MITRE / FLUX NOTES **SELECTED CONCEPTS vI4.4** The following concepts explore the data capture driven templates and their interactions. EDWIN CHOI, DANIEL REEVES, JUHAN SONIN, 15.JUN.2018 goinvo

PRINCIPLES FOR DATA CAPTURE BASED TEMPLATES

TEMPLATES FOR DIRECT DATA CAPTURE easy data capture and note generation. There are two main components to the feature. Before the encounter, the clinician identifies a small set of data that they expect to capture by choosing or editing then using a template that includes "unknown" elements. Then during the encounter, those targeted elements are filled in using a convenient and accessible Point-of-Sale interface. In the future voice-first interaction, the narrow set of unknown values assists the NLP and voice-recognition software to identify relevant data.

I.I PRINCIPLES FOR DATA CAPTURE BASED TEMPLATES

Next Step Capabilities Include and identify expected data in template and note Ability to identify expected categories, such as "grade" or "reason"

- Ability to specify a label or prompt for the POS Placeholder elements are translated into clickable Point-of-Sale interface for inencounter data capture
- Supports expected data within templates and within pre-encounter note editing GUI for note editing Pre-made template demonstrating specific data capture placeholders for oncology
- **Considerations & Limitations**
- Placeholder elements should have textual representation in note as well as a graphical representation. Very limited training time, but it is worth showing off the capability of easy template editing.
- During-encounter view should keep eyes off the note. POS design should not overwhelm clinician with too many checkboxes etc.

Additional Templating Features Default POS elements to last value in record if-then logic to determine required data or next prompts if-then logic to determine narrative text in note Default values for things like a full ROS (most entries are negative) templates are large, specialized, and initialize a note

Graphical interface with building blocks

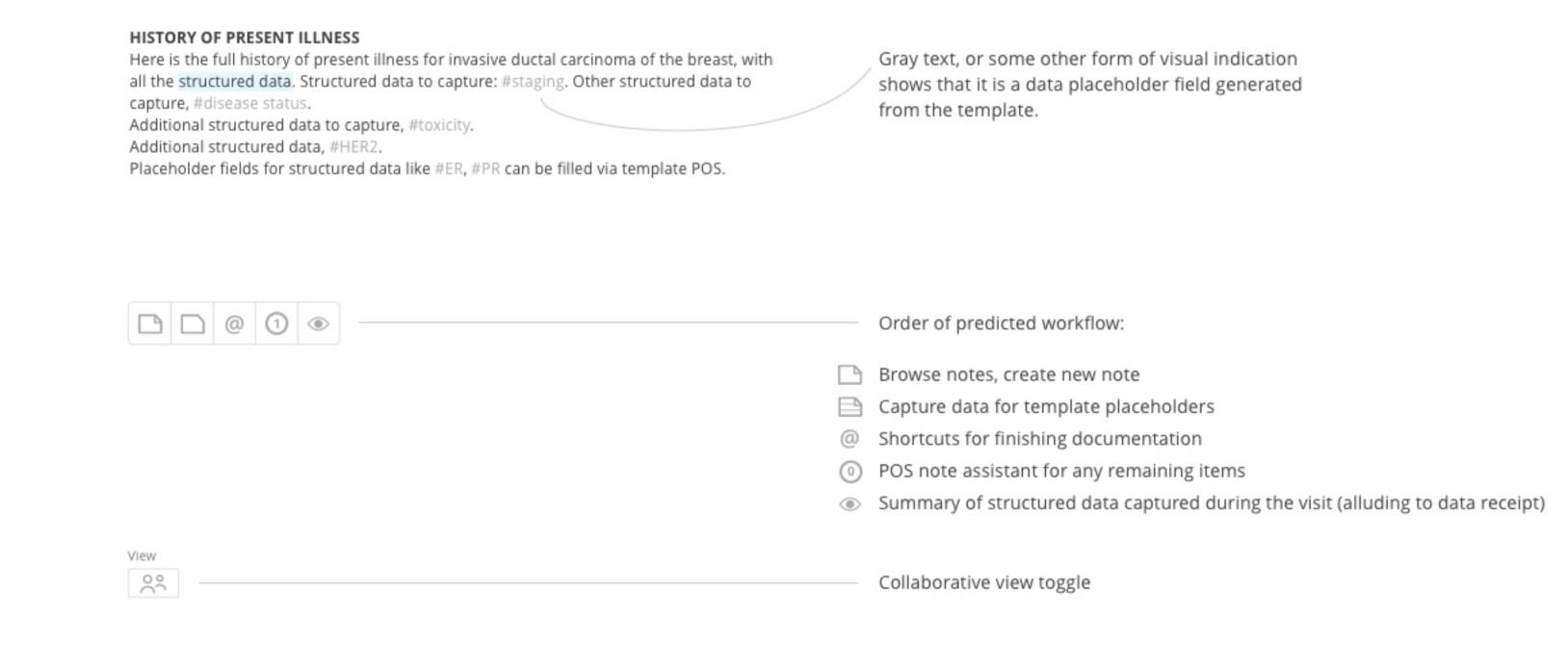
•	Management
	 saving/updating to user or to patient
	tiers of specificity
	 tagging
	 searching
	sharing & publishing
•	template vs. snippets
	 templates are large, specialized, and initialize a note
	 snippets are small and potentially context based (like HPI)
•	Ability to insert placeholders for capture of structured & unstructured data
•	Template placeholders can be for multiple levels of description: data element
	or attribute
•	Lists and iterations for data retrieval
	 Filtering
	- Sorting

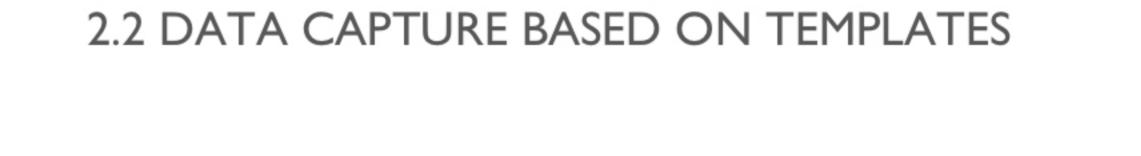
1.3 PRINCIPLES FOR DATA CAPTURE BASED TEMPLATES

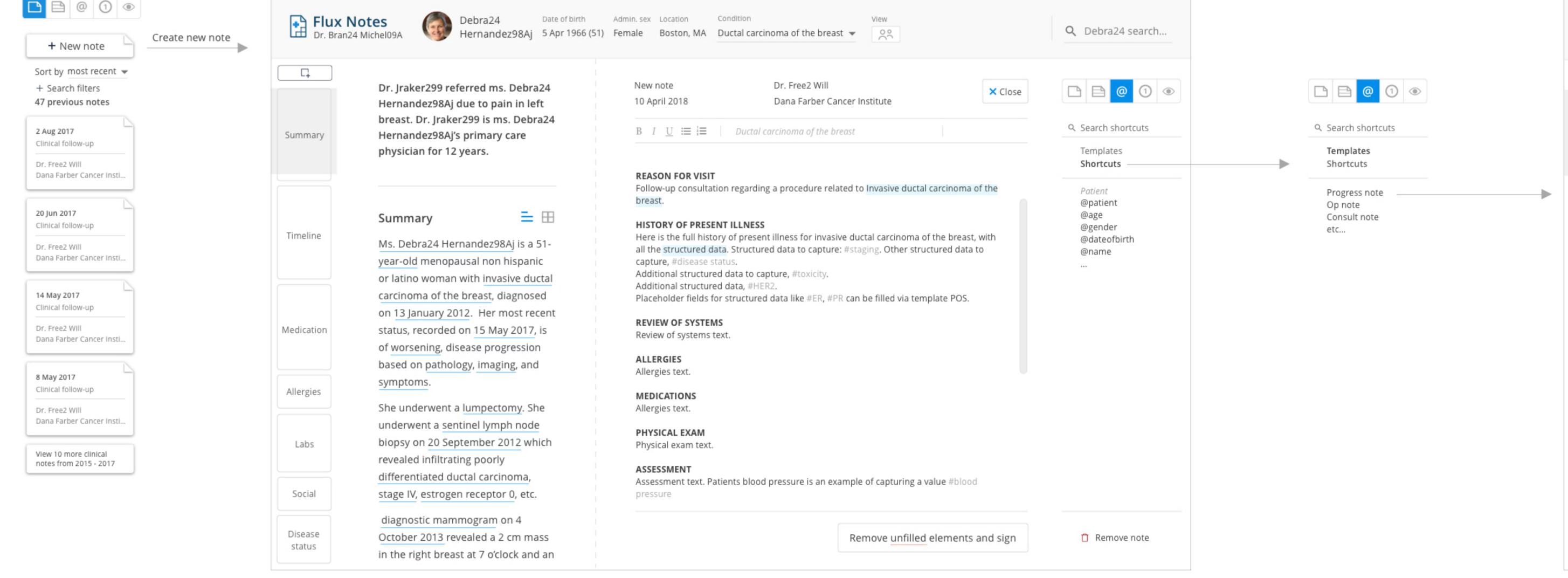
	Primary note types	Specific patient
Primary note types	for a specific cohort	templates
Progress note	Progress note	Progress note
Op note	For condition A	For condition A
Consult note	For condition B	For patient A
etc	For condition etc	For patient B
	For patient cohort A	For patient etc
	For patient cohort B	For condition B
	For patient cohort etc	For condition etc
	Op note	For patient cohort A
	Consult note	For patient cohort B
	etc	For patient cohort etc
/		Op note
		Consult note
		etc

2 DATA CAPTURE BASED ON TEMPLATES

2.1 DATA CAPTURE BASED ON TEMPLATES







2.3 DATA CAPTURE BASED ON TEMPLATES

breast. Dr. Jraker299 is ms. Debra24

Summary $\equiv \boxplus$

Ms. Debra24 Hernandez98Aj is a 51-

year-old menopausal non hispanic

or latino woman with invasive ductal

carcinoma of the breast, diagnosed

of worsening, disease progression

based on pathology, imaging, and

She underwent a lumpectomy. She

Medication status, recorded on 15 May 2017, is

Labs biopsy on 20 September 2012 which

revealed infiltrating poorly

differentiated ductal carcinoma,

October 2013 revealed a 2 cm mass

on 13 January 2012. Her most recent

Hernandez98Aj's primary care

2.4 DATA CAPTURE BASED ON TEMPLATES

Q Debra24 search...

#Disease status Status Complete response Complete resection Responding Stable Progressing Inevaluable

#toxicity Grade 1 Grade 2 Grade 3 Grade 4 Grade 5

#HER2 Receptor Positive Negative

#PR Receptor Positive Negative

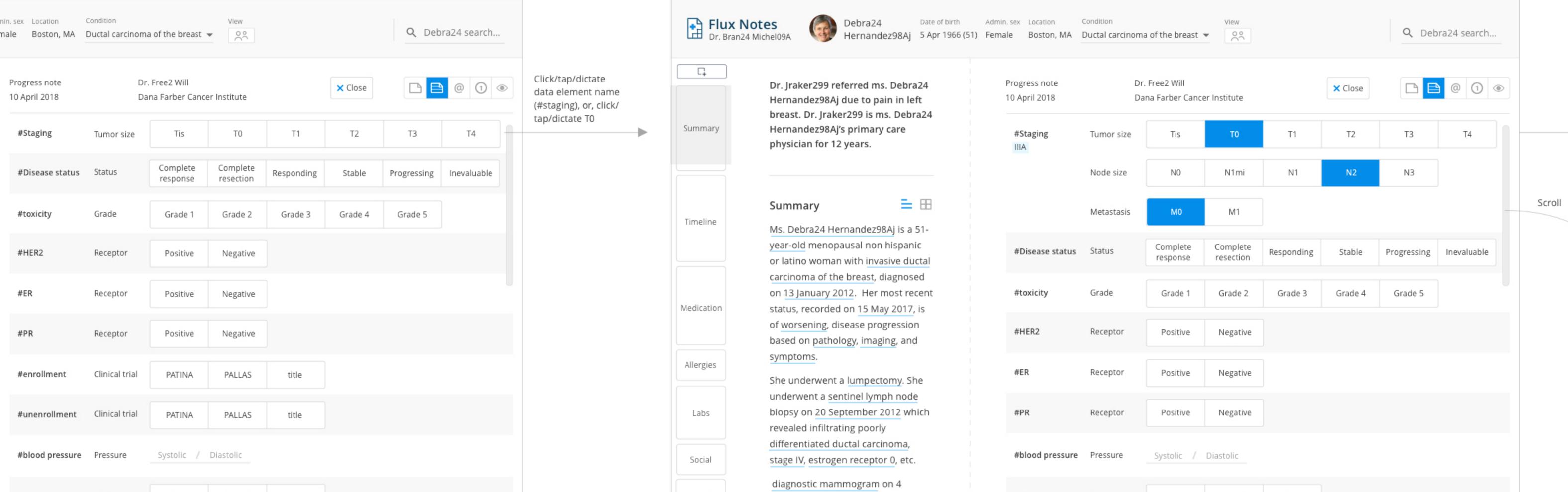
#enrollment Clinical trial PATINA PALLAS title

#unenrollment Clinical trial PATINA PALLAS title

#data element Clinical trial PATINA PALLAS title

#ER Receptor Positive Negative

#blood pressure Pressure Systolic / Diastolic



#data element Clinical trial PATINA PALLAS title

Scroll to bottom to enter free text that only

the clinical note later as unstructured text.

exists in template data capture mode. Almost like a temporary "post-it" note for entering into

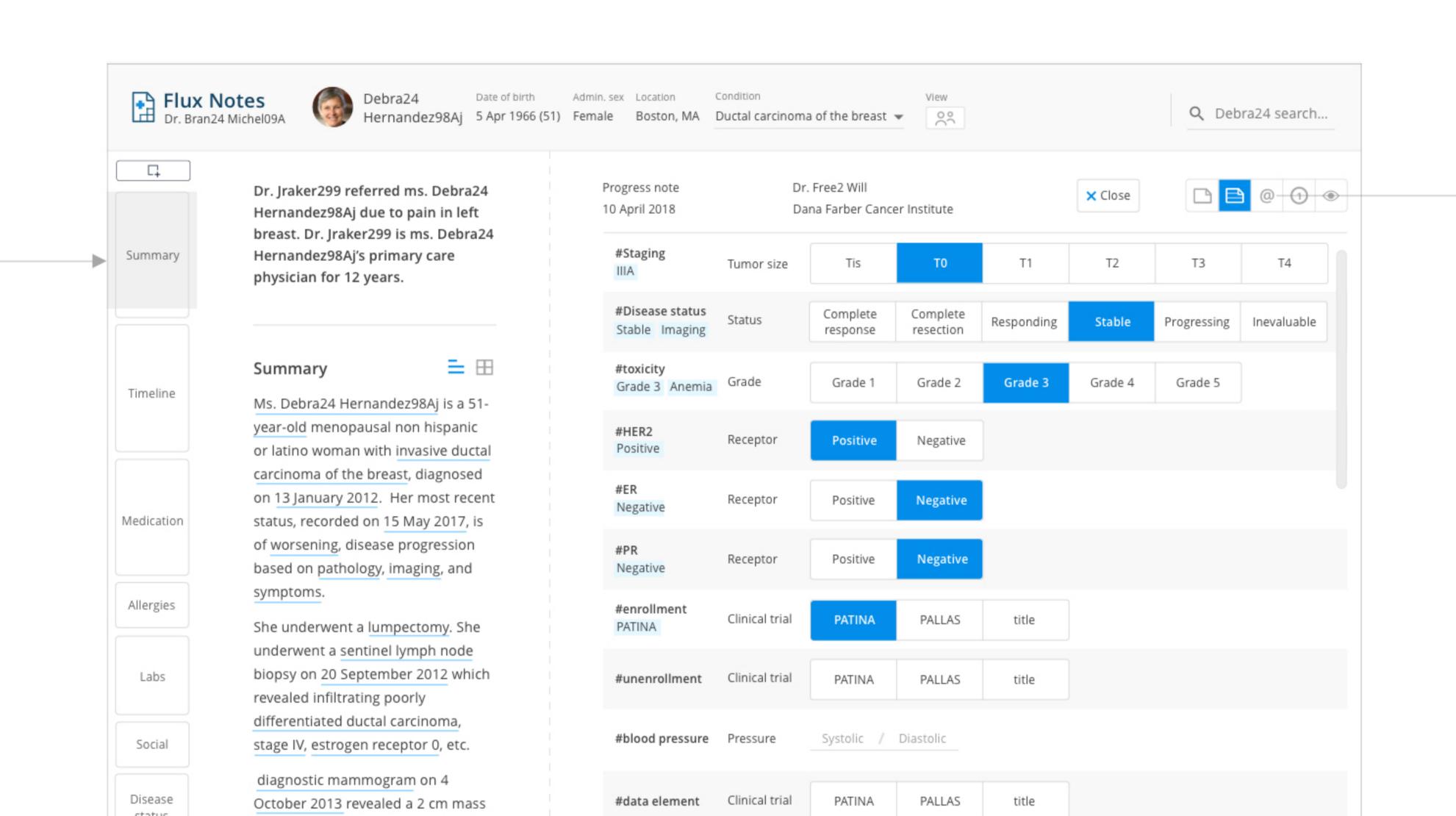
#PR Receptor Positive Negative

#blood pressure Pressure Systolic / Diastolic

#data element Clinical trial PATINA PALLAS title

free text Patient's cat Some free text notes to self that will somehow present later to aid in finishing note.

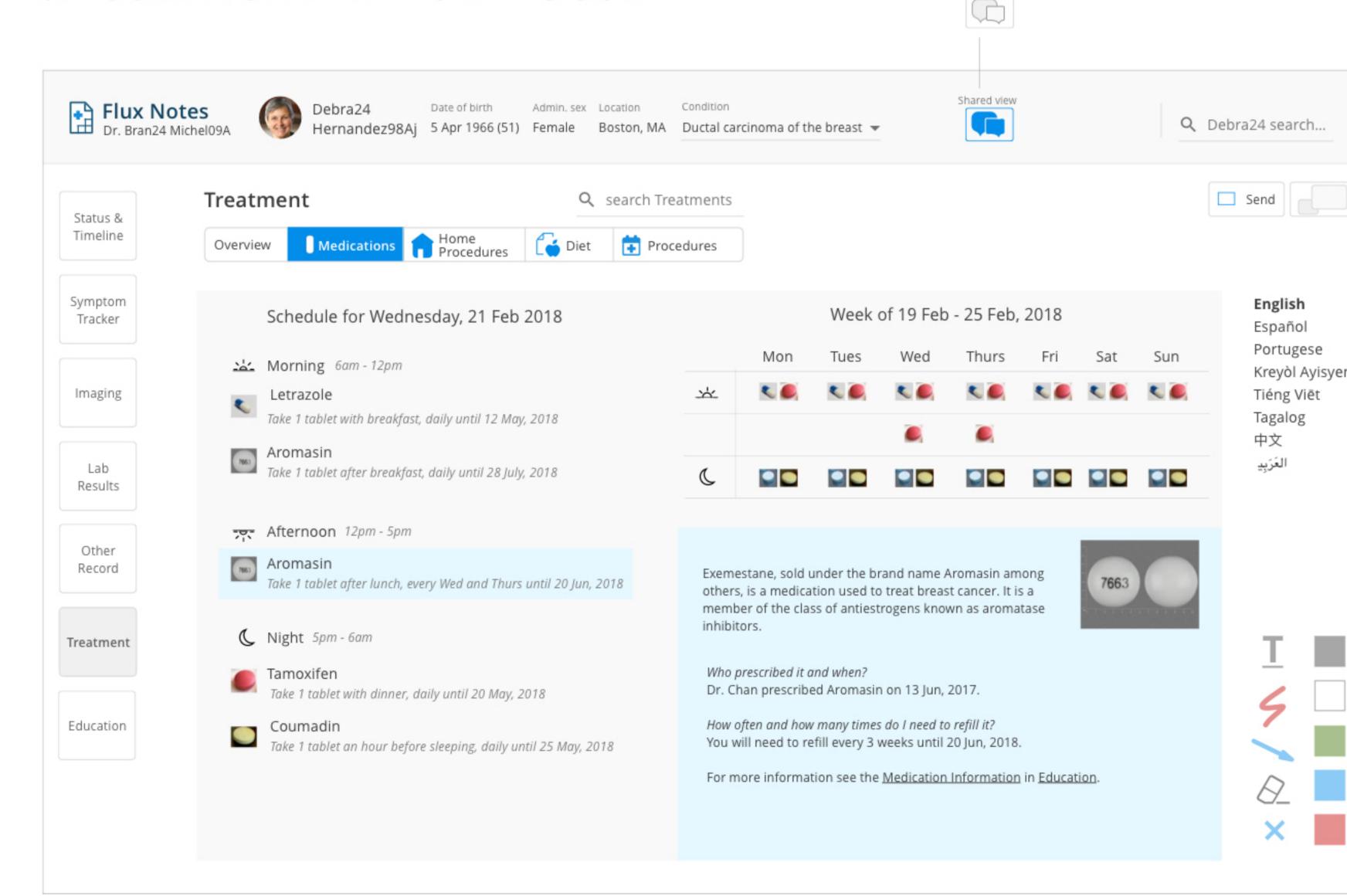
2.5 DATA CAPTURE BASED ON TEMPLATES



2.6 DATA CAPTURE BASED ON TEMPLATES

Hernandez98Aj due to pain in left breast. Dr. Jraker299 is ms. Debra24 Hernandez98Aj's primary care physician for 12 years. REASON FOR VISIT Follow-up consultation regarding a procedure related to Invasive ductal carcinoma of the breast. Summary Summary History of Present Illness History of Present Illness Dana Farber Cancer Institute Q. Search short Q. Search short Templates Shortcuts Patient @age @gender	Flux N Dr. Bran2	Notes Debra24 Date of birth Hernandez98Aj 5 Apr 1966 (5	51) Female Boston, MA Ductal carcinoma of the breast 🔻 💍	Q Debra24 s
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Social stage IV, estrogen receptor 0, etc. Assessment text. Patients blood pressure is an example of capturing a value #blood	Labs	biopsy on 20 September 2012 which		
	Social		Assessment text. Patients blood pressure is an example of capturing a value #blood	

3.1 COLLABORATIVE MODE TOGGLE



Only the first data attribute entry for elements appear by default in order to show as many elements as possible. Once a particular attribute is chosen, that data element expands, and the rest of the attribute selections appear