

MITRE / FLUX NOTES **SELECTED CONCEPTS v13.7: CONTEXT/SHORTCUTS TRAY**

EDWIN CHOI, DANIEL REEVES, JUHAN SONIN, 27.APR.2018



CONTEXT TRAY: Considerations

Initial considerations:

- If hierarchy of data is presented, it should be clear
- The current state (contexts) of editor should be clear to user
- The most relevant shortcuts should be easily accessible
- The user must be able to access all current contexts (patient, one condition, one medication, etc.)
- Unavailable shortcuts are hidden

Strong reactions and new considerations:

- It's confusing that italicized headings are not expandable. They are different from "toxicity" etc.
- Desirable for "a way to visually see" what the current state of the editor is. In primary care for example, the user may be dealing with many issues at once. This will be particularly useful for a new user or when reviewing a note.
- The strong blue box is the wrong graphic.
- The tray is currently serving three purposes, each of which is important.
 - inform the user of editor state
 - predict and present likely shortcuts
 - offers exploration of all available shortcuts across contexts (patient, or condition, or medication, or toxicity etc.)

Challenges:

- The hierarchy of shortcuts isn't the same as the hierarchy of data. The italicized categories are NOT contexts and do NOT require a shortcut. But they are parts of the structured data hierarchy.
- Displaying a hierarchy with contexts implies a purity and completeness. This is at odds with the goal of predictive sorting
- Serving all three purposes listed above, but not mixing them up and confusing them.

CONTEXT TRAY: Four ideas presented Thursday, 4/27

With Subcontexts + Dropdowns



- Q Search shortcuts

TEMPLATES

SNIPPETS

PATIENT
- Invasive ductal car...

Staging

Toxicity

grade

#Grade 1

#Grade 2

#Grade 3

#Grade 4

adverse effect

#Febrile neutrop...

#Fatigue

#Anemia

#Nausea

#Diarrhea

attribution

#Treatment

#Disease

#Error

#Unrelated

#Unkown

Taxol

Remove note

No Subcontexts + Dropdowns



- Q Search shortcuts

TEMPLATES

SNIPPETS

PATIENT
- Invasive ductal car...

grade

#Grade 1

#Grade 2

#Grade 3

#Grade 4

#Grade 5

adverse effect

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#Fatigue

#Anemia

#Diarrhea

attribution

#Treatment

#Disease

#Error

#Unknown

#Unrelated

metastasis

#M0

#M1

#disease status

#toxicity

#ER

Remove note

With Subcontexts + Buttons



- TEMPLATES

SNIPPETS

Patient

Invasive ductal car...

Staging

Toxicity

Taxol
- Q Search shortcuts

grade

#Grade 1

#Grade 2

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#Grade 4

#Grade 5

adverse effect

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#Fatigue

#Generalized musc...

#Anemia

#Nausea

#Diarrhea

see more

attribution

#Treatment

#Disease

#Error

#Unknown

#Unrelated

Remove note

No Subcontexts + Buttons



- TEMPLATES

SNIPPETS

Patient

Invasive ductal car...

Taxol
- Q Search shortcuts

grade

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#Disease

#Error

#Unknown

#Unrelated

metastasis

#M0

#M1

#disease status

#toxicity

#ER

Remove note

Summary

Timeline

Medication

Allergies

Labs

Social

Disease status

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

New Note

10 April 2018

Dr. Free2 Will

Dana Farber Cancer Institute

Close

@

Search shortcuts

TEMPLATES

SNIPPETS

PATIENT

Invasive ductal car...

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Toxicity

grade

#Grade 1

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#Unrelated

#Unkown

Taxol

Remove note

REASON FOR VISIT:
follow-up regarding Invasive ductal carcinoma of the breast

HISTORY OF PRESENT ILLNESS:
Ms. Ortiz is a 43-year-old premenopausal Hispanic woman who recalls an unremarkable mammogram December 3, 2015. She recalls feeling a sharp pain in her right breast about 8 months later, and feeling a palpable lump two months after that. A diagnostic mammogram on August 13, 2017, revealed a 2 cm mass in the right breast at 7 o'clock and an indeterminate lymph node in the right axilla, 13 mm.

She underwent neoadjuvant cyclophosphamide (ddAC) followed by Taxol (T) from October 20, 2017 to February 23, 2018. Taxol was dose reduced to 60mg/m2 for the last 2 cycles and stopped after 11 doses due to neuropathy. She received 11 of 12 planned doses.

She underwent right lumpectomy with Dr. Ford on March 12, 2018. Pathology report on March 16, 2018 showed no residual disease, 0/2 SLNs, pathological complete response pCR.

ASSESSMENT
I assess #staging #T0 #N0. She is experiencing #Toxicity |



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

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](#).

She underwent a [lumpectomy](#). She underwent a [sentinel lymph node biopsy](#) on [20 September 2012](#) which revealed infiltrating poorly differentiated [ductal carcinoma](#), stage IV, estrogen

New Note
10 April 2018

Dr. Free2 Will
Dana Farber Cancer Institute

✕ Close

REASON FOR VISIT:

follow-up regarding [Invasive ductal carcinoma of the breast](#)

HISTORY OF PRESENT ILLNESS:

Ms. Ortiz is a 43-year-old premenopausal Hispanic woman who recalls an unremarkable mammogram December 3, 2015. She recalls feeling a sharp pain in her right breast about 8 months later, and feeling a palpable lump two months after that. A diagnostic [mammogram on August 13, 2017](#), revealed a 2 cm mass in the right breast at 7 o'clock and an indeterminate lymph node in the right axilla, 13 mm.

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ASSESSMENT

I assess [#staging](#) [#T0](#) [#N0](#). She is experiencing [#Toxicity](#) |



TEMPLATES
SNIPPETS

Patient
[Invasive ductal car...](#)
[Staging](#)

Toxicity

[Taxol](#)

🔍 Search shortcuts

[grade](#)
[#Grade 1](#)
[#Grade 2](#)
[#Grade 3](#)
[#Grade 4](#)
[#Grade 5](#)
[adverse effect](#)
[#Febrile neutropen...](#)
[#Fatigue](#)
[#Generalized musc...](#)
[#Anemia](#)
[#Nausea](#)
[#Diarrhea](#)
[see more](#)
[attribution](#)
[#Treatment](#)
[#Disease](#)
[#Error](#)
[#Unknown](#)
[#Unrelated](#)

🗑 Remove note

CONTEXT TRAY: Improvements on previous ideas

@

:

Search shortcuts

TEMPLATES

SNIPPETS

PATIENT

Invasive ductal car...

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Toxicity

grade

#Grade 2

#Grade 3

#Grade 4

...

adverse effect

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#Anemia

#Nausea

#Diarrhea

...

attribution

#Treatment

#Disease

#Error

#Unrelated

#Unkown

Taxol

Expand this group to show all shortcuts (e.g. all grades)

Remove note

@

:

Search shortcuts

TEMPLATES

SNIPPETS

SHORTCUTS

grade

#Grade 3

#Grade 4

#Grade 5

...

adverse effect

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#Fatigue

#Anemia

#Diarrhea

...

attribution

#Treatment

#Disease

#Error

#Unknown

#Unrelated

metastasis

#M0

#M1

Invasive ductal car...

#disease status

#toxicity

#ER

#PR

#HER2

Remove note

CONTEXT TRAY: Giving user a choice

@

≡

🔍 Search shortcuts

TEMPLATES

SNIPPETS

SUGGESTED

CONTEXT

grade

#Grade 4

#Grade 5

adverse effect

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#Anemia

#Diarrhea

attribution

#Treatment

#Disease

#Error

metastasis

#M0

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Invasive ductal car...

#disease status

🗑 Remove note

@

≡

🔍 Search shortcuts

TEMPLATES

SNIPPETS

SUGGESTED

CONTEXT

> Taxol

✓ Invasive ductal car...

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#Unrelated

#Unkown

#disease status

#toxicity

"EP

🗑 Remove note

All menus are expandable and collapsable. By default, only the newest, most recent contexts are open all the way down.

Note that all Invasive ductal carcinoma shortcuts are available here. This is a fully expandable, traditional, tree.

CONTEXT TRAY: Separating out the context state information

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TEMPLATES

SNIPPETS

SHORTCUTS

Q

Search

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metastasis

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#disease status

Patient

Invasive ductal carcin...

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Taxol

Remove note

Popup explaining:

Data contexts at current cursor position