

August 2024

# UI/UX Guidelines for EMR & Clinical Systems

Users, Artifacts, Environments, Relationships, Ecosystems









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## Opportunity to Improve Adoption of Digital Tools in Indian Healthcare

For a long time, India's medical infrastructure relied solely on paperwork and analogue records, highlighting the crucial need for digitization. Government initiatives aim to promote digitization, and private healthcare providers are investing in digital innovations. The emergence of healthcare IT companies in India provides a diverse array of hospital management solutions including Electronic Medical Records (EMR) and telemedicine.

Although the transition to digitizing the healthcare infrastructure in India is an ongoing effort, it also introduced new challenges, particularly regarding adoption of digital tools. The World Health Organization reported in 2020 that the global average adoption rate of EMRs in hospitals is around 50%, but drops to 20% in low-income countries. The transition to EMRs, while beneficial, has resulted in longer times needed for updating records often due to usability issues. This reduces the time available for direct patient interactions, contradicting the intended purpose of digitization.

The project between the National Cancer Grid - Koita Centre for Digital Oncology (NCG-KCDO) and ZEUX Innovation focuses on improving the user experience of healthcare systems to help drive adoption. The project started with an audit of current systems, followed by the creation of detailed design guidelines to enhance overall usability.



The first step is to identify the User Experience (UX) challenges through a process known as a UX audit. The primary objective of this audit is to observe users, such as doctors, nurses and admin staff, in their working environments & their interaction with the digital tool in focus. Thus gaining insights into the nuanced challenges they face. To conduct this UX audit, we created a framework called SHIFT. The SHIFT framework can be applied to future audits, ensuring a standardized approach to identifying and addressing user challenges across various healthcare settings. For developing new healthcare management systems, we adopt a user-centered approach and use our HEALING framework, ensuring the creation of intuitive and efficient solutions tailored for the healthcare ecosystem. This method fosters user adoption and satisfaction by prioritizing their needs and preferences. Combining these frameworks, we can streamline digital healthcare management, enhancing both existing and new systems to support better healthcare delivery and outcomes.

## The SHIFT Framework

First part of this project involved conducting a UX audit of a Hospital Management Information System (HMIS) used by various government hospitals and small clinics in India. The first step involved field research and user interviews with doctors, nurses, and admin staff. Doctors face time constraints, system latency, device issues, confusing

#### A guide to assessing the UX of a Healthcare Management System

navigation, and non-matching forms. Nurses struggle with limited system access, glitches, dual desk responsibilities, redundant data entry, and lack of training. The Administrative staff encounter high workloads, slow systems, interdepartmental workflow issues, excessive manual data entry, and inadequate training.

#### This research lead to 11 key insights

- The system is slow and unreliable, often timing out and requiring multiple logins throughout the day, sometimes even mid-task.
- The system does not match the user's mental model; hence, doctors prefer using one text field for all relevant details.
- The system requires manual input for data that should be auto-filled, like diagnoses, tests, and procedure details, impacting billing efficiency.
- 4. Tasks and data must be maintained offline, in registers as well as online, staff must input data in both formats.
- 5. It is hard to find information because staff use the father's name to cross-check patient information, which is hidden
- 6. Information is fragmented across different computers with no consolidated data view.

- When a referred patient comes, the doctor cannot view previous details or scan and upload previous reports. For revisit patients, the previously prescribed medication list cannot be selected
- 8. Users create new records for existing patients when they lose their slip or lack a mobile number, leading to redundant information.
- Optional fields are shown as mandatory, causing users to add placeholder text and skip mandatory fields to proceed.
- 10. Despite ward and bed vacancies, the system inaccurately shows no availability for a newly admitted patient.
- 11. Users find it difficult to type on tablets and prefer using their mobile devices instead.

As the next step, we leveraged this research to conduct a UX audit of their hospital management system. One of the key insights from audit was to leverage 'Object-Oriented UX'. A design methodology that models digital interfaces similar to what our brains do in the real world. It focuses on aligning user journeys around real-world process flows & interactions, making the user experience more intuitive. By aligning interface elements with users' mental models, it simplifies navigation and tasks, enhancing usability and ensuring that systems are easier to learn and use effectively and ultimately boosting usability and adoption.

#### As the final step, the research and UX audit conducted so far, enabled us to evaluate and organize the findings within a structured framework called the 'SHIFT Framework'.

Audit Fr	ramework	Audit Findings
S	Structural Blueprint	Incoherent structural blueprint
н	Harmony of Components	Lack of harmony in UI components
I	Interface Aesthetics & Interaction	<b>Outdated</b> interface aesthetics and <b>confusing</b> interaction
F	Form Design	<b>Poor</b> form design
т	Table Design	Table design <b>violates best practice</b>

## **The HEALING Framework**

## A guide to designing & developing new healthcare management systems

To design an effective electronic medical record (EMR) system, the requirements were thoroughly studied to understand the medical context. In order to analyse the UX landscape, we had multiple interactions with the users in their working environment to gain insights into their natural real-world workflow & to understand the areas of friction in the digital workflow. Some of these findings were, doctors often lack a full picture of a patient's treatment plan and quick access to lab readings and historical data. They struggle with disorganized information and sometimes rely on WhatsApp for managing patient reports or prescribing drugs over the phone without proper records.

Nurses face challenges such as the absence of a portable system for bedside updates, managing multiple patients simultaneously, and the effort required for making handwritten notes.

*To view the detailed application of the design framework leveraging the HEALING framework, please refer to* **the annexure** 



## 7 Keys to Best-in-Class Treatment Mgmt. System

## Н

#### Human - centered Design

Prioritize the needs, preferences, and experiences of users, including healthcare professionals and patients, throughout the design process to create a system that is intuitive, empathetic, and supportive.

- Define your target audience
- Identify users' pain points
- Map the process & role players

#### E Efficiency

Design workflows and interactions that optimize efficiency in chemotherapy management tasks, enabling users to accomplish their goals quickly and effectively.

- Land users in the right place
- Persistently display decision-aiding info
- Design for speed and ease of input



Ensure that the system provides accurate and reliable information, such as medication dosages, treatment schedules, and patient records to support safe and effective chemotherapy administration.

- Prioritize error prevention
- Visually represent key statuses
- · Lock edits and discard outdated data

#### L Lifecycle Support

Provide comprehensive support throughout the entire treatment lifecycle, from treatment planning and administration to monitoring, follow-up care and survivorship planning.

- Design end-to-end treatment management
- Seamlessly integrate with patient's EMR
- Make past data available

## Idiot-proofing

Include features and fail-safes that simplify complex processes and ensure critical tasks are performed correctly. The goal is to ensure that systems are accessible and safe for users of all skill levels.

- Minimize the use of icons
- Provide reference information
- Include redundancies

N

#### **Navigation Simplicity**

Design intuitive navigation structures and user interfaces that simplify the user experience, making it easy for users to find information, complete tasks, and navigate the system effectively.

- Maintain flat menu structures
- Provide clear location cues
- Simplify switching patients & processes

## **Growth-oriented**

Build the system with scalability and adaptability in mind, allowing it to grow and evolve alongside advancements in treatment, healthcare practices, and technological innovations.

- Reuse existing templates and components
- Design for scalable phases and processes
- Design for scalable actions

## Paving the Way for Improved Digital Solutions

Cancer care is changing rapidly worldwide, and use of digital tools and technologies are playing a key role in driving this change – improving quality, access, and cost of care. Digital technologies are being used across the entire patient journey – screening, diagnostics, treatment, hospital care, home care and survivorship. It is imperative for India to have a strong focus on driving adoption of digital tools to improve cancer care.

The project between the National Cancer Grid - Koita Centre for Digital Oncology (NCG-KCDO) and ZEUX Innovation provides for an easy to use framework to improve design and adoption of digital tools in India's healthcare landscape. The project underscores the importance of UX in digital healthcare systems to increase user satisfaction and enhance adoption . By prioritizing intuitive interfaces, healthcare systems become more user friendly and efficient, allowing medical professionals to focus on patient care while benefiting from the digital capture of critical medical information.



#### **ZEUX Innovation**

402, El Tara, Orchard Ave, Hiranandani Gardens, Powai, Mumbai, Maharashtra 400076

zeuxinnovation.com

ZEUX Innovation, based in Mumbai with over 8 years of experience, specializes in user centered design across sectors, including healthcare. Their expertise in crafting solutions tailored for India's unique challenges makes them a valuable partner.



#### The National Cancer Grid

Tata Memorial Hospital, Dr. E Borges Road, Parel, Mumbai 400 012. India.

ncgindia.org

The National Cancer Grid (NCG) is a large network of cancer centres, research organizations and charitable institutes with over 340 members providing treatment to around two-thirds of all cancer cases in India and created with the primary mandate of ensuring uniform standards of cancer care across the nation in addition to capacity building and collaborative clinical research.



#### Koita Centre for Digital Oncology

Tata Memorial Hospital, Dr. E Borges Road, Parel, Mumbai 400 012. India. The Koita Centre for Digital Oncology (KCDO) is India's first organisation dedicated to transforming cancer care in India using digital technology and a joint initiative of the National Cancer Grid (an initiative of the Government of India and the Tata Memorial Centre) and the Koita Foundation (leading non-profit organisation focused on digital health adoption).

kcdo.in

Design blueprint for better healthcare

# Annexure

Design blueprint for better healthcare

# The HEALING Framework >

# Design Framework

Human-centered Design
 Efficiency

Accuracy

A

G

Lifecycle Support

Idiot-proofing

**N** Navigation Simplicity

Growth Oriented

# H Human-centered Design

Prioritize the needs, preferences, and experiences of users, including healthcare professionals and patients, throughout the design process to create a system that is intuitive, empathetic, and supportive.

- Define your target audience
- Identify users' pain points
- Map the process & role players

## Define your target audience

Who are your users?



## Define your target audience

Who are your users?



## Define your target audience

Understand user's objectives



Sr. Doctors

- Have an overview of patient
   & treatment plan
- Adjust drug dosages
- Recalibrate complete treatment plan
- Add/ view notes on the fly



#### Jr. Doctors

- Assess reports & scans
   before treatment begins
- Provide follow-up dates and advice
- Aid symptom management
- Add/ view notes on the fly



#### Nurses

- Check and update patient's vitals
- Administer drugs
- Record drug tolerance
- Add/ view notes on the fly

## Identify users' pain points



Sr. Doctors

- No view of overall treatment response
- No quick access to lab readings & historical data
- Disorganized and fragmented information



Jr. Doctors

- Delay between authorization & administration of chemo
- Patient reports reside in their personal phone
- Drugs prescribed over the phone are not recorded



#### Nurses

- No portable system to enable bed-side updates
- Handling multiple patients simultaneously
- Excessive handwritten note-taking

### Map the process & role-players



#### Clarify jargons and nuances



\*\*May span across one or more days, includes the ensuing gap period



Design workflows and interactions that optimize efficiency in chemotherapy management tasks, enabling users to accomplish their goals quickly and effectively.

- Land users in the right place
- Persistently display decision-aiding information
- Design for speed and ease of input

### Land users in the right place

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Bring users to the current cycle/ phase instead of making them find it.

### Land users in the right place

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Automatically scroll tables to the current day instead of making the user scroll to locate it.

## Persistently display decision-aiding info

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Maintain key patient information that affects the treatment plan as the central object.

### Persistently display decision-aiding info

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Ritakumari Ba MR No. 3790132 Switch Patient	lsekar/ 46/ F	Breast Cancer Progressive Disease Update/ View Histo	23.02.24 Pl ry Cha	ministratio	on route	Allergi Sulphur Update	es Penicillin	View all	Add/ View All N More Actions	lotes
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Always keep key information regarding the selected cycle visible regardless of the process.

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Allow in-line edits for tables when it is critical to see all other info and no additional fields are required.

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Ritakumari Balso MR No. 3790132 Switch Patient	ekar/ 46/ F	Breast Cancer_Stage	V Adr	ninistration rou	ite Alle	rgies mu (Penicilian)		Add/ View All Notes More Actions
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Allow user to apply changes to multiple cycles/ phases at one time thereby reducing repeated inputs.



Auto-populate the current date and time and allow user to change this where retrospective data input is permitted.



Enable on-the-go usage by designing responsive screens for mobile



Ensure that the system provides accurate and reliable information, such as medication dosages, treatment schedules, and patient records to support safe and effective chemotherapy administration.

- Prioritize error prevention
- Visually represent key statuses
- Lock edits and discard outdated data

Ritakumari Ba MR No. 3790132 Switch Patient	lsekar/ 4	16/ F	Breast Cancer Progressive Disease 12 Update/View Histor	_Stage IV A 3.02.24 ( y C	dministration	n route	Allergi Sulphur Update	es Penicillin (	View all M	d/ View All I ore Actions	Note
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ycle 1 01.05.24	D2	Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	÷	7	0	Ū
Planned	D2	Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	(-+)		0	Ū
	D2	Post	Flouroracil 🛈	Subcutaneous once as bolus 24 Hrs after completion o <b>more</b>	0.3 mg	100	0.3 mg	ш.	÷	0	Ū
iQ21											

Use a single-color palette with variations in shade.

Avoid using green, amber, and red as primary or secondary colors to prevent users from associating them with preconceived meanings (e.g., red for danger or stop).



Alert the users about destructive actions.



Ask confirmation questions for critical action such as drug administration, editing dosages etc.

CANCER GRID GOLIADSANDH HOI CHURCH							Q 5	earch by Patient	Name/ MR N	o	¢ ۲	6
Ritakumari Ba MR No. 3790132 Switch Patient	lsekar/ 4	ŀ6/ F	Breast Cancer Progressive Disease	Stage IV A 23.02,24 C	dministratic	on route	Allergi Sulphur Update	es Penicillin	(View all	Add/ Mor	View All M	Notes
reatment Plan :	Cycle	<b>3</b> 16.04.24	BR PACL1 + TRAS	(21 days) Ongoing ~		Body Met	<b>ics</b> 165 cm	56kg   2.1 m²	Patient C	ondition Asyn	nptomatic (	0
asis: Routine 🛈	Labs +	IB 8.2 PLT	1,20,000 WBC 10,000	ANC 3000 BR 1.2 AL	B 2.8 SGOT 7.	0 SGPT 5.0	Cr 1.1	Vitals 97°F	102 bpm	90/60 mmHg	96 % 14	1 bpm
ycle 1 16.03.24	Chem	o Drugs P	lanned Chemo	Administration C	hemo Tolera	ince Di	scharge Ad	vice Ren	noved Dri	ugs		
Complete Tolerance: 2	-											
and the state	Day	Туре 🛩	Drug Name 🛩	Route/Instructions 👻	Dosage	%	Total dose	Modified 🛩	Reason			
Cle 2 01.04.24	Day 1	16.04.24	TODAY								+ Add	d Drug
Complete Folerance: 3	D1	Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	-	-		õ	
cle 3   16.04 :4 PACL1 + TRAS WEEKLY(21d)	D1	Pre	Aprepitant	Per oral once	100 mg	100	100 mg	- A-	144		0	
Ongoing Tolerance: 2	D1	Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	-	~		0	
sis: Progressic	Day 2	17.04.24									+ Add	i Drug
vcle 1 01.05 4	D2	Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	÷	÷		0	
Planned	D2	Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2		;;		0	Ū
<b>ycle 2 16.05.24</b>	D2	Post	Flouroracil 🛈	Subcutaneous once as bolus 24 Hrs after completion o <b>more</b>	0.3 mg	100	0.3 mg	ω			0	
rtanited	D2	Post	Dexamethosone	Per oral after food	10 mg	100	10 mg		-		0	
515 5 52100124												

Visually represent key statuses to alert the users at a glance.

						Q Search by	Patient Name/ MR N	D .	¢) ()
Ritakumari Ba MR No. 3790132 Switch Patient	ılsekar/ 46/ F	Breast Cancel Progressive Disease Update/ View Histo	r_Stage IV A	dministratio	n route	Allergies Sulphor (Pen Update	icillin) (Viewall)	Add/ View More Acti	All Notes
Treatment Plan :	Cycle 3 16.04.2	4    BR PACL1 + TRAS.	(21 days) Ongoing ~		Body Metrics	165 cm   56kg	2.1 m <sup>2</sup> Patient C	ondition Asymptoma	atic 🛈 🚦
Basis: Routine 🛈	Labs HB 8.2 PU	1,20,000 WBC 10,000	0 ANC 3000 BR 1.2 AL	B 2.8 SGOT 7.0	SGPT 5.0	Cr 1.1 Vitals	97°F 102 bpm	90/60 mmHg 96 %	14 bpm
Cycle 1 16.03.24 BR PACL1 + TRAS., WEEKLY(21d)	Chemo Drugs	Planned Chem	o Administration	Chemo Tolera	nce Disc	harge Advice	Removed Dr	ugs	
Complete Tolerance: 2	Day Type ~	Drug Name 🛩	Route/ Instructions ~	Total dose	Status 🛩	Start Time - End Time	Site of Administration	Remarks	
Cycle 2 01.04.24 BR PACL1 + TRAS WEEKLY(21d)	Day 1   16.04.24	TODAY							
Complete Tolerance: 3	D1 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	Given	10:45 AM - 11:16 AM	Left Upper Limb	*	ø
Cycle 3 16.04.24 BR PACL1 + TRAS., WEEKLY(21d)	D1 Pre	Aprepitant	Per oral once	100 mg	Not Given	N/A	N/A	Severe allergic reaction observed.	0
Ongoine Tolerance: 2	D1 Chemo	) Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	Explained	N/A	N/A	Spoken with mother	ø
Basis: Progression 🛈	Day 2 17.04.24	6							
Cycle 1 01.05.24	D2 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg		-			0
Planned	D2 Chemo	) Flouroracil ①	Intravenous central line once as bolus	1000 mg/ m2	-	-	-		0
Cycle 2 16.05.24			Subcutaneous once as						

Visually represent key statuses to alert the users at a glance.

#### Lock edits & discard outdated data



Disable editing of data after a stipulated period to account for human error but disallow data tampering later.

Accuracy

#### Lock edits & discard outdated data

Ritakumari Ba MR No. 3790132 Switch Patient	lsekar/ 4	46/ F	Breast Cancer Progressive Disease Update/ View Histo	23.02.24 C	dministratic	on route	Allergi Sulphur Update	es Penicillin (	Viewall	Add/ View All N More Actions	lote
eatment Plan	Cycle	<b>3</b> 16.04.24	BR PACL1 + TRAS	. (21 days) Ongoing ~		Body Me	<b>trics</b> 165 cm	56kg   2.1 m²	Patient Condition	on Asymptomatic (	Ð
sis: Routine 🛈	Labs			Pending				Vitals	Pen	ding	
rcle 1   16.03.24 PACL1 + TRAS WEEKLY(21d) Complete Tolerance: 2	Day		enem	Dente / Instanción			Toonaige No	weetend			
ycle 2 01.04.24 PACL1 + TRAS WEEKLY(21d)	Day 1	16.04.24	TODAY	Route/ Instructions *	Dosage	70	Total dose	Modified *	Reason	+ Add	Dru
Complete Tolerance: 3	D1	Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	-	4	ı	
vcle 3 16.04.24 PACL1 + TRAS WEEKLY(21d)	D1	Pre	Aprepitant	Per oral once	100 mg	100	100 mg	÷	i è i	ı	
Ongoing Tolerance: 2	D1	Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	-	4	ı	
sis: Progression 🛈	Day 2	17.04.24								+ Add	Dru
vcle 1 01.05.24	D2	Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	÷	~	0	
Planned	D2	Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	14 m		o	
Q21	D2	Post	Flouroracil 🛈	Subcutaneous once as bolus 24 Hrs after completion o <b>more</b>	0.3 mg	100	0.3 mg	20	-	õ	Ū
rianita	D2	Post	Dexamethosone	Per oral after food	10 mg	100	10 mg	-	-	0	

Discard data which is time sensitive and alert the user that it is pending for updation.

# L Lifecycle Support

Provide comprehensive support throughout the entire treatment lifecycle, from treatment planning and administration to monitoring, follow-up care and survivorship planning.

- Design end-to-end treatment management
- Seamlessly integrate with patient's EMR
- Make past data available

#### Design end-to-end treatment management

Ritakumari Ba MR No. 3790132 Switch Patient	lsekar/ 4	46/ F	Breast Cancer Progressive Disease 2 Update/View Histor	Stage IV // 3.02.24 ( y S	Administratic	on route	Allergi Sulphur Update	es Penicillin	(View all)	Add/ View All	Notes
reatment Plan	Cycle	<b>3</b> 16.04.24	BR PACL1 + TRAS	(21 days) Ongoing 🗸		Body Me	etrics 165 cm	56kg   2.1 m²	Patient Conditio	<u>n</u> Asymptomatic	0
asis: Routine 🛈	Labs	HB 8.2 PLT	1,20,000 WBC 10,000	ANC 3000 BR 1.2 A	LB 2.8 SGOT 7.	0 SGPT 5.	0 Cr 1.1	Vitals 97°F	102 bpm 90/60 m	nmHg 96% 1	L4 bpm
ycle 1 16.03.24 R PACL1 + TRAS WEEKLY(21d)	Chem	io Drugs P	lanned Chemo	Administration	Chemo Tolera	ince [	Discharge Ad	vice Rer	noved Drugs		
Complete Tolerance: 2	Day	Туре 🗸	Drug Name 🗸	Route/Instructions 🗸	Dosage	%	Total dose	Modified ~	Reason		
ycle 2 01.04.24 R PACL1 + TRAS WEEKLY(21d)	Day 1	16.04.24	TODAY							+ Ac	ld Drug
Complete Tolerance: 3	D1	Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	-	-	6	* 🔟
ycle 3 16.04.24 R PACL1 + TRAS WEEKLY(21d)	D1	Pre	Aprepitant	Per oral once	100 mg	100	100 mg		100	0	> 🔟
Ongoing Tolerance: 2	D1	Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	-	-	6	* 🔟
asis: Progression (i)	Day 2	17.04.24								+ Ac	ld Drug
/cle 1 01.05.24	D2	Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg		7	6	» 🔟
Planned	D2	Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2			6	* 🔟
ycle 2 16.05.24	D2	Post	Flouroracil 🛈	Subcutaneous once as bolus 24 Hrs after completion o <b>more</b>	0.3 mg	100	0.3 mg	-		6	* 🔟
rianned	D2	Post	Dexamethosone	Per oral after food	10 mg	100	10 mg	÷	÷	6	× 🔟

Cover all the stages of treatment including pre, during and after care.

### Seamlessly integrate with patient's EMR

NATIONAL CANCER GRID < ( Q Search by Patient Name/ MR No.  $\Box$ 8 Ritakumari Balsekar/ 46/ F Breast Cancer Stage IV Administration route Allergies Add/ View All Notes MR No. 3790132 PICC Penicillin View all More Actions 🗸 Switch Patient **Update/View History** Change Update **View Patient Profile** view Protocol Chart **Treatment Plan** Cycle 3 16.04.24 BR PACL1 + TRAS... (21 days) Ongoing Body Metrics 165 cm 56kg 2.1 m<sup>2</sup> Patient Conditio Labs HB 8.2 PLT 1,20,000 WBC 10,000 ANC 3000 BR 1.2 ALB 2.8 SGOT 7.0 SGPT 5.0 | Cr 1.1 Vitals 97°F 102 bpm 90/60 mmHg 96 % 14 bpm Basis: Routine () Cycle 1 16.03.24 **Chemo Drugs Planned** Chemo Administration Chemo Tolerance Discharge Advice Removed Drugs BR PACL1 + TRAS ... WEEKLY(21d) Tolerance: 2 Modified ~ Day Drug Name v Route/Instructions ~ Dosage Total dose Reason Type 🛩 Cycle 2 01.04.24 TODAY BR PACL1 + TRAS... WEEKLY(21d) Intravenous central line Complete Tolerance: 3 (Pre) Atropin Sulphate 100 1 1 D1 0.25 mg 0.25 mg once as bolus Cvcle 3 16.04.24 1 1 ( Pre D1 Aprepitant Per oral once 100 mg 100 100 mg BR PACL1 + TRAS... WEEKLV(21d) Intravenous central line 1000 mg/ 1000 mg/ Tolerance: 2 1 1 Chemo Flouroracil () 100 DI once as bolus m2 m2 Basis: Progression (i) Intravenous central line 0 1 Atropin Sulphate Cycle 1 01.05.24 D2 Pre 0.25 mg 100 0.25 mg once as bolus ACO21 1000 mg/ Intravenous central line 1000 mg/ Planned 1 1 100 D2 Chemo Flouroracil () once as bolus m2 m2 Subcutaneous once as Cycle 2 16.05.24 0 1 D2 Post Flouroracil () bolus 24 Hrs after 0.3 mg 100 0.3 mg ACO21 completion o...more Planned 1 1 D2 Post Per oral after food 100 Dexamethosone 10 mg 10 mg Cycle 3 01.06.24 **Generate Prescription Authorise Chemo Administration** 

Allow user to easily go back and forth to the patient's larger electronic medical record.

### Make past data available

					Vitals					×
Ritakumari Ba MR No. 3790132 Switch Patient	lsekar/ 46/ F	Breast Cancer Proposition Disase Update/ View Histo	r_Stage IV /	Adminis PICC Change	Update H	istory Last 1 month	O Last 3 mon	ths O Last 6	5 months	_
Treatment Plan	Cycle 3 16.04.24	BR PACL1 + TRAS	. (21 days)		Vitals	02 Feb 2024 2:20 PM	01 Feb 2024 2:00 PM	<b>17 Jan 2024</b> 3:00 PM	16 Jan 2024 3:00 PM	<b>01 Jan</b> 3:00
Basis Routine 🕢	Labs HB 8.2 PLT	1,20,000 WBC 10,000	) ANC 3000 BR 1.2 A	LB 2.8 S	Respiratory Rate	14 bpm	14 bpm	14 bpm	14 bpm	141
Cycle 1, 16.03.24 RR PACLE + TRAS WEEKLVIJIHI	Chemo Drugs P	lanned Chem	o Administration	Chemo	SPO <sub>2</sub>	96 %	96 %	96 %	96 %	96
Tolerance: 2	Day Туре ~	Drug Name 🐱	Route/Instructions ~	Dosa	Blood Pressure	90/60 mmHg	90/60 mmHg	90/60 mmHg	90/60 mmHg	90/60
Cycle 2 01.04.24 BM MACL1 + TRAS WEEKIV(210)		TODAY			Temperature	97°F	97°F	97°F	97°F	97
Tolerance: 2	ITL (FIE)	Atropin Sulphate	Intravenous central line once as bolus	0.25	Pulse	102 bpm	102 bpm	102 bpm	102 bpm	102
Cycle 3 16.04.24	(11 (Pie))	Aprepitant	Per oral once	100 r						
Oncoloc Tolerance: 2		Flouroracil 🛈	Intravenous central line once as bolus	1000 m2						
Basis: Progression ()										
Cycle 1 01.05,24	DZ (Pre)	Atropin Sulphate	Intravenous central line once as bolus	0.25 n						
		നസ്തന്ത് ന	Intravenous central line	1000						

Allow user to access all historical data related to the patient.

#### Make past data available

						Q SI	earch by Patient P	lame/ MR No		8
Ritakumari Ba MR No. 3790132 Switch Patient	lsekar/ 46/ F	Breast Cancer Progressive Disease Update/View Histor	_Stage IV //	Administratio PICC Change	n route	Allergi Sulphur Update	es Penicillin (	View all	Add/ View All N More Actions	lotes
Treatment Plan	Cycle 3 16.04.24	BR PACL1 + TRAS	(21 days) Ongoing ~		Body Met	rics 165 cm	56kg   2.1 m²	Patient C	ondition Asymptomatic G	D :
Add cycles	Labs HB 8.2 PLT	1,20,000 WBC 10,000	ANC 3000 BR 1.2 A	LB 2.8 SGOT 7.0	SGPT 5.0	Cr 1.1	Vitals 97°F	102 bpm	Order Tests for Next Cycle	e
Postpone treatment Cancel treatment	Chemo Drugs F	Planned Chemo	Administration	Chemo Tolera	nce D	ischarge Ad	vice Rem	oved Dru	View Scans & Test Report Postpone cycle	ts
View/ Record patient consent View Edit Log	Day Type 🗸	Drug Name 🗸	Route/Instructions ~	Dosage	%	Total dose	Modified ~	Reason	Cancel cycle View/ Record patient con	isent
BR PACL1 + TRAS WEEKLY(21d)	Day 1   16.04.24	TODAY							View Edit Log	
Complete Tolerance: 3	D1 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	÷	-	î	
Cycle 3 16.04.24 BR PACL1 + TRAS., WEEKLY(21d)	D1 Pre	Aprepitant	Per oral once	100 mg	100	100 mg	-	4	ı	۵
Ongoing Tolerance: 2	D1 Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	-	-	õ	
Basis: Progression ()	Day 2 17.04.24								<u>+ Add</u>	Drug
Cycle 1 01.05.24	D2 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	41	1	î	
Planned	D2 Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	1	с÷ С	î	
Cycle 2 16.05.24	D2 Post	Flouroracil 🛈	Subcutaneous once as bolus 24 Hrs after completion o <b>more</b>	0.3 mg	100	0.3 mg		171	1	
Cycle 3 01.06.24	D2 (Post)	Dexamethosone	Per oral after food	10 mg	100	10 mg	-	-	Ø	
						Generate Pre	scription	Author	rise Chemo Administrat	tion

Provide access to edit logs which will contain date, time, author of key changes made.

#### Make past data available

						9	Notes	
Ritakumari Bal	sekar/ 46/ F	Breast Cancel	r_Stage IV	Administratio	on route	Allerg	Q Search for keyword/ author	F
Switch Patient		Update/ View Histo	ory (	Change		Update	General Note	1
	-						Refer to doctor's prescription fo Do not mix medication for pre, o	r cycle 3 medication. luring & post cycle.
Treatment Plan	Cycle 3 16.04.2	4   BR PACL1 + TRAS	(21 days) Ongoing		Body M	etrics 165 cm	Today at 3:15 PM	Dr. Nitin Shah
Basis: Rouline ① Cycle 1 16.03.24 BR PACL1 + TRAS WEEKLY(21d)	Labs HB 8.2 PL	<b>Planned</b> Chem	o ANC 3000 BR 1.2 A	Chemo Toler	ance	.0 Cr 1.1 Discharge A	Cycle 2 BR PACL1 + TRAS 3 WEE Remove Dexa from plan.	CKLY
Tolerance: 2	Day Type 🛩	Drug Name 🗸	Route/Instructions ~	Dosage	₩	Total dose	T DAY 860	Di, With Shan
Cycle 2 01.04.24 BR PACL1 + TRA5 WEEKLY(21d)		TODAY					Cycle 2 BR PACL1 + TRAS 3 WEEKLY Check vitals periodically every 2	hours.
Complete: Tolerance: 3	DI Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	2 days ago	Dr. Shivam Singh
Cycle 3 16.04.24 BR PACLL + TRAS WEERLY(21d)		Aprepitant	Per oral once	100 mg	100	100 mg	Cycle 3 ACQ21	
Origoine Tolerance: 2	DI Chemb	) Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2		a current cycle Note
Basis: Progression ①							Add a note	
Cycle 1 01.05.24	U2 (Pro)	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg		
		Flouroracil CD	Intravenous central line	1000 mg/		1000 mg/		
						Generate Pra		Cancel Save

# Allow user to access all past notes related to the patient.

# I Idiot-proofing

Include features and fail-safes that simplify complex processes and ensure critical tasks are performed correctly. The goal is to ensure that systems are accessible and safe for users of all skill levels.

- Minimize the use of icons
- Provide reference information
- Include redundancies

#### **Minimum use of icons**

COLLARDATION AL						Q s	earch by Patient	Name/ MR No		) ©	8
Ritakumari Ba	lsekar/ 46/ F	Breast Cancer	_Stage IV A	Administratio	on route	Allergi	es	View all	Add/ V	/iew All N	lotes
Switch Patient		Update/ View Histor	<u>γ</u>	hange		<u>Update</u>			More	ACTIONS	
Treatment Plan :	Cycle 3 16.04.24	BR PACL1 + TRAS	(21 days) Ongoing 🛩		Body Met	rics 165 cm	56kg   2.1 m <sup>2</sup>	Patient Co	ondition Asymp	otomatic (	D I
Basis: Routine	Labs HB 8.2 PLT	1,20,000 WBC 10,000	ANC 3000 BR 1.2 A	LB 2.8 SGOT 7.	0 SGPT 5.0	Cr 1.1	Vitals 97°F	102 bpm	90/60 mmHg	96 % 14	bpm
Cycle 1 16.03.24 BR PACL1 + TRAS WEEKLY(21d)	Chemo Drugs F	Planned Chemo	Administration	Chemo Tolera	nce Di	scharge Ad	lvice Rer	noved Dru	igs		
Complete Tolerance: 2	Day Type 🗸	Drug Name 🐱	Route/Instructions 😽	Dosage	%	Total dose	Modified 🗸	Reason			
Cycle 2 01.04.24 BR PACL1 + TRAS WEEKLY(21d)	Day 1   16.04.24	TODAY								+ Add	Drug
Complete Tolerance: 3	D1 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	-	-		ľ	
Cycle 3   16.04.24 BR PACL1 + TRAS WEEKLY(21d)	D1 Pre	Aprepitant	Per oral once	100 mg	100	100 mg		1		0	
Ongoing Tolerance: 2	D1 Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	н	~		0	Ū
Basis: Progression 🛈	Day 2   17.04.24									+ Add	Drug
Cycle 1 01.05.24	D2 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	~	-		0"	
Planned	D2 Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2				0	
Cycle 2 16.05.24	D2 Post	Flouroracil 🛈	Subcutaneous once as bolus 24 Hrs after completion o <b>more</b>	0.3 mg	100	0.3 mg	ш	-22		0	Ū
Planned	D2 Post	Dexamethosone	Per oral after food	10 mg	100	10 mg	+	÷		0	

Use text buttons instead of icons to ensure that there is no ambiguity in what the action means.

Use icons only for universally recognizable actions such as edit, delete, search, etc.

### **Provide reference information**

		Q Search by Patient Name/MR No.
Ritakumari Ba MR No. 3790132 Switch Patient	Isekar/ 46/ F Breast Cancer_Stage IV Administration route Progressive Disease 23.02.24 Update/ View History Change	Allergies Sulphur Peniciliir (View all) Update Add/ View All Notes More Actions ~
Treatment Plan :	Cycle 3 16.04.24   BR F Authorise for Chemo Administration	X m   56kg   2.1 m <sup>2</sup> Patient Condition Asymptomatic 3
Basis: Routine ③ Cycle 1 16.03.24 BR PACL1 - TRAS WEEKLY(21d) Complete Tolerance: 2	Labs       HB       8.2       PLT       1.2(       Ritakumar Balasekar       Cycle 3 - 16.04.24       BR PACL1 + TR(21 days)         Chemo       Drugs       Plan       Plan <td>Vitals 97°F 102 bpm 90/60 mmHg 96 % 14 bpm dvice Removed Drugs</td>	Vitals 97°F 102 bpm 90/60 mmHg 96 % 14 bpm dvice Removed Drugs
Cycle 2 01.04.24 BR PACL1 + TRAS WEEKLY(21d) Complete Tolerance: 3	Day 1 16.04.24 TOD/ D1 Pre Atro	+ Add Drug
Cycle 3 16.04.24 BR PACL1 + TRAS WEEKLY(21d) Ongoing Tolerance: 2	DI Pre Apre Cancel Yes, Proceed	
Basis: Progression ①	Day 2 17.04.24	+ Add Drug
Cycle 1 01.05.24	D2 Pre Atropin Sulphate Intravenous central line 0,25 mg 100 0	0.25 mg
	132 Chemical Flouroreicil Contravenous central line 1000 mg/ 100	1000 mg/
		Authorise Chemo Administration

Provide reference information on popups to give the user context.

#### **Provide reference information**

				Q Search by Patient Name/	MR Nó.
Ritakumari Ba MR No. 3790132 Switch Patient	lsekar/ 46/ F	Breast Cancer_Stage IV Progressive Disease 23.02.24 Update/View History	Administration route	Allergies Sulphur Penicillin View Update	Add/ View All Note
Treatment Plan :	Cycle 3 16.04.24	BR PACL1 + TRAS (21 days)	Ongoing 🗸 Body Me	e <mark>trics</mark> 165 cm   56kg   2.1 m² Pati	ent Condition Asymptomatic 🛈
Basis: Routine 🛈	Labs HB 8.2 PLT	1,20,000 WBC 10,000 ANC 3000	BR 1.2 ALB 2.8 SGOT 7.0 SGPT 5.	0 Cr 1.1 <u>Vitals</u> 97°F 102 b	opm 90/60 mmHg 96 % 14 bpn
Cycle 1 16.03.24 BR PACL1 + TRAS WEEKLY(21d)	Chemo Drugs	Planned Chemo Administ	ration Chemo Tolerance	Discharge Advice Remo	a Drugs
Complete Tolerance: 2	Day Toxicity o	bserved 🛩 Adverse Events 🛩	Grade 🛩 Remarks		Grades
Cycle 2 01.04.24 BR PACL1 + TRAS WEEKLY(21d)	Day 1 16.04.24	TODAY			1 Expected reaction
Complete Tolerance: 3	D1 Pending	1		ľ	2 Expected reaction
Cycle 3 16.04.24	Day 2 17.04.24				<ol> <li>Symptomatic bronchospasi with or without urticaria,</li> </ol>
BR PACL1 + TRAS WEEKLY(21d) Ongoing Tolerance: 2	D2 Pending	G		1	parenteral intervention indicated, hypertension,
	Day 3 18.04.24	1			edema/ angioedema
Basis: Progression 🛈	D3 Pending	~		ı	4 Life threatening consequent urgent intervention indicate
Cycle 1 01.05.24 ACQ21 Planned					5 Death
Cycle 2 16.05.24					

# Provide guidelines for information that is critical.

#### **Include redundancies**

Ritakumari Ba	lsekar/ 4	16/ F	Breast Cancer	_Stage IV Ad	ministratio	n route	Allergi	es		Add/ View Al	ll Note
MR No. 3790132 Switch Patient			Progressive Disease	(3.02.24) y Cha	ange		Update	) (Peoicillin) (	View all	More Action	is V
eatment Plan :	Cycle	3 16.04.24	BR PACL1 + TRAS	(21 da s) Ongoing 🗸		<u>Body Metr</u>	<b>ics</b> 165 cm	56kg   2.1 m²	Patient Condi	<b>tion</b> Asymptomatic	c ()
sis: Routine 🛈	Labs H	HB 8.2 PLT	1,20,000 WBC 10,000	ANC 3000 BR 1.2 ALB	2.8 SGOT 7.0	SGPT 5.0	Cr 1.1	Vitals 97°F	102 bpm 90/6	i0 mmHg 96 %	14 bpm
cle 1 16.03.24 PACL1 + TRAS WEEKLY(21d) Complete Tolerance: 2	Chem	o Drugs P	lanned Chemo	Administration Ch Route/Instructions ~	nemo Tolera Dosage	nce Di	scharge Ad Total dose	vice Rem Modified V	noved Drugs Reason		
cle 2 01.04.24 PACL1 + TRAS WEEKLY(21d)	Day 1	16.04.24	TODAY							<u>+ A</u>	dd Dru
Complete Tolerance: 3	D1	Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	-	-	4	1
cle 3 16.04.24	D1	Pre	Aprepitant	Per oral once	100 mg	100	100 mg		1441	2	1
Ongoing 1 erance: 2	D1	Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	~	~	z	1
sis: Progression 🛈	Day 2	17.04.24								+ A	dd Dru
cle 1 01.05.24	D2	Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	~	7	4	1
65T	D2	Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2		)++)	4	1
Planned			Elouroracil (i)	Subcutaneous once as bolus 24 Hrs after	0.3 mg	100	0.3 mg	-	-	4	1
cle 2 16.05.24	D2	Post	The around a company of the second seco	completion omore							

Show status information when it is likely that one instance might disappear from the user's view due to scrolling.

#### **Include redundancies**

						Q Se	sarch by Patient	Name/ MR No.	¢ ۲	8
Ritakumari Ba MB No. 2700122 Switch Patient	lsekar/ 46/ F	Breast Cancer Progressive Disease Update/ View Histo	r_Stage IV Ad 23.02,24 P rry Cha	Iministratic	n route	Allergie Sulphur Update	es Penicillin	View all	Add/ View All More Actions	Notes
Treatment Plan :	Cycle 3 16.04.2	4 BR PACL1 + TRAS	. (21 days) 🛛 Ongoing 🛩		Body Me	<b>trics</b> 165 cm	56kg   2.1 m²	Patient Cond	i <b>tion</b> Asymptomatic	0:
Basis: Routine 🛈	Labs HB 8.2 PL	T 1,20,000 WBC 10,000	O ANC 3000 BR 1.2 ALB	2.8 SGOT 7.	SGPT 5.	Cr 1.1	Vitals 97°F	102 bpm 90/	60 mmHg 96 % 14	1 bpm
Cycle 1 16.03.24	Chemo Drugs	Planned Chemo	o Administration C	hemo Tolera	ince D	)ischarge Ad	vice Rem	ioved Drugs		
Complete Tolerance: 2	Day Type 🗸	Drug Name 🗸	Route/Instructions 🛩	Dosage	%	Total dose	Modified 🛩	Reason		
Cycle 2 01.04.24 BR PACL1 + TRAS WEEKLY(21d)	Day 1   16.04.24	TODAY							+ Ad	d Drug
Complete Tolerance: 3	D1 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	~	~	Ö	
Cycle 3 16.04.24 BR PACL1 + TRAS WEEKLY(21d)	D1 Pre	Aprepitant	Per oral once	100 mg	100	100 mg	До		i	•
Ongoing Tolerance: 2	D1 Chemo	) Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	-	~	i	•
Basis: Progression 🛈	Day 2   17.04.24								<u>+ Ad</u>	d Drug
Cycle 1 01.05.24	D2 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	~	~	Ö	
Planned	D2 Chemo	) Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	(++)	21	0	
Cycle 2 16.05.24	D2 (Post)	Flouroracil 🛈	Subcutaneous once as bolus 24 Hrs after completion o <b>more</b>	0.3 mg	100	0.3 mg	ω.	-22	Ö	Ū
Cycle 3 01.06.24	D2 Post	Dexamethosone	Per oral after food	10 mg	100	10 mg	÷	+	i	•
					(	Generate Pres	scription	Authorise	Chemo Administra	tion

Allow multiple paths for users to complete actions to include users of all skill levels.

#### **Include redundancies**

						Q Search by Patient Name/ M	R No
Ritakumari Ba MR No. 3790132 Switch Patient	lsekar/ 46/ F	Breast Cancer Progressive Disease Update/View Histo	23.02.24	Adminis PICC Change	tration route	Allergies Sulphur Penicillin View all Update	Add/ View All Notes
Treatment Plan :	Cycle 3 16.04.2	4   BR PACL1 + TRAS	. (21 days) Ongo	ing 🛩	Body Metri	zs 165 cm   56kg   2.1 m <sup>2</sup> Patier	nt Condition Asymptomatic ①
Basis: Routine 🛈	Labs HB 8.2 PL	1,20,000 WBC 10,000	ANC 3000 BR	1.2 ALB 2.8 SO	GOT 7.0 SGPT 5.0	Cr 1.1 Vitals 97°F 102 bp	Order Tests for Next Cycle
Cycle 1 16.03.24	Chemo Drugs	Planned Chem	o Administrati	on Chemo	Tolerance Dis	charge Advice Removed	view scans & rest reports Dr
Complete Tolerance: 2	Post Chemo D	rugs					Cancel cycle View/ Record patient consent
Cycle 2 01.04.24 BR PACL1 + TRAS WEEKLV(21d)	Symptom Mar	agement Drugs					View Edit Log
	Symptom ~	Drug Name 🗸	Total Dose	No. of Days 🐱	Remarks		
Cycle 3 16.04.24 BR PACLI + TRAS WEEKLY(21d) Ongoing Tolerance: 2	Pain	Ibuprofen	300 mg	1	SOS for pain		1 🔟
Ratic Promocion	Nausea	Pantagra	40 mg	2			0 🔟
Cycle 1 01.05.24	Fever	Naproxen	250 mg	1	Take for 2 days in ca	se of onset of fever	0 🔟
Planned	+ Add drug						
Cycle 2 16.05.24	Follow-Up De	tails					
Planned	OPD Date 1st Apr 2024	Chemo Date 2nd Apr 2024	Emergency Co 9834567890	ntact No.	Tests Recommended CBC LFT	RFT Immunophenotyping	0
Cycle 3 01.06.24							
							Generate Discharge Summary

Allow multiple paths for users to complete actions to include users of all skill levels.

# **N** Navigation Simplicity

Design intuitive navigation structures and user interfaces that simplify the user experience, making it easy for users to find information, complete tasks, and navigate the system effectively.

- Maintain flat menu structures
- Provide clear location cues
- Simplify switching patients, phases and processes.

#### Maintain flat menu structures

						Q Se	sarch by Patient I	Name/ MR No.		8
Ritakumari Bals MR No. 3790132 Switch Patient	sekar/ 46/ F	Breast Cancer Progressive Disease Update/ View Histo	ry Characteria	Iministratio	n route	Allergi Sulphur Update	es Penicillin	View all	Add/ View All More Actions	Notes
Treatment Plan :	Cycle 3 16.04.24	BR PACL1 + TRAS	. (21 days) Ongoing 🗸		Body Met	trics 165 cm	56kg   2.1 m²	Patient Cond	<b>ition</b> Asymptomatic	0:
Basis: Routine 🛈	Labs HB 8.2 PLT	1,20,000 WBC 10,000	ANC 3000 BR 1.2 ALE	3 2.8 SGOT 7.0	SGPT 5.0	Cr 1.1	Vitals 97°F	102 bpm 90/	60 mmHg 96 % 14	4 bpm
Cycle 1 16.03.24 BR PACL1 + TRAS WEEKLY(21d)	Chemo Drugs P	lanned Chemo	o Administration C	hemo Tolera	nce D	ischarge Ad	vice Rem	noved Drugs		
Complete Tolerance:	Day Type 🗸	Drug Name 🛩	Route/ Instructions 🛩	Dosage	%	Total dose	Modified 🗸	Reason		
Cycle 2   01.04.24 BR PACL1 + TRAS WEEKLY(21d)	Day 1   16.04.24	TODAY							+ Adı	d Drug
Complete Tolerance: 3	D1 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	-	-	Ô	•
Cycle 3 16.04.24 BR PACL1 + TRAS WEEKLY(21d)	D1 Pre	Aprepitant	Per oral once	100 mg	100	100 mg		- Alice - Alic	Ö	•
Ongoing Tolerance: 2	D1 Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	~	~	Ö	Ū
Basis: Progression (i)	Day 2   17.04.24								± Adı	d Drug
Cycle 1 01.05.24	D2 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	×.	÷	Ö	•
Planned	D2 Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2		200	0	•
Cycle 2 16.05.24 ACQ21	D2 Post	Flouroracil 🛈	Subcutaneous once as bolus 24 Hrs after completion o <b>more</b>	0.3 mg	100	0.3 mg	-	-	Ö	•
Cycle 3 01.06.24	D2 Post	Dexamethosone	Per oral after food	10 mg	100	10 mg	+	÷	Ô	•
1.4.5.5.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.					C	Generate Pre	scription	Authorise	Chemo Administra	tion

Reduce complexity by avoiding deep multi-level nested menus, and limiting menu levels to 2-3 max.

#### **Provide clear location cues**

						Q 56	sarch by Patient I	Name/ MR No.		8
Ritakumari Ba MR No. 3790132 Switch Patient	lsekar/ 46/ F	Breast Cancer, Progressive Disease	_Stage IV Ac 23 02 24 P ry Ch	dministratio	on route	Allergi Sulphur Update	es ) (Penicillin) (	View all	Add/ View All N More Actions	lotes
Treatment Plan :	Cycle 3 16.04.24	4   BR PACL1 + TRAS	(21 days) Ongoing 🗸		Body Met	<b>rics</b> 165 cm	56kg   2.1 m²	Patient Condi	<b>tion</b> Asymptomatic (	) :
Basis: Routine 🛈	Labs HB 8.2 PL	1,20,000 WBC 10,000	ANC 3000 BR 1.2 ALE	3 2.8 SGOT 7.0	0 SGPT 5.0	Cr 1.1	Vitals 97°F	102 bpm 90/	50 mmHg 96 % 14	bpm
Cycle 1 16.03.24 BR PACL1 + TRAS WEEKLY(21d)	Chemo Drugs	Planned Chemo	Administration C	hemo Tolera	ince D	scharge Ad	vice Rem	noved Drugs		
Complete Tolerance: 2	Day Type 🗸	Drug Name 🗸	Route/Instructions 👻	Dosage	%	Total dose	Modified 🗸	Reason		
Cycle 2 01.04.24 BR PACL1 + TRAS WEEKLY(21d)	Day 1   16.04.24	TODAY							<u>+ Add</u>	Drug
Complete Toterance: 5	D1 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	-	-	õ	
Cycle 3 16.04.24 BR PACL1 + TRAS WEEKLY(21d)	D1 Pre	Aprepitant	Per oral once	100 mg	100	100 mg		(++)	Ø	
Ongoing Tolerance: 2	D1 Chemo	) Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	-	~	õ	
Basis: Progression (i)	Day 2   17.04.24								+ Add	Drug
Cycle 1 01.05.24	D2 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	T.	7	õ	
Planned	D2 Chemo	) Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2			0	
Cycle 2 16.05.24	D2 (Post)	Flouroracil 🛈	Subcutaneous once as bolus 24 Hrs after completion o <b>more</b>	0.3 mg	100	0.3 mg			0°	
Pranned	D2 Post	Dexamethosone	Per oral after food	10 mg	100	10 mg		-	ľ	

Always indicate where the user is by providing clear location cues.

#### Simplify switching patients, phases & processes

COLUMNATIONAL CANCER GRID COLUMNONION CHICK CAR						Q Se	arch by Patient N	Jame/ MR No.	¢ 2 🖗	8
Ritakumari Bal	lsekar/ 46/ F	Breast Cance Progressive Disease Update/ View Histo	r_Stage IV Ad 23.02,24 P pry Cha	Iministratic	on route	Allergie Sulphur Update	<b>ES</b> ) (Peoicillin) (	Viewall	Add/ View All N More Actions	Notes
Treatment Plan :	Cycle 3 16.04	.24   BR PACL1 + TRAS.	(21 days) Ongoing 🛩		Body Me	etrics 165 cm	56kg   2.1 m²	Patient Condit	<b>ion</b> Asymptomatic (	D :
Basis: Routine 🛈	Labs HB 8.2	PLT 1,20,000 WBC 10,00	0 ANC 3000 BR 1.2 ALB	2.8 SGOT 7.	0 SGPT 5.	0 Cr 1.1	Vitals 97°F	102 bpm 90/6	0 mmHg 96 % 14	bpm
Cycle 1 16.03.24 BR PACL1 + TRAS WEEKLY(21d) Complete Tolerance: 2	Chemo Drug	s Planned Chem	o Administration C	hemo Tolera	ince [	Discharge Adv	vice Rem	oved Drugs		
	Day Type	✓ Drug Name ❤	Route/Instructions 🛩	Dosage	%	Total dose	Modified 🗸	Reason		
Cycle 2 01.04.24 BR PACL1 + TRAS WEEKLY(21d)	Day 1   16.04.2	4 TODAY							+ Add	Drug
Complete Tolerance: 3	D1 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	-	-	o	
Cycle 3 16.04.24 BR PACL1 + TRAS WEEKLY(21d)	D1 Pre	Aprepitant	Per oral once	100 mg	100	100 mg		344)	0	
Ongoing Tolerance: 2	D1 Chem	• Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	-	~	ı	
Basis: Progression 🛈	Day 2 17.04.2	4							+ Add	Drug
Cycle 1 01.05.24	D2 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	-	~	i	
Planned	D2 Chem	• Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2		)+-(	ı	
Cycle 2 16.05.24 ACQ21	D2 Post	) Flouroracil 🛈	Subcutaneous once as bolus 24 Hrs after completion o <b>more</b>	0.3 mg	100	0.3 mg	ω.	-	0	۵
Cycle 3 01.06.24	D2 Post	) Dexamethosone	Per oral after food	10 mg	100	10 mg	-	-	0°	
					ſ	Generate Prov	cription	Authorise	Themo Administrat	tion

Make it easy for the user to toggle between patients, phases and processes while remaining on the same page.

# **G** Growth-oriented

Build the system with scalability and adaptability in mind, allowing it to grow and evolve alongside advancements in treatment, healthcare practices, and technological innovations.

- Reuse existing templates and components
- Design for scalable phases and processes
- Design for scalable actions

#### **Reuse existing templates & components**

COLLANDARION AN CANCER						Q Se	earch by Patient	Name/ MR No.		\$ 8
Ritakumari Ba MR No. 3790132 Switch Patient	Ritakumari Balsekar/ 46/ F       Breast Cancer_Stage IV       Administration route       Allergie         MR No. 3790132       Switch Patient       Update/View History       Progressive Busave/23 0223       Proc       Change       Supply         nent Plan       :       Cycle 3       16.04.24       BR PACL1 + TRAS (21 days)       Ongoing       Body Metrics 165 cm       Supply         outine @       :       Labs HB 8.2       PLT 1.20,000       WBC 10,000       ANC 3000       BR 1.2       ALB 2.8       SGOT 7.0       SGPT 5.0       Cr 1.1         1       16.03.24        Chemo Drugs Planned       Chemo Administration       Chemo Tolerance       Discharge Adv         aire       Tolerance: 2       Day       Type        Drug Name        Route/Instructions        Dosage       %       Total dose         2       01.04.24       Day 1       16.04.24       TODAY       Intravenous central line       0.25 mg       100       0.25 mg         3       15.04.24       Day 1       Pre       Aprepitant       Per oral once       100 mg       100       mg         1       Chemo       Flouroracil @       Intravenous central line       0.25 mg       100       0.25 mg         2       Pre       Atropin	Allergies Sulphur Penicillin View all Update More Actions								
Treatment Plan :	Cycle 3 16.04.24	BR PACL1 + TRAS	. (21 days) Ongoing 🗸		Body Me	etrics 165 cm	56kg   2.1 m²	Patient Cond	l <b>ition</b> Asymptomat	ic 🛈 🚦
Basis: Routine ①	Labs HB 8.2 PLT	1,20,000 WBC 10,000	ANC 3000 BR 1.2 ALB	2.8 SGOT 7.0	SGPT 5.	0 Cr 1.1	Vitals 97°F	102 bpm 90/	/60 mmHg 96 %	14 bpm
	Chemo Drugs F	lanned Chemo	Administration C	hemo Tolera	nce [	Discharge Ad	vice Rem	noved Drugs		
Complete Tolerance: 2	Day Type ~	Drug Name 🗸	Route/Instructions 🛩	Dosage	%	Total dose	Modified ~	Reason		
Cycle 2 01.04.24 BR PACL1 + TRAS WEEKLY(21d)	Day 1   16.04.24	TODAY							±.	Add Drug
Complete Tolerance: 3	D1 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	-	-		0
Cycle 3 16.04.24 BR PACL1 + TRAS WEEKLY(21d)	D1 Pre	Aprepitant	Per oral once	100 mg	100	100 mg				0
Ongoing Tolerance: 2	D1 Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	н	×		0
Basis: Progression ()	Day 2   17.04.24								+	\dd Drug
Cycle 1 01.05.24	D2 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg		7		0 🔟
Planned	D2 Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2				1
Cycle 2 16.05.24 ACQ21	D2 Post	Flouroracil 🛈	Subcutaneous once as bolus 24 Hrs after completion o <b>more</b>	0.3 mg	100	0.3 mg	÷	-		0 🔟
Cycle 3 01.06.24	D2 Post	Dexamethosone	Per oral after food	10 mg	100	10 mg	÷	-		0
					(	Generate Pre	scription	Authorise	Chemo Adminis	tration

![](_page_58_Picture_3.jpeg)

#### **Reuse existing templates & components**

			Q 563	rch by Patient Name/ MR No.	
Ritakumari Balsekar/ 46/ F MR No. 3790132 Switch Patient	Breast Can Pratient Ce Progressive Dicessei 23 02 24 Update/View History		Allergies Sulphur Update	S Penicillin (View all)	Add/ View All Notes
Treatment Plan : Cycle 3 16.0-	4.24   BR PACL1 + TRAS (21 days) Ongoing	Bog	l <mark>y Metrics</mark> 165 cm   56	ikg   2.1 m <sup>2</sup> Patient Con	dition Asymptomatic 🛈 🚦
Basis: Routine ()		2 ALB 2.8 SGOT 7.0 SGF		Vitals 97°F 102 bpm 9	0/60 mmHg 96 % 14 bpm
Cycle 1 16.03.24 BR PACL1 + TRAS WEEKLY(21d) Chemo Drug	s Planned Chemo Administration				S
Complete Tolerance: 2 Day Type	<ul> <li>Drug Name </li> <li>Route/ Instruction</li> </ul>	ns 👻 Dosage %	Total dose		
Cycle 2   01.04.24 BR PACL1 + TRAS WEEKLY(21d) Day 1   16.04.					
Complete Tolerance: 3 D1 Pre					1 🔟
Cycle 3 16.04.24 D1 Pre		100 mg 100			1
Cycles/mmerz	Flouroracil 🕢 Intravenous centra once as bolus	Patient Tas	k Panel		1
Phases Day 2, 17,04.					+ Add Drug
Cycle 1 01.05.24 D2 Pre					0 🔟
Planned D2 Chem					1
Cycle 2 16.05.24 ACQ21 D2 Post	) Flouroracil ③ Subcutaneous onc bolus 24 Hrs after completion omo	te as 0.3 mg 100 re			1
D2 Post					1
				ription	e Chemo Administration

![](_page_59_Picture_3.jpeg)

#### **Reuse existing templates & components**

12 Mar 2024

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10:25

AM

ΡM

Cards	Buttons	Text fields
Cycle 2 01.04.24	More Actions	Remarks
BR PACL1 + TRAS WEEKLY(21d)		Enter
Complete Tolerance: 3	Cancel Save	Drug name
		Select 🗸
<b>Cycle 3 16.04.24</b> BR PACL1 + TRAS WEEKLY(21d)	Submit	Drug name
Ongoing Tolerance: 2		Select 🗸
		Date Time

#### **Checkboxes and Radio Buttons**

- •

#### **Design for scalable phases & processes**

						Q s	earch by Patient (	Name/ MR No		ŝ	8
Ritakumari Ba MR No. 3790132 Switch Patient	lsekar/ 46/ F	Breast Cancer Progressive Disease Update/ View Histo	_Stage IV Ac 23.02.24 (F ry Ch	dministratio	n route	Allergi sulphur Update	Penicillin (	View all	Add/ View	v All N tions	otes
Treatment Plan :	Cycle 3 16.04.24	BR PACL1 + TRAS	(21 days) Ongoing 🛩		Body Met	<b>rics</b> 165 cm	56kg   2.1 m <sup>2</sup>	Patient Co	ondition Asymptor	natic (	
Basis: Routine 🛈	Labs HB 8.2 PLT	1,20,000 WBC 10,000	ANC 3000 BR 1.2 ALE	3 2.8 SGOT 7.0	SGPT 5.0	Cr 1.1	Vitals 97°F	102 bpm	90/60 mmHg 96 9	6 14	bpm
Cycle 1 16.03.24	Chemo Drugs I	Planned Chemo	Administration C	hemo Tolera	nce Di	scharge Ac	lvice Rem	ioved Dru	igs		
Complete Tolerance: 2	Day Type ~	Drug Name 🗸	Route/Instructions ~	Dosage	%	Total dose	Modified 🗸	Reason			
Cycle 2 01.04.24 BR PACL1 + TRAS WEEKLY(21d)	Day 1   16.04.24	TODAY								+ Add	Drug
Complete Tolerance: 3	D1 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	-	-		0	
Cycle 3 16.04.24 BR PACL1 + TRAS WEEKLY(21d)	D1 Pre	Aprepitant	Per oral once	100 mg	100	100 mg	4			0	
Ongoing Tolerance: 2	D1 Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	н	-		0	
Basis: Progression 🛈	Day 2   17.04.24									+ Add	Drug
Cycle 1 01.05.24	D2 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	÷	~		0	
Planned	D2 Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2				0	Ū
Cycle 2 16.05.24	D2 Post	Flouroracil 🛈	Subcutaneous once as bolus 24 Hrs after completion o <b>more</b>	0.3 mg	100	0.3 mg	4	-		0	
Cycle 3 01.06.24	D2 Post	Dexamethosone	Per oral after food	10 mg	100	10 mg	-	-		0	
						Generate Pre	escription	Author	ise Chemo Admin	nistrat	ion

Vertically stack cycles/ phases to ensure that the design can accommodate n number of them.

#### **Design for scalable phases & processes**

CALMERT GRID							Q Se	arch by Patient	Name/ MR No.		
Ritakumari Bal MR No. 3790132 Switch Patient	lsekar/4	46/ F	Breast Cancer Progressive Disease 2 Update/ View Histor	Stage IV	Administratio	n route	Allergie Sulphur Update	es Peniciilin	View all	Add/ View Al	l Notes
Freatment Plan	Cycle	3 16.04.24	BR PACL1 + TRAS	(21 days) Ongoing ~		Body Met	<b>trics</b> 165 cm	56kg   2.1 m²	Patient Condit	<b>ion</b> Asymptomatic	0
Basis: Routine 🛈	Labs	HB 8.2 PLT	1,20,000 WBC 10,000	ANC 3000   BR 1.2 /	ALB 2.8 SGOT 7.0	SGPT 5.0	Cr 1.1	Vitals 97°F	102 bpm 90/6	0 mmHg 96 %	14 bpm
Cycle 1 16.03.24 BR PACLI + TRAS WEEKLY(21d)	Chem	no Drugs Pl	anned Chemo	Administration	Chemo Tolera	nce D	ischarge Ad	vice Rem	noved Drugs	More 🗸	
Complete Tolerance: 2	Day	Туре 🗸	Drug Name 🗸	Route/ Instructions ~	Dosage	%	Total dose	Modified ~	Reason		
Cycle 2 01.04.24 BR PACL1 + TRAS WEEKLY(21d)	Day 1	16.04.24	TODAY							<u>+ A</u>	dd Drug
Complete Tolerance: 3	DI	Pre	Atropin Sulphate	Intravenous central line once as bolus	e 0.25 mg	100	0.25 mg	-		0	1
Cycle 3 16.04.24 BR PACL1 + TRAS WEEKLY(21d)	D1	Pre	Aprepitant	Per oral once	100 mg	100	100 mg	-	-	c	1
Ongoing Tolerance: 2	D1	Chemo	Flouroracil 🛈	Intravenous central line once as bolus	e 1000 mg/ m2	100	1000 mg/ m2	-	-	c	1
Basis: Progression 🕜	Day 2	17,04.24								<u>+ A</u>	dd Drug
Cycle 1 01.05.24	D2	Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	~	~	e	1
Planned	D2	Chemo	Flouroracil 🛈	Intravenous central line once as bolus	e 1000 mg/ m2	100	1000 mg/ m2	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		e	1
Cycle 2 16.05.24	D2	Post	Flouroracil 🛈	Subcutaneous once as bolus 24 Hrs after completion o <b>more</b>	0.3 mg	100	0.3 mg	-	-	c	1
Evela 2 01 05 24	D2.	Post	Dexamethosone	Per oral after food	10 mg	100	10 mg	-	++)	4	1
yue 5 01.00.24											

Horizontally arrange processes with a 'More' tab in the end to ensure that the design can accommodate n number of processes within the treatment.

#### **Design for scalable actions**

					Q Se	arch by Patient N	lame/ MR No.		8
ekar/ 46/ F	Breast Cancer Progressive Disease Update/ View Histo	Stage IV Ac 23.02.24 P ry Ch	dministratio	n route	Allergie Sulphur Update	es ) (Penicillin) (	Viewall	Add/ View All N More Actions	lotes ~
Cycle 3 16.04.24	BR PACL1 + TRAS 1,20,000 WBC 10,000	. (21 days) Ongoing ~	3 2.8 SGOT 7.6	Body Me	<mark>trics</mark> 165 cm   ! D   Cr 1.1	56kg   2.1 m <sup>2</sup> <u>Vitals</u> 97°F	Patient Cor 102 bpm 9	View Patient Profil tic View Protocol Cha View Edit Log	le art
Chemo Drugs F Day Type Y	Drug Name 🛩	Administration C Route/Instructions ~	hemo Tolera Dosage	nce D %	Discharge Adv Total dose	vice Rem Modified ~	oved Drugs Reason		
Day 1   16.04.24	TODAY							+ Add	Drug
D1 (Pre)	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	-	÷	ı	
D1 Pre	Aprepitant	Per oral once	100 mg	100	100 mg	-	÷	0	
D1 Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	~	-	0	
Day 2   17.04.24								+ Add	Drug
D2 Pre	Atropin Sulphate	Intravenous central line once as bolus	0.25 mg	100	0.25 mg	-	÷	ı	
D2 Chemo	Flouroracil 🛈	Intravenous central line once as bolus	1000 mg/ m2	100	1000 mg/ m2	÷1 –	9	0	
D2 Post	Flouroracil 🛈	Subcutaneous once as bolus 24 Hrs after completion o <b>more</b>	0.3 mg	100	0.3 mg		7	ı	
D2 (Post)	Dexamethosone	Per oral after food	10 mg	100	10 mg	-	-	0	
	kar/ 46/ F       Cycle 3     16.04.24       Labs HB     8.2     PLT       Chemo     Drugs F       Day     Type ~       Day     16.04.24       D1     Pre       D1     Pre       D1     Chemo       Day2     17.04.24       D2     Pre       D2     Pre       D2     Post       D2     Post	Series of the serie	Breast Cancer_Stage IV       Action         Progressive Disease 2302.34       Progressive Disease 2302.34         Update/View History       Chemo         Cycle 3       16.04.24       BR PACL1 + TRAS (21 days)       Ongoing <	Breast Cancer_Stage IV       Administration         Progressive Disease: 23.02.24       Progressive Disease: 23.02.24       Progressive Disease: 23.02.24         Update/ View History       Update/ View History       Change         Cycle 3       16.04.24       BR PACL1 + TRAS (21 days)       Ongoing ×         Labs HB 8.2       PLT 1,20,000       WBC 10,000       ANC 3000       BR 1.2       ALB 2.8       SGOT 7.4         Chemo       Drugs Planned       Chemo       Administration       Chemo Tolera         Day       Type ×       Drug Name ×       Route/ Instructions ×       Dosage         Day       Type ×       Drug Name ×       Route/ Instructions ×       Dosage         Day       Type ×       Drug Name ×       Route/ Instructions ×       Dosage         Day       Type ×       Drug Name ×       Route/ Instructions ×       Dosage         Day       Type ×       Drug Name ×       Route/ Instructions ×       Dosage         Day       Type ×       Drug Name ×       Route/ Instructions ×       Dosage         Day       Type ×       Drug Name ×       Route/ Instructions ×       Dosage         Day       Type ×       Aropin Sulphate       Intravenous central line once as bolus       0.25 mg	Harry 46/F       Breast Cancer_Stage IV Progressive Disease: 23.02.24       Administration route (Picc) Change         Cycle 3       16.04.24       BR PACL1 + TRAS (21 days)       Origoing        Body Me         Labs HB       8.2       PLT       1,20,000       WBC 10,000       ANC 3000       BR 1.2       ALB       2.8       SGOT 7.0       SGPT 5.4         Chemo       Drugs Planned       Chemo       Administration       Chemo       Toberace       D         Day       Type        Drug Name        Route/Instructions        Dosage       %         Day       Type        Progressite       Intravenous central line once as bolus       0.25 mg       100         D1       Pre       Atropin Sulphate       Intravenous central line once as	Breast Cancer_Stage IV       Administration route       Allergie         Progressive Disease: 23.02.24       Update/ View History       PCC       Change       Support       Body Metrics 165 cm       Support         Cycle 3       16.04.24       BR PACL1 + TRAS (21 days)       Ongoing        Body Metrics 165 cm       Support       Body Metrics 165 cm       Support       Body Metrics 165 cm       State         Labs HB       8.2       PLT 1,20.000       WBC 10,000       ANC 3000       BR 12       ALB 2.8       SGOT 7.0       SGPT 5.0       C r 11         Chemo Drugs Planned       Chemo Administration       Chemo Tolerance       Discharge Adv         Day       Type        Drug Name        Route/ Instructions        Dosage       %       Total dose         Day1       16.04.24       TODAY       Intravenous central line once as bolus       0.25 mg       100       0.25 mg         D1       Pre       Aprepitant       Per oral once       100 mg       100       mg         D1       Chemo       Flouroracil O       Intravenous central line once as bolus       0.25 mg       100       0.25 mg         D2       Pre       Atropin Sulphate       Intravenous central line once as bolus       0.25 mg       100       0.25 mg	Breast Cancer_Stage IV (Progressive Dissure 200224) Update/View History       Administration route (Prc Change       Allergies (Suppur Date         Cycle 3       16.04.24       BR PACL1 + TRAS (21 days)       Ongoing C       Bedy Metrics       165 cm       56 kg       2.1 m²         Labs       HB       8.2       PtT       1.20,000       WBC       10,000       ANC 3000       BR       1.2       ALB       2.8       SGOT       7.0       SGPT       5.0       Cr       1.1       Vitals       97°F         Cherno       Drugs Planned       Cherno       Administration       Cherno       Tolerance       Discharge Advice       Rem         Day       Type v       Drug Name v       Route/Instructions v       Dosage       96       Total dose       Modified v         Day1       16.04.24       TODAV       Intravenous central line once as bolus       0.25 mg       100       0.25 mg       -         D1       Cherno       Adrepin Sulphate       Intravenous central line once as bolus       0.25 mg       100       000 mg/ m2       -       -         D1       Cherno       Adrepin Sulphate       Intravenous central line once as bolus       0.25 mg       100       0.00 mg/ m2       -       -         D2       Pre	Harly 46/F       Breast Cancer_Stage IV       Administration route       Allergies         Processore Decode: 23.02.31       Update/View History       Proce       Support       Bedy Metrics 165 cm       56kg       2.1 m²       Patient Concer         Cycle 3       16.04.24       BR PACL1 + TRAS (21 days)       Orgener       Bedy Metrics 165 cm       56kg       2.1 m²       Patient Concer         Labs HB 82       PLT       1,20,000       WBC       10,000       ANC 3000       BR 1.2       ALB 2.8       SGOT 7.0       SGPT 5.0       Cr 1.1       Vitals 97*       102 bpm       9         Chemo       Drug Name       Route/ Instructions       Dosage       %       Total dose       Modified       Reason         Day       Type       Drug Name       Route/ Instructions       Dosage       %       Total dose       Modified       Reason         Day       Type       Arropin Sulphate       Intravenous central line once as bolus       0.25 mg       100       0.25 mg       -       -       -         D1       Pre       Atropin Sulphate       Intravenous central line once as bolus       0.25 mg       100       100 mg/       -       -       -         D2       Pre       Atropin Sulphate       Intravenous central li	Kkar/ 46/ F       Breast Cancer_Stage IV (Pergressive Conserve 22023) Update/View Histor       Administration route (Picc change       Allergies (Suppur)       Administration (Vew II)       Add/View AII (Nor Actions View Patient Profive View Patien

Use multi-action buttons to allow for several actions from one place.

#### **Design for scalable processes**

Charlonal Cancer GRID Charlenger for Execute Car							Q SE	earch by Patient	Name/ MR	No	(
Ritakumari Balsekar/ 46/ F MR No. 3790132 Switch Patient		46/ F	Breast Cancer_Stage IV Add Progressive Disease: 23.02.24 Pi Update/ View History Cha		Administration route		Allergies Sulphur Penicillin View all Update			Add/ View All No More Actions	
Treatment Plan :	Cycle	3 16.04.24	BR PACL1 + TRAS	. (21 days) Ongoing 🗸		Body Me	etrics 165 cm	56kg   2.1 m²	Patie	Condition Asymptomatic (	0
Add cycles	<u>Labs</u>	HB 8.2 PLT	1,20,000 WBC 10,000	ANC 3000 BR 1.2	ALB 2.8 SGOT 7.0	SGPT 5.	.0 Cr 1.1	Vitals 97°F	102 bp	Order Tests for Next Cycl	le
Postpone treatment	Chem	no Drugs Pl	anned Chemo	o Administration	Chemo Tolera	nce I	Discharge Ad	vice Ren	noved	View Scans & Test Report	ts
View/ Record patient consent View Edit Log	Day	Туре 🗸	Drug Name 🗸	Route/Instructions ~	Dosage	‰	Total dose	Modified ~	Rea	Cancel cycle View/ Record patient cor	nsen
BR PACL1 + TRAS WEEKLY(21d)	Day 1	16.04.24	TODAY							View Edit Log	
	D1	Pre	Atropin Sulphate	Intravenous central lin once as bolus	e 0.25 mg	100	0.25 mg	**	*	U	e
Cycle 3 16.04.24 BR PACLI * TRAS WEEKLY(21d)	D1	Pre	Aprepitant	Per oral once	100 mg	100	100 mg	-	-	õ	Ū
Ongoing Tolerance: 2	D1	Chemo	Flouroracil 🛈	Intravenous central lin once as bolus	e 1000 mg/ m2	100	1000 mg/ m2	-		ı	Ū
Basis: Progression 🛈	Day 2	17.04.24								+ Add	l Dr
Cycle 1 01.05.24	D2	Pre	Atropin Sulphate	Intravenous central lin once as bolus	e 0.25 mg	100	0.25 mg	÷	÷	ı	Ū
Planned	D2	Chemo	Flouroracil 🛈	Intravenous central lin once as bolus	e 1000 mg/ m2	100	1000 mg/ m2		-	ı	Ū
Cycle 2   16.05.24	D2	Post	Flouroracil 🛈	Subcutaneous once as bolus 24 Hrs after completion o <b>more</b>	0.3 mg	100	0.3 mg	~	÷	0	Ū
Cycle 3 01.06.24	D2	Post	Dexamethosone	Per oral after food	10 mg	100	10 mg	-	-	Ø	Ū
						ſ	Generate Pro	scription	Auth	orise Chemo Administrat	tio

Use kebab menus to accommodate secondary actions.

## Design Framework

![](_page_65_Picture_1.jpeg)

Lifecycle Support

Idiot-proofing

![](_page_65_Picture_4.jpeg)

Navigation Simplicity

![](_page_65_Picture_6.jpeg)

Growth Oriented

Thank You