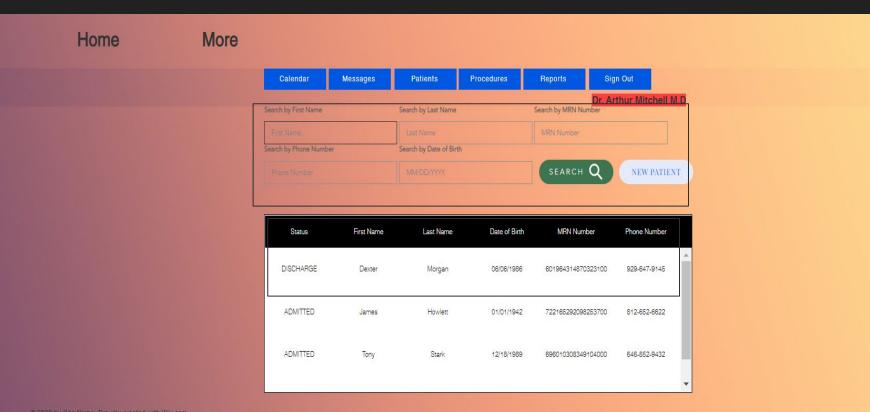
This is the 'Login Page,' for the first workflow for Provider Medication Administration. The username is 'Provider,' and password is 'Provider.' Press login after inputting the correct information.



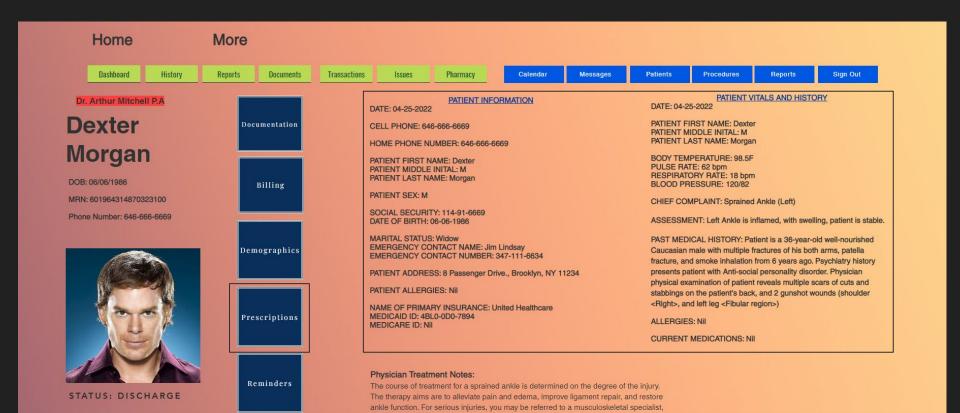
This is the 'Provider's Homepage,' by clicking on 'Patients,' the provider will be able to access all of his current patients in the EHR. By pressing 'Sign Out,' you will be directed back to the Medication Administration provider login.



Provider can look at which patient are admitted, transferred, or discharged. The Provider can search for the patient by first name, last name, mrn number, phone number, and date of birth. Provider enters the discharged patient's first name 'Dexter' and last name 'Morgan.' And presses 'Search.'



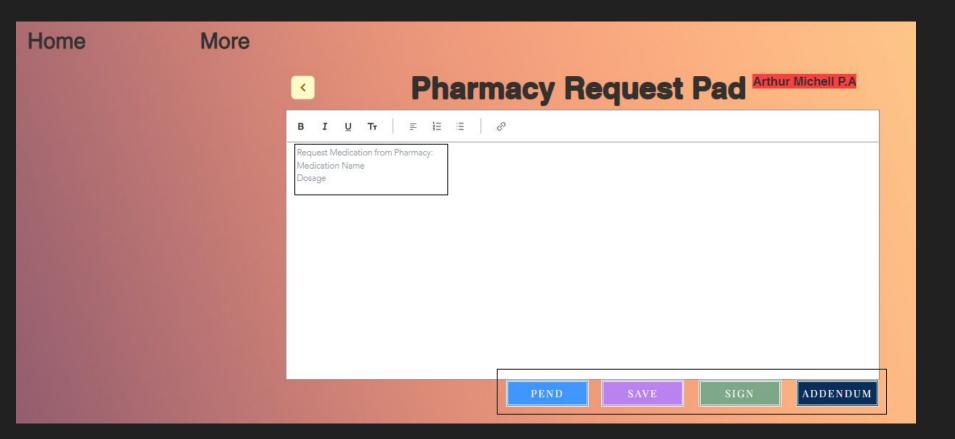
The Provider is now inside the patient's profile. Here you can see the pertinent patient information, patient vitals and history, and physician treatment notes.



As you can see on the previous slide the Provider can request medication from the pharmacy clicking on the 'Pharmacy' tab which is green, next to issues. The Provider can then search by medication id, company, or medication name. But an easier way of doing it in which the Provider know what medications the patient need, they can use a

'Pharmacy Request Pad'. Home More Arthur Mitchell P. **Pharmacy Request** Medication Name Request Pa Search INDUSTRIA CHEMICA PRODOTTI FRANCIS CHLOROTHIAZIDE (BULK) -456 HYDROCHLOROTHIAZIDE FEED MANUF PLANTS AND CONTROL 457 ALLIED MILLS, INC. LABORATORIES WAYNE FEEDS 458 RT VANDERBILT CO INC. VANCIDE ZP AND VANCIDE ZP DISPERSION 459 RT VANDERBILT CO INC VANCIDE BL 460 RT VANDERBILT CO INC VANCIDE BN 461 RT VANDERBILT CO INC METHYL TUADS 462 PHARMACIA LABORATORIES INC RHEOMACRODEX 463 SB PENICK AND CO BENZOMETHAMINE CHLORIDE 464 ELANCO PRODS DIV ELI LILLY AND CO HYGROMIX - CHICKENS

The Provider can now request medication from the pharmacy via request pad, almost just like a prescription pad. But it has to be in the form of medication name, and dosage. There are buttons on the bottom for 'Pending,' 'Save,' 'Sign,' 'Addendum,'.



Continuation of Previous Slide #6, if the Provider has all the right medications, and the right dosage. The Provider can at the same time double check the right medications, dosage, patient, time to take, patient education, and document in the EHR by clicking on the 'Prescriptions' Box.



STATUS: DISCHARGE





Reminders

Labs/Vitals

SOCIAL SECURITY: 114-91-6669 DATE OF BIRTH: 06-06-1986

MARITAL STATUS: Widow
EMERGENCY CONTACT NAME: Jim Lindsay
EMERGENCY CONTACT NUMBER: 347-111-6634

PATIENT ADDRESS: 8 Passenger Drive., Brooklyn, NY 11234

PATIENT ALLERGIES: Nil

NAME OF PRIMARY INSURANCE: United Healthcare MEDICAID ID: 4BL0-0D0-7894 MEDICARE ID: NII ASSESSMENT: Left Ankle is inflamed, with swelling, patient is stable.

PAST MEDICAL HISTORY: Patient is a 36-year-old well-nourished Caucasian male with multiple fractures of his both arms, patella fracture, and smoke inhalation from 6 years ago. Psychiatry history presents patient with Anti-social personality disorder. Physician physical examination of patient reveals multiple scars of cuts and stabbings on the patient's back, and 2 gunshot wounds (shoulder <Right>, and left leg <Ribular region>)

ALLERGIES: NIL

CURRENT MEDICATIONS: Nil

Physician Treatment Notes:

The course of treatment for a sprained ankle is determined on the degree of the injury. The therapy aims are to alleviate pain and edema, improve ligament repair, and restore ankle function. For serious injuries, you may be referred to a musculoskeletal specialist, such as an orthopedic surgeon or a physical medicine and rehabilitation physician.

For the first two or three days following an ankle injury, follow the R.I.C.E. method: Rest. Avoid activities that cause discomfort, agony, or edema.

Ice. Apply an ice pack or ice slush bath for 15 to 20 minutes immediately and repeat every two to three hours while awake. Consult your doctor before using ice if you have vascular disease, diabetes, or impaired feeling.

Compression. Compress the ankle with an elastic bandage until the swelling subsides. Avoid obstructing circulation by wrapping too tightly. Begin wrapping at the end furthest from your heart and work your way in.

Elevation. Elevate your ankle above the level of your heart to decrease swelling, especially at night. Gravity aids in swelling reduction by emptying extra fluid. Medications

In most circumstances, over-the-counter pain medications such as ibuprofen (Advil, Motrin IB, others), naproxen sodium (Aleve, others), or acetaminophen (Tylenol, others) are sufficient to alleviate the discomfort associated with a sprained ankle.

The Provider can at the same time double check the right medications, dosage, patient, time to take, patient education, and document in the EHR by clicking on the 'Prescriptions' Box. The Provider can now confirm the right medications, dosage, and what time's the patient will take the medication with this medication sheet. The Provider can also confirm the right patient by scanning the patient's wristband id, and the barcode on top of the medication document. After listing the medications, dosage, and times. The next few pages gives general safety information about the medications to the patient (patient education).

Daily Medicine Schedule

you close the form; you cannot save it.



Use this form to remind you when to take your medicines. Write the medicine's name in the column on the left, and check the box for the time (or times) you take it each day. Post this sheet where you can see it, such as near your medicine cabinet or wherever you store your medicines. Bring it to your doctor appointments. And take it with you

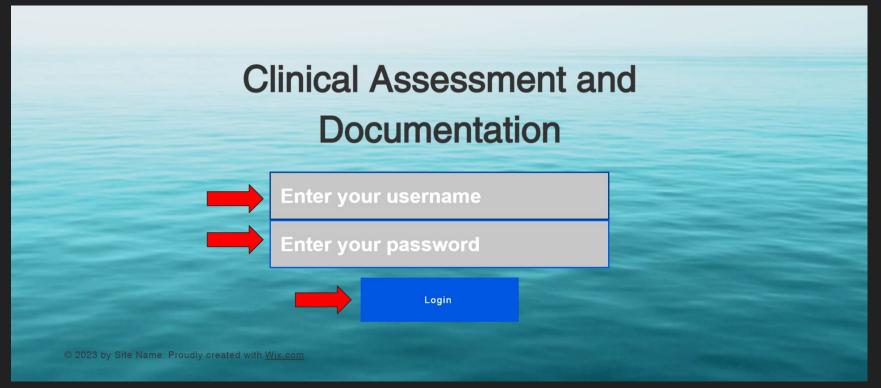
Name of Medicine	Before breakfast What time?	With breakfast	Before Lunch What time?	With Lunch	Before dinner What time?	With dinner	Before bedtime What time?	At bedtime	During the nighttime What time?
Sertraline - 50 mg						V			
Fluoxetine - 20 mg						V			
Baby Aspirin - 81mg		V				V			
Sildenafil - 5 mg									



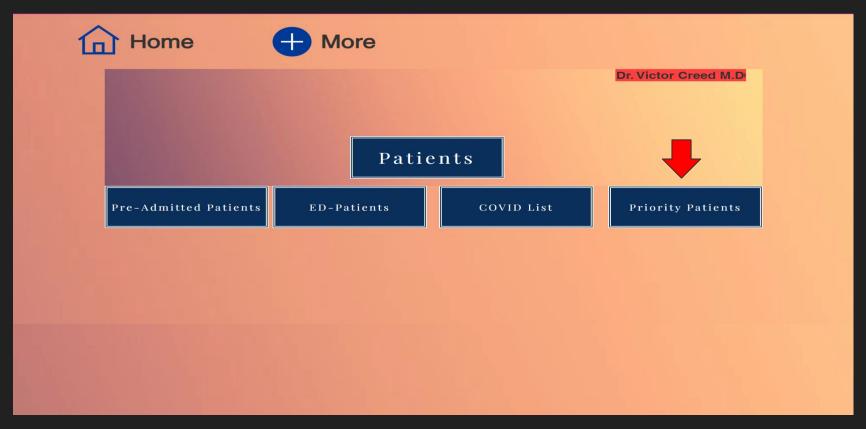
- Sertraline is a medication that is used to treat depression, panic attacks, obsessive compulsive disorder, post-traumatic stress disorder, social anxiety disorder (social phobia), and a severe type of premenstrual syndrome (premenstrual dysphoric disorder).
 - o Zoloft is a brand name.
 - Selective Serotonin Reuptake Inhibitors are antidepressants (SSRIs) Availability: A prescription is required.
 - o Pregnancy: Before usage, see a doctor.

 - o Consult a doctor before usage if you are lactating.
 - o Limit your alcohol consumption while taking this medicine. o Driving: Drowsiness or dizziness may occur. Use extreme care.
- Sertraline Precautions
 - Any suicidal ideas should be reported to your doctor right once.
 - o Discuss the risks vs the advantages of using during pregnancy. o If you are breast-feeding, consult your doctor.
 - o It may cause drowsiness or dizziness. Use cautious when driving.
 - o Avoid alcohol and other sleep-inducing substances.
 - O Before you stop taking it, your doctor may need to cut the dose.
- Fluoxetine is prescribed to treat depression, panic attacks, obsessive compulsive disorder, bulimia, and a severe type of premenstrual syndrome (premenstrual dysphoric disorder).
 - o Prozac, Sarafem, Prozac Weekly, Selfemra, Rapiflux are examples of brand names. o Selective Serotonin Reuptake Inhibitors are antidepressants (SSRIs)
 - Availability: A prescription is required.

This is the 'Login Page,' for the <u>Clinical Assessment and Documentation</u>. The username and password are 'Provider,' and once entered the clinician can then enter this section of the EHR.



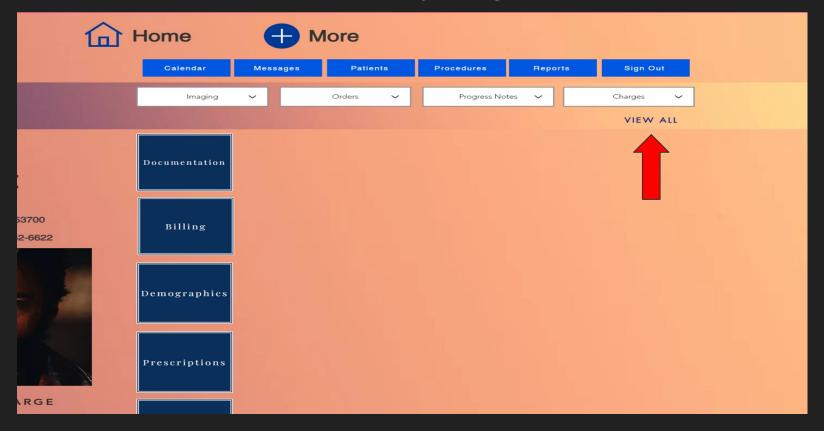
Once the clinician has entered, they will then come across a screen listing the type of patients they wish to view. For this demonstration we will search 'Priority Patients' to demonstrate.



Once 'Priority Patients' has been selected it gives us a list. Specifically, it provides the clinician with a quick overview of pertinent information they will need such as the patient's name, location, MRN, diagnosis, and attending MD. We can also see that this clinician has a new order/referral that has been placed that requires his/her attention and to which they click the arrow icon to acknowledge.



Once the clinician enters the patient's chart there are a host of decisions to be made. For simplicity purposes for this workflow the clinician can first do a quick comprehensive overview of the patient by hitting the 'View All' icon



Once the clinician has completed his initial chart review they can then view other important information such as demographics, labs, and for this workflow the patient's previous medications by clicking 'Prescriptions'



This is an example of a prescription and medication sheet for our selected patient which importantly gives the medications name, dosage, and what time of day it was given by nursing

Daily Medicine Schedule

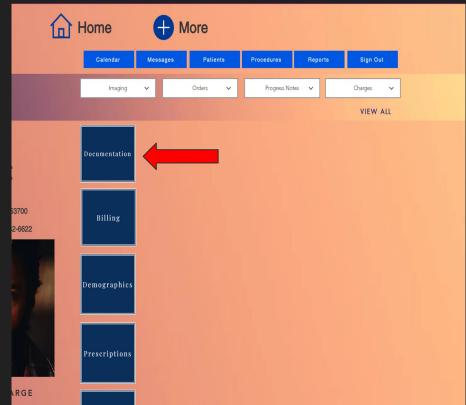


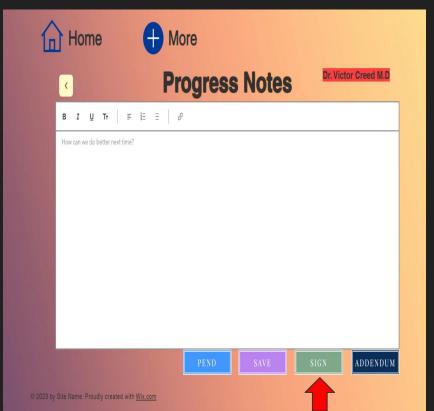
You can complete the highlighted fields on this form online and then print the form for easy reference. Only text that is visible on the form is printed; scrolled text will not print. Any text you enter into these fields will be cleared when you close the form; you cannot save it.

Use this form to remind you when to take your medicines. Write the medicine's name in the column on the left, and check the box for the time (or times) you take it each day. Post this sheet where u can see it, such as near your medicine cabinet or wherever you store your medicines. Bring it to your doctor when you travel.

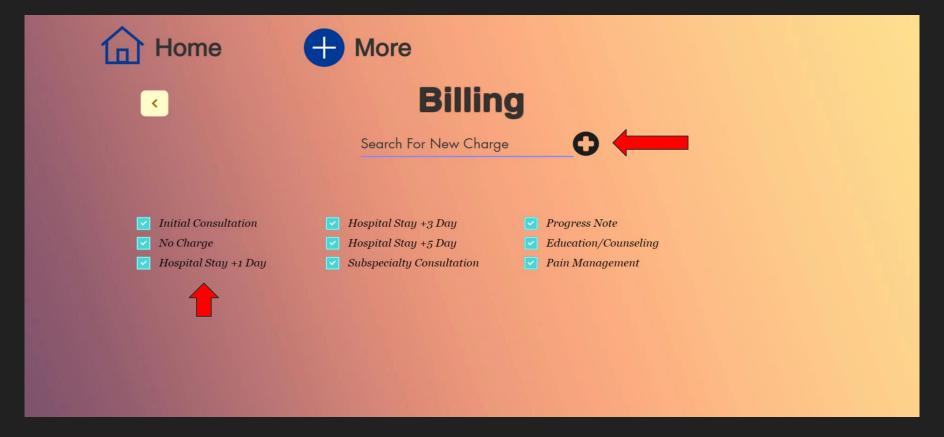
Name of Medicine	Before breakfast What time?	With breakfast	Before Lunch What time?	With Lunch	Before dinner What time?	With dinner	Before bedtime What time?	At bedtime	During the nighttime What time?
Sertraline - 50 mg						~			
Fluoxetine - 20 mg						~			
Baby Aspirin - 81mg		~				~			

After the clinician has conducted a physical exam on the patient they would then need to provide documentation for this exam. This is done by selecting the patient from the providers patient list and selecting 'Documentation'. Once selected the clinician then writes their note and can either pend, save, sign, or addendum their note. Once the note is 'signed' the clinician can then bill for services rendered.

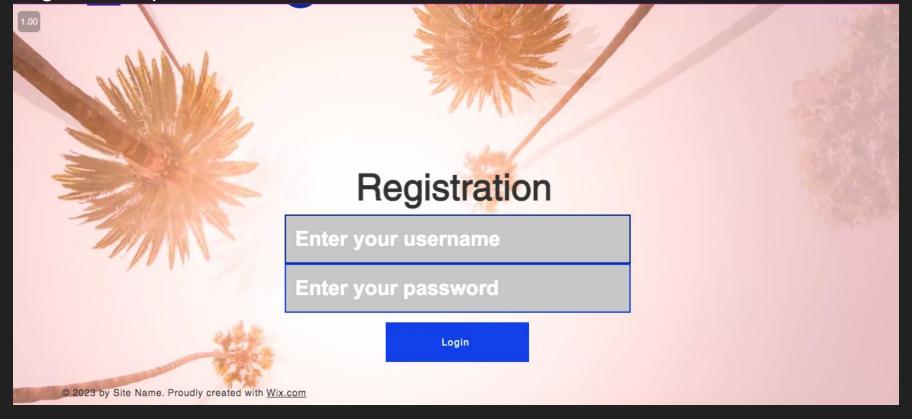




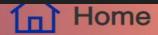
To place charges for the service rendered the clinician has a few options: 1) select a predetermined charge based on the clinician's preferences or 2) **search** for the **appropriate charge** in the search box which can be added by hitting the **+** icon.



This is the initial login screen for any kind of provider. From here you start the registration process.



This is where basic information of the patient is added.



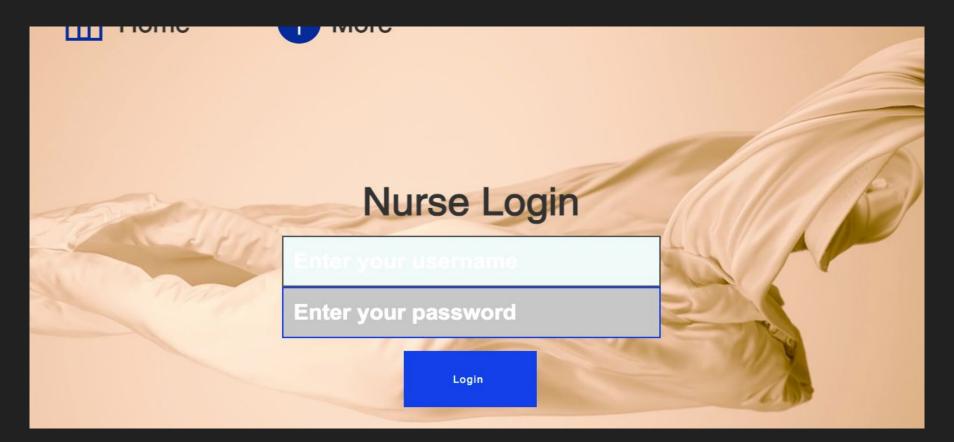


New Patient Registration Page

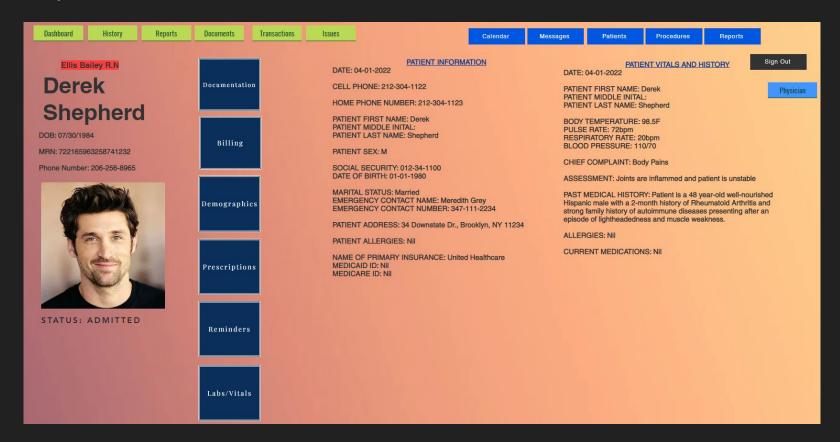
DATE					
CELL PHONE NUMBER	HOME PHONE NUMBER				
PATIENT FIRST NAME	PATIENT MIDDLE NAME	PATIENT LAST NAME			
SOCIAL SECURITY NUMBER	DATE OF BIRTH	PATIENT SEX			
PATIENT MARITAL STATUS	EMERGENCY CONTACT NAME	EMERGENCY CONTACT NUMBER			
PATIENT SEX	PATIENT ADDRESS				
NAME OF PRIMARY INSURANCE	ALLERGIES TO MEDICATION IF ANY				
MEDICAID ID					
MEDICARE ID		Add New Periods			

Add New Patient

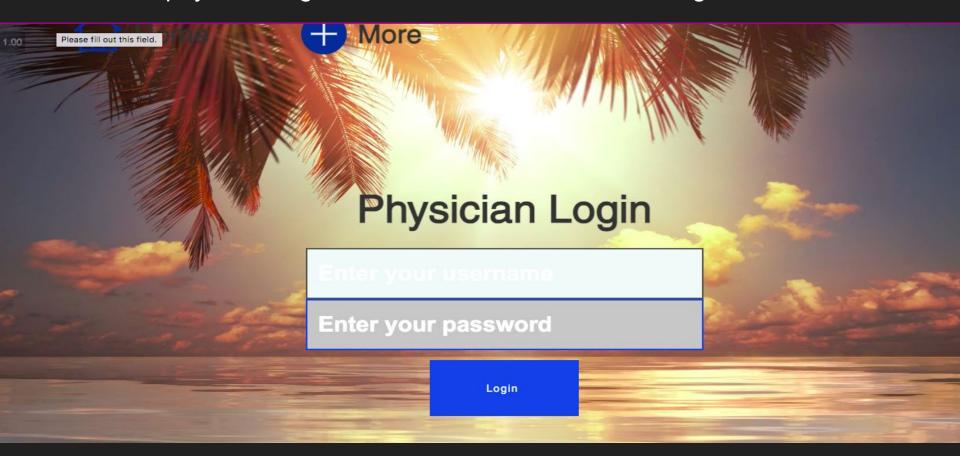
Then the patient is taken to a room where the nurse begins the process of admission. This is her initial screen.



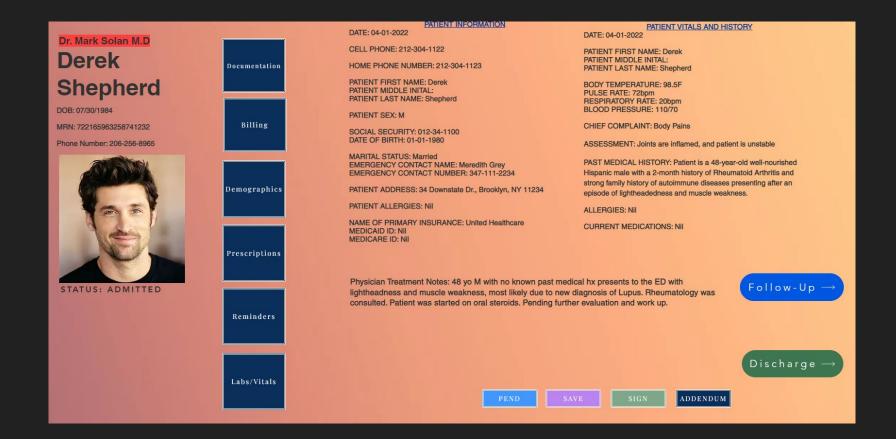
The nurse uses this screen to verify the patient, add vitals, chief complaint, past medical/surgical hx and other necessary medical information.



This is the physician login screen, similar to the nurse's login screen.



However, physicians have more options on their initial screen to create notes, put in orders, and formulate a plan.



This is what a physician sees when he/she is trying to write a note.

