

FLUX NOTES COMPONENTS DOCUMENT v01

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This document outlines the component breakdown for the design of MITREs Flux Notes (Full). This v01 document is meant to describe major standard components and areas of functionality that have been designed thus far through March 2018, and can be grouped together and serve as a planning tool for implementation and a guideline for modularity of components. Future revisions will include additional components as they are developed.

Principles

Metaphor

A linear narrative, supported by charts and visuals, present the patient data. The clinician records notes on pages of notepaper.

Space and Shapes

The interface is tidy, comfortable, and boasts plenty of breathing space. The spaces of the user interface are subtly divided by soft borders and boundaries. Interactive elements blend into the record.

Depth and layering

The patient record and the tools to manipulate the record are flat. Although some temporary elements require layering, visibility is controlled with collapsing and expanding. Depth and shadows are reserved for elements that are portrayed with physical concrete forms.

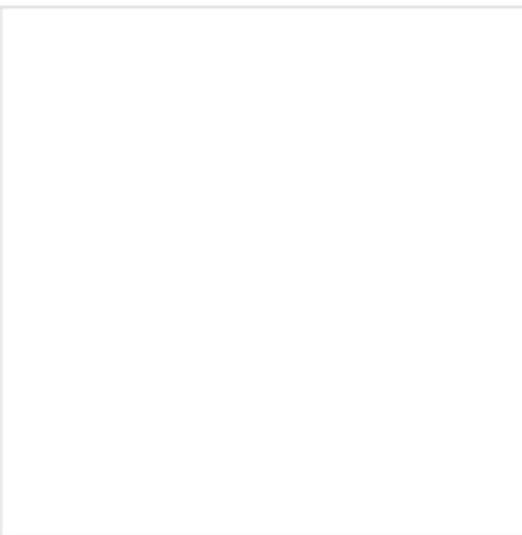
Icons

Graphical elements are minimalist, familiar, and monochrome. They are concrete, and many represent actual objects such as pills, pencils, and notepaper.

COLOR PALETTE

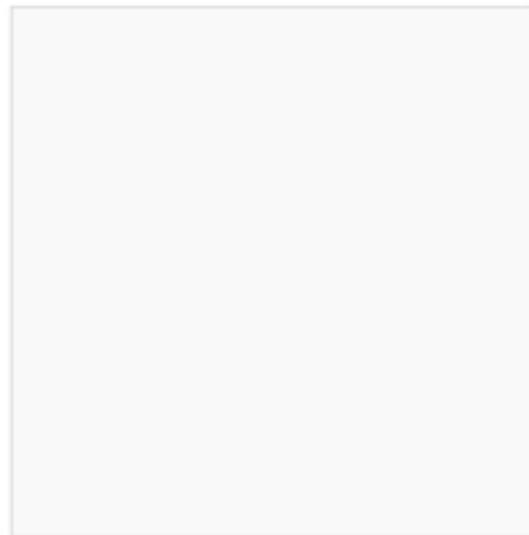
COLOR PALETTE: Primary Palette

Background



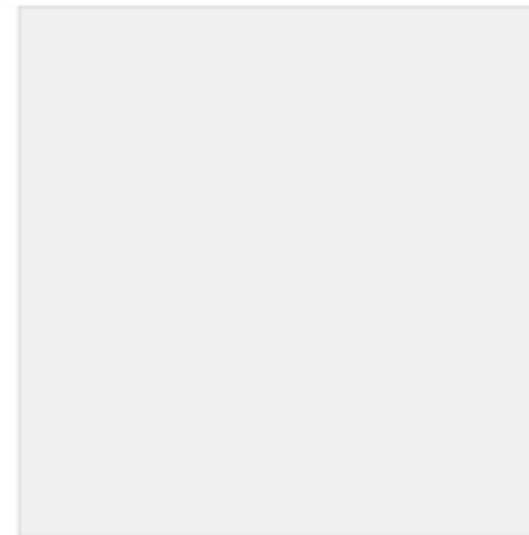
Background

hex FFFFFF
rgb 255 255 255



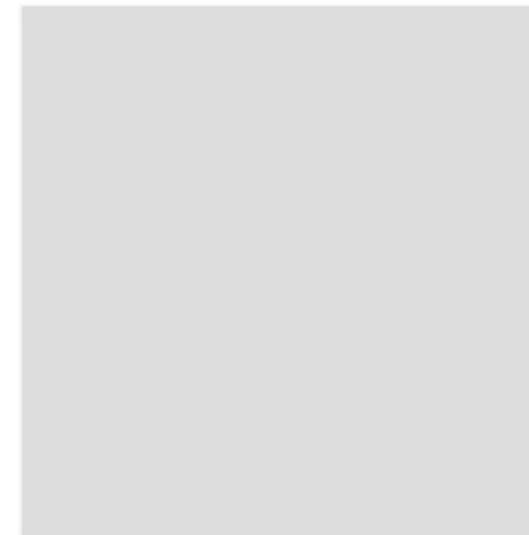
Contrast gray

hex F9F9F9
rgb 249 249 249



Feature gray

hex F0F0F0
rgb 240 240 240



Line gray

hex DDDDDD
rgb 221 221 221

Apply contrast gray to alternate cells in tables or to assist visibility of distinct areas such as the header. Apply Feature gray to small UI features such as scroll bars, selection boxes, and inactive buttons. Use Divider gray for section dividers and outlines.

Type



Body gray

hex 3F3F3F
rgb 63 63 63



State

hex AAAAAA
rgb 170 170 170



Warning Red

hex C80B0B
rgb 200 11 11

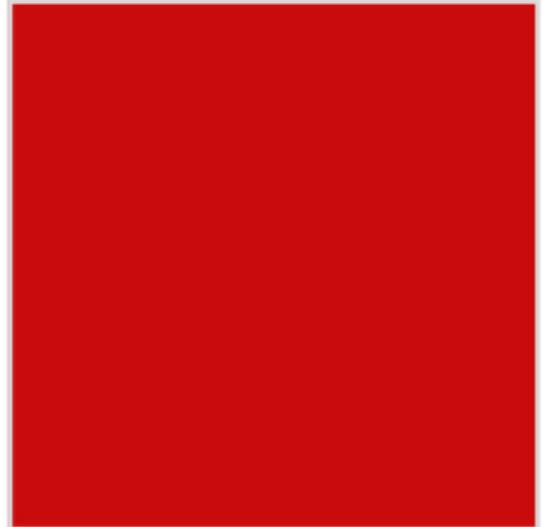
Apply State gray to text that changes with the state of the display, such as mode text, missing data text, condition text, and filter text.

COLOR PALETTE: Primary Palette

Alert



Missing Data Red
hex FFBoA2
rgb 255 176 162



Warning Red
hex C8oBoB
rgb 200 11 11

Missing Data Red is reserved for underlining text pointing to missing data in the SHR. It should not be used to color text or as a solid block. Warning Red is used to alert the physician to exceptional data, as either a text color or as the coloring of a graphical element.

Interactive



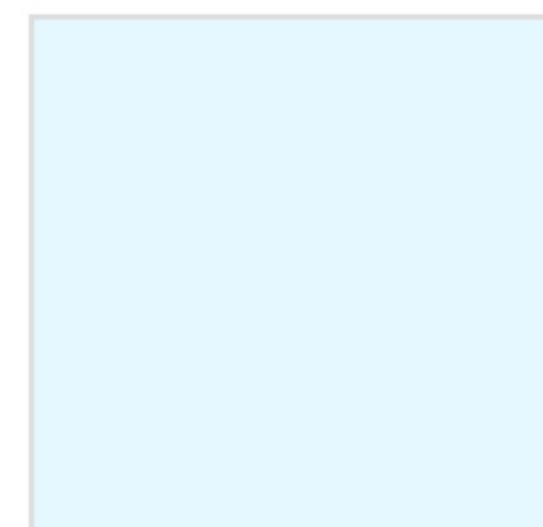
Interface Blue
hex 028DEA
rgb 2 141 234



SHR Context Dark
hex 0084B8
rgb 0 132 184



SHR Context Line
hex 5EBFFF
rgb 94 191 255



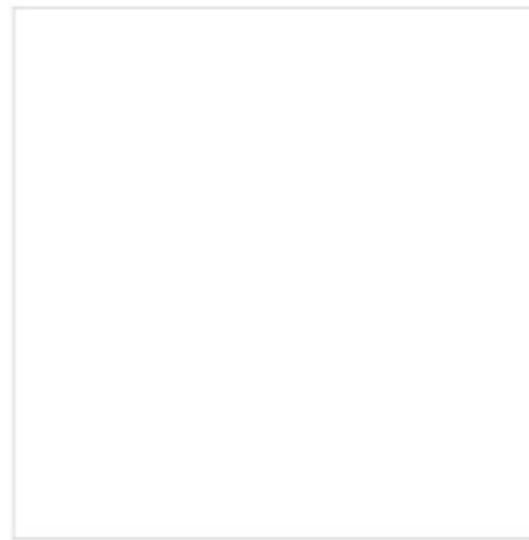
SHR Context Light
hex E5F7FF
rgb 229 247 255

Interface Blue is intended for user interface elements and for indicating items selected in the user interface (expansions, dropdowns, etc.). SHR Context Dark and Light are used to underline or highlight text and elements that are linked to structured data in the SHR.

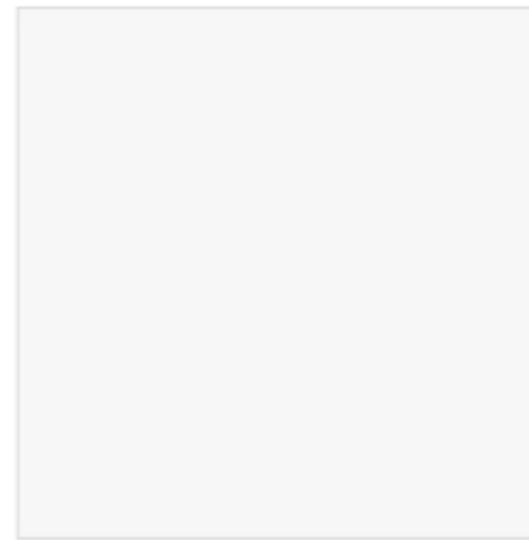
COLORS: Deutanopia Example

Most common color deficiency that affects 5% of all males. The following is an example of how the palette would look for users with this color deficiency.

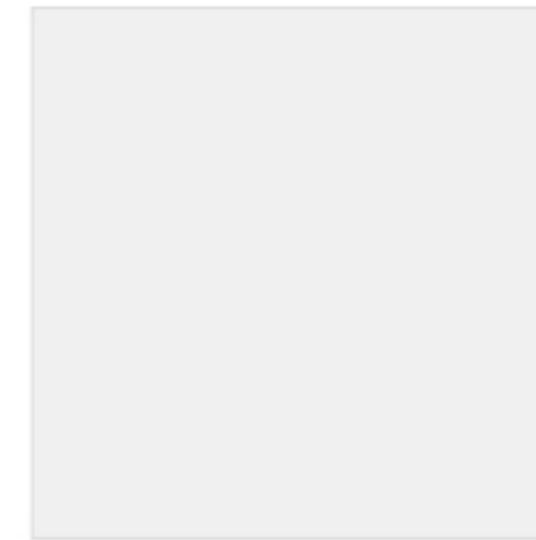
Background



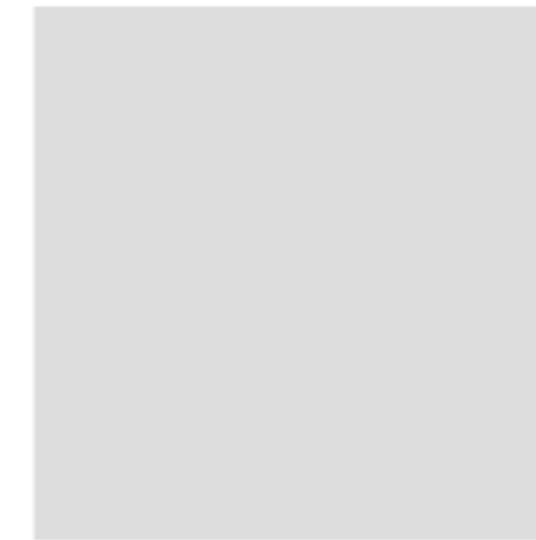
Background



Contrast gray



Feature gray



Divider gray

Alert



Missing Data Red



Warning Red

Type



Body gray



State



Warning Red

Interactive



Interface Blue



SHR Context Dark



SHR Context Line



SHR Context Light

COLORS: Projection / Low Contrast Placeholder

TEXT STYLE

TEXT STYLE: Reusable Styles

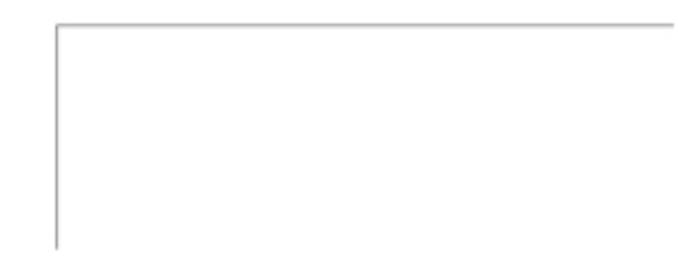
Use regular weight on all body text, table cell content. Also use regular weight with subsection headers, UI element labels, and interactive text, all of which are given emphasis with other techniques.

Use semibold weight for section headings, column headings, and timeline titles.

Section header	Open Sans Semibold #3F3F3F RGB (63, 63, 63) 16px
Text emphasis visual view	Open Sans Regular #3F3F3F RGB (63, 63, 63) 16px
Subsection header	Open Sans Semibold #3F3F3F RGB (63, 63, 63) 14px
Narrative body text	Open Sans Regular #3F3F3F RGB (63, 63, 63) 14px
Tabular column header	Open Sans Semibold #3F3F3F RGB (63, 63, 63) 14px
Tabular body text	Open Sans Regular #3F3F3F RGB (63, 63, 63) 14px
Right context tray #@ shortcuts	Open Sans Regular #3F3F3F RGB (63, 63, 63) 12px
Tabular missing data	Open Sans Regular #A1A1A1 RGB (161, 161, 161) 12px
Previous notes label text	Open Sans Regular #3F3F3F RGB (63, 63, 63) 10px

LAYOUT

LAYOUT: Narrative View



Color: Interface Blue (#028DEA)

Section title



Color: State (#AAAAAA)

— Subsection title

NARRATIVE TEXT 14 FONT REGULAR. Narrative text placeholder. Narrative text should be fairly large to enable ease of reading. Narrative text placeholder. Narrative text should be fairly large to enable ease of reading. Narrative text placeholder. Narrative text should be fairly large to enable ease of reading.

Font-size: 14px
Color: Body gray (#3F3F3F)
Font weight: regular
Line height: 20px (1.4x font-size)

NARRATIVE TEXT 14 FONT REGULAR. Narrative text placeholder. Narrative text should be fairly large to enable ease of reading. Narrative text placeholder. Narrative text should be fairly large to enable ease of reading. Narrative text placeholder. Narrative text should be fairly large to enable ease of reading.

Width: 1px
Color: State (#AAAAAA)

Section title



— Subsection title

NARRATIVE TEXT 14 FONT REGULAR. Narrative text placeholder. Narrative text should be fairly large to enable ease of reading. Narrative text placeholder. Narrative text should be fairly large to enable ease of reading. Narrative text placeholder. Narrative text should be fairly large to enable ease of reading.

Width: 1px
Color: State (#AAAAAA)
Opacity: 60%
Width: 1px
Color: SHR Context Line (#5EBFFF)

NARRATIVE TEXT 14 FONT REGULAR. Narrative text placeholder. Narrative text should be fairly large to enable ease of reading. Narrative text placeholder. Narrative text should be fairly large to enable ease of reading. Narrative text placeholder. Narrative text should be fairly large to enable ease of reading.

LAYOUT: Tabular View

Section title



— Subsection title

NARRATIVE TEXT 14 FONT REGULAR. Narrative text placeholder. Narrative text should be fairly large to enable ease of reading. [Narrative text placeholder](#). Narrative text should be fairly large to enable ease of reading. Narrative text placeholder. Narrative text should be fairly large to enable ease of reading.

Section title



— Subsection title

Column header	Column header	Width: 1px Color: Line gray (#DDDDDD)
Cell text	<u>Cell text</u>	
Cell text	<u>Cell text</u>	Color: Contrast Gray (#F9F9F9)
Cell text	<u>Cell text</u>	

— Subsection title

Left
hanging
labels

Content of the subsection, such as tables, charts, and timelines, are left aligned on the graphic. If there is left hanging text, it hangs into the margin.

> Expandable subsection

> Expandable subsection 2

LAYOUT: Visual View

Section title CONDITION



Text emphasis

Additional narrative or descriptive text

Text emphasis

Additional narrative or descriptive text

TIMELINE

2015

2014

2013

Width: 1px

Color: Line gray (#AAAAAA)

ICONS

ICONS

Global

-  Close
-  Dropdown
-  Search

Clinical notes

-  New note
-  Structured phrase mode disabled
-  Clinical notes mode
-  Delete the clinical note

Visualizations

-  Morning
-  Afternoon
-  Night

Navigation

-  View mode record (deselected)
-  View mode record (selected)
-  View mode split (deselected)
-  View mode split (selected)
-  View mode notes (deselected)
-  View mode notes (selected)

Patient record exploration

-  Narrative mode (deselected)
-  Narrative mode (selected)
-  Tabular mode (deselected)
-  Tabular mode (selected)
-  Visualization mode (deselected)
-  Visualization mode (selected)

Timeline

-  Inpatient (deselected)
-  Inpatient (selected)
-  Outpatient (deselected)
-  Outpatient (selected)
-  Medications (deselected)
-  Medications (selected)
-  Allergy panel
-  Grade 2
-  Grade 3
-  Grade 4
-  Grade 5

INTERACTION

INTERACTION: Structured Data

SHR inline structured data

She underwent a lumpectomy. She underwent a sentinel lymph node biopsy on 20 September 2012 which revealed infiltrating poorly differentiated ductal carcinoma, estrogen receptor 0, etc.

Width: 1px

Color: SHR Context Line (#5EBFFF)

The structured data element is automatically populated and is interactive.

SHR inline structured data - selected

She underwent a lumpectomy. She underwent a sentinel lymph node biopsy on 20 September 2012 which revealed infiltrating poorly differentiated ductal carcinoma, **estrogen receptor 0**, etc.

The user is selecting the interactive structured data. A popup is appearing.

Color: SHR Context Dark (#0084B8)

SHR inline structured data - tentative insertion

She underwent a lumpectomy. She underwent a sentinel lymph node biopsy on 20 September 2012 which revealed infiltrating poorly differentiated ductal carcinoma, estrogen receptor 0, etc.

Data has been captured but not validated or signed off by the provider.

Width: 1.5px

Color: SHR Context Line (#5EBFFF)

Note entry structured data

Debra Hernandez672 is a 51 year old Female. Patient was diagnosed with Invasive ductal carcinoma of breast on 13 Jan 2012. Breast cancer diagnosed in Right breast. Primary tumor size was 30 mm. Histological grade was High grade or poorly differentiated.

Tags and shortcuts in the note editor are replaced with highlighted text that is non-interactive.

INTERACTION: Missing Data

Missing data in tabular form

Test	Value	Date	
White blood cell count	<u>missing</u>	2 Jan 2018	The missing data element text is pushed back into space, while a red underline reminds the provider fill in the element.

Width: 1px

Color: Missing Data Red (#FFB0A2)

Missing data in narrative form - selected

She underwent a lumpectomy. She underwent a sentinel lymph node biopsy on 20 September 2012 which revealed infiltrating poorly differentiated ductal carcinoma, **missing estrogen receptor**, etc.

The user is selecting the missing data. A popup is appearing.

Color: Missing Data Red (#FFB0A2)

INTERACTION: Example Text Interaction Mockup

* This design continues to be iterated and should be seen as an applied example of the components documentation. The following is the latest concept as of 9 March, 2018.

Medications All conditions  

— Current medications (6) —

Medication ▾	Dosage	Timing	Start	End
Adriamycin	6 10 ⁹ /L	6 cycles	10 Feb 2012	Missing date
Cyclophosphamide	10 mg	6 cycles	10 Feb 2012	30 Aug 2017
Tamoxifen	20 mg	qd	1 Nov 2013	13 Aug 2016
Letrazole	2 mg	qd	5 Sep 2015	1 Jun 2016
Coumadin	2 mg	qd	5 Mar 2015	1 Jun 2015
Aromasin	25 mg	qd	5 Oct 2014	1 May 2014

KEY SCREENS

KEY SCREENS: Pre-encounter View Mode

* The following design continues to be iterated and should be seen as an applied example of the components documentation. The following is the latest concept as of 9 March, 2018.



Debra24
Hernandez98Aj Date of birth 5 Apr 1966 (51) Admin. sex Female Location Boston, MA

Workflow Pre-encounter Condition Ductal carcinoma of the breast

View

Debra24 search...



Summary

Timeline

Medication

Allergies

Labs

Social

Disease status

Dr. Jraker299 referred ms. Debra24 Hernandez98Aj due to pain in left breast. Dr. Jraker299 is ms. Debra24 Hernandez98Aj's primary care physician for 12 years.

Summary Ductal carcinoma of the breast



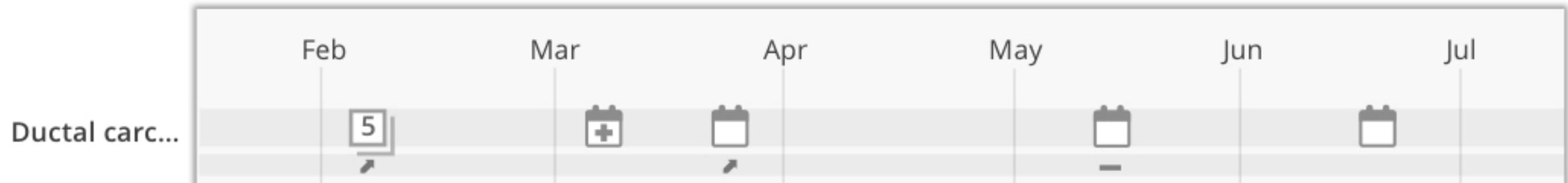
Ms. Debra24 Hernandez98Aj is a 51-year-old menopausal non hispanic or latino woman with invasive ductal carcinoma of the breast, diagnosed on 13 January 2012. Her most recent status, recorded on 15 May 2017, is of worsening, disease progression based on pathology, imaging, and symptoms.

- 1 | She underwent a lumpectomy. She underwent a sentinel lymph node biopsy on 20 September 2012 which revealed infiltrating poorly differentiated
- 2 | ductal carcinoma, estrogen receptor 0, etc. A diagnostic mammogram on 4 October 2013 revealed a 2 cm mass in the right breast at 7 o'clock and an indeterminate lymph node in the right axilla, 13 mm.

Timeline All conditions

Show all Inpatient Outpatient Condition status Medications

1 W | 1 M | 6 M | 1 Y



+ New note

Sort by most recent

+ Search filters

47 previous notes

2 Aug 2017
Clinical follow-up

Dr. Free2 Will
Dana Farber Cancer Insti...

20 Jun 2017
Clinical follow-up

Dr. Free2 Will
Dana Farber Cancer Insti...

14 May 2017
Clinical follow-up

Dr. Free2 Will
Dana Farber Cancer Insti...

8 May 2017
Clinical follow-up

Dr. Free2 Will
Dana Farber Cancer Insti...

View 10 more clinical notes from 2015 - 2017

UPCOMING ADDITIONS

Components for:

Filter interactions

Toggle interactions

Menu interactions

Missing data within visuals