

Beacon Ordering Process

Results

Participants: We ran 8 RNs and Nurse Practitioner through the usability test via [usertesting.com](#). Link to raw notes, observations, and usability videos.

TOP 3 TAKEAWAYS

- For 6 out of the 7 participants, there were disconnects between what we were trying to accomplish with new Epic module, and how people describe the new Beacon ordering process.
- 8 out of 8 participants did not know what to do once they've completed setting up treatment plan on a patient.
- All participants found value in the using treatment plan as we suggested, but 5 of the 8 participants wanted to be able to enter/change how to order chemo drugs after they were signed and released.

How did users view/describe the products that we are implementing?

"This will help me track my patient coming for chemo treatment or standard of care visit"

"Epic tries to implement a product that is for larger practices, Oncology is concentrated and specialty field"

"I'm not sure what is the difference between regular ambulatory ordering process versus treatment plan"

For 6 out of the 7 participants, there were disconnect between what we were trying to accomplish with new Epic module, and how users describe the new Beacon ordering process. By the numbers, this would mean that 46-99% of new Beacon users would not be able to accurately describe or understand how the Beacon ordering process will work. Keep in mind, these exist EPIC users, not a new users who are already familiar with Ambulatory ordering process. Explanations for what we do varied from participant to participant. Common themes in new users exploration:

- 7 or 8 participants hovered over "Oncology Tab" to find information about the treatment plan, NO PARTICIPANTS attempted to click information sign with Oncology Tab hyperlink
- 3 participants compared "Oncology Tab" to "Transplant Tab"
- 3 participants were confused about what was included in the Treatment Plan orders

OPPORTUNITIES FOR IMPROVEMENT:

How can we differentiate the Beacon ordering and Ambulatory Order Entry in the interface? Recommended different icon or information link to differentiate Beacon ordering using Treatment Plan versus Ambulatory Order Entry.

What are the stopping point to adding Oncology Treatment Plan Tab?

8 of the 8 participants successfully finished the login and enter patient's chart, however, participants stalled on a few steps:

- 4 of the 8 participants struggled to enter a "patient's name" making several tries before getting a green-light. Most wanted to include entire name of the patients. (this will represent between 21% and 78.5% of our new user base)
- 5 of the 8 participants suggested that Oncology Tab were not located in their preferred location on the interface design (this will represent between 30.4% and 86.5% of our new customer base). 2 participants went straight to Order Entry after finding test patient.
- 3 of the 8 participants went to Sign and Held to entered medication orders. (this will represent between 13.5% and 69.6% of our new user base)

OPPORTUNITIES FOR IMPROVEMENT:

Evaluate navigation path for RNs and NPs finding correct encounter to place order.
Offer the ability for user to change the location of Oncology Tab to meet their workflow.
Validate Sign and Held is appropriate place to put in medication orders

Did we meet users expectations?

Participants were (for the most part) pleasantly surprised about how easy it was to create a treatment plan.

- 8 out of 8 participants did not know what to do once they've completed adding appropriate treatment plan with diagnosis:
 - 6 of the 8 participants skipped the interim page between Edit Plan and dose modification
 - 6 participants immediately signed the orders without clicking verified dosage check
 - 2 participants mentioned they didn't know what a "Dose modification" was, it took 1 person 36 minutes for them to understand what "Dose modification" meant.
- Once the test was over, participants were able to communicate what Oncology Treatment Tab includes in the interface designs.

Opportunities for Improvement and Next Steps:

When a user completes test setup: set clear expectations around data collection, a

☑ Consider a more prominent, "We're collecting your data"

Look at engagement metrics for Oncology tab, to see what people are interacting with.

STATS

Applying Treatment Plan Time on Task: Between 11.61 and 34.83 seconds to complete
 Signing and Releasing order Time on Task: Between 1.55 and 49.26 seconds to complete
 Dose Modification changes Time on Task: 13.33 and 33.30 to complete

- SEQ: Between 4.41 and 6.21 (95% confidence)
- SEC: Between 3.22 and 6.55 (95% confidence)

Test Details (For reference only)

GOALS:

1. What are the roadblocks, pain points, and points of confusion in each new user step?
2. What are users expectations, and where they met?
3. Goals per section:

Oncology Tab --->	Treatment Plan	Closing the encounter	Finding a patient
<ul style="list-style-type: none"> - What are the roadblocks, pain points, and points of confusion? - What do people know about Beacon Module? - What do you think Oncology Tab is going to do? - Can they differentiate b/w Treatment Plan ordering versus Ambulatory ordering process - What does each do? - What questions do you still have about this module that you would need before using? 	<ul style="list-style-type: none"> - What are the roadblocks, pain points, and points of confusion for Applying Treatment Plan? - What are the barriers to Editing, signing and releasing orders from the treatment plan? 	<ul style="list-style-type: none"> - What are the roadblocks, pain points, and points of confusion? - Do the close validation point upon closing encounter page make sense? Cause confusion? - Is there anything they expected during setup that was missing? 	<ul style="list-style-type: none"> - Do they understand finding patients chart in correct encounter? - What do they expect to happen next? - Do they understand they get a suite of tools, not just the insights on Oncology tab? - After going through the new user flow, how did they feel about the new product

Stakeholders

TBD

Methodology

User Test, with high-level tasks prompting user to go through their clinical day workflow for seeing patient and ordering chemotherapy medication

Technical requirements: Inbound engineering will setup a specific username/password to grant access to the DEMO environment. This will allow us to login as themselves not generic users

Recruitment:

7-10 users. Given a problem that affects 10% of our users, we'll need 7 people to have 50% chance of finding the problem.

- Mostly current Epic System users and hospital employees
- Some beginner
- Recruitment Method: email distribution and clinical supervisors recommendation

Script

Introduction

Hello! The following User Test will explore: what Beacon Oncology Module has to offer, finding patients encounter and using Oncology Tab to apply Treatment Plan and ordering chemotherapy drugs. Keep in mind, any information you give will be deleted after this test. Ready... Set... Go!

Tasks

1. Talk aloud as you EXPLORE what Moz.com has to offer. Answer the following questions aloud:
 - What is Epic Beacon?
 - What are the reasons someone uses this function?
 - Who would benefit from using the Beacon functionality?
2. You've decided you want to start a prepping patients who is coming tomorrow for an infusion treatment plan. Walk us through how you would do that using the following information:
 - Login to Exam Area in Hyperspace
 - Password: password
 - Create orders only encounter and find your patient (XXXtest, Beacon)
 - Find Oncology Tab
 - Find Create Plan to apply Breast Cancer Treatment Plan
 - Type in Weight and heights for patient in Edit Treatment Plan
 - Change Chemotherapy Dose modification to 10%
 - Sign and release the order

3. On a scale of 1 to 7, how easy was that task to complete? (7=very easy, 1=not easy)
4. On a scale of 1 to 7, how confident are you that you successfully completed that task? (7=very confident, 1=not confident)
5. You just finished Treatment Plan setup. What do you expect to happen next? Hit "next" after you've answered the question.
6. Before wrapping up the user test, is there any other place you'd like to explore? Feel free to take a moment to navigate through the Oncology Tab, talking aloud as you go.

Follow-up Questions

1. What did you see in Oncology Tab?
2. What questions do you still have about the Beacon Module?
3. How likely are you to recommend this module to your colleagues (0=Not at all likely, and 10=Very)