



**WIRELESS ACCESS
FOR HEALTH**

WAH FOR HOSPITALS

GROUP 4 - PSEUDOERS

SYSTEMS ANALYSIS & DETAILED DESIGN

SSYADD1 - SS231

Mr. Jose Eugenio L. Quesada



Meet Pseudoers



**Jhon Lloyd
R. Nicolas**

Scrum Master

Lead Developer



**Elijah Josh
R. Quibin**

Member

Backend Developer



**John Kenneth
L. Jajurie**

Member

Frontend Developer



**Mariyah Vanna
Monique C. Chavez**

Member

Project Manager



PBL Adviser

**Sir Jose Eugenio
Quesada**

Table of Contents

INTRODUCTION	05 - 07
PM DOCS CHAPTER 2	08 - 14
STAGE 1 - EMPATHIZE	16 - 36
STAGE 2 - DEFINE	32 - 35
STAGE 3 - IDEATE	36 - 40
STAGE 4 - PROTOTYPE	41 - 51
STAGE 5 - TESTING	52 - 53
DATAFLOW DIAGRAMS	54 - 62
OPENPROJECT OUTPUT	63 - 64
INDIVIDUAL CONTRIBUTIONS	65 - 68



WIRELESS ACCESS FOR HEALTH (WAH)



Scrum Master
Lloyd



A Non-profit NGO



Focuses on public, primary, and rural healthcare facilities



Largest digital health public-private partnership in the Philippines



Collaborates with Local Government Units (LGUs)



Started in 2009 (foreign-funded e-health project in 4 Tarlac municipalities)

Legalized in 2013 registered with:



SEC (Securities and Exchange Commission)



BIR(Bureau of Internal Revenue)



DTI (Department of Trade and Industry)

Certifications:



DOH (Department of Health)



PhilHealth



NPC(National Privacy Commission)



Scrum Master
Lloyd

vision

To be a trailblazing digital health organization working with partners to create innovative technology and service solutions for healthier and happier communities.

To empower partner LGUs and health facilities through effective use of digital health technology and generation and sharing of quality electronic data for universal usability towards self-reliance.

mission



Scrum Master

Lloyd

WHAT IS WAH4H?

– IS A PROPOSED MODULAR, CLOUD-BASED HOSPITAL INFORMATION SYSTEM (HIS) DEVELOPED FOR SMALL TO MID-SIZED HOSPITALS IN THE PHILIPPINES, PARTICULARLY THOSE MANAGED BY LOCAL GOVERNMENT UNITS (LGUS).

- It will be developed in partnership with [Wireless Access for Health \(WAH\)](#) and will be piloted in [Cuyapo Infirmary](#).
- The system will digitize critical workflows like patient registration, [billing](#), [PhilHealth e-claims](#), and Dashboards
- WAH4H will be built using [Frappe Framework](#), [React](#), and [Supabase](#), with a focus on usability, affordability, and government compliance.





Scrum Master
Lloyd

PM CHAP 2 DOCS

Charter



Scrum Master

Lloyd



WAH for Hospitals (WAH4Hospital)

Hospital Information System for Philippine municipal and community hospitals

Key Highlights:

Digitizes hospital operations from patient registration to PhilHealth e-claims

Modular, scalable platform for low-resource settings

Supports inpatient care, billing, monitoring, and EHR

Timeline: August 2025 - March 2026

Core Modules - Aug. to Nov. 2025

Secondary Modules - Dec. 2025

UAT & Deployment - Jan. to Mar. 2026

Rough Estimates and Budget: Planned Funding Sources (TBD)

Wireless Access for Health (WAH)

Partner LGUs or Municipal Health Offices

PhilHealth Support Programs (if applicable)

Donor or academic grants (optional, subject to approval)

Objectives



Member
Eli

Target: Successful implementation at Cuyapo Infirmary

1

Digitize Operations (Operational)

- Digitize existing paper-based workflows at Cuyapo Infirmary (patient intake, record-keeping, billing, and data reporting)
- Reduce administrative burdens and minimize clerical errors

2

User-Friendly System (Technical)

- Develop an easy-to-use Hospital Information System with simplified UI/UX design
- Tailored for non-technical users, particularly staff with limited IT experience

3

Regulatory Compliance (Compliance)

- Ensure system compliance with Universal Health Care (UHC) Law
- Support and automate PhilHealth and Department of Health (DoH) data/reporting standards and submissions



Scope



Member
lyah

Core Modules (Essential)

- ◆ Patient Management system
- ◆ Billing and financial management
- ◆ PhilHealth e-Claims processing and submission
- ◆ System integration and documentation
- ◆ User Access management and security controls
- ◆ Early testing and validation

Secondary Modules (If Feasible)

- ◆ Laboratory management system
- ◆ Pharmacy operations
- ◆ Comprehensive reporting system





Scope



Member
lyah

Additional Deliverables

- ◆ Integration with government-required reporting formats (PhilHealth XML, DOH/FHSIS)
- ◆ Simplified UI/UX designed for low-tech hospital staff
- ◆ Pilot deployment at Cuyapo Infirmary
- ◆ ERP integration capabilities
- ◆ Electronic Health Records (EHR) functionality
- ◆ Secure, low-maintenance system architecture

Out of Scope

- ◆ Mobile applications for doctors
- ◆ Full outpatient module (covered by WAH4Clinics)
- ◆ Clinical decision support features
- ◆ SMS alerts and patient feedback systems
- ◆ Health information exchanges across multiple facilities
- ◆ WAH4Patients portal development (handled by separate team)
- ◆ WAH4Interoperability platform (handled by separate team)



Stakeholder Analysis



Member
Ken

Name	Department/Company	Position	Objectives	Influence	Project Contribution	Resistance
Pseudoers	Asia Pacific College (APC)	Student Development Team	<ul style="list-style-type: none">- Develop a functional, user-friendly WAH4Hospital system- Align with APC academic requirements	High	<ul style="list-style-type: none">- System design and development- Documentation and prototyping- Testing and iteration	<ul style="list-style-type: none">- Time constraints due to academic deadlines- Limited real-world healthcare experience
Wireless Access for Health (WAH)	Wireless Access for Health	Client/Implementation Partner	<ul style="list-style-type: none">- Deploy a cost-effective, scalable HIS for LGU hospitals- Ensure DOH/PhilHealth compliance- Support nationwide healthcare digital transformation	Medium	<ul style="list-style-type: none">- Provides project scope and requirements- Shares industry expertise- Facilitates hospital partnerships	<ul style="list-style-type: none">- Budget limitations for system customization- Need for rapid deployment in multiple sites
Cuyapo Infirmary	Cuyapo Infirmary	End User/Hospital Client	<ul style="list-style-type: none">- Adopt a simple, intuitive system to replace manual processes- Improve billing accuracy and PhilHealth claims processing- Enhance operational efficiency	Low	<ul style="list-style-type: none">- Provides workflow insights- Participates in UAT and feedback- Pilots the system post-deployment	<ul style="list-style-type: none">- Staff resistance to change from paper-based systems- Limited IT infrastructure for initial setup

Stakeholder Analysis



Member
Ken

Name	Department/ Company	Position	Objectives	Influence	Project Contribution	Resistance
WAH4Interoperability	Asia Pacific College (APC)	Student Development Team	To serve as a platform for provinces and cities to implement health system integration and interoperability as required by Section 19 of RA 11223.	Medium	<ul style="list-style-type: none"> - System design and development - Documentation and prototyping - Testing and iteration 	<ul style="list-style-type: none"> - Time constraints due to academic deadlines - Limited real-world healthcare experience
WAH4Patients	Asia Pacific College (APC)	Student Development Team	To improve patient health-seeking behavior and encourage feedback via modules for health alerts, reminders, and digital feedback on clinic services.	Medium	<ul style="list-style-type: none"> - System design and development - Documentation and prototyping - Testing and iteration 	<ul style="list-style-type: none"> - Time constraints due to academic deadlines - Limited real-world healthcare experience



Member
Eli

DESIGN THINKING



**WAH for
Hospitals**



Member
Eli

Stage 1 - Empathize

Client and Customer Interview



Member

Eli



Wireless Access
for Health (WAH)
Headquarters



La Paz Medicare
and Community
Hospital



Cuyapo
Infirmary
Meeting Room



Empathy Survey for Wireless Access for Health – WAH4H (WAH for Hospitals) Project

This survey is part of our Design Thinking process for the **WAH4H (WAH for Hospitals) Project**. While we already conducted empathy work during the recent **educational trip**, which gave us valuable firsthand insights into the challenges and realities faced by healthcare workers and patients, this form serves as an important **formality** to document those perspectives in a more structured way. It is also a requirement for this term to ensure that our research process is systematic, recorded, and academically grounded. By gathering your input here, we can better capture the nuances of user experiences that may not have been fully documented during the trip.

At the same time, this survey aims to **gather more detailed information** about user needs, goals, frustrations, and day-to-day experiences in small healthcare centers and infirmaries. These responses will guide us in building accurate **User Personas**, which are essential tools in Design Thinking for empathizing with stakeholders and creating solutions that truly fit their context. All information collected will remain **confidential** and used only for research and project design purposes. Your participation will directly contribute to shaping a cost-effective, user-friendly hospital information system that supports healthcare delivery in the Philippines.

Google Forms:
for WAH



Empathy Survey for Cuyapo Infirmary – WAH4H (WAH for Hospitals) Project

This survey is part of our Design Thinking process for the **WAH4H (WAH for Hospitals) Project**. While we already conducted empathy work during the recent **educational trip**, which gave us valuable firsthand insights into the challenges and realities faced by healthcare workers and patients, this form serves as an important **formality** to document those perspectives in a more structured way. It is also a requirement for this term to ensure that our research process is systematic, recorded, and academically grounded. By gathering your input here, we can better capture the nuances of user experiences that may not have been fully documented during the trip.

At the same time, this survey aims to **gather more detailed information** about user needs, goals, frustrations, and day-to-day experiences in small healthcare centers and infirmaries. These responses will guide us in building accurate **User Personas**, which are essential tools in Design Thinking for empathizing with stakeholders and creating solutions that truly fit their context. All information collected will remain **confidential** and used only for research and project design purposes. Your participation will directly contribute to shaping a cost-effective, user-friendly hospital information system that supports healthcare delivery in the Philippines.

Google Forms:
for Cuyapo Infirmary



COMLOGIK - HIMS



Member

Eli

Dashboard Registration/Accommodation Form

Patient's Information Other Information Vital Signs / Other Info / Px Diet HMO/Company Patient(s) w/ Incomplete LOA No.

ALLERGIC REACTION

Old Patient Confidential
 Indigent Reg. Complete

Case No. Auto Generated

Admission No. 19001649 Monthly Adm. #

Patient Detected with Pending Account

PENDING ACCOUNTS DETECTED!!!

Name: BRLNGUTR, MQRLONC TRTYT

Date Admitted: 10/16/2018 04:00 AM

Date Discharged: 11/11/2018 07:06 AM

Date Issued: 08/31/2018

Balance:

Hospital Bill : 8,221.45

Prof. Fee : 100.00

Admit Patient Deny Admission

New Edit Save Preview Request Charges Refresh Close

Select Hide

Patient List

Patient Type: IPD OPD All Top: 25 ER Patients Only

Last Name First Name Middle Name Case no.

Type Here

- May Go Home - Suspended Account

Last Name	First Name	Middle Name	Address
A	A	A	123 APLAYA ...
AA	AA	AA	street SAN A...
AAA	AAA	AAA	CITY OF DIG...
AAAA	AAAA	AAAA	CITY OF DIG...
AAAAA	AAAAA	AAAAA	CITY OF DIG...
B	B	B	CITY OF DIG...
BB	BB	BB	CITY OF DIG...
BBB	BBB	BBB	CITY OF DIG...
BBBB	BBBB	BBBB	CITY OF DIG...
BBBBB	BBBBB	BBBBB	CITY OF DIG...
BLBO	BB GWRL		
BLDXN	QUQQN CNN	DYLT CRUZ	
BLDXN	FCRCH GQM...	DYLT VKCT...	PNP VILLAGE ...
BLDXN	GQMMC	D	
BLGTXSLN	QSUCRO		
BLLLONT	SQGLJNDW...	RTMOS	ABELLA SUB...
BLLLONT	CCSH		
BLLLONT	DCYLWNDC	LTRYDY	CITY OF DIG...
BLLLONT	NINCGOLK...	POCTRC	CITY OF DIG...



Member

Eli

Actual Persona



Benditha D. Babac

Administrative Officer - Cuyapo Infirmary

QUOTE

"Having a digital platform that reduces manual work will make our job more efficient and less stressful."

Experience

Tech Comfort Level

Daily Workflow

1. Updates and manages patient records.
2. Handles billing/insurance (PhilHealth, etc.).
3. Prepares reports and coordinates with other admin staff.

3-6 Years

5 out of 5



Goals

- Speed and efficiency in handling patient information.
- Improved accuracy and faster processing of PhilHealth claims.
- Reliable reporting to DOH and internal management

Frustrations

- Delays caused by manual processes.
- Difficulty retrieving old patient records.
- Errors in encoding that lead to inefficiencies and compliance risks.





Madel Lozano

Nurse - Cuyapo Infirmary

QUOTE

"The system should be accurate, efficient, secure, and easy to use – especially since not all of us are tech-savvy."

★ Experience

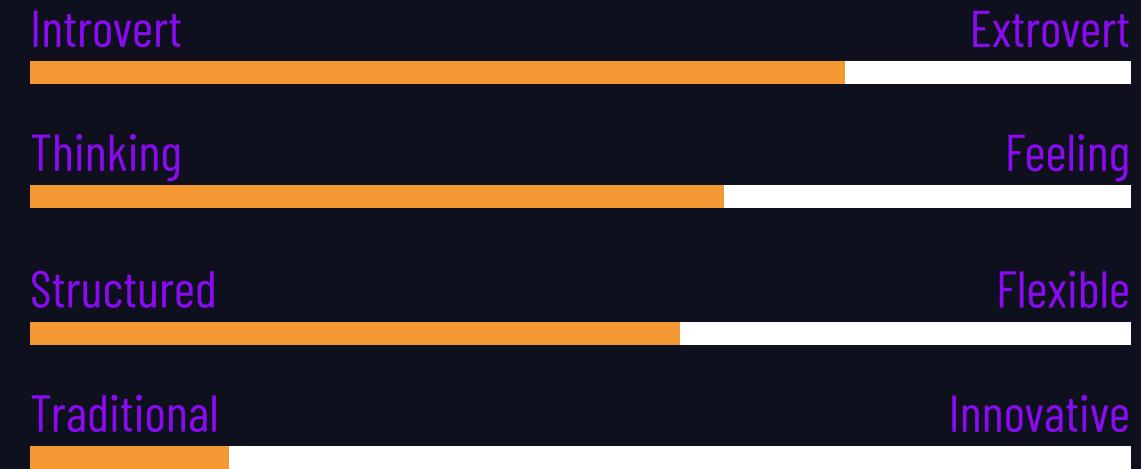
1-3 years

Gears Tech Comfort Level

3 out of 5

Sun Daily Workflow

- Registers patients and records consultations.
- Encodes medical information and vitals.
- Monitors outpatients and coordinates with records staff.



Member

Eli

Goals 🎯

- Easy-to-use system that supports fast and secure data entry.
- Accurate and efficient handling of patient records.
- A system that ensures patient privacy.
- Systematic and accessible patient record system.
- Secure handling of patient information.
- A platform that is simple enough for all staff to use.

Frustrations ☰

- Manual registration delays patient flow.
- Difficulty in retrieving records during urgent situations.
- Inconsistent processes for managing patient data.



Nicky Abuso-Balderosa

HR and Training Consultant –
Wireless Access for Health



QUOTE

"WAH4H should become the premiere HIS of choice for public hospitals in the Philippines."

Experience

Not specified (HR/Training background)

Tech Comfort Level

5 out of 5

Daily Workflow

1. Prepares trainers for system rollouts.
2. Ensures training aligns with hospital needs.

Goals

- Scalable system that is cost-effective and user-friendly.
- Better data collection for decision-making and compliance.

Frustrations

- Lack of streamlined processes.
- Difficulty in capturing valuable data from small hospitals.
- Hard-coding that prevents scalability.



Ara Severo

HR - Wireless Access for Health



QUOTE

"WAH4H will establish standardized, lifelong patient records to improve healthcare delivery."

★ **Experience**

3 years

⚙️ **Tech Comfort Level**

5 out of 5

⌚ **Daily Workflow**

1. Assists small hospitals in filing claims.
2. Provides technical support.

Goals 🎯

- Reliable, accurate, and cost-effective HIS.
- Easy-to-use interface for hospital staff.

Frustrations ✨

- Small hospitals heavily rely on manual processes.
- Many systems are difficult for staff to use.
- Overly complicated systems that discourage use.



Jerimie-Ian Garcia

Platform Innovation Partner –
Wireless Access for Health

QUOTE

"WAH4H should create a connected, data-driven health ecosystem that empowers small hospitals and patients.

 **Experience**

6 years and 3 months

 **Tech Comfort Level**

5 out of 5

 **Daily Workflow**

1. Oversees reporting and platform innovation for EMRs.

Introvert

Thinking

Structured

Traditional

Extrovert

Feeling

Flexible

Innovative



Member

Eli

Goals

- Accurate, reliable, and scalable data management.
- Systems aligned with PhilHealth and DOH requirements.

Frustrations

- Inaccurate or fragmented data.
- Poor system compatibility across hospitals.
- Poor scalability.
- Incompatibility with existing systems.



Member

Eli

Empathy Maps

Empathy Map

Benditha D. Babac



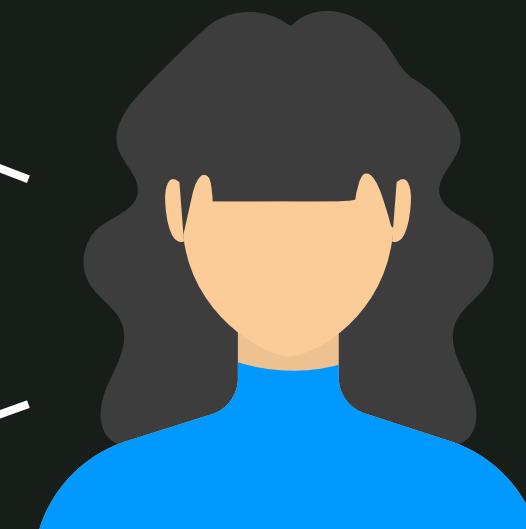
Member
Eli

What does she think and feel?

Wants speed and accuracy in managing patient records.
Feels frustrated with delays caused by manual work.
Concerned about errors in PhilHealth claims and reporting.

What does she hear?

Complaints from staff about time wasted on paperwork.
Reminders from management about compliance and deadlines.
Patients asking about claim status and billing updates.



What does she see?

Stacks of patient folders and paper records.
Long queues of patients waiting for registration and billing.
Co-workers double-checking records to avoid mistakes.

What does she say and do?

Says: "We need a system that can handle records faster."
Regularly updates patient logs and prepares reports.
Coordinates with admin staff and processes PhilHealth claim

Pain

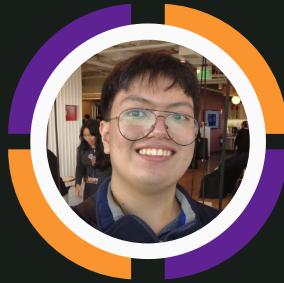
- Manual systems cause frequent errors.
- Difficulty retrieving patient records quickly.
- Overloaded with repetitive documentation.

Gain

- A digital system reduces workload and saves time.
- Improved efficiency in handling patient information.
- Less stress when reporting to DOH and PhilHealth.

Empathy Map

Madel Lozano



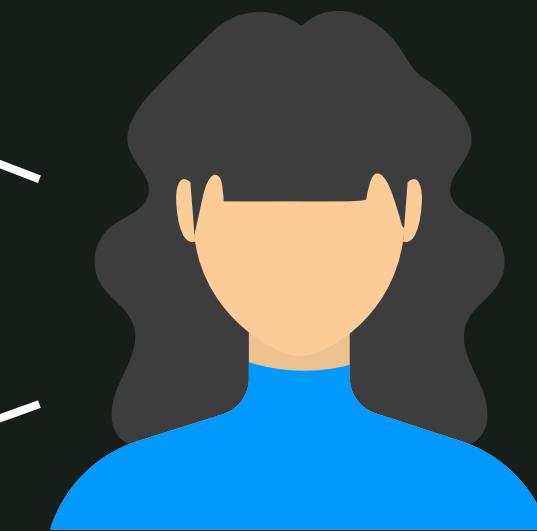
Member
Eli

What does she think and feel?

Wants accuracy and privacy in handling patient information.
Feels frustrated when manual processes delay patient care.
Concerned that not all staff are tech-savvy.

What does she hear?

Patients asking about their consultations and results.
Feedback from doctors needing quick access to patient data.
Co-workers sharing frustrations about inefficiencies.



What does she see?

Long queues for patient registration.
Records staff manually pulling out old files.
Multiple steps to document patient visits.

What does she say and do?

Says: "It should be accurate, efficient, secure, and easy to use."
Registers patients, encodes vitals, and records consultations.
Coordinates with records staff to update logs.

Pain

- Delays in registration and consultation flow.
- Hard to retrieve patient information in urgent cases.
- Manual systems make data inconsistent and slow.

Gain

- An easy-to-use, secure system accessible to all staff.
- Faster registration and consultation recording.
- Improved patient flow and continuity of care.

Empathy Map

Nicky Abuso-Balderosa



Member
Eli

What does she think and feel?

Believes training quality affects adoption success.

Concerned that if systems are too complex, hospitals won't use them.

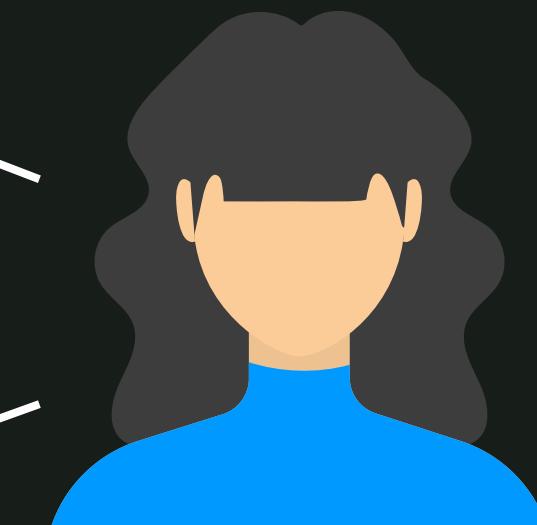
Wants a scalable, easy-to-train system.

What does she hear?

Feedback from trainers about staff struggles with technology.

Concerns from hospitals about cost and usability.

Encouragement from WAH management to push scalability.



What does she see?

Trainers preparing modules for hospital staff.

Hospitals hesitant to adopt overly complicated systems.

The need to align WAH training with the HIS features.

What does she say and do?

Says: "It must be user-friendly and scalable."

Prepares trainers for rollout.

Works on improving training materials.

Pain

- Hard-coded or rigid systems that can't adapt.
- Hospitals rejecting HIS due to complexity.
- Risk of wasted training effort.

Gain

- Hospitals adopting HIS smoothly after training.
- Trainers empowered to deliver effective rollouts.
- WAH achieving its goal of wider adoption.

Empathy Map

Ara Severo



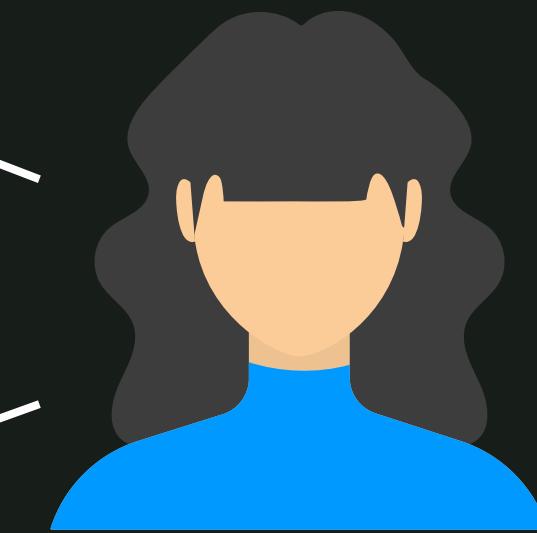
Member
Eli

What does she think and feel?

Believes small hospitals deserve accessible digital solutions.
Concerned about difficulty in claim filing without system support.
Wants a reliable, easy-to-use platform.

What does she hear?

Hospital staff complaining about slow manual processes.
Feedback from healthcare workers about errors in claim filing.
Colleagues emphasizing the need for accuracy and cost-effectiveness.



What does she see?

Small hospitals struggling with manual PhilHealth claim filing.
Staff overwhelmed by tedious reporting.
Variations in how hospitals handle processes.

What does she say and do?

Says: "It has to be reliable, accurate, and affordable."
Assists in filing claims for hospitals.
Provides technical support to hospital staff.

Pain

- Hospitals find existing HIS too hard to use.
- Claims often delayed or rejected due to errors.
- Staff discouraged by complex systems.

Gain

- Staff adopting a simple HIS quickly.
- PhilHealth claims processed with fewer errors.
- Standardized workflows across small hospitals.

Empathy Map

Jerimie-lan Garcia



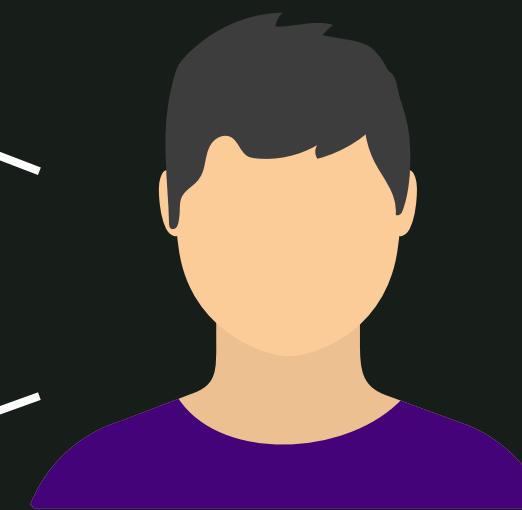
Member
Eli

What does he think and feel?

Wants to ensure systems are scalable and compatible.
Concerned about inaccurate or fragmented data.
Believes WAH4H must support long-term sustainability.

What does he hear?

Feedback from hospitals on difficulties with data encoding.
Internal discussions about improving EMR reporting.
Partners stressing importance of integration and compliance.



What does he see?

Data inconsistencies across hospitals.
Existing systems failing due to poor scalability.
Challenges in connecting hospital data into one ecosystem.

What does he say and do?

Says: "We must focus on accuracy and scalability."
Oversees reporting for EMRs.
Collaborates with hospitals to test and refine systems.

Pain

- Incompatibility with existing systems.
- Risk of poor scalability in HIS design.
- Fragmented data reducing reliability.

Gain

- Consistent and accurate data reporting.
- Scalable HIS solutions that grow with hospitals.
- A connected, data-driven health ecosystem.

TO SUMMARIZE...



Member

Eli

PAINS

- Slow and error-prone manual workflows
- Difficulty retrieving patient records
- Tedious compliance reporting
- Costly and complex HIS options
- Excessive paperwork



GAINS

- Faster and more accurate processes
- Quick and reliable access to patient data
- Simplified and accurate reporting
- Reduced manual workload
- Easy-to-use interfaces that encourage adoption



ANALYSIS

- The gap between current pains and desired gains centers on inefficiency, compliance risks, and poor adoption
- WAH4H must focus on simplicity, affordability, automation, and user-centered design
- The goal is to balance the daily needs of hospital staff with WAH's vision for scalability and sustainability





**WAH for
Hospitals**



Member
lyah

Stage 2 - Define

Clustered Problems



These clusters represent the most pressing challenges faced by Cuyapo Infirmary staff and partner stakeholders under Wireless Access for Health (WAH).

Patient Records & Data Management

- Delays in retrieving patient records during consultations or emergencies.
- Errors and inconsistencies caused by manual data entry.
- Risk of misplaced or lost paper records.
- Difficulty updating patient records across multiple departments.
- Lack of centralized access for doctors, nurses, and administrative staff.
- Duplication of records due to uncoordinated manual systems.
- Insufficient security measures for protecting sensitive patient information.
- Inability to generate quick reports for compliance and audits.

Staff Workload

- Excessive paperwork required from healthcare staff (registration, billing, reports).
- Long queues caused by slow, manual processes.
- Repetitive documentation tasks, reducing time for patient care.
- Staff struggling to balance administrative tasks with medical duties.
- Over-reliance on a few employees for key processes, leading to burnout.
- Time wasted searching for files or forms.
- Limited training and familiarity with digital tools.
- Stress caused by inefficiencies, affecting work-life balance.

Billing & Payments

- Limited payment methods available for patients.
- Lack of transparency in billing processes (unclear or delayed bills).
- Errors in computing PhilHealth claims or patient balances.
- Manual tracking of payments leading to inaccuracies.
- Delays in processing refunds or adjustments.
- Difficulty handling patients with installment or debt-based payment terms.
- No automated system for generating receipts and invoices.
- Challenges in consolidating billing data with patient records.



Member
Iyah

Problem Statement



Member

Iyah

1. Manual and paper-based records cause delays, errors, and inconsistencies.
2. Lack of a centralized database makes access and updates inefficient.
3. Records are often duplicated, misplaced, or insecure.
4. Generating reports for compliance and audits is slow and difficult.
5. Excessive paperwork and repetitive tasks reduce time for patient care.
6. Manual processes create long queues and inefficiencies.
7. Staff face stress and burnout due to workload and limited digital skills.
8. Billing is manual, error-prone, and lacks transparency.
9. Limited payment options inconvenience patients.
10. PhilHealth claims and balances are often inaccurate.
11. Consolidating billing data with patient records is inefficient.



How-Might-We



Member

Iyah

1. How might we create a centralized and secure patient records system that allows quick access for doctors, nurses, and administrative staff?
2. How might we minimize errors and duplication in patient data entry?
3. How might we reduce paperwork and streamline documentation tasks for healthcare staff?
4. How might we shorten patient queues and improve the flow of hospital processes?
5. How might we simplify the billing process to ensure accuracy and transparency for patients?
6. How might we integrate PhilHealth e-claims and automate receipts to reduce manual workload?
7. How might we ensure billing data is seamlessly integrated with patient records?





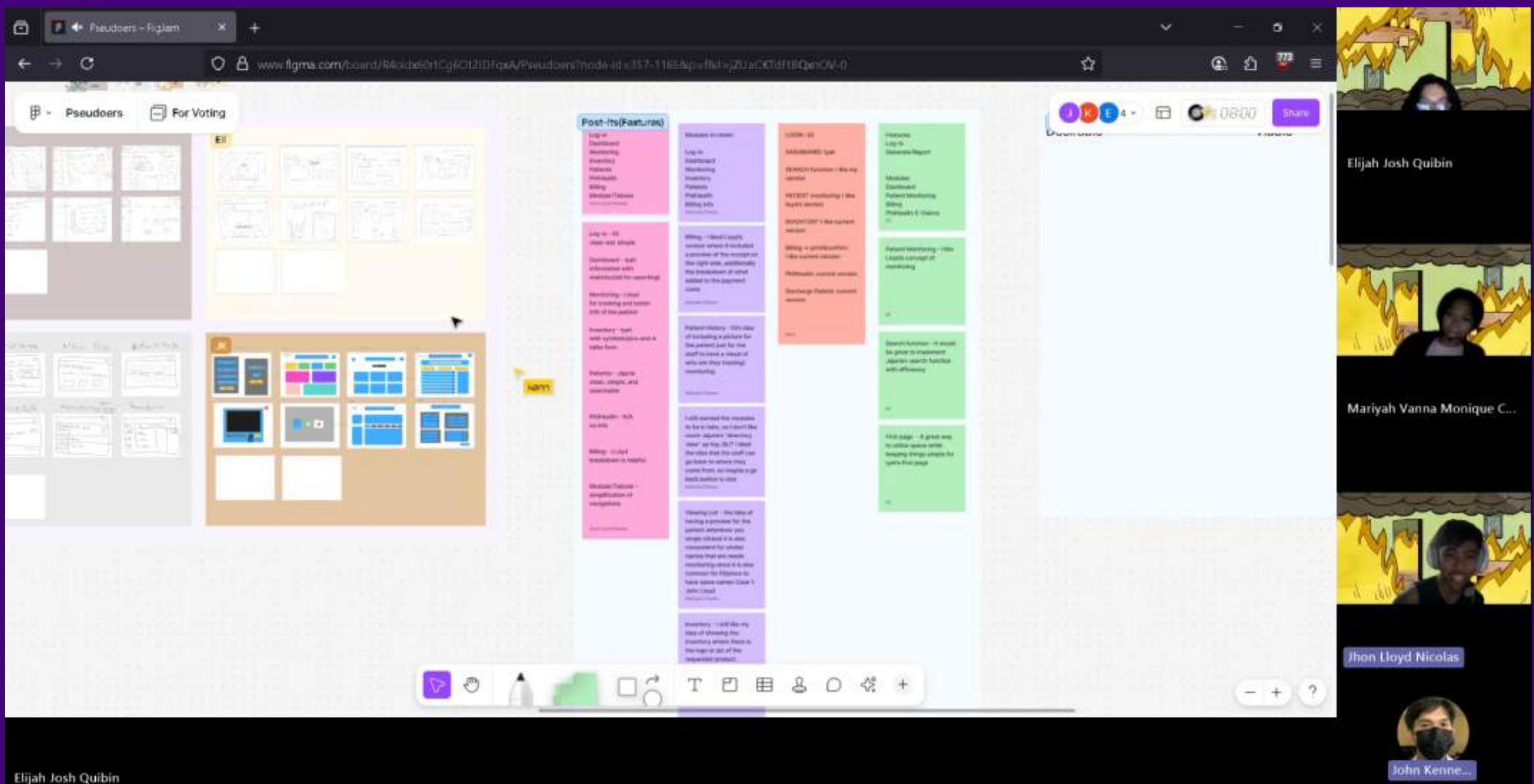
**WAH for
Hospitals**



Member

Ken

Stage 3 - Ideate

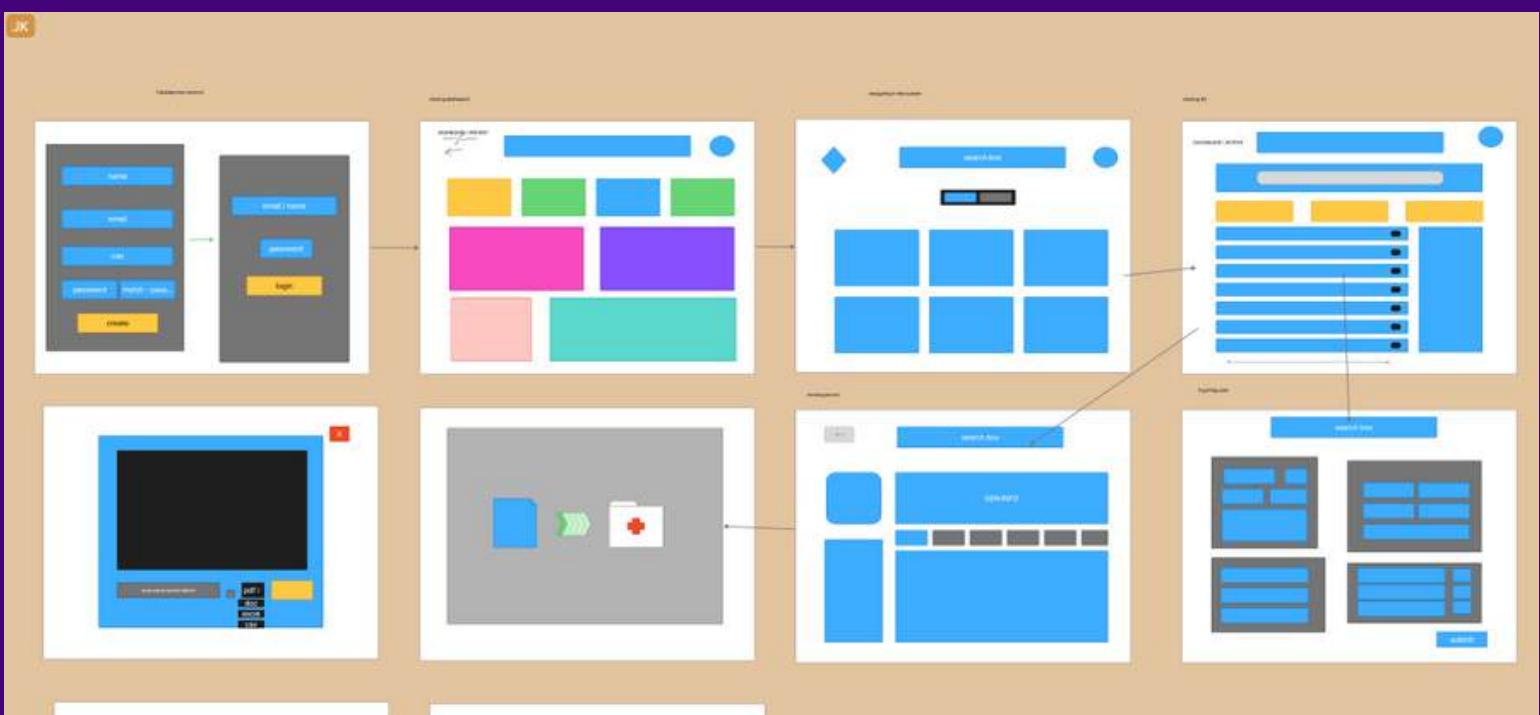
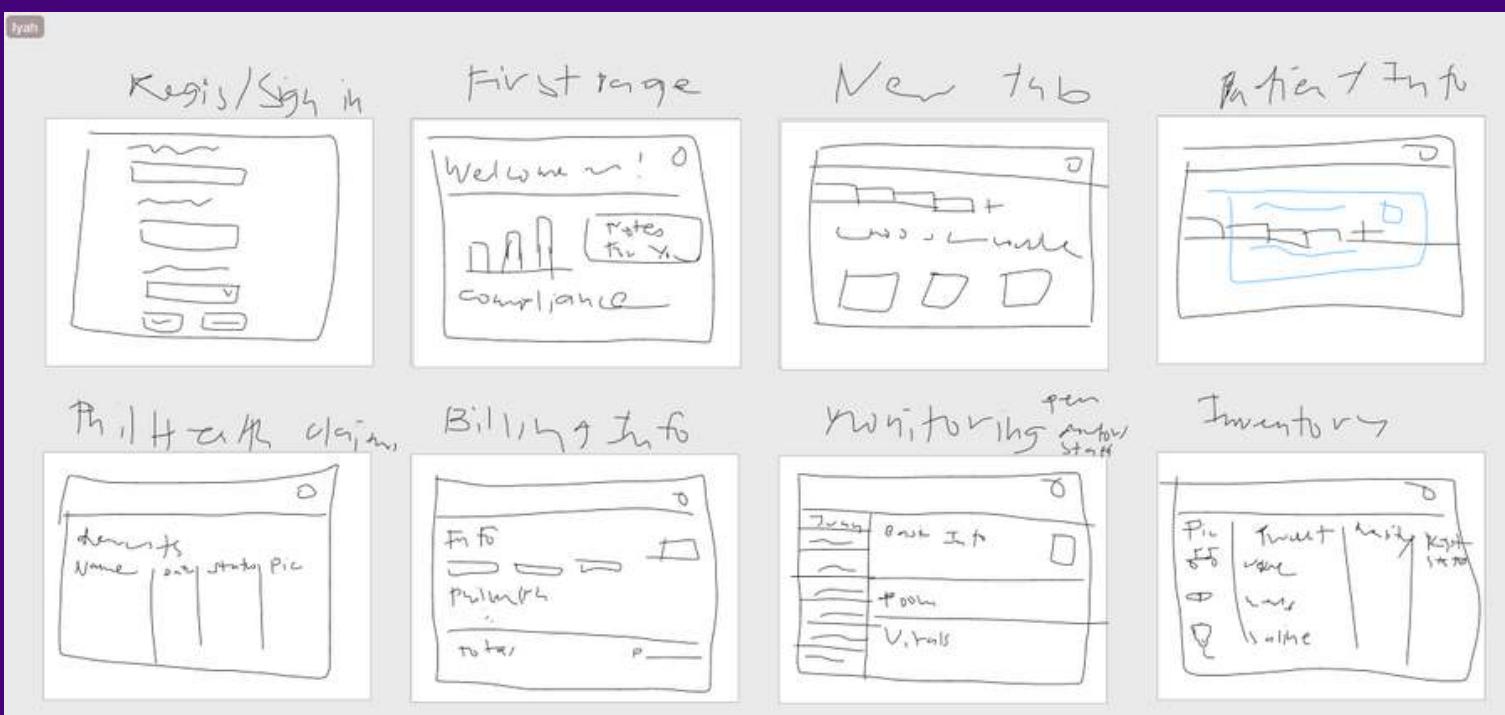
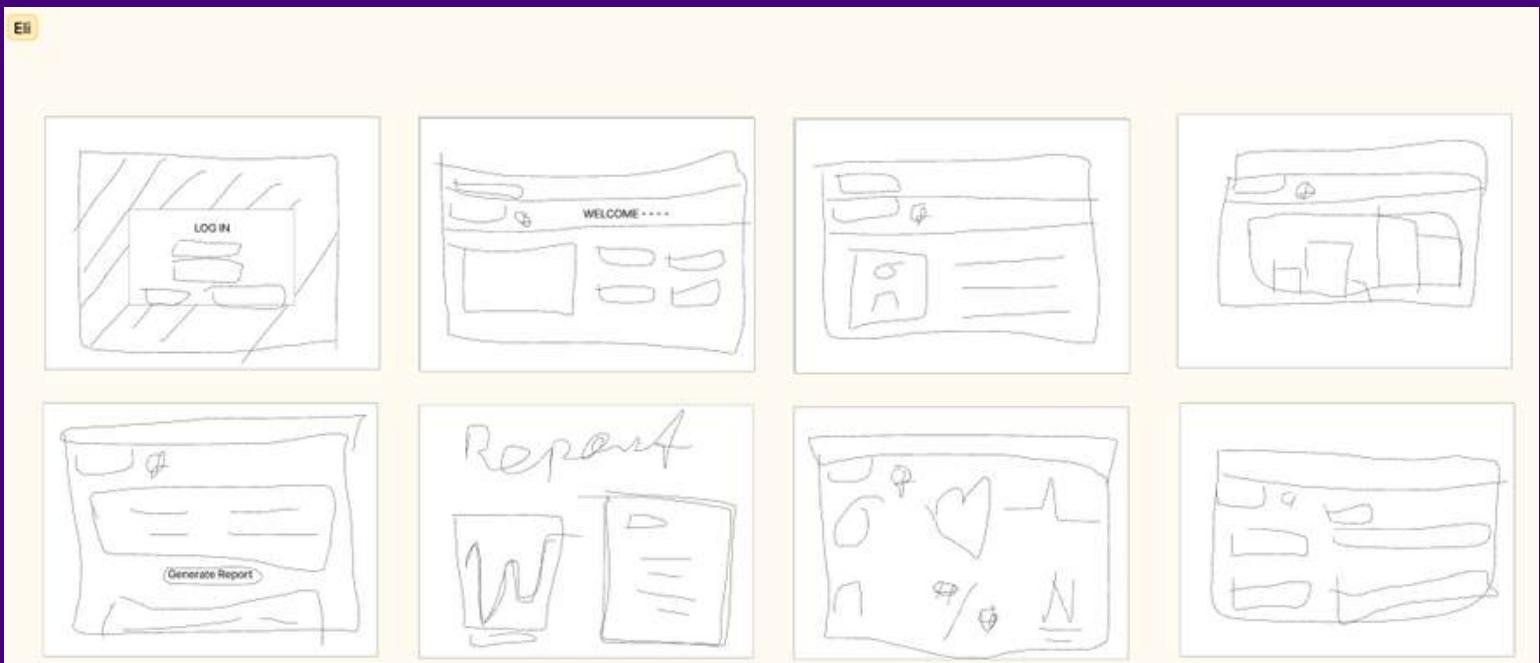
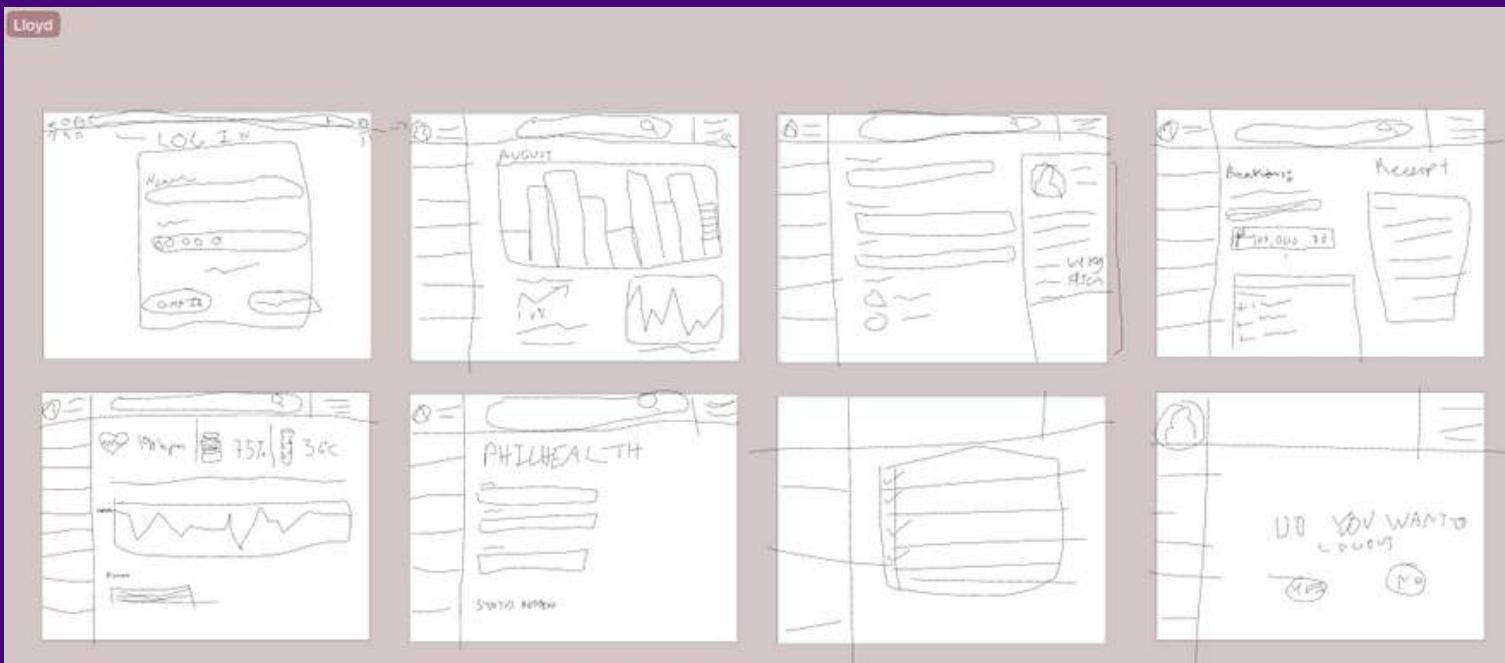


Brainstorming Session



Member

Ken



Crazy 8's



Member

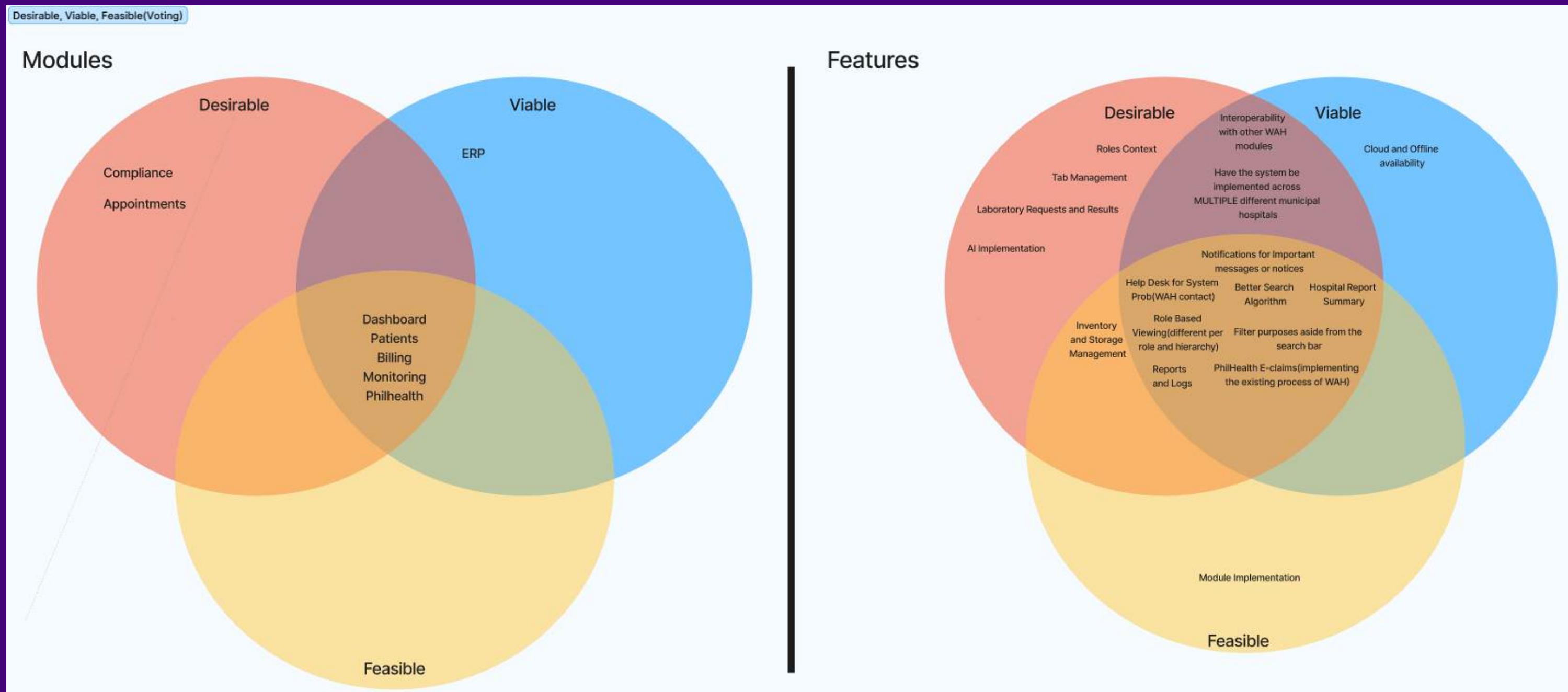
Ken

Post-it Voting

Post-its(Features)	Log-in	Dashboard	Monitoring	Inventory	Patients	PhilHealth	Billing	Modular/Tabular
Jhon Lloyd Nicolas	Log-in Dashboard Monitoring Inventory Patients PhilHealth Billing Modular/Tabular Jhon Lloyd Nicolas	Modules to retain: Log-in Dashboard Monitoring Inventory Patients PhilHealth Billing Info Marilyn Chavez	Viewing List - the idea of having a preview for the patient whenever you single clicked it is also convenient for similar names that are needs monitoring since it is also common for Filipinos to have same names Case 1: John Lloyd Marilyn Chavez	LOGIN : Eli	SEARCH function: I like my version PATIENT monitoring: I like Lloyd's version INVENTORY: I like current version Billing → print&confirm: I like current version PhilHealth: current version Discharge Patient: current version	Features: Log-in Generate Report Modules: Dashboard Patient Monitoring Billing PhilHealth E-Claims Eli		
Log-in - Eli clean and simple	Billing - I liked Lloyd's version where it included a preview of the receipt on the right side, additionally the breakdown of what added to the payment costs Marilyn Chavez	Patient History - Eli's idea of including a picture for the patient just for the staff to have a visual of who are they treating/ monitoring Marilyn Chavez	Dashboard - I like my version of it being simple but it does not have the reporting feature of Eli so I also want that Marilyn Chavez	DASHBOARD: lyah	SEARCH function: I like my version	Patient Monitoring - I like Lloyd's concept of monitoring Eli		
Dashboard - lyah informative with statistics(eli for reporting)						Search function - It would be great to implement Jajurie's search function with efficiency Eli		
Monitoring - Lloyd for tracking and better info of the patient						First page - A great way to utilize space while keeping things simple for lyah's first page Eli		
Inventory - lyah with symbols/plcs and in table form								
Patients - Jajurie clean, simple, and searchable								
PhilHealth - N/A no info								
Billing - LLoyd breakdown is helpful								
Modular/Tabular - simplification of navigations								
Jhon Lloyd Nicolas								



Member
Ken



Desirable, Viable, Feasible



**WAH for
Hospitals**



Member

Ken

Stage 4 – Prototype



Member

Ken

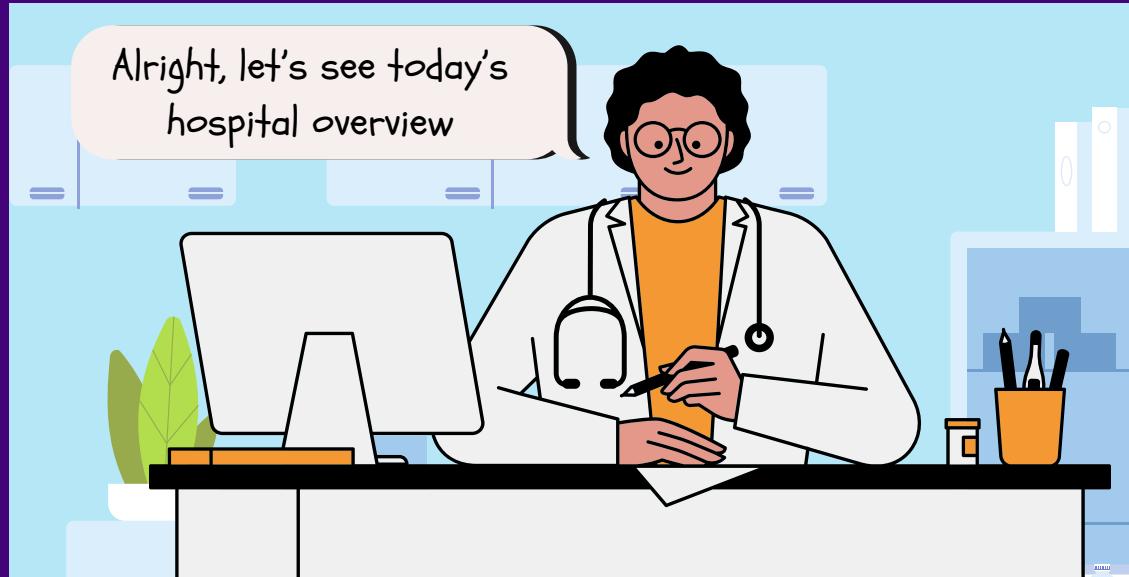
Storyboards

Administrator Accessing the System

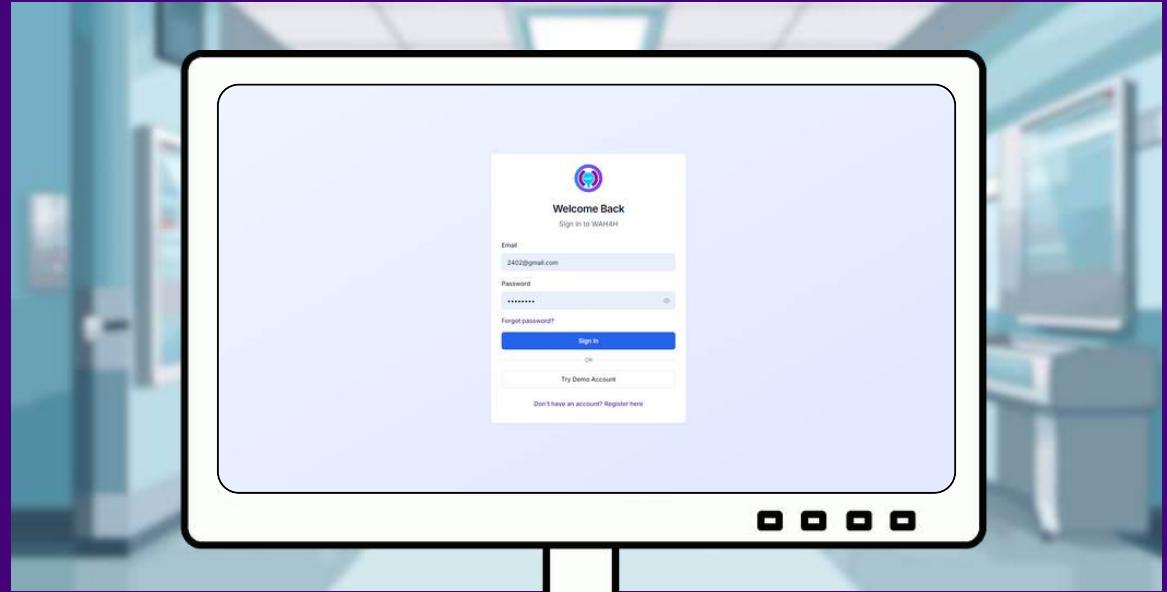


Member
Ken

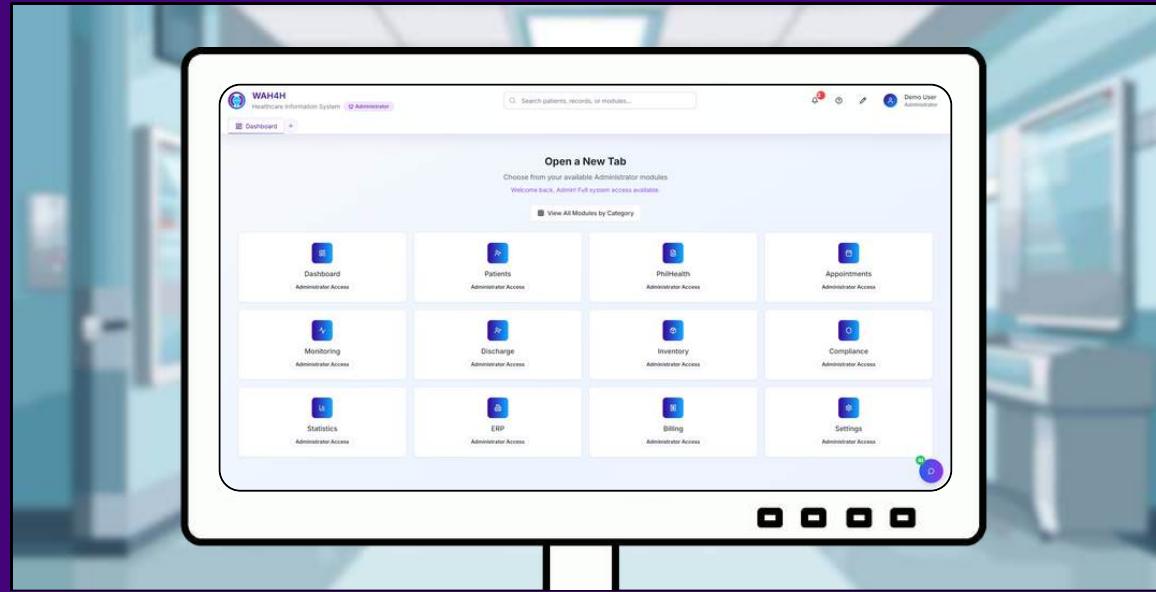
*The hospital admin logs in to the WAH4H system.



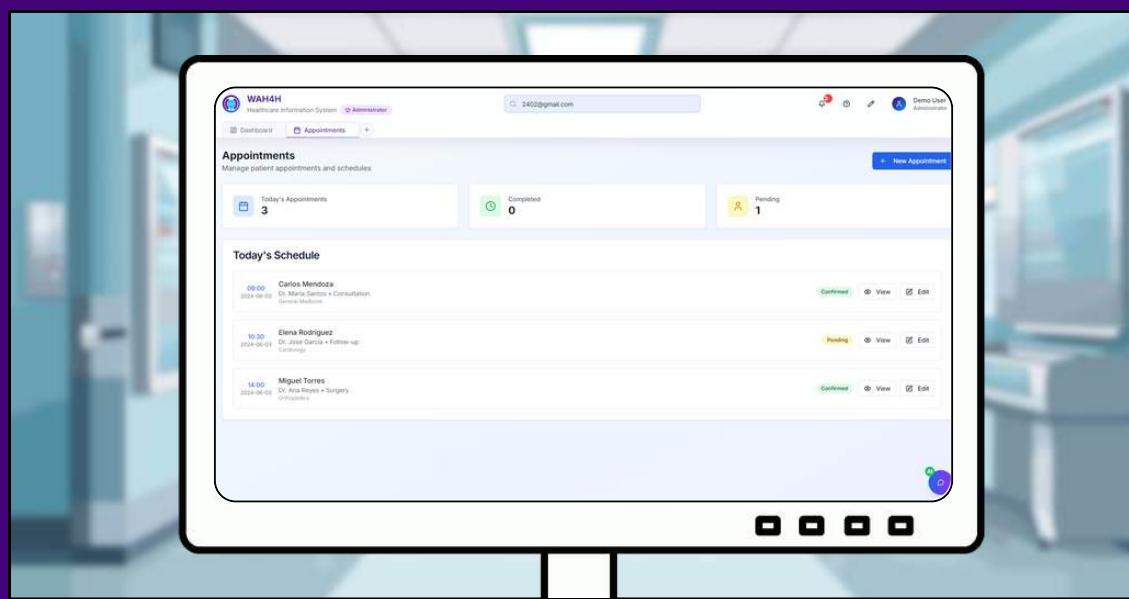
*They input their information in the system.



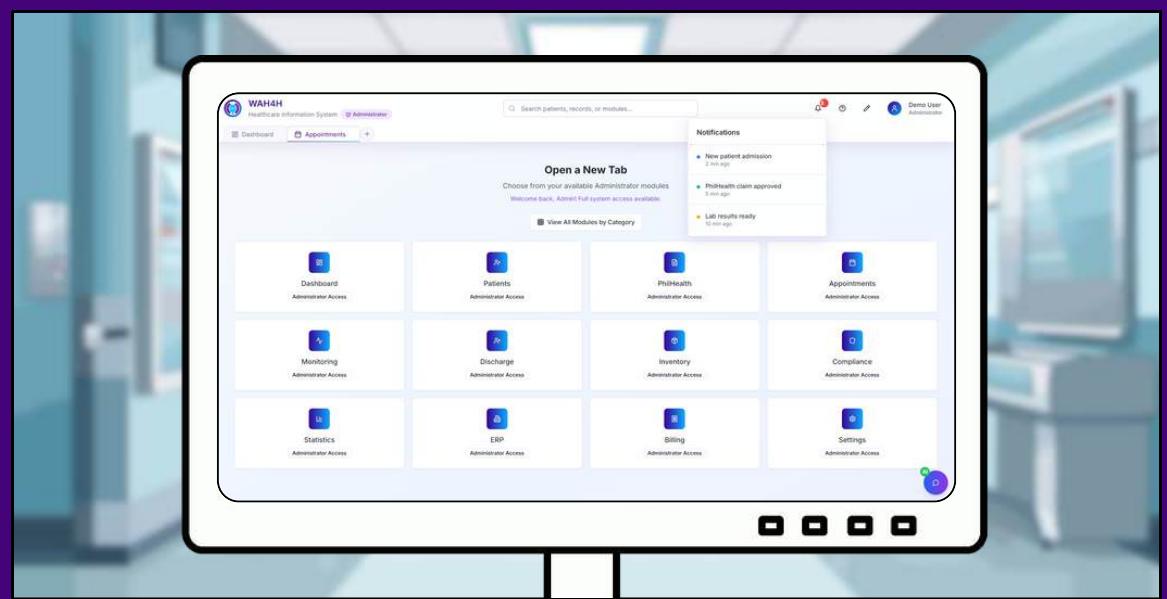
*They check the dashboard if everything is fine in the hospital.



*They go ahead and checked the other modules for information.



*They check system notifications for missed alerts or updates.



*The admin now waits for concerns from other hospital staff to address.



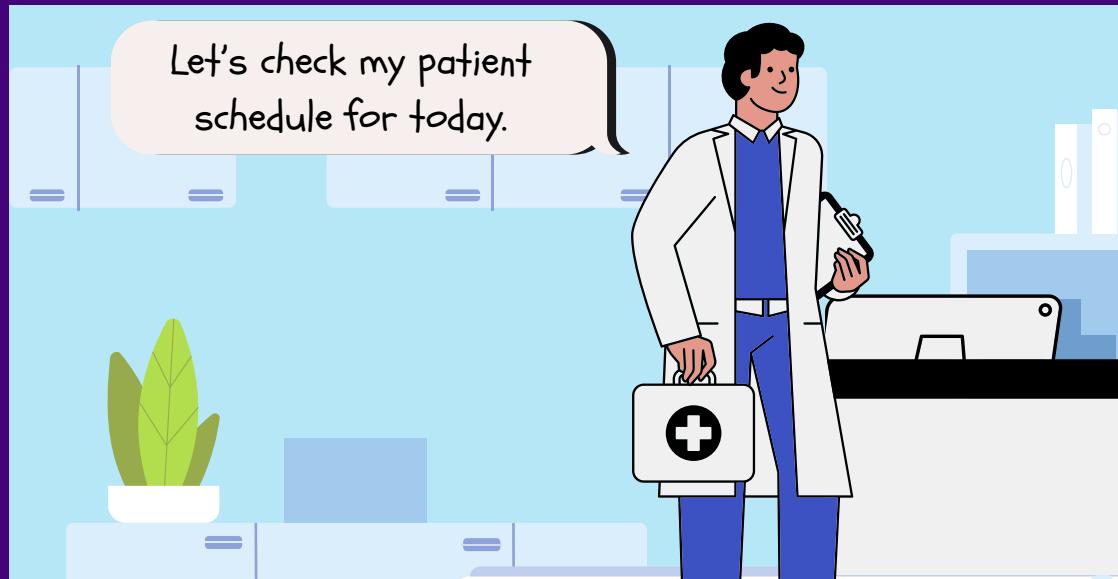
Doctor Accessing the System



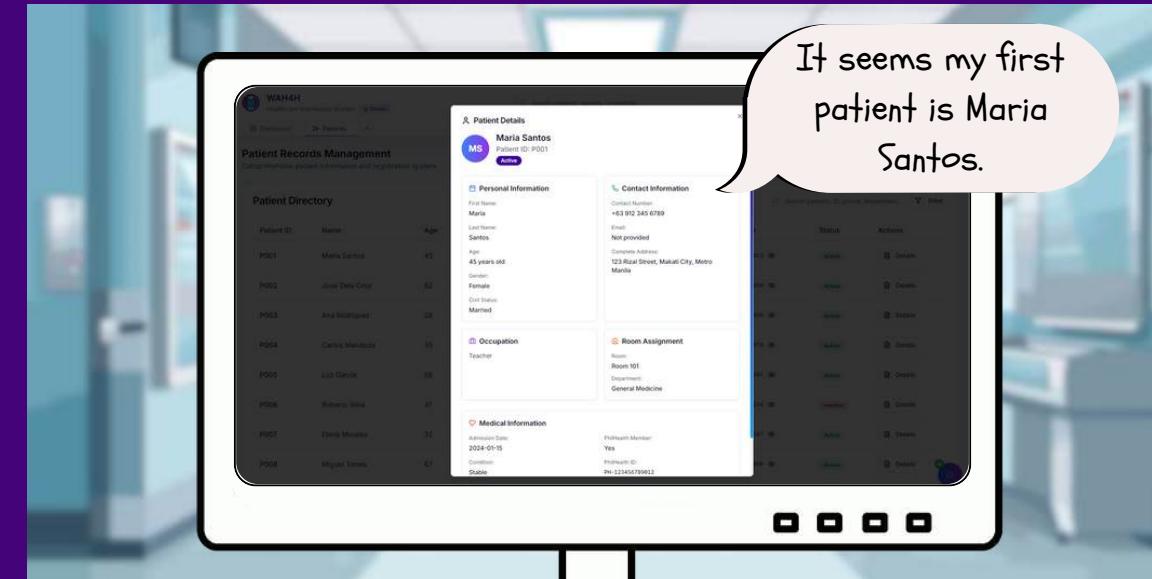
Member

Ken

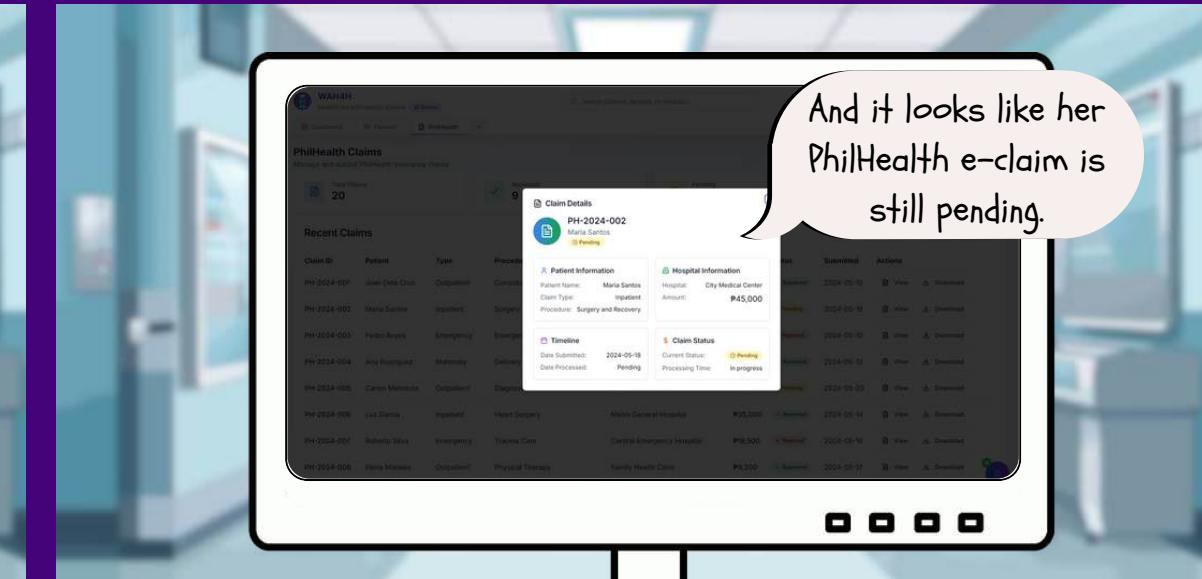
*Hospital doctor otw to check the system



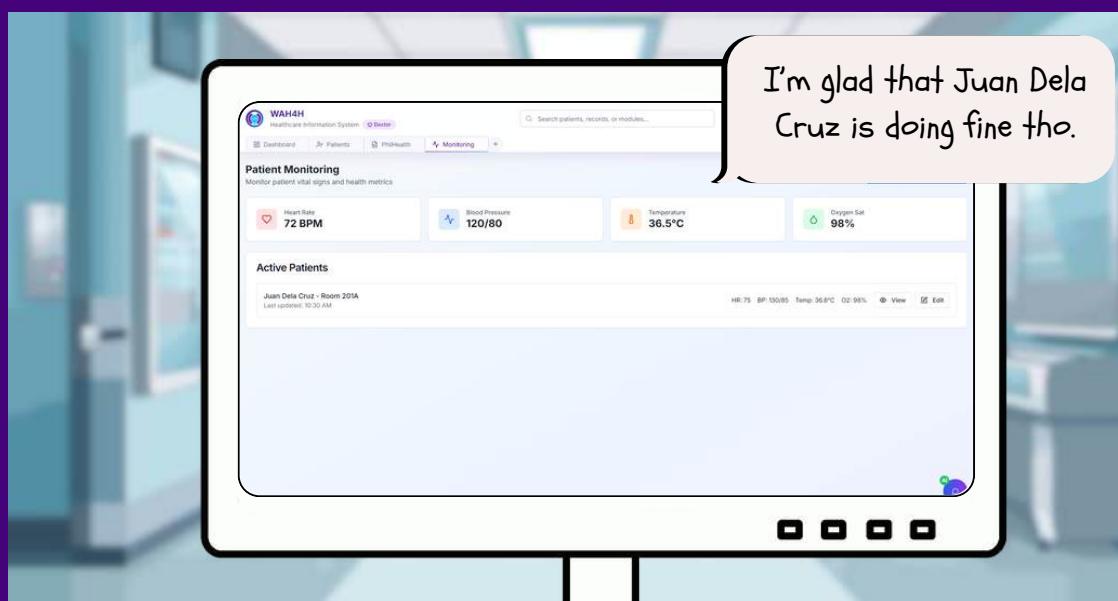
*Views daily patient list via the patients module



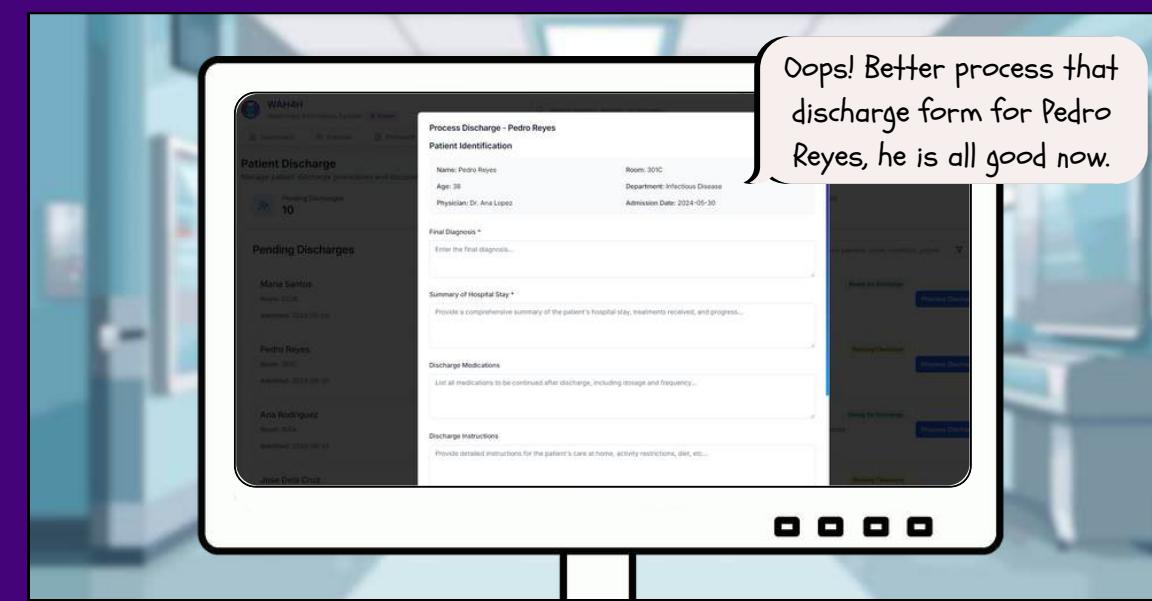
*Cross checks the patient's e-claim



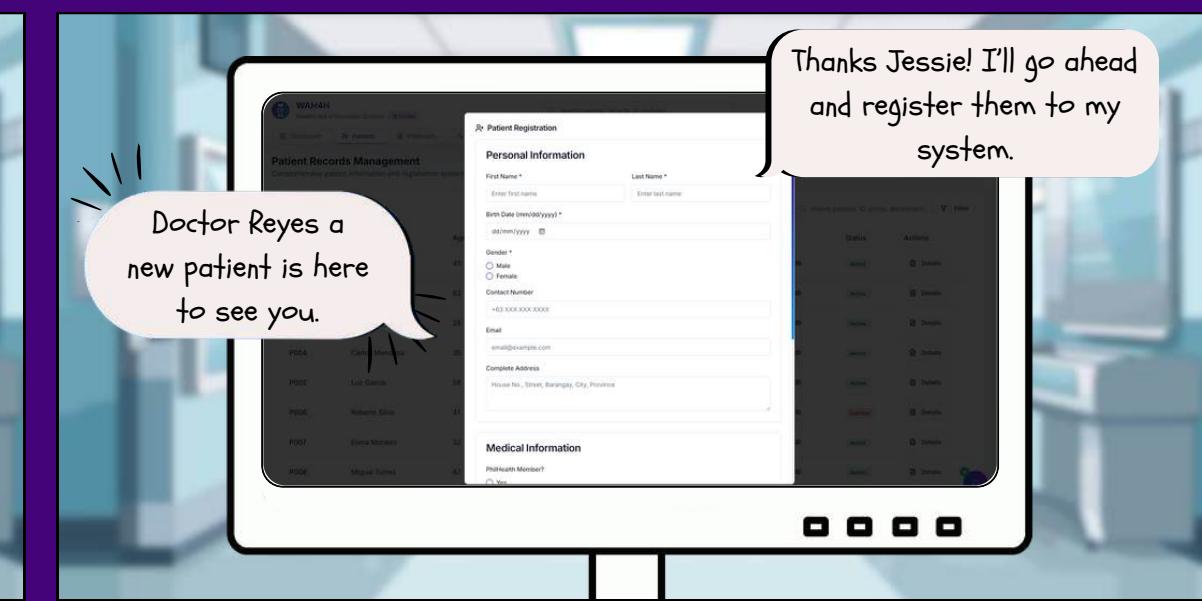
*Monitors the stats of previous patients



*Processing discharge information for patients



*And the cycle starts once again for a doctor in a busy hospital..

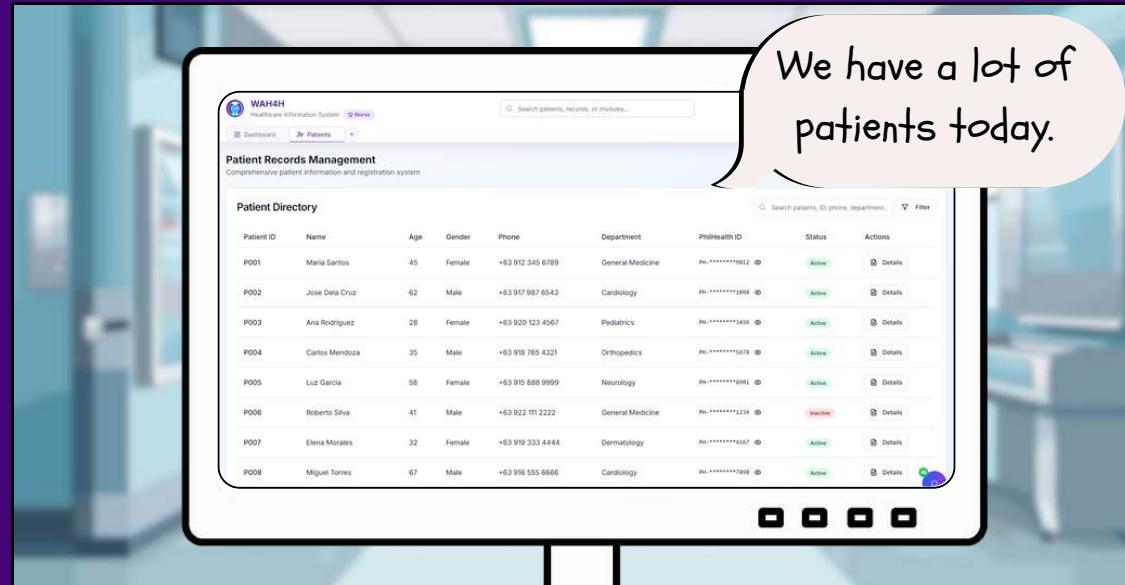


Nurse Accessing the System

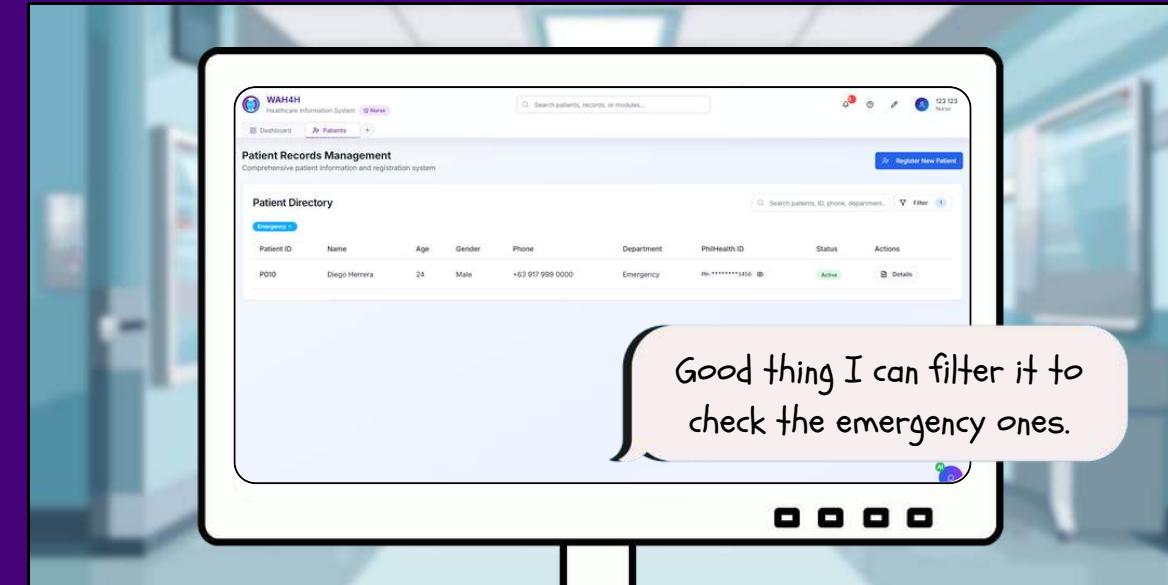


Member
Ken

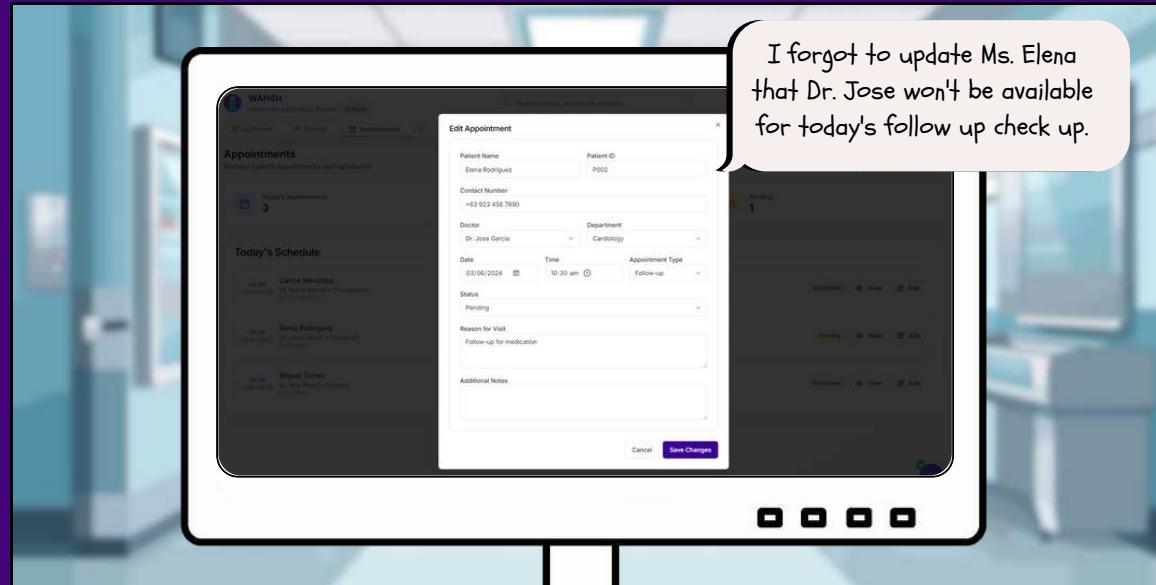
*Checking the Patients module



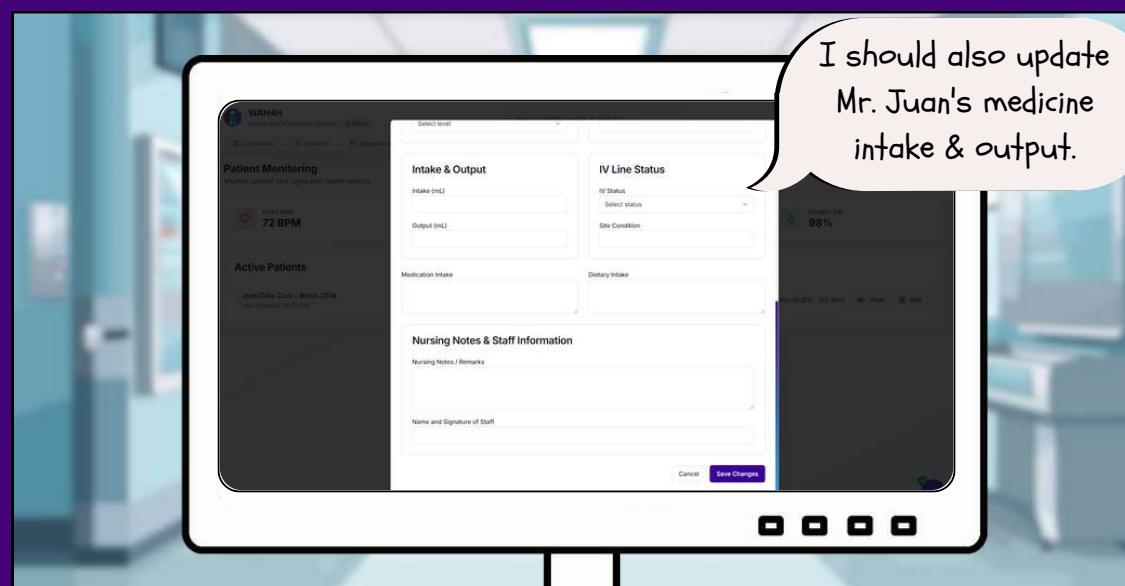
*Utilizing the filter to categorize results



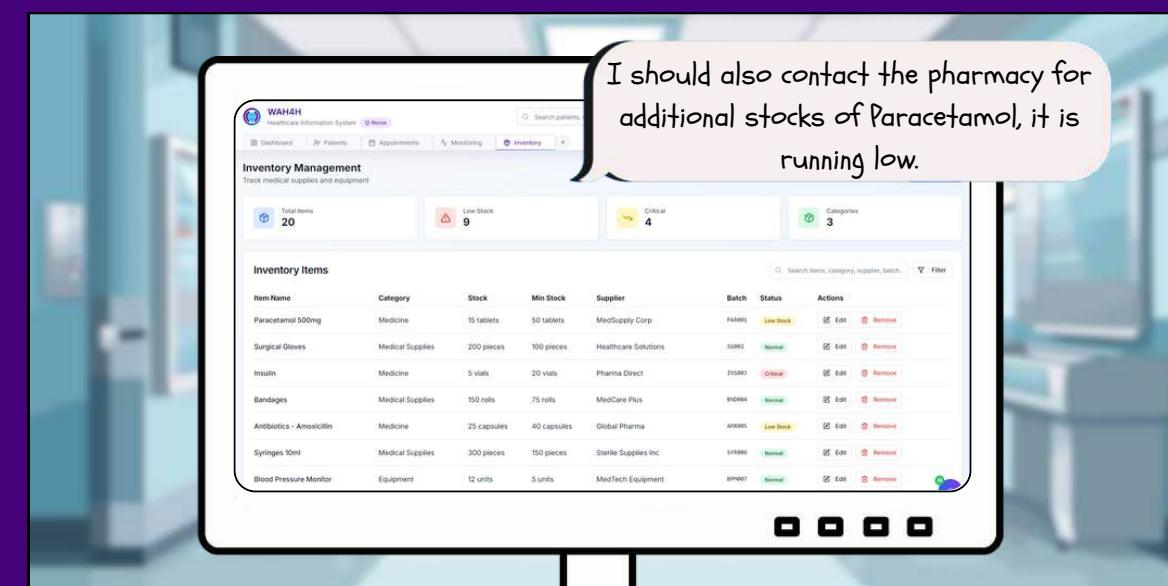
*Editing the record for a patient in the Appointments module



*Updating stats of a patient in the Monitoring module so that it is updated across all copy of the records



*Nurses also have access to the Inventory module to check medical stocks



*After tending to digital records, it's time for the real-world tasks

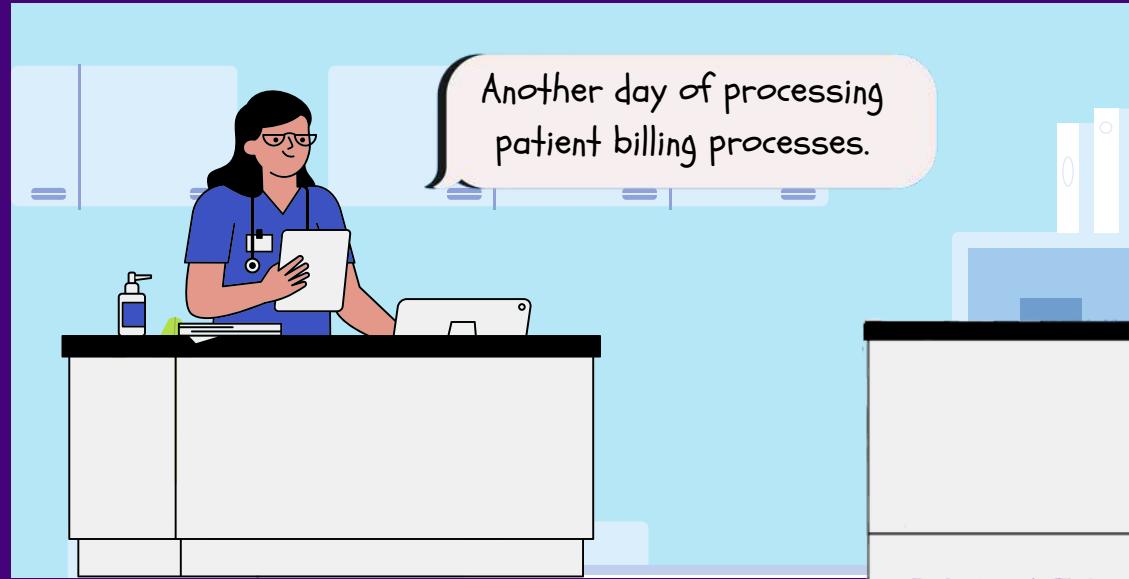


Billing Staff Accessing the System

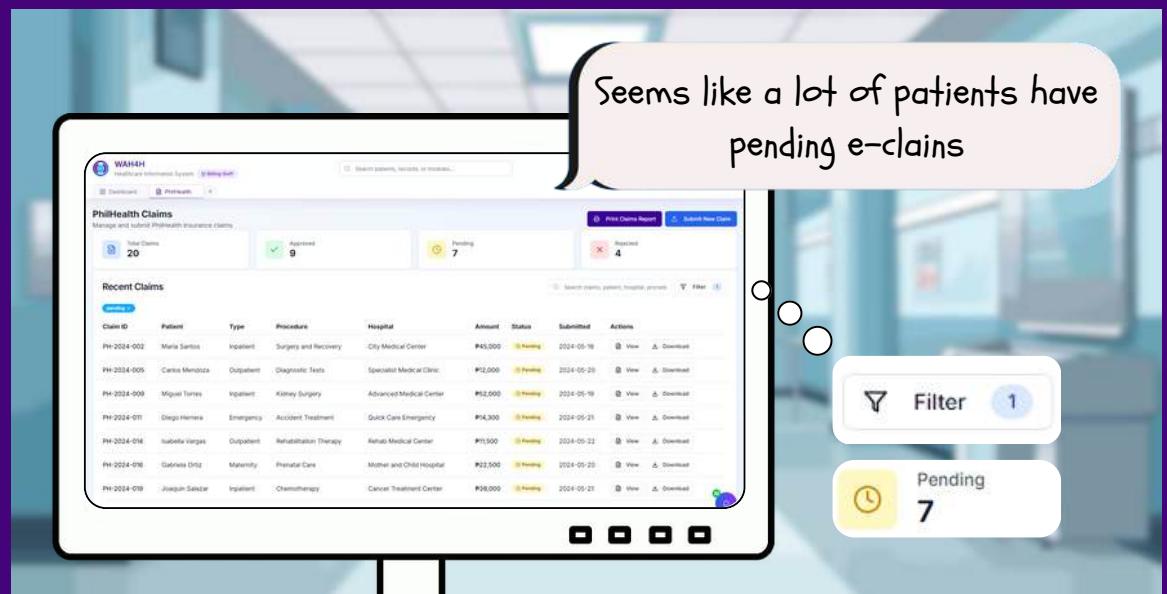


Member
Ken

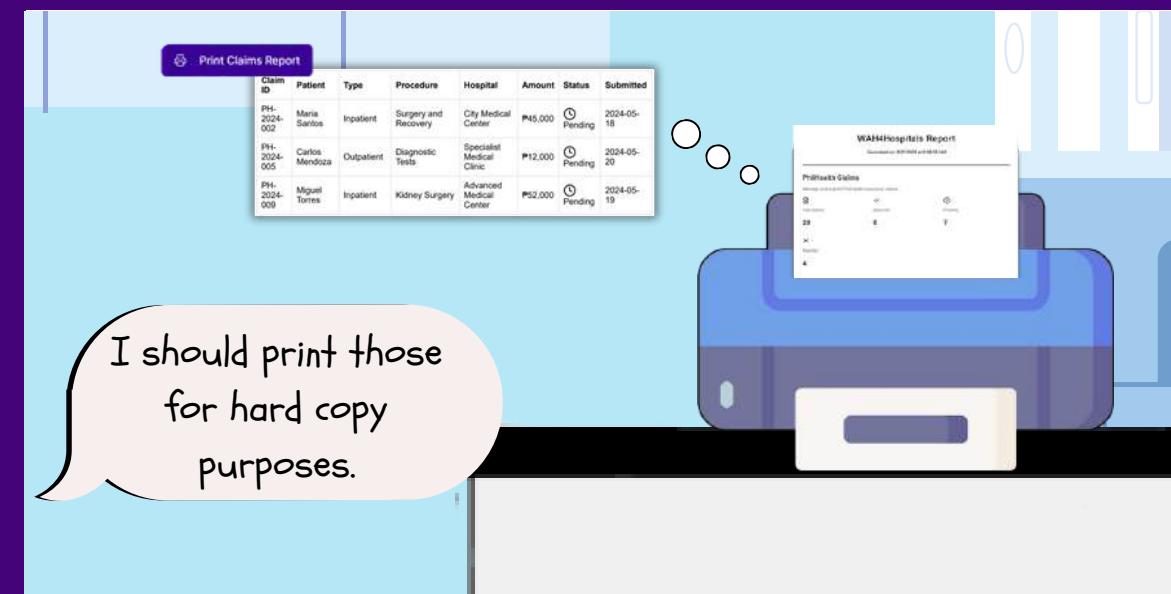
* Starting the Day: Preparing for Billing



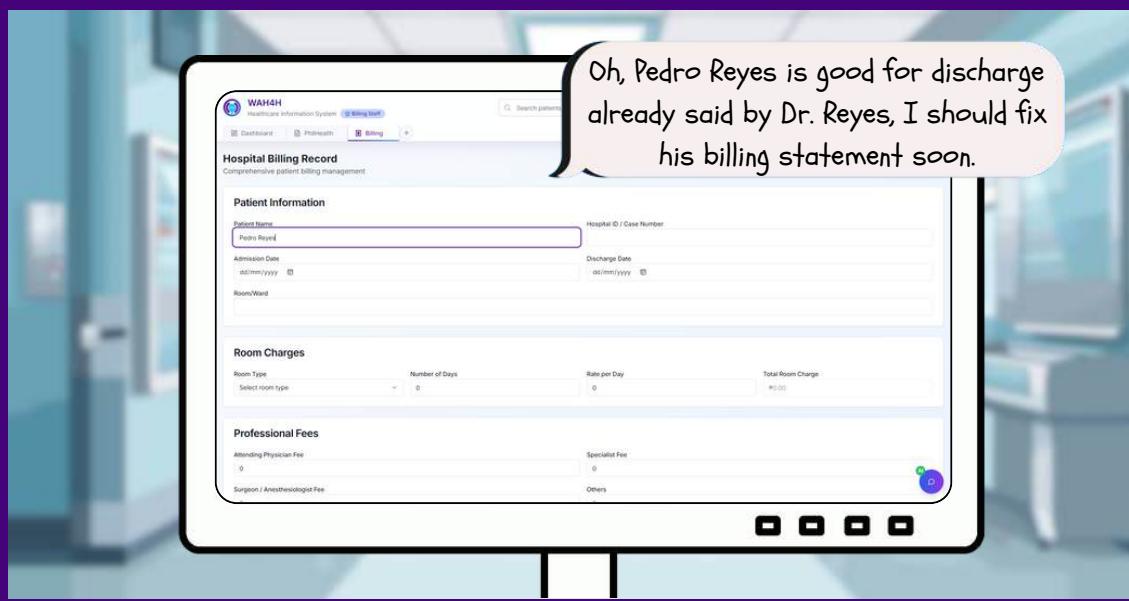
* Patient Billing Requests Appear



* Printing Receipts and Forms



* Processing New Billing Statements



* Finalizing and Submitting Billing Records



* And the billing staff start to process a new patient's billing statement



Creating an Account for the first time

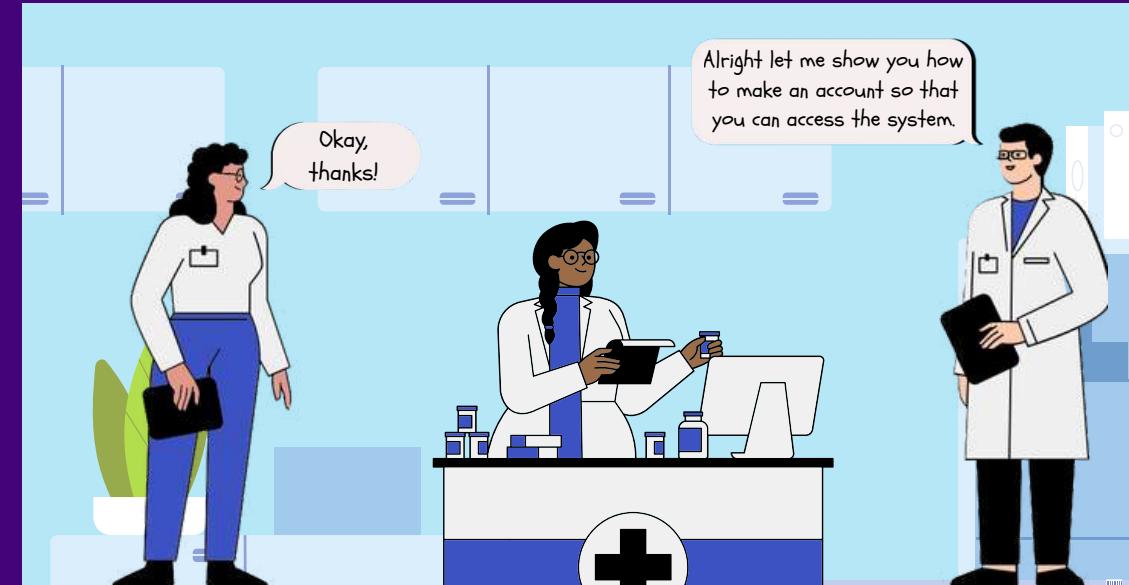


Member
Ken

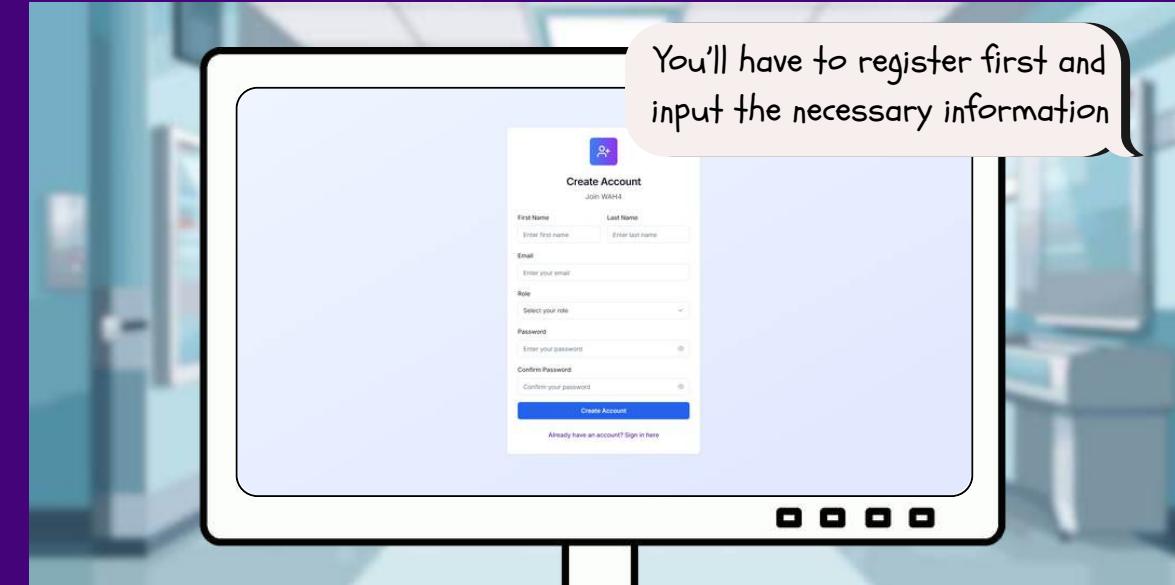
* Welcoming a New User



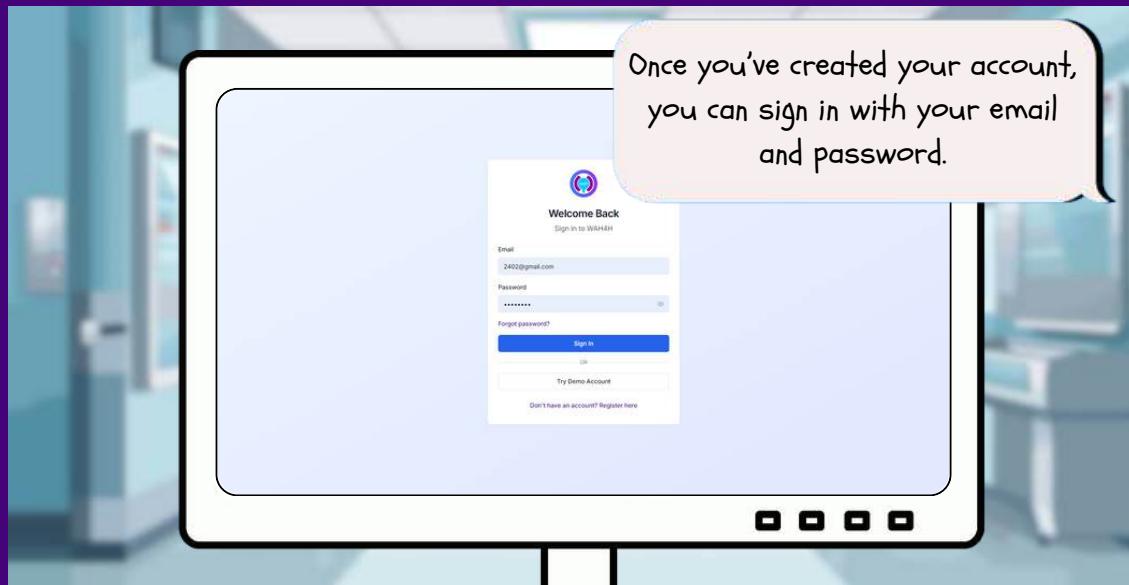
* Explaining Registration Steps



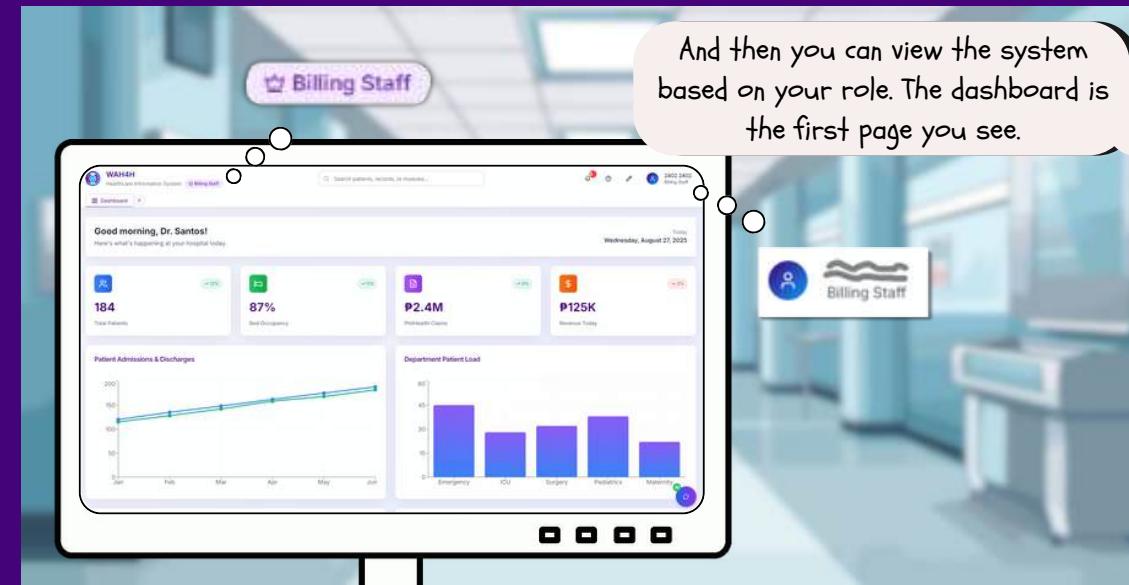
* Encoding Details in the System



* Confirming Account Creation



* Reviewing Data Accuracy



* Need Help?



Navigating the Settings - 6 Things to take note of

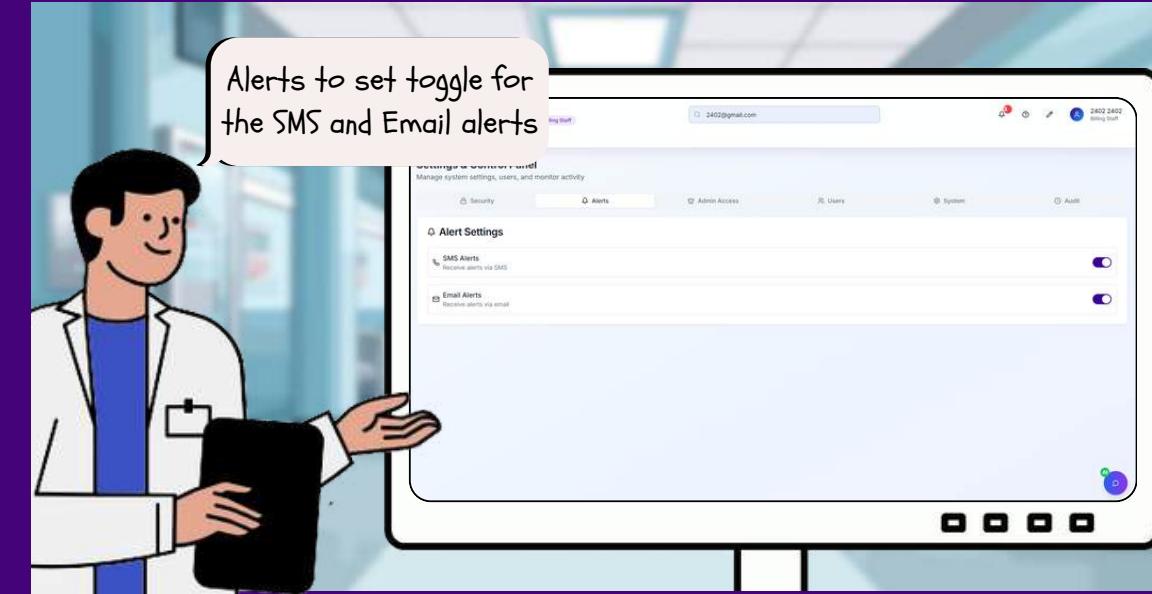


Member
Ken

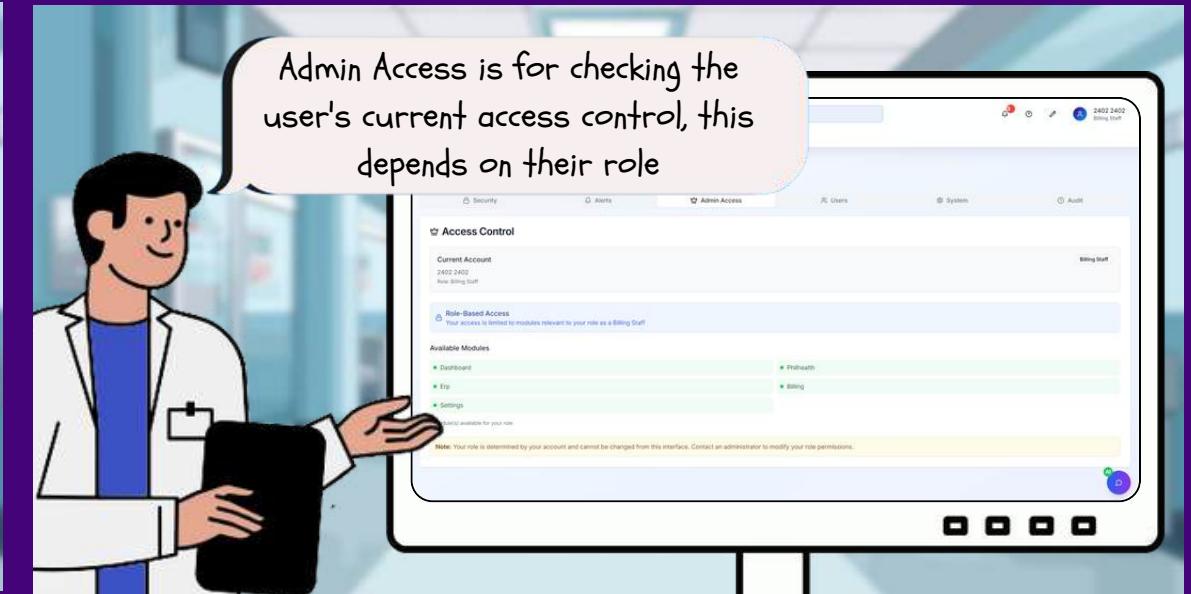
* Password Security



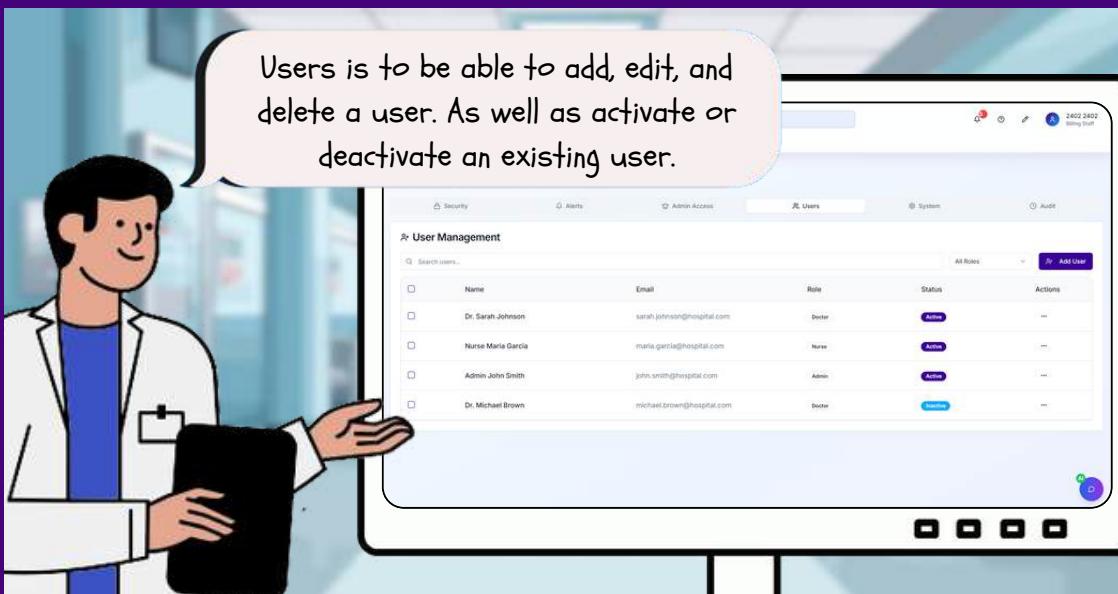
* Notification Alerts



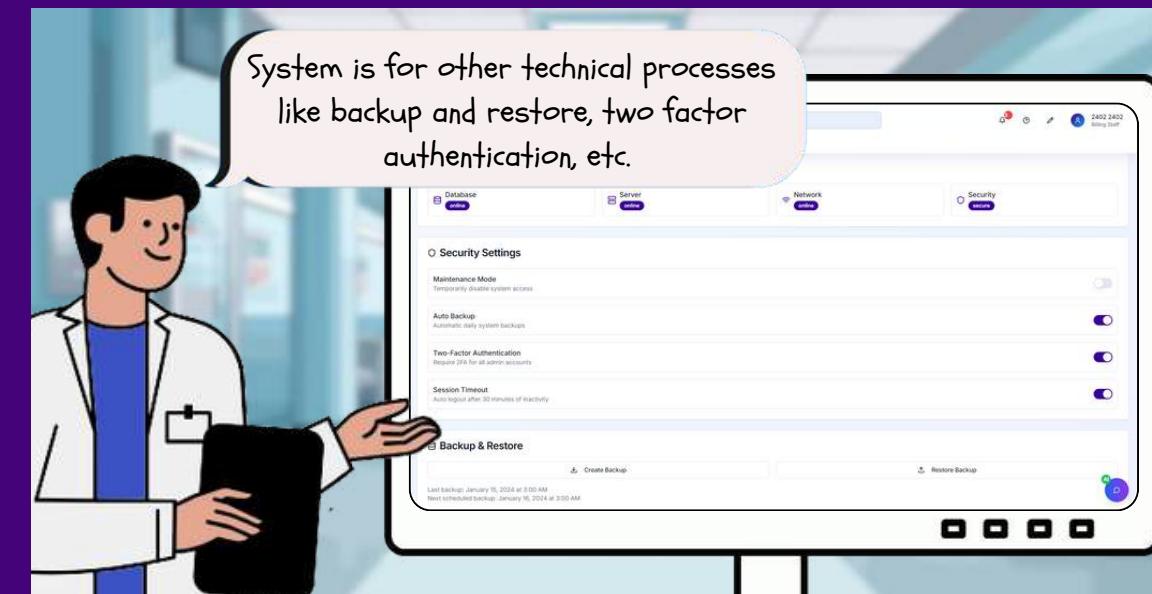
* Admin Access Control



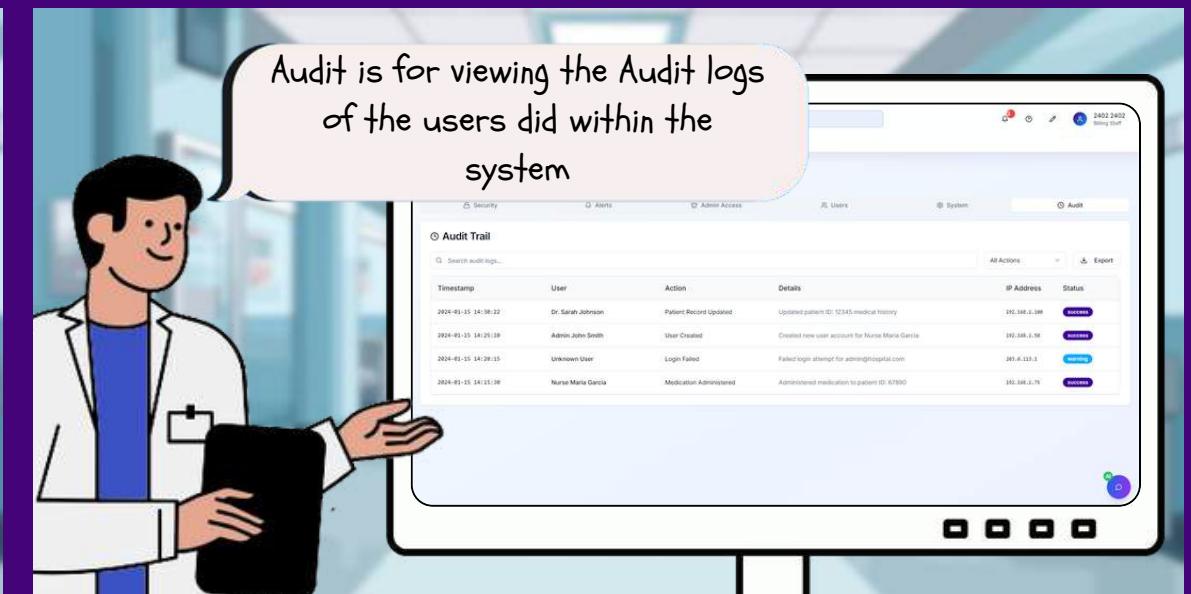
* User Management



* System Processes



* Audit Logs



Using the A.I. Chatbot

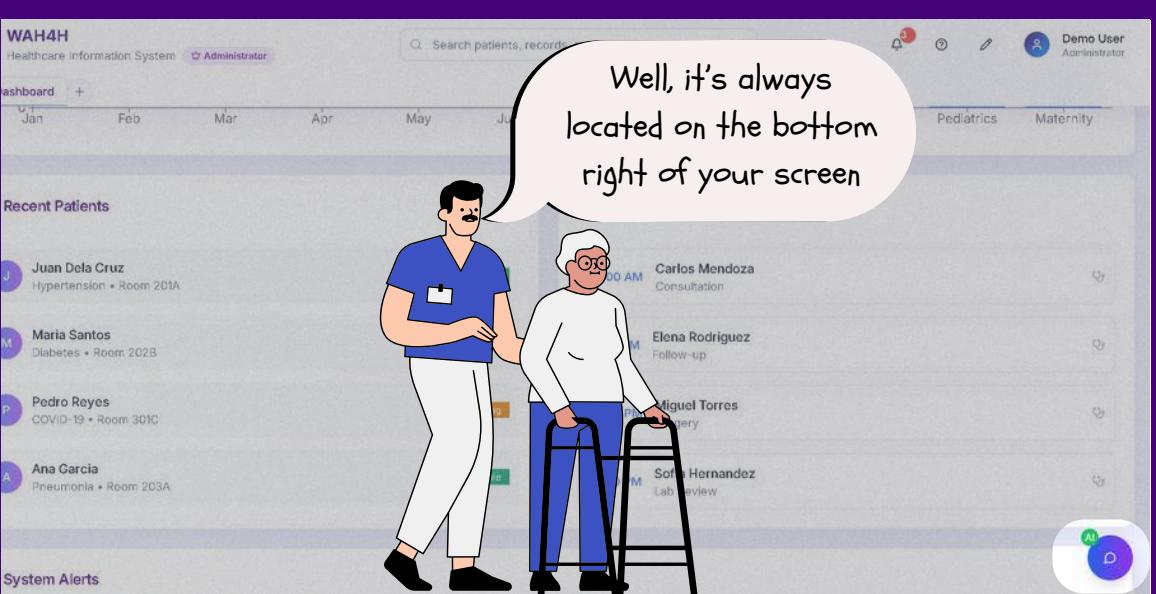


Member
Ken

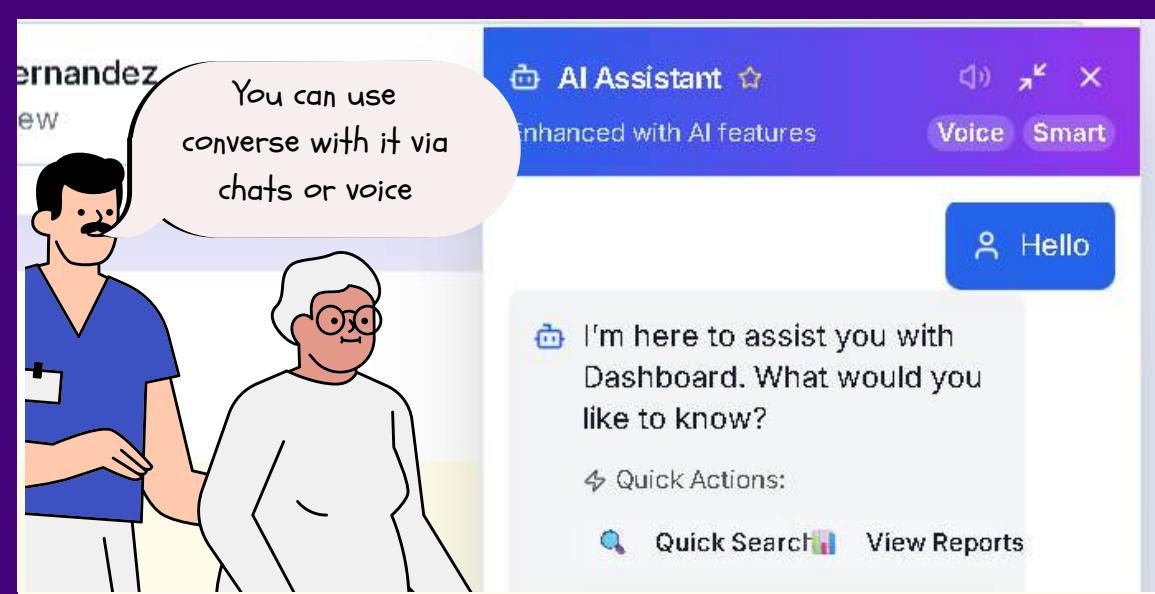
* How to use Chatbot



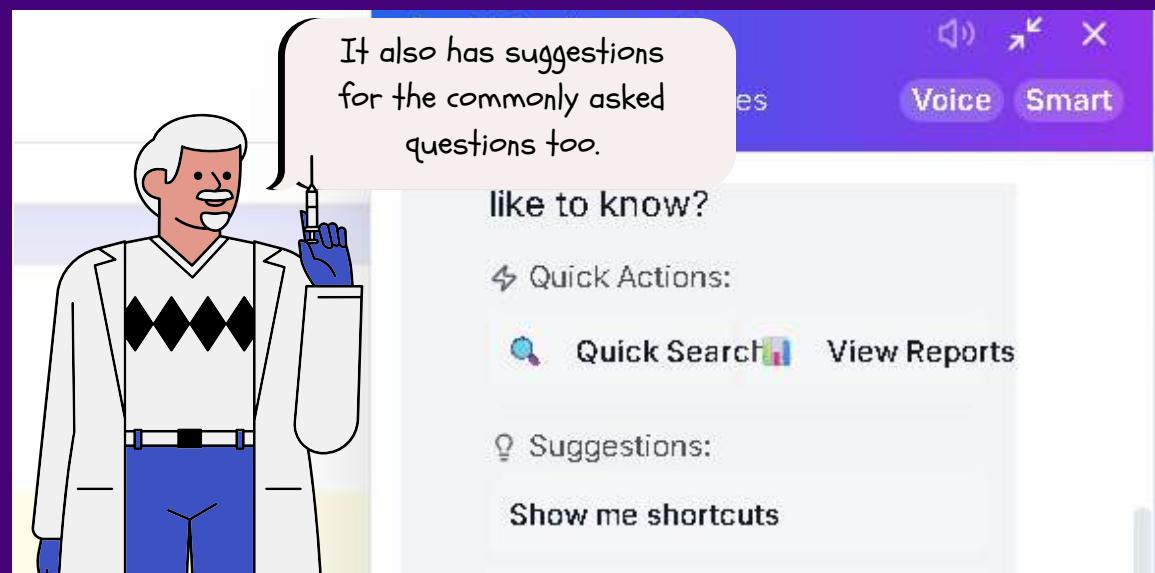
* Found the Chatbot



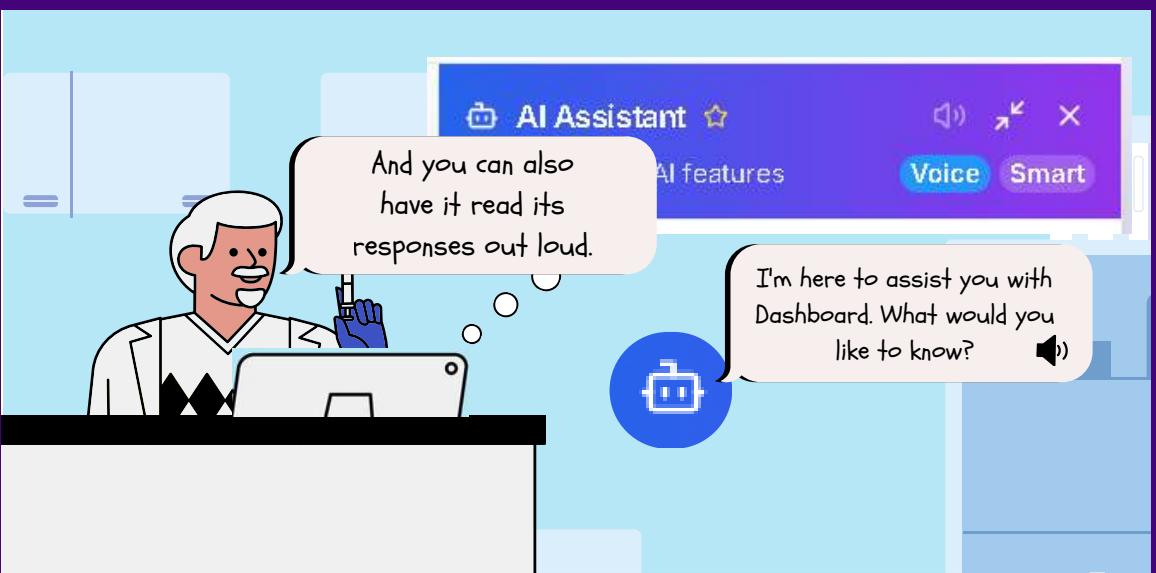
* Talk with it



* Chatbot with Suggestions



* Audio Feature



* Gaining Confidence to Use It Alone





Member

Ken

Mockup Design

Prototype

WAH4HOSPITAL



Member

Ken

The screenshot shows the WAH4HOSPITAL Healthcare Information System dashboard. At the top left is the logo "WAH4H" with the tagline "Healthcare Information System". To the right is a search bar with placeholder text "Search patients, records, or modules...". On the far right are icons for notifications (3), help, edit, and user info for "Demo User Administrator". Below the header is a welcome message: "Good morning, Dr. Santos!" followed by "Here's what's happening at your hospital today." and the date "Sunday, September 7, 2025".

The dashboard features four main KPI cards:

- Total Patients:** 184 (Icon: People, Change: +12%)
- Bed Occupancy:** 87% (Icon: Bed, Change: +5%)
- PhilHealth Claims:** ₱2.4M (Icon: Document, Change: +8%)
- Revenue Today:** ₱125K (Icon: Dollar, Change: -3%)

Below these are two charts:

- Patient Admissions & Discharges:** A line chart showing monthly admissions and discharges from January to June. The blue line with green dots starts at approximately 120 in Jan and rises to about 195 in Jun.
- Department Patient Load:** A bar chart showing patient load across three departments: Emergency (45), ICU (29), and Surge (32). There is also a small bar for another department.

A welcome message at the bottom right says "Welcome back! Successfully logged in as Demo User".



**WAH for
Hospitals**



Scrum Master
Lloyd

Stage 5 - Testing



WAH for
Hospitals

Client Feedback

- They love the UI and Design
- They recommended to add more modules
- Compared to other brands, this easier to navigate



Scrum Master

Lloyd

WAH4H Healthcare Information System Administrator

Dashboard +

Good morning, Dr. Santos!

Here's what's happening at your hospital today.

Today Tuesday, September 9, 2025

184 Total Patients ↑ 12%

87% Bed Occupancy ↑ 5%

₱2.4M PhilHealth Claims ↑ 8%

₱125K Revenue Today ↑ 3%

Patient Admissions & Discharges

Department Patient Load

Welcome back!
Successfully logged in as Demo User



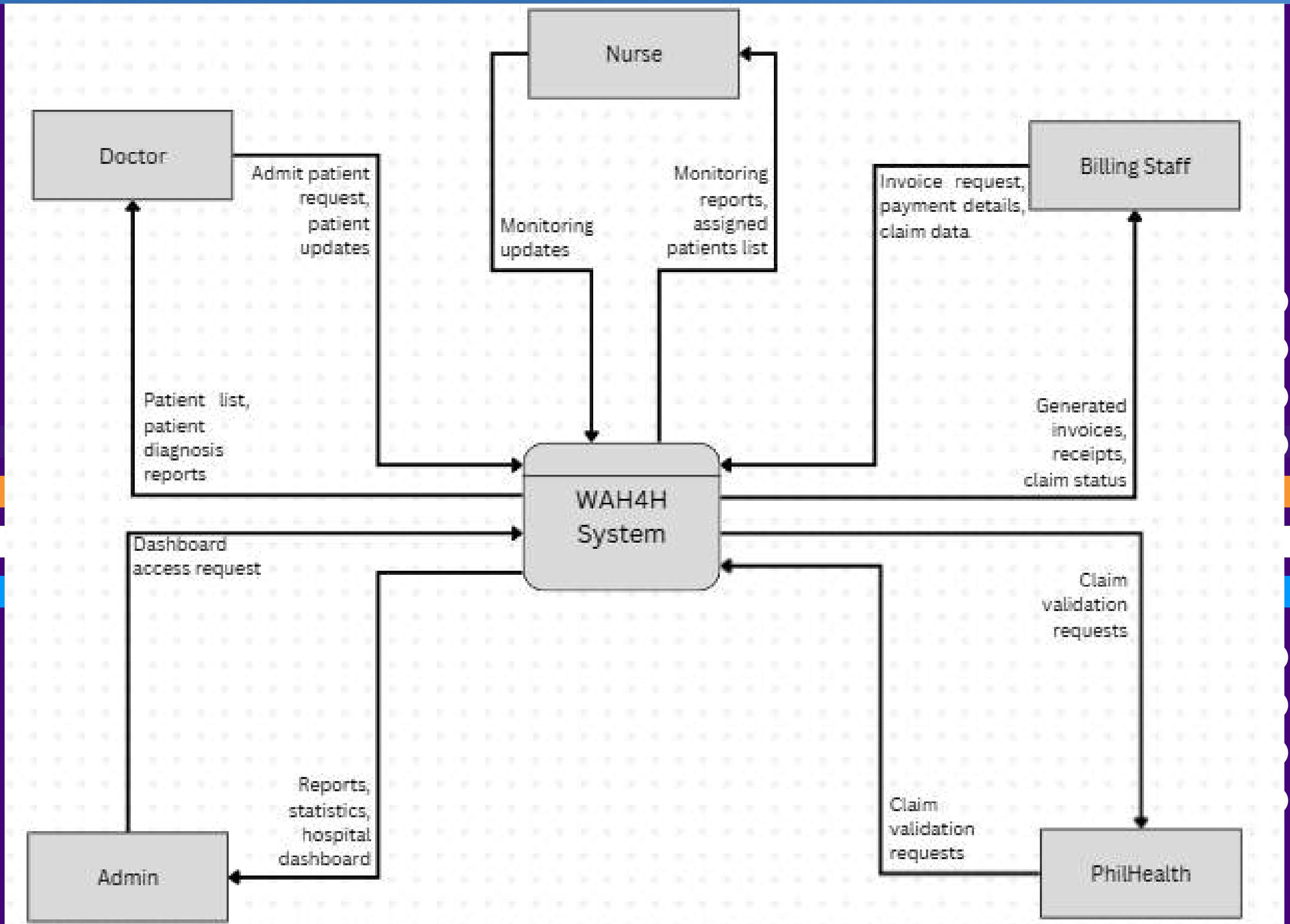
Scrum Master
Lloyd

DATAFLOW DIAGRAMS

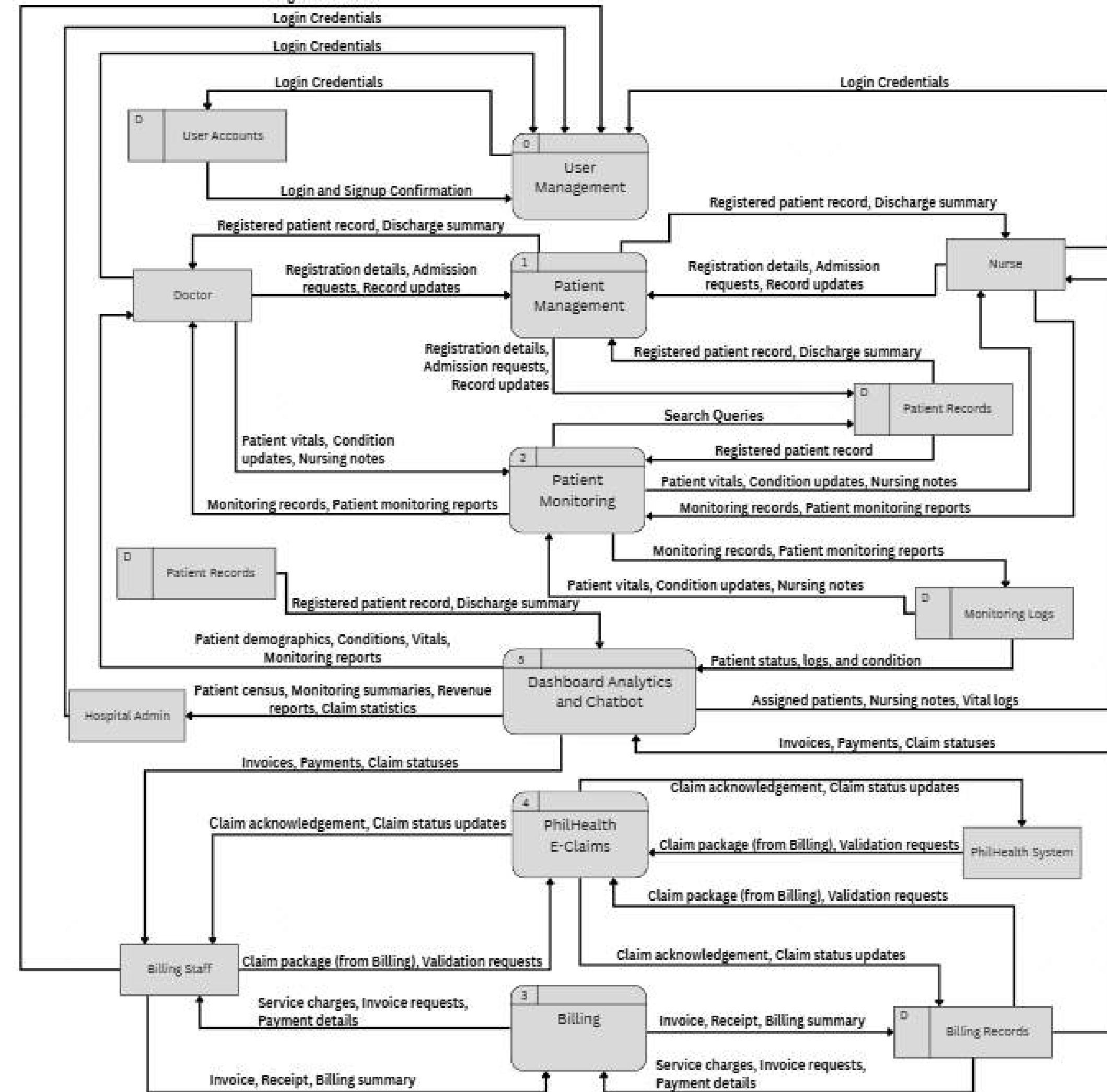
LEVEL 0



Scrum Master
Lloyd



LEVEL 1

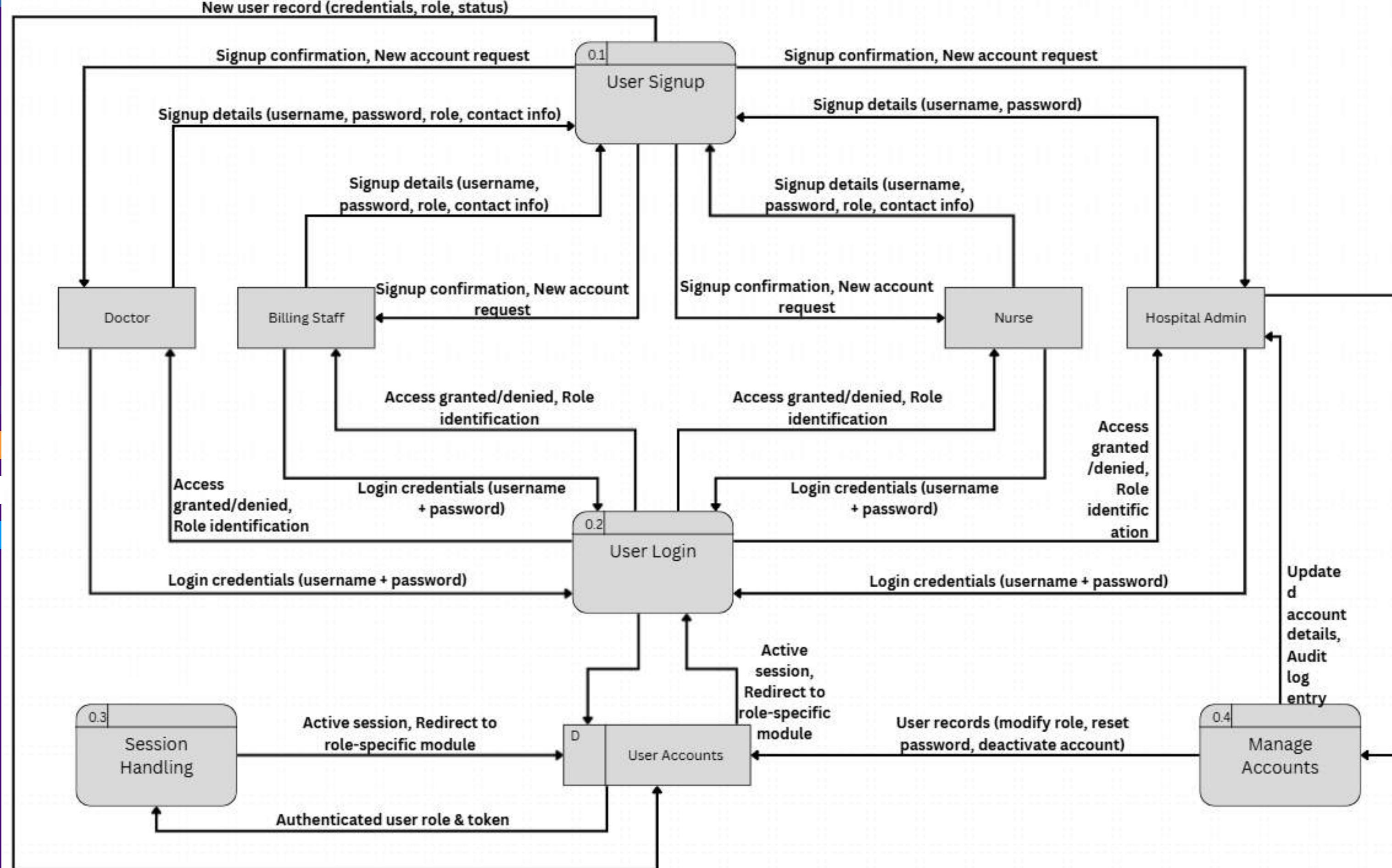


Scrum Master
Lloyd

LEVEL 2 - User Management



Scrum Master
Lloyd

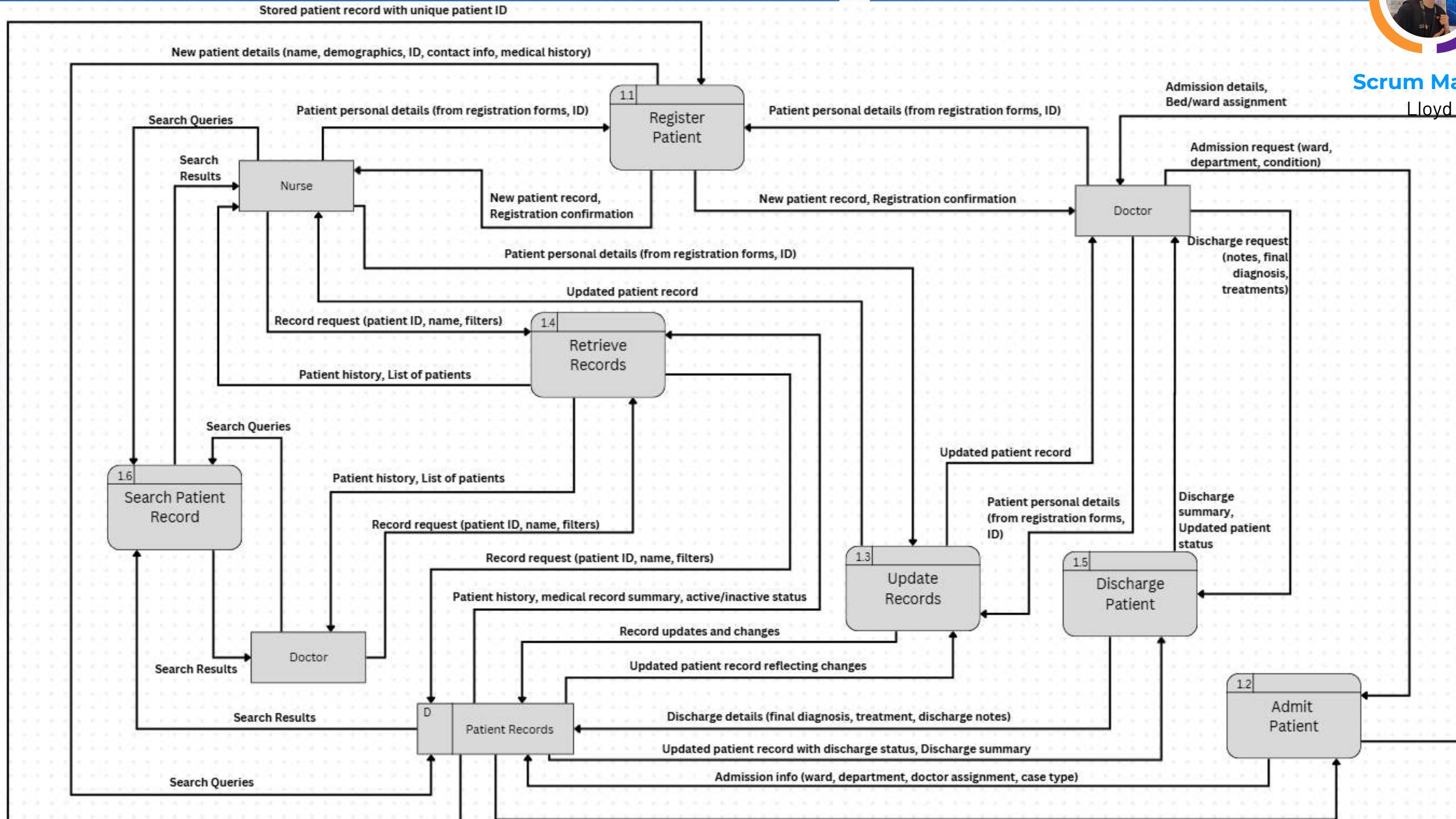


LEVEL 2 - Patient Management



Scrum Master

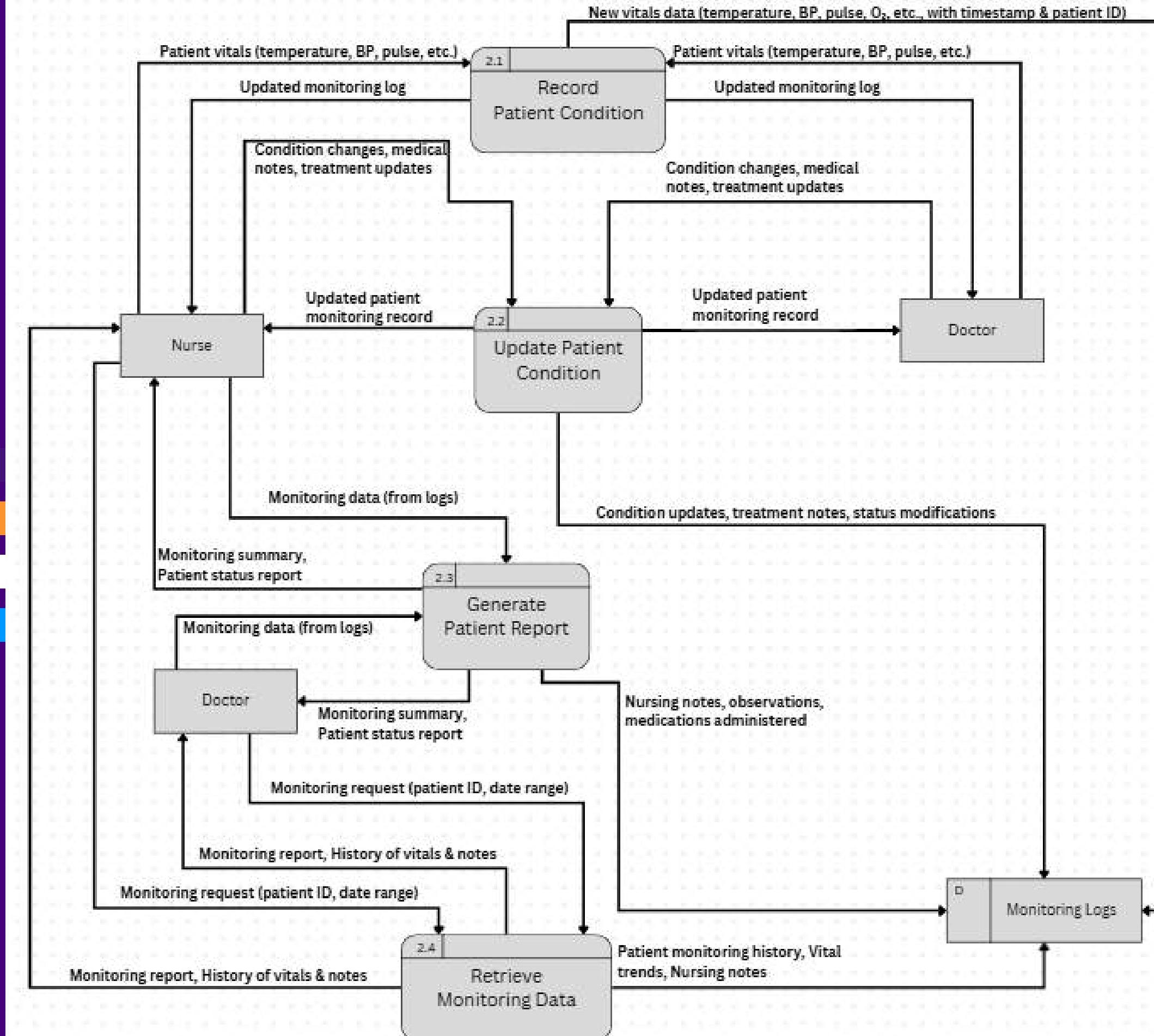
Lloyd



LEVEL 2 - Patient Monitoring



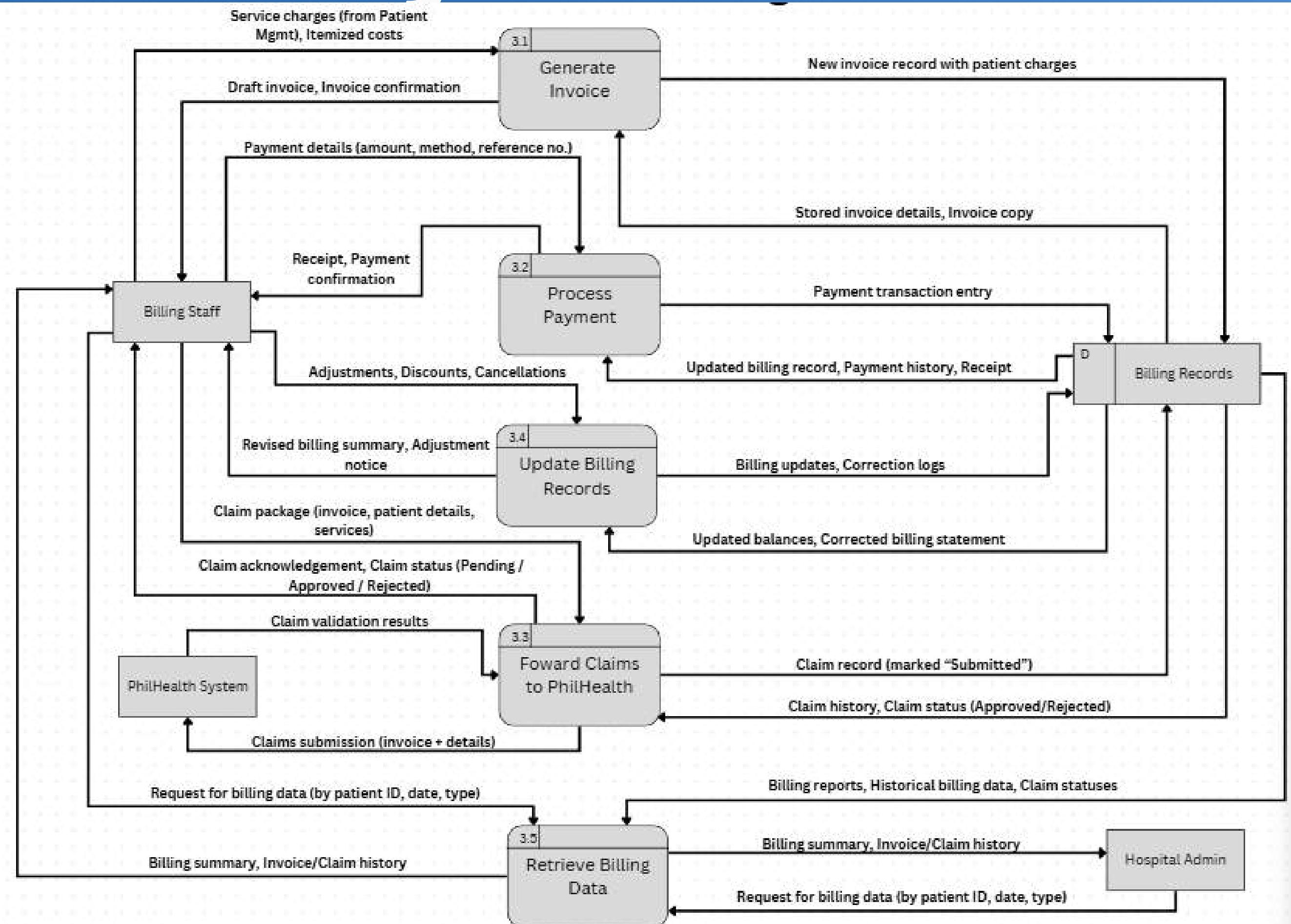
Scrum Master
Lloyd



LEVEL 2 - Billing



Scrum Master
Lloyd

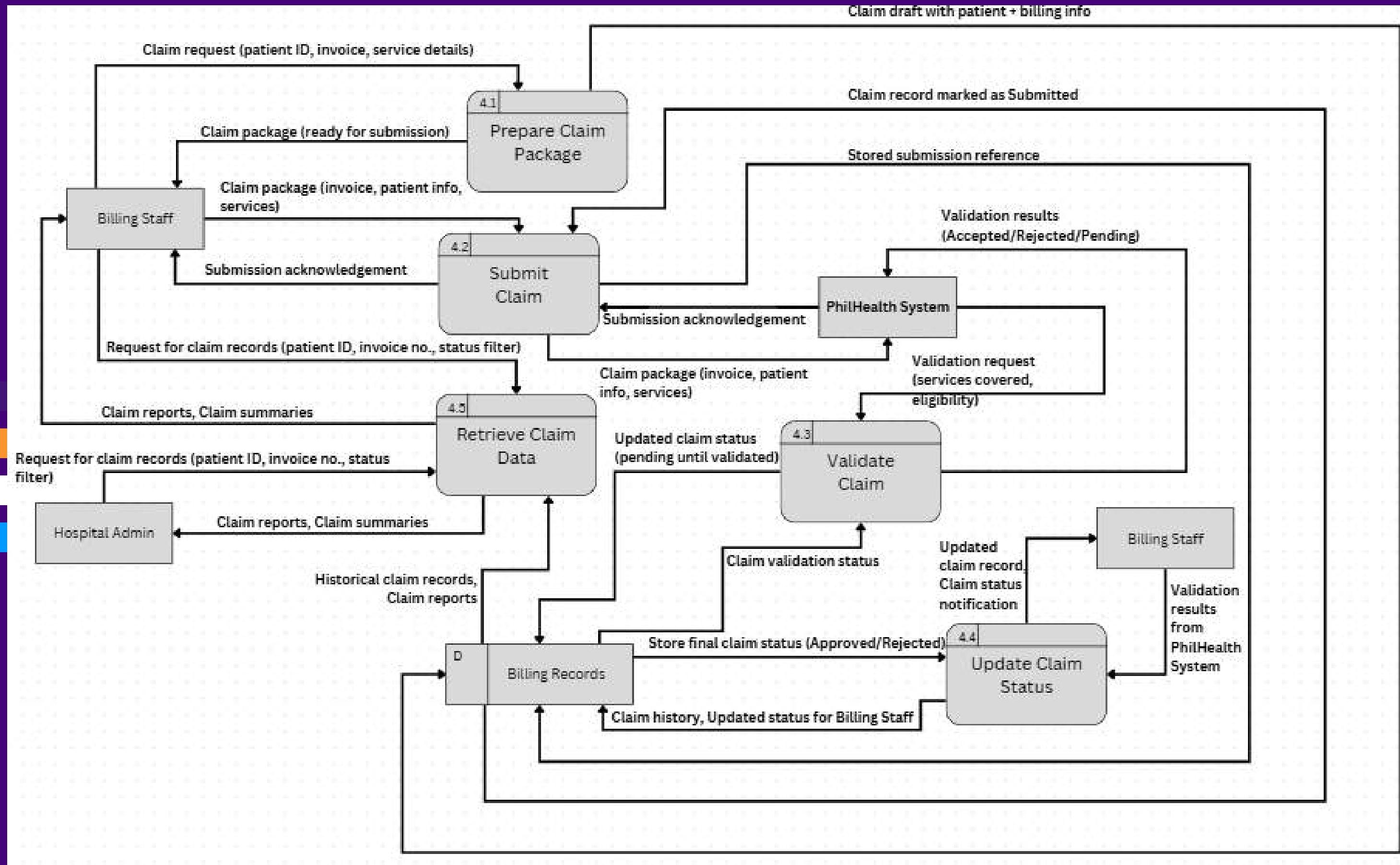


LEVEL 2 - PhilHealth E-Claims



Scrum Master

Lloyd

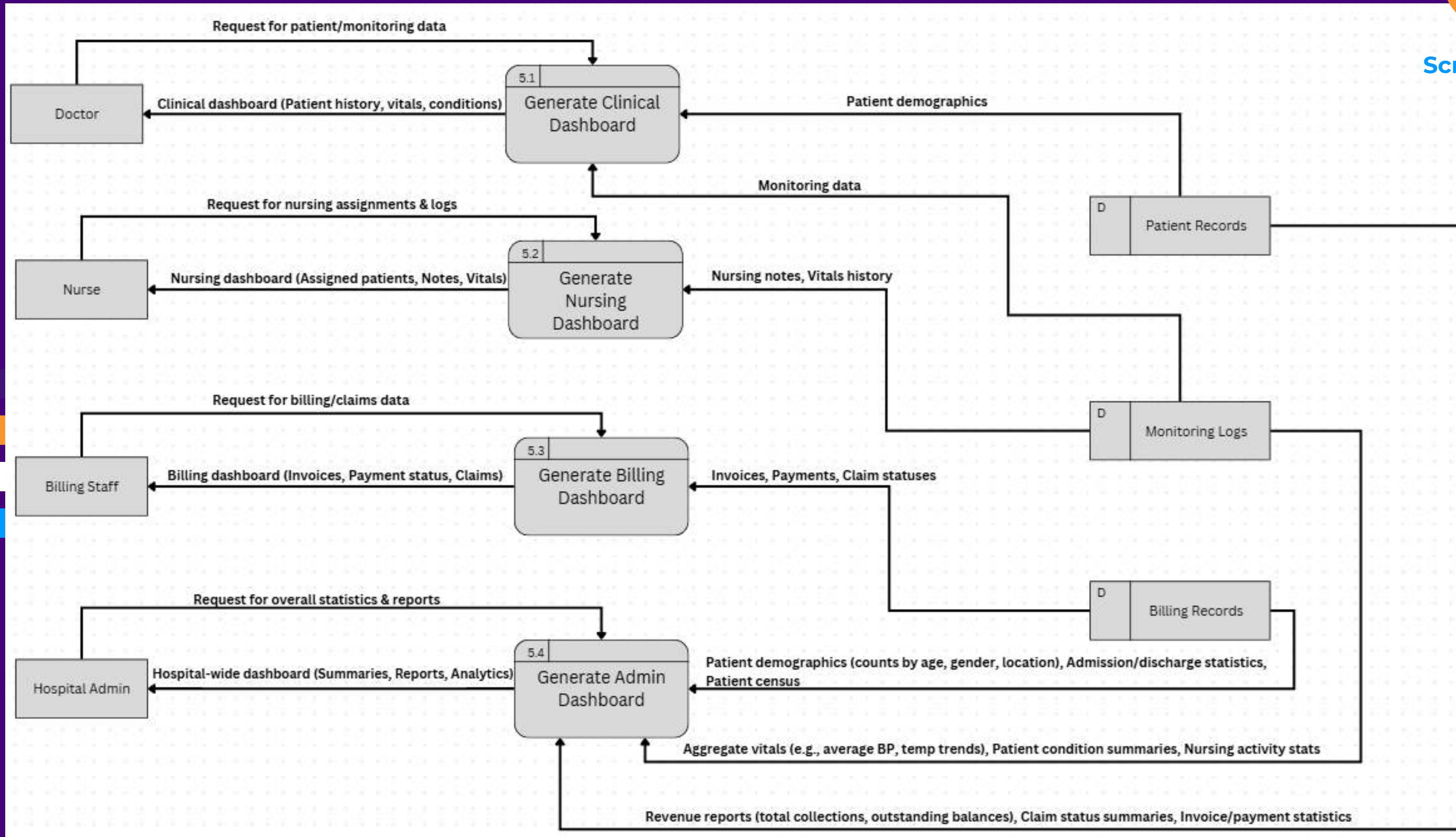


LEVEL 2 - Dashboard and Chatbot



Scrum Master

Lloyd





Member
lyah

OPENPROJECT OUTPUT

Pseudoers OpenProject

LINK



Member
lyah

The screenshot shows the OpenProject project overview page for the project "APC_2025_2...". The left sidebar contains navigation links such as Overview, Activity, Roadmap, Work packages, Gantt charts, Calendars, Boards, Meetings, Wiki, Backlogs, News, Time and costs, Budgets, Forums, Members, and Project settings. The main content area includes sections for Project Description, Project Status (ON TRACK), Members (Project admin: Elijah Quibin, Jhon Lloyd Nicolas, John Kenneth Jajurie, Mariyah Vanna Monique Chavez), and Work Packages Overview (a bar chart showing progress for tasks 21, 27, and 29). The right sidebar displays the Project life cycle phases: Initiating, Planning, Executing, and Closing, along with Project attributes like PBL Track and PBL Track 1.

OpenProject / APC_2025_2026_T1_SS231_G04 Pseudoers WAH for Hospitals / Overview

Overview

PROJECT DESCRIPTION

WAH for Hospitals

WAH4Hospital is a hospital information system (HIS) built for Philippine municipal and community hospitals. It digitizes hospital operations—from patient registration to PhilHealth e-claims—through a modular platform that aligns with national regulatory standards. Designed for low-resource settings, WAH4Hospital supports inpatient workflows, billing, pharmacy, laboratory, ERP modules, and electronic health records.

PROJECT STATUS

ON TRACK

MEMBERS

Project admin

Elijah Quibin, Jhon Lloyd Nicolas, John Kenneth Jajurie, Mariyah Vanna Monique Chavez

+ Member View all members

WORK PACKAGES OVERVIEW

Status

Task	Status	Progress (%)
21	In Progress	21
27	In Progress	27
29	In Progress	29

Project life cycle

- Initiating: 03/19/2025 - 06/30/2025
- Planning: 07/01/2025 - 09/12/2025
- Executing: 09/15/2025 - 12/31/2025
- Closing: 01/01/2026 - 02/20/2026

Project attributes

PBL Track
PBL Track 1

INDIVIDUAL CONTRIBUTION

- 01** Charter
- 02** Dataflow Diagrams
- 03** Communication with WAH
- 04** Stage 1 Empathize Interview
- 05** Empathy Map
- 06** Facilitating Meetings
- 07** Prototype Development
- 08** Initial Scoping
- 09** Stage 5 - Testing



JHON LLOYD NICOLAS

INDIVIDUAL CONTRIBUTION

- 01** Objectives
- 02** Use Case Diagram
- 03** Initial Scoping
- 04** Communication with Cuyapo Infirmary
- 05** Stage 1 Empathize Interview
- 06** Storyboard
- 07** Theoretical Persona
- 08** SSYADD Paper
- 09** Facilitating Meetings



ELIJAH JOSH QUBIN

INDIVIDUAL CONTRIBUTION

- 01** Stakeholder Analysis
- 02** SSYADD Paper
- 03** Facilitating Meetings
- 04** Prototype Development



JOHN KENNETH JA JURIE



INDIVIDUAL CONTRIBUTION

- 01** Scope
- 02** OpenProject Management
- 03** Storyboard
- 04** Actual Persona
- 05** Documents Organization
- 06** Facilitating Meetings
- 07** Slides Presentation



MARIYAH VANNA MONIQUE CHAVEZ



WAH for
Hospitals

THANK
YOU

