

Alpha Rollout Plan - New Jotter

Alpha Pitch

You need to draw and document for a patient procedure but you are forced to use the old version of the Jotter to draw and annotate on custom templates using limited jotter functionality. Now you can use a new version of the Jotter which provides **a smooth and intuitive drawing experience, bigger drawing space, a revised set of drawing tools, a multiselect dropdown for template selection and the ability to upload, draw or annotate on patient images, which are automatically tied to the current encounter.**

Alpha Hypotheses/Problem Statement

While using the Jotter, clinicians routinely face several problems affecting clinician efficiency, the amount of time spent on documenting an encounter and the accuracy of clinical drawings. The current jotter has drawing functionality that is rudimentary at best. Clinicians have a small drawing space with a limited functionality, affecting drawing precision. The current jotter drawing experience is not intuitive and drawing on patient templates is time consuming. Clinicians need to scroll through a list of templates before they can begin drawing, wasting precious time. Clinicians often need to but cannot draw on or annotate on patient images. They rely on workarounds such as using athenacapture or adding documents and then manually tying them to the encounter. Both workarounds don't allow clinicians to draw or annotate as needed on the images they upload. Clinicians need to draw different shapes such as boxes, arrows, triangles and circles and they waste precious time by manually drawing such shapes even for small annotations. Lastly since they cannot zoom in and out of current drawings, they resort to workarounds such as uploading and using extremely zoomed in versions of their own or athena supplied drawing templates, further reducing precision and accuracy of their drawing. As a result of all these issues, clinicians can't capture high quality documentation. This inhibits clinicians' ability to do their job, decreasing overall clinician efficiency and increasing the time needed to document a jotter image for an encounter.

Alpha Metrics

[Most frequent jotter users.xlsx](#) - This file contains the list of users who are the most frequent users of the Jotter. We can use this list to select a sample of users to test new functionality of the jotter. It would be helpful to add a column which identifies the type of specialty of each user (Dermatology, Gynecology, Pain Management, Cardiology and Neurology etc).

| Metric | Data points | Method of tracking |
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| Adoption | Number and percentage of users who use the Jotter tool (of all potential Jotter users identified) in 3 weeks | Tableau dashboard showing usage of jotter across different specialties such as Dermatology, Gynecology, Pain Management, Cardiology and Neurology. Note: We can use the list of Most frequent jotter users uploaded above. |
| Sustained adoption (retention / attrition) | Retention: Number and percentage of encounters in which the Jotter is used per week for the last 3 weeks (our attempt to track sustained adoption) Attrition: Attrition of the Jotter (users in the alpha that start using the Jotter and then abandon it, do not open the tool for three weeks on end after one week of use) | Retention: Select a sample set of users (2 per specialty) from different specialties such as Dermatology, Gynecology, Pain Management, Cardiology and Neurology. For the selected sample of users <ul style="list-style-type: none">SQL queries to find how many open or closed encounters contain Jotter drawings.Tableau dashboard showing number and % of open or closed encounters with jotter drawings. Attrition: Tableau dashboard showing the number and % of users who utilized the Jotter in encounters for one week and then did not use Jotter drawings in encounters for the next three weeks. |
| Jotter Drawing Documentation Time | 1. Amount of time taken to complete and save a jotter drawing in an encounter. 2. % Change in average time to complete a drawing using the new Jotter tool versus the old Jotter tool. 3. % Change in average time spent using the new Jotter tool versus the old Jotter tool. | Shadow clinicians (2 each from Dermatology, Gynecology, Pain Management) who use the Jotter frequently. Tableau dashboard showing % change in average time to complete a drawing using the new Jotter tool versus the old Jotter tool. |

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| Reduction in Documentation related errors | <ol style="list-style-type: none"> 1. No of errors in jotter drawings made using old jotter 2. No of errors in jotter drawings made using the new Jotter. | Shadow users in the alpha across a time-frame of two weeks to and work with to determine whether the new Jotter allows for a reduction in documentation errors. |
| Key workflow usage - Template select and search dropdown | <p>Assess the user feedback on ease of searching for and selecting a template from the select and search dropdown.</p> <p>Change in user experience and overall user satisfaction of selecting a template from the select and search dropdown.</p> | <p>Select a sample set of users (2 per specialty) from different specialties such as Dermatology, Gynecology, Pain Management.</p> <p>For the selected sample of users:</p> <p>Conduct usability tests and surveys with users to determine the change in user experience between selecting and searching templates on the old jotter vs the new jotter.</p> |
| Key workflow usage - Uploading & drawing /annotating on patient images on the Jotter Workspace | <ol style="list-style-type: none"> 1. Number and percentage of encounters in which the Jotter users uploaded patient images either through athenaCapture or through Add Document functionality in the Procedure Documentation section of the Physical Exam workflow in encounters opened across 3 weeks. 2. Number and percentage of encounters (across 3 weeks) in which jotter users uploaded patient images either through athenaCapture or through Add Document functionality in the HPI, ROS workflows. | <ol style="list-style-type: none"> 1. SQL queries to find how many encounters contain patient images uploaded through athenaCapture or through Add Document functionality in the Procedure Documentation section of the Physical Exam workflow in an encounter 2. Tableau dashboard showing how many encounters contain patient images uploaded through athenaCapture or through Add Document functionality in the Procedure Documentation section of the Physical Exam workflow in an encounter. 3. Tableau dashboard showing how many encounters contain patient images uploaded through athenaCapture or through Add Document functionality in HPI, ROS workflows. 4. Conduct usability tests and surveys with users to determine whether the functionality to draw and annotate on uploaded patient images is helpful for clinical documentation and determine the change in user experience and overall user satisfaction. |
| Key workflow usage - Drawing & annotating on images uploaded through athenaCapture | <ol style="list-style-type: none"> 1. Number and percentage of encounters in which the Jotter users uploaded annotated patient images either through athenaCapture in the Physical Exam and Procedure Documentation sections of the PE workflow in an encounter across 3 weeks. <p>Note: Tracking only annotated encounters in athenacapture is key because it will give us an idea of the number & type of users who could benefit from using the upload image functionality and then draw/annotate on images in the new jotter. This could potentially help expand the jotter user base.</p> | <ol style="list-style-type: none"> 1. Tableau dashboard showing how many encounters contain patient images uploaded through athenaCapture or through Add Document functionality in the Procedure Documentation section of the Physical Exam workflow in an encounter. 2. Tableau dashboard showing how many new encounters contain patient images uploaded and documented within the new jotter. |
| Zoom-in/out of a Jotter Drawing | Number and percentage of users who zoom-in/out of a Jotter Drawing for encounters opened across 1 week. | <ol style="list-style-type: none"> 1. Obtain a list of user-click events on the magnifying tools for a sample of users who most frequently used jotter for encounters across 1 week. 2. Conduct usability tests and surveys with users to determine whether the zoom-in/out functionality is helpful to clinicians while documenting with the jotter and determine the change in user experience and overall user satisfaction. |
| New Tool set for drawing shapes and lines | Number and percentage of users who used the new shape tools to draw shapes for encounters opened across 1 week. | <ol style="list-style-type: none"> 1. Obtain a list of user-click events on the shape tools for a sample of users who most frequently used jotter for encounters across 1 week. 2. If it is not possible to track #1, we need a Tableau dashboard showing how many encounters contain shapes drawn using the drawing tools 3. Conduct usability tests and surveys with users to determine whether the zoom-in/out functionality is helpful to clinicians during documenting with the jotter and determine the change in user experience and overall user satisfaction. |

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| Key workflow usage - Creating User Defined labels for marking frequently annotated terms such as Lesion, Biopsy etc. (labels defined at practice level) | TBD - we have not been able to implement this feature in the jotter during the summer internship. | Conduct surveys with users to determine whether the label functionality is helpful to clinicians while documenting with the jotter, the label functionality will save time while drawing or annotating on jotter images and determine the change in user experience and overall user satisfaction. |
| Key workflow usage - Uploading templates directly through Jotter | TBD - we have not been able to implement this feature in the jotter during the summer internship. Number of times users upload and save templates to the local table through the admin page. | Conduct surveys with users to determine whether the ability to directly upload a template through jotter without having to go through the label functionality is helpful to clinicians. Using the usability tests and surveys, determine the following 1. How frequently do users upload templates through the admin page ? Do they upload templates very infrequently or do they repeatedly keep uploading updated templates ? 2. Is it easier/more efficient (number of clicks/time elapsed) to upload a template each time for a new jotter drawing instead of relying on templates saved in the local or global tables in the admin page? Especially since a lot of the users who answered our survey seemed to be unaware of the fact that they can add their own custom templates to the jotter and draw/annotate on them as needed. |
| Key workflow usage - copy/accelerate jotter drawing from a previous encounter to a new encounter. | TBD - we have not been able to implement this feature in the jotter. | Conduct surveys with users to determine whether the ability to accelerate/copy jotter images for a patient from a previous encounter to a new encounter opened for the same patient. |

Metrics to track not on Tableau dashboards

- Qualitative feedback from user surveys

Outstanding questions / things to do:

- How are clinicians using the new Jotter? Does it meet all of their demands?
 - How are other specialties using the Jotter tool?
- Determine our baseline metrics hypotheses.
- Determine method and cadence for collecting customer feedback (interviews, surveys, email)
- Schedule feedback calls with customers in alpha.
- Write paragraph pitching the alpha and explain that future features and functionalities will be made available for clients who are in the alpha.
- Research and development of the label tool
- Research into possibility of linking athenaCapture to the Jotter tool (upload image via athenaCapture shows in the Jotter dropdown menu)
- Research into accelerating Jotter drawings with previous encounter's notes
- Research into the Jotter as a patient-facing product
 - Would clinicians find value in giving patients access to the Jotter so that they can highlight regions of pain?
 - Would clinicians find value in using the Jotter as a sort of signing consent forms or provider forms ?

For Release Notes:

- Should point users to the admin page, where they can upload custom templates to a local table. (TBD)
- Should indicate where users may access the new Jotter tool
- Should highlight new feature to upload images directly through the Jotter tool

Customer Mix/Recruiting Demographics

4 client interviews, 82 concept validation survey responses (so far)

Goal ~12 customers in the alpha, four from each of the major specialties that seem to use the Jotter tool most: Dermatology, Gynecology, and Pain Management.

Additional Considerations

- What happens to current jotter users ? Current Jotter users should not be affected by the new jotter because the underlying functionality is the same as the previous jotter. The new jotter will be accessible from the same access points within clinicals as the old jotter. To make user transition easier we ought to include documentation detailing what each new icon and tool set does and how it works. Additional features such as image upload, drawing on images , zoom-in and out , undo-redo actions and the template search and select bar should be explained in more

detail in our release notes to ensure users are aware that these features now exist and how users can use them. Usability tests of these features with jotter customers from the alpha should help us understand how useful these features are.

- Will old images still be available ?

Yes, old jotter images will be still be available. However the key difference will be that the drawings in the old jotter will be in a format utilized by the old jotter. The New jotter is built upon tldraw which utilizes a different file format which is not compatible with the old jotter. We will start by creating identification tests in the code which will help us identify whether a drawing is from the old jotter format or not. Once we determine this, initially we will have to save all old jotter images as read-only files, meaning users will be able to see them but not draw on them. Users will be able to view them from the same location in the encounter workflow where they saved them. We are researching options to determine whether we can convert the file format of the old jotter images to the file format of the new jotter images. Once this is done, users should be able to not only view but also edit old jotter drawings in the new jotter.