

ACAA KPATH 2.0 Multiple Appointments Mobile Summative Usability Study: Findings

July 25, 2018

User Research Overview

Purpose

Evaluate how successful users are going through three different multiple appointment scenarios with a more functional, high-fidelity desktop prototype that incorporates cumulative refinements from past testing

- Track success – are users able to overcome usability issues, learn the tool and use it how they want?
- Identify trouble spots – where do users encounter the biggest usability issues?
- Identify opportunities – to make the experience more intuitive, learnable and flexible

Main Focus Areas

1. New workflow logic and progress tracker
2. Reason for appointment step
3. New date and time slot scheduling layout
4. Identify areas where users might need help or explanation

Participants

8 Kaiser Permanente members from SCAL region who are registered on Kp.org and schedule appointments for themselves and children or other family members using different methods

What & When

Usability sessions held in-person to evaluate a mobile prototype of a multiple appointments booking experience between July 5th and July 11th

Scheduling Multiple Appointments: Topline Summary

What we continue to validate

- ✓ **Interaction model** → patterns used within each step were intuitive
- ✓ **Language/Copy** → used as prompts and descriptions are clear and intuitive
- ✓ **Functionality** → flexibility of various options provided added value

Improvements between iterations

- ✓ **Reason/Triage** → we provided different ways to book an OBGYN appointment
- ✓ **Context sensitivity** → previously seen physicians presented are now contextual to reason for appointment

Persistent issues across platform

- ❑ **Capture intent upfront** → users expect to voice their appointment needs earlier than later in the appointment scheduling workflow (e.g. gender, language filters)

Unique Issues to Mobile

- ❑ **Non-Linear workflow** → moving back and forth between members or appointments not only frustrated some users, but led them to attribute appointment details to the wrong member appointment
- ❑ **Contextual awareness** → noticeability issues associated with visual design treatment was behind physician availability, member/appointment step and required fields awareness

Scheduling Multiple Appointments: Task Performance Summary

Similar fail points to desktop experience were observed within an otherwise easy to navigate experience

Scenario			Success Rate	Fail Points
1	Elena	Has seen a Neurologist for memory problems Experiencing dizziness and pressure in head which might be related to memory problems Wants to make a phone visit with primary care physician or another female doctor	1 of 8	Workflow (3) Filters (3) Required Fields (1)
	Pearl	Needs a physical exam		
	William	Has a fever Seeks first available Spanish speaking male		
2	Elena	Needs a follow-up with previously seen Cardiologist Needs to be seen no later than July 12th; willing to drive to another location to be seen	2 of 8	Workflow (1) Location Change (3) Next Availability (2)
	Pearl	Has a sore throat and seeks an office visit with PCP who turns out to be on vacation		
	William	Has never had vision problems before, needs an eye exam		
3	Elena	Recently found out she is pregnant Needs to schedule 3 prenatal appointments scheduled four weeks apart starting on July 12 th	7 of 8	Workflow (1)

Scheduling Multiple Appointments: Fail Points – Workflow

“Type of appointment” was thought to also include different appointment modalities

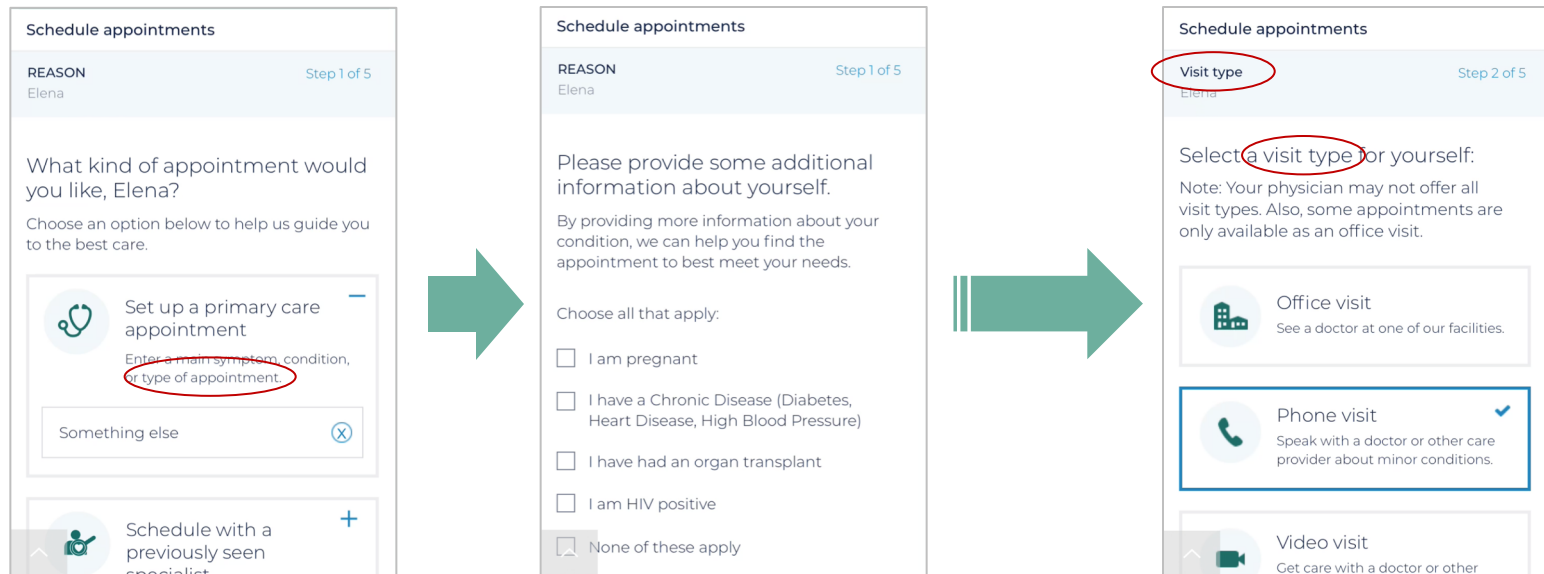
- One user expected to be able to specify their desire for a phone visit after selecting “Something else” before moving on to the next appointment (i.e. for Pearl)

Scenario 1

Fails 1

“I am not seeing anything for a phone appointment, so I would expect to leave the doctor a note.”

P1, xx



? “type of appointment” vs. “visit type”?

Scheduling Multiple Appointments: Fail Points – Workflow

Non-linear workflow led to mixing up appointment details across multiple appointments

Scenario 1, 2

Fails 2



- Less screen real estate on mobile led users to scroll past prompts providing important context as to which appointment or member the step was for
 - One user thought they were being taken back to re-enter appointment information when scheduling multiple successive appointments for one member
 - Another user, unintentionally entered Elena's symptoms on Pearl's reason for appointment step after selecting a specialist and answering triage questions, thinking she was still answering questions about Elena

What kind of appointment would you like, Elena?

Choose an option below to help us guide you to the best care.

Set up a primary care appointment +
Enter a main symptom, condition, or type of appointment.

Schedule with a previously seen specialist -
Set a return appointment for an ongoing or existing condition.

Teresa McKenzie, MD
NEUROLOGY



Schedule appointments

REASON Step 1 of 5
Elena

Please provide some additional information about yourself.

By providing more information about your condition, we can help you find the appointment to best meet your needs.

Choose all that apply:

- I am pregnant
- I have a Chronic Disease (Diabetes, Heart Disease, High Blood Pressure)
- I have had an organ transplant
- I am HIV positive
- None of these apply



Set up a primary care appointment
Enter a main symptom, condition, or type of appointment.

Dizziness and pressure in head ⓧ

RESULTS

No results found

Scheduling Multiple Appointments: Fail Points – Workflow

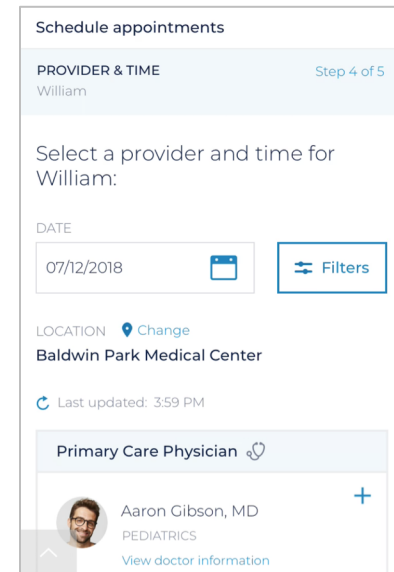
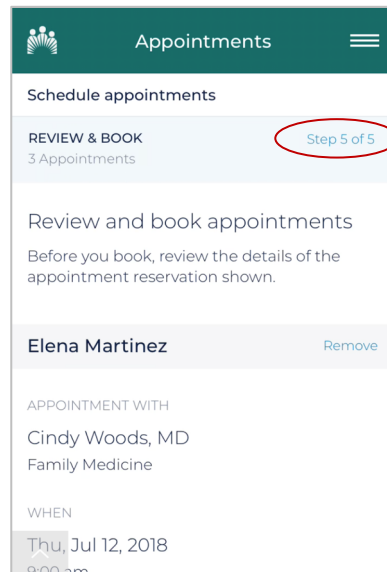
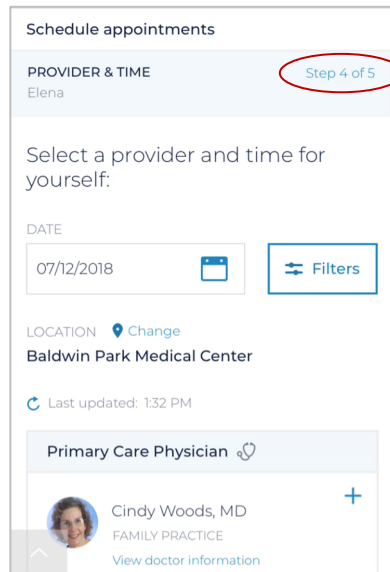
Navigation affordances were not readily available, visible or where they were expected

Scenario 1, 2

Fails 2



- The step indicator was easily missed or thought to be simply for informational purposes
- There were no clear affordances for moving between appointments when coordinating or comparing dates and times across appointments
- Once on the Review & Book step users often expected an “edit” link to be provided beside “Remove”; two task failures occurred due to users being unable to correct appointment details



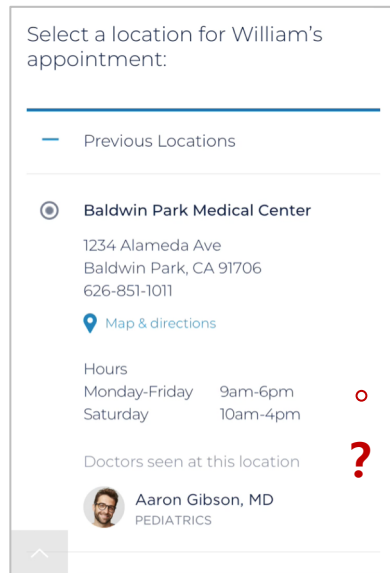
Scheduling Multiple Appointments: Fail Points – Filters

Scenario 1

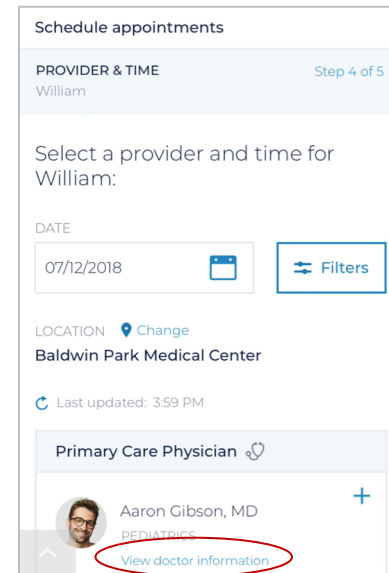
Fails 3

Filters did not fit where and how users expected to specify physician attributes

- Workflow → One user expected to specify gender and language earlier within the workflow as it is more of a driver of where and how they would be seen
- In-Page Interaction → Two other users ignored the filters feature expecting instead to identify gender and language attributes using the “Visit doctor information” links
- Language → “Filters” was an ambiguous term especially in context of a medical facility provider listing
- Placement → “Filters” was perceived to be date/time related beside the date picker



Are there any male, Spanish speaking doctors here?



Scheduling Multiple Appointments: Fail Points – Next Availability

Physician availability was expected to match date selected in prior date selection step

Scenario 2

Fails 2

- Physicians listed first in Provider & Time step were expected to match specified date
- Two users ignored “Next availability” thinking that their physicians listed were available on the specified date, resulting in them booking appointment on the wrong date
- If primary care or previously seen physicians were not available on specified date, more obvious, explicit messaging was expected to communicate their unavailability

The image displays two screenshots of a scheduling interface. The left screenshot shows a date selection step with the question "What day would you like this appointment for yourself?". Below the question is a checkbox for "Same date for all appointments" and a "DATE" field containing "07/12/2018", which is circled in red. Underneath are "TIME OF DAY" options: "Morning", "Afternoon", and "Evening", all of which are checked. A blue "Next" button is at the bottom. A green arrow points from this screenshot to the right screenshot. The right screenshot shows a provider selection step with the question "Select a provider and time for yourself:". It includes a "DATE" field with "07/12/2018" and a "Filters" button. Below that is the "LOCATION" "Baldwin Park Medical Center" and a "Last updated: 5:15 PM" timestamp. A section for "Primary Care Physician" lists "Cindy Woods, MD" with a plus sign. Below her name, "NEXT AVAILABILITY: SAT, JUL 14 at 8:00 AM" is circled in red. There is also a link to "View doctor information" and a link to "View other locations for this provider".

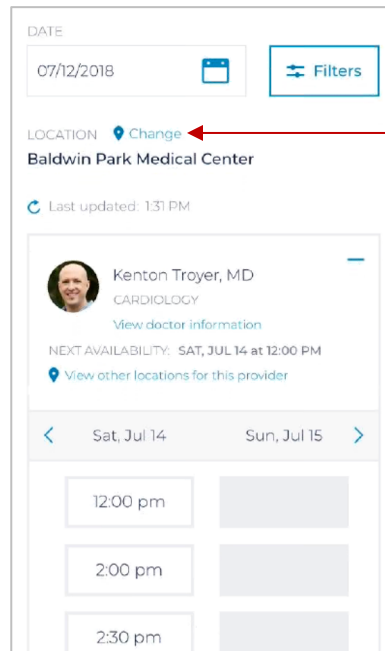
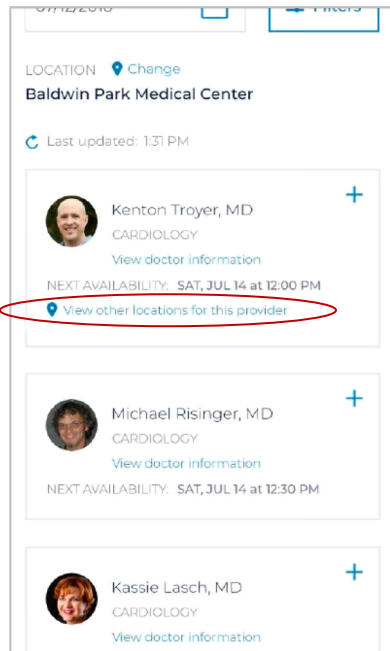
Scheduling Multiple Appointments: Fail Points – Location Change

Scenario 2

Fails 3

View other locations for this provider link was often missed

- User focus was primarily on dates and times; once users determined a physician was not available they did not focus on other information on the tile
- Changing location was thought to be non-specific to physician
 - Leading with a location first approach may have contributed to this expectation



Some users sought to change the location they previously selected in a prior step

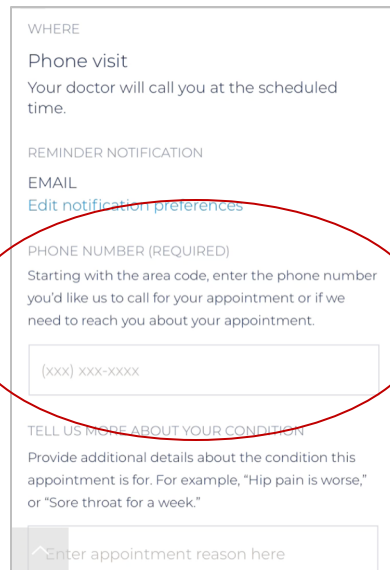
Scheduling Multiple Appointments: Fail Points – Required Fields

Scenario 1

Fails 1

Required field for phone number was not obvious or easily discoverable

- One user was unaware they needed to complete a required field to complete booking their appointments
- Review and Book step appeared to be similar to Confirmation page, which was a contributing factor



WHERE
Phone visit
Your doctor will call you at the scheduled time.

REMINDER NOTIFICATION

EMAIL
[Edit notification preferences](#)

PHONE NUMBER (REQUIRED)
Starting with the area code, enter the phone number you'd like us to call for your appointment or if we need to reach you about your appointment.

{xxx} xxx-xxxx

TELL US MORE ABOUT YOUR CONDITION
Provide additional details about the condition this appointment is for. For example, "Hip pain is worse," or "Sore throat for a week."

Enter appointment reason here

More obvious visual indicator?
Field validation messaging?

Scheduling Multiple Appointments: Summary Perceptions

Ease of Use Rating (Overall) (5 point scale – 1 = very difficult to 5 = very easy)



Reasons for Rating:

- + Logical, intuitive (aside from “back-and-forth” issue in workflow)
- + Ability to see all appointment times for multiple appointments
- + Flexibility provided (e.g. visit type, filters, other physicians)
- Length, repetition (i.e. mostly scenario 3) and back-and-forth between appointments within workflow
- Difficulty comparing, coordinating, remembering and/or changing appointments details