

TESTING

*Quality Assurance and
User Acceptance*

FROM DEVELOPMENT INTO THE HANDS OF USERS

The VMLY&R AQ team leaves no stone unturned. Through automated test scripts and complex user stories, we work with development and creative to identify gaps and modify to increase performance and usability.

In this section we will address:

HOW WE TEST

Development driven testing guides applications through a multi-tiered approach.

VALIDATION METHODS

Relying on platform standards and real-user responses allow us to maintain quality practices that fit every mold.

HOW WE TEST

With nearly 200 million-plus mobile devices in the United States, support for unique/specific devices is no longer a best practice or a maintainable effort.

At VMLY&R, we are committed to the Shift Left approach to development testing by embedding quality assurance in all stages of the development life cycle.

This ensures that any issues are caught as early as possible, reducing the cost of remediation and ensuring high-quality mobile applications are delivered to the end user.

1. DEVELOPMENT-DRIVEN TESTING

To ensure a high level of testing is incorporated into the development process, VMLY&R will use:

- **Unit Testing**
Test-driven development at VMLY&R follows the “Red, Green, Refactor” approach creating unit tests for business logic built into the mobile applications.
- **Integration Testing**
As this mobile application will be consuming APIs for most of the features, VMLY&R will use integration testing against key API methods.

2. FUNCTIONAL TESTING

Functional testing is carried out against test scripts based on the requirements for each feature in the mobile application. The goal is to mimic an end user experiencing the mobile application, but also to uncover any underlying issues that may be present. There are numerous layers to the functional testing VMLY&R carries out, but the following test execution will be performed during functional testing:

- Component/Widget Testing
- Integration Testing
- System Integration Testing
- System Testing/End-to-end Testing
- Regression Testing
- Production Smoke Testing

3. OS SUPPORT

VMLY&R recommends support for iOS be current version, minus one at the time of the agreement (iOS14 and iOS13 after September 2020). iOS 13 accounts for 92.5% of active devices. Android support should be target API 23 (Marshmallow), which captures 89.3% of Android users as reported by Google.

VALIDATION METHODS

Self-qualification is the enemy of quality, so ensuring the experiences are built for the members puts us in the best position.

Executed Beta Testing Plan



CONCEPT TESTING

- **Approach:** Agile and informal interviews to gut-check big ideas in low fidelity before investing time and effort
- **Output:** Insights to guide updated design and functionality; revised prioritization

BEHAVIORAL STUDIES

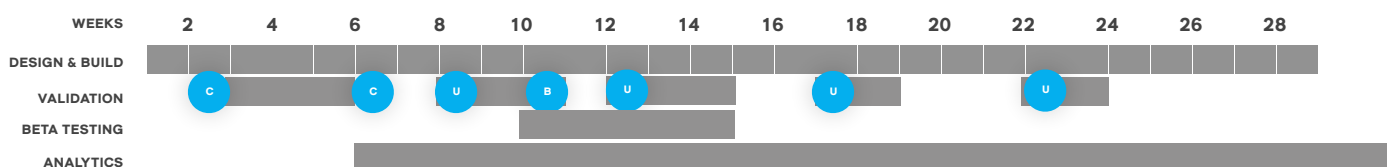
- **Approach:** Engage users over several days for an understanding of their behaviors, thoughts and feelings about how the product fits their life
- **Output:** Insights to build features that get adopted

USABILITY TESTING

- **Approach:** Formal interviews with high-fidelity designs to gain insight on ease of use; ability to functionally solve a user's problem
- **Output:** Thorough evaluation to reduce risk on critical features

ALPHA/BETA TESTING

- **Approach:** Deliver the product to the user to use in real life; see what they do when no one is looking
- **Output:** Analytic and narrative feedback for what technically and functionally does and does not work



FROM
SCHEDULED



TO
ANYTIME

PET CARE: BANFIELD PET HOSPITAL **MANAGE YOUR PET CARE ANYTIME, ANYWHERE.**

CHALLENGE

Across 1,000+ locations, 3,600 veterinarians and 17,000 associates, Banfield Pet Hospitals wanted to expand their digital offering from expected online appointment scheduling to a trusted resource and centralized health record for America's 150+ million pets.

SOLUTION

Pet owners have come to expect 'always-on' from their own healthcare providers, so we extended that to their furry loved ones. Now, beyond appointment and pet management, owners have the ability to review and revisit appointment details such as vitals, notes, prescribed medicines and vaccine records. Owners are encouraged continue to track pet health with a Pet Timeline Tool that manages wellness plans, weight trends and shareable records.

That's not all, with the addition of 24/7 veterinarian support with Vet Chat, owners now have the ability to reach out to one of Banfield's 3,600 registered vets for peace of mind.

