Bed Tracking Pilot Final Report

What is it?	Why are we doing it?
Description A small pilot with EMR providers who will enter their capacity into Dimagi instead for 7 days.	Goal To guide product improvements based on user feedback.
Timeline Mid February - Mid March Methodology Group sessions Async activities	 Deliverables User satisfaction score Prioritized list of product improvements

Executive Summary

Participant sentiments during this pilot were generally very positive:

- "But as far as the ease of use [of the new tool] and everything, I really like this. I think it's gonna help out a lot."
- "...I liked how there was one save button at the bottom, not multiple where EMR had that..."
- Paraphrase "I wouldn't use this for incoming referrals [very much because we serve such a specific population] but I see a big benefit for outpatient [transitions of care]"

The results of this pilot indicate we're ready to move into a summer 2024 public launch for the bed tracking and bed search components of this technology system.

The following is a summary of quantitative and qualitative insights and action items. Full detail can be found later in the document.

Average Response:	At Kick Off	At Close Out
"CommCare's capabilities meets my requirements."	2 Agree	2.2 Agree
"CommCare is easy to use."	1.5 Strongly Agree	1.6 Strongly Agree
"I would use CommCare for care coordination."	N/A	2.2 Agree

Quantitative Analysis

We wanted users to be able to complete updating their bed availability in less than 2 minutes and data from Dimagi's backend shows we're well within that timeframe.

Measurement	Result
Average time to perform bed update	115 seconds
Median time to perform bed update	36 seconds
Average Time Spent on Manage Facility Profile	144 seconds
Median Time Spent on Manage Facility Profile	87 seconds
Average Time Spent On Create Units	308 seconds
Median Time Spent on Create Units	217 seconds

Although EMR and CommCare's usability scores are similar, we're excited to see the high level of agreement from participants that they would use this new tool for *care coordination* which they do not by and large use EMR for today.

Average Response:	At Kick Off	At Close Out
"EMResource meet my requirements."	2.3 Agree	N/A
"EMResource is easy to use."	1.8 Strongly Agree	N/A
"On a scale of 1-5 how easy or difficult was LOGGING IN [in CommCare] to complete? "	1.8 Very Easy	N/A
"On a scale of 1-5 how easy or difficult was ADDING UNITS/BEDS [in CommCare] to complete?"	2.5 Easy	N/A
"On a scale of 1-5 how easy or difficult was UPDATING BED AVAILABILITY [in CommCare] to complete? "	1.6 Very Easy	N/A
"On a scale of 1-5 how easy or difficult was searching for a bed [in CommCare] ?"	N/A	2.5 Easy
"I would use CommCare for care coordination."	N/A	2.2 Agree
"CommCare's capabilities meets my requirements."	2 Agree	2.2 Agree
"CommCare is easy to use."	1.5 Strongly Agree	1.6 Strongly Agree

Qualitative Analysis

Data & Tech

API Integration

Summary | Providers continue to be interested in API integrations for auto updates to this tool, especially for weekend and holiday bed updates.

Action Items

• Continue to create an overarching API integration strategy for BHA digital infrastructure to reduce provider administrative burden.

Account Management

Summary | Providers continued to mention the need to have multiple state agencies able to access this system as case workers, counties workers across different agencies are large parts of the care coordination process.

We also heard again that for many orgs, there will be someone who updates the data and someone who engages in care coordination but those people are likely different users.

Action Items

- Establish clear business rules to invite the necessary providers and state staff to this tool in order to support improvements in care coordination.
- Create easy to use account management processes for provider organizations so they can invite the right people from their staff and easily remove employees that have left.

Login & Multi Factor Authentication

Summary | Multiple providers found MFA frustrating and a source of friction. It complicates the ability to build robotic process automation (RPA) or just delays login. However, we want to balance that friction with the extra security MFA drives.

Action items:

 Explore options like "remember me" or less frequent MFA requirements. Also include multiple options for MFA outside of phone numbers like OIT approved authentication apps.

Compliance Logic

Summary | Multiple providers found compliance logic confusing / unintuitive. For example, if a provider had multiple units and one unit had availability changed while the other didn't, only the changed number would be considered in compliance. Multiple providers made a work around where they would fake the number in the second unit, and go back and change it to the true number to stay in compliance,

Action items:

• Update compliance logic so that each time a user saves the *Update Bed Availability* form, all compliance clocks should be reset.

Email Notifications

Summary | Emails helped to remind providers to update beds, but were becoming overwhelming for some. An ability to be more intentional when emails get sent (e.g. only when I am out of compliance, or only on weekends) would reduce the noise and volume of emails.

Action items:

 Create the ability for users to opt in and out of email notifications (other than system-wide announcements).

LADDERS Data

Summary | Many providers found their facility information ported from LADDERS to be outdated, including missing locations. This created lots of confusion and concern and highlighted a perhaps large effort needed to update this information before a larger rollout

Action items:

 Follow up with LADDERS team to see why data in CommCare looks outdated and establish a process for data validation on launch.

Facility / Unit / Bed Setup

Summary | Different providers had different interpretations of what amount of detail to include and how to use certain fields like Populations Served and Gender Identity. Providers were confused if these meant they were *specialists* in these populations or if they simply *served* these populations.

Bed types in particular had a wide variety of setups. For example in regard to bed gender: three different settings across this subset of providers.

- 1. Beds are dynamic and can be deployed so it doesn't make sense to split by gender.
- 2. Gender is split at facility level so a bit **redundant at bed level**, but it's okay,
- 3. Beds **need to be assigned** by gender

Action Items:

- Design training to specifically emphasize setups of unit and bed types.
- Explore additional copy updates &/or info button for unit/bed setup process pages.
- Continue to monitor different unit/bed setups upon system launch for future learnings and system improvements. This may include adding ASAM levels, and other types of bed categorizations (ex. hospital beds, emergency beds).

UX & Design

Provider Waitlists & Referral Forms

Summary | Some providers have existing external waitlists and referral forms they publish on their websites.

Action Items

- Create entries on facility profile pages for external referral forms and public waitlists.
- In the future, BHA might want to explore a custom form builder in the system to allow providers to personalize their own referral forms.

Bed Search

Summary | Users were confused by facilities showing up in the provider list multiple times. They didn't understand that each "card" was a unit. In addition, we heard feedback that users would prefer to search by bed availability location vs. unit/facility cards.

Action Items

- Explore effort/impact of including a RAE/BHASOs overlay on our directory map.
- Redesign the bed search provider "cards" for user testing at April provider technology
 office hours. Design should further emphasize bed availability.

UX Updates

- Remove the option to create multiple bed types at a time (from a dropdown list), this
 was confusing to users as they thought they could only add 10 beds. Instead, please
 make users able to add one new bed type at a time.
- Explore effort/impact to make the tool mobile responsive.
- Across the platform, we need to have explicit sorting criteria both on the bed search
 page and on the interior facility profile page. We suggest starting with alphabetical
 listing until a user selects another way to sort the items on whatever page they are on.
- Make a "duplicate unit" feature to avoid manual data duplication (providers said they
 would just copy one unit multiple times to craft their orgs structure).
- Redesign save button. We have many comments that it was difficult to find.
- Rename and update image for facility profile module as it was hard for users to find.

UX Positives Comments

- Providers loved the no beds available button for their whole facility, quick and great UX!
- Providers like seeing a summary of beds available at their facility.

General Insights

- Providers told us that case managers supporting placements into these levels of care will watch the internal waitlists provided by orgs to wait for beds to open.
- We also heard that providers don't really use EMR for care coordination today, but that
 they would be more likely to use this tool especially if it included outpatient care in the
 future. Providers are excited about the idea of more
- Larger organizations think of referrals as primarily coming in (from crisis services) and directing to internal providers (inpatient/residential), so that entire process takes place within their EHR with no external actors.
- It isn't immediately clear who should be updating availability in the platform and for what use cases. (e.g. questions asked during pilot: do OTP slots belong here, how about respite beds). Clear business rules reinforced through training and roll out materials will be important.