

Personas

Creation Processes

The creation of the persona is based on the information elicited from document analysis and interviews, then adjusted during the team meetings and client meetings.

Version	Based On What Information	Date	Description
1	<ul style="list-style-type: none">Information of Who-Do-Be-Feel list.The information was elicited through the document analysis.<ol style="list-style-type: none">The FHIR Studio should be embedded into the Validitron Sandbox.The FHIR Studio should become user-friendly.The FHIR Studio should work as a workflow.The Simulated data could be configured.The current healthcare organizations are not willing to take the risk of validating healthcare innovations, so validation is difficult for many healthcare innovations.The information was generated through the stakeholder analysis and brainstorming session.<ol style="list-style-type: none">The director users, like healthcare innovators and developers, need the system to be easy to use.The Validitron Sandbox Developers need the FHIR Studio should be easy to integrate into the Validitron Sandbox.Researchers could use the simulated data to validate their research outcome.The simulated data need to be accurate and reliable.The collection of actual clinical data is risky in terms of privacy and data security.The information was elicited through interviews with clients and client meetings.<ol style="list-style-type: none">Currently, real clinical data collection is difficult and expensive.FHIR Standard is widely used.The data could be shared with others.The data could be pushed directly not only to the clinical system server but also to other healthcare innovation servers.	2023-4-2	<p>The first version of the personas. We generated three personas for the first version.</p> <ol style="list-style-type: none">Rohan Devid - healthcare innovation developer<ul style="list-style-type: none">Utilise the FHIR Studio to generate test cases.Utilise the data repository.Larry Andrews - cardiologist (Researcher)<ul style="list-style-type: none">Utilise the FHIR Studio to test their research outcome.Utilise the FHIR Studio to facilitate their research.Wei Chen - Validitron Sandbox developer<ul style="list-style-type: none">Integrate the FHIR Studio to Validitron Sandbox

2	<ul style="list-style-type: none"> Information of Who-Do-Be-Feel list. The information was collected during the client meeting on the 5th of April. <ul style="list-style-type: none"> Healthcare innovators could be split into two stakeholders. One is the product owner, and one is the marketing lead. Researchers could test the data process pipeline using the simulated data. Considerable interest in the data analysis area. Some suggestions for the Personas The feedback from our supervisor Naveed during the supervisor meeting on the 4th of April. <ul style="list-style-type: none"> Be more detailed. Be more specific. 	2023-4-7	<p>The second version of the personas. We generated five personas for the second version in total. We added two more personas and modified one based on the client's feedback to Who-Do-Be-Feel.</p> <p>Modified</p> <ol style="list-style-type: none"> Larry Andrews - cardiologist (Researcher) <ul style="list-style-type: none"> Utilise the FHIR Studio to test their research outcome. Utilise the FHIR Studio to facilitate their research. Utilise the FHIR Studio to test the data process pipeline. <p>Added</p> <ol style="list-style-type: none"> Meiling Zhang - Product owner of healthcare innovation. <ul style="list-style-type: none"> Utilise the FHIR Studio to support her decision-making. Utilise the FHIR Studio for Product validation. Utilise the FHIR Studio to test the compatibility of their product with the current clinical system. Ritu Pate - Marketing lead of a healthcare innovation team. <ul style="list-style-type: none"> Utilise the FHIR Studio to generate the desired dataset for product demonstration.
3	<ul style="list-style-type: none"> Information of Who-Do-Be-Feel list. Review the supervisor meeting minutes. <ul style="list-style-type: none"> Need to unify the format of all personas Improve the grammar. Fix typos. 	2023-4-10	<p>The final version of the personas. We have five personas in total. The personas include users from different backgrounds. All of them have a different purpose in using the FHIR Studio. Some are tech-savvy, and some are not. Our personas focus on users of working age. We finalise the format, spelling and content of all personas in the final version.</p>

Justifications

Rohan Devid:

According to the information elicited from the Client interview and document analysis. Healthcare innovation developers are the primary users. The client expected FHIR Studio to target their pain point that it is difficult to find the dataset for test cases. Therefore, Rohan Devid is a good representative of this group of users who use the FHIR Studio to generate test cases for development.

Meilin Zhang:

After the team brainstorming, we think that the simulated clinical data can not only be used for development testing, but also contribute to a higher level, like product validation, compatibility validation and decision-making. Therefore Meiling Zhang as a product owner could be a good representative of the users who use the FHIR Studio's simulated data for validation and decision-making.

Ritu Pate:

After the third client meeting, the client suggested that the marketing department could also use FHIR Studio for product demonstration. Because for many healthcare innovations, it is difficult for the marketing team to find the dataset to demonstrate their product. Creating customised datasets to showcase their product to customers with different primary concerns is also challenging. Therefore, Ritu Pate, as a marketing lead of a digital healthcare start-up, could be a good representation for the users who use FHIR Studio to generate the data set for product demos.

Larry Andrews:

After the team brainstorming and the third client meeting, we think the FHIR Studio could contribute to the clinical research. There is a huge interest in data analysis of new treatments, so many researchers intend to build clinical data processes or analysis pipelines. However, finding actual clinical data to test the pipeline may be very difficult and troublesome. So they may have a strong motivation to utilise FHIR Studio to generate realistic clinical data to test their pipeline. Moreover, the simulated data could also validate their research outcome. Therefore, Larry Andrews could be a good representative of the researchers who use the FHIR Studio to facilitate their research.

Wei Chen:

According to the information elicited from the document analysis provided by the client. FHIR Studio should be able to integrate into the Validitron Sandbox environment. Therefore, the FHIR Studio's interfaces should be compatible with the Validitron Sandbox's requirement. And it should be easy to maintain by Validitron Sandbox developing team. Therefore, Wei Chen, as a developer of the Validitron Sandbox, could be a good representative of the Validitron Sandbox developing team.

Rohan Devid



"I want everyone to live a healthy life."

Age: **43**
Work: **Senior software engineering in FitOn Company**
Family: **Married, kids, etc.**
Location: **Melbourne, VIC**
Income: 136000/year

Personality



Goals

- Rohan wants to use an easy, fast, and visually accessible data simulation system.
- Rohan wants to store the generated data on his local computer.
- Rohan wants the data to be reliable to increase the practicality of his application.

Frustrations

- Rohan finds generating customer data is cumbersome.
- Rohan's team do not know the good test data looks like.

Bio

Rohan is a high skilled senior software developer. He is full of passion on his work. He plays the important role in FitOn company for several years and has contributed significantly to the success of the company. Currently, he is leading a project to develop effective sports solutions for FitOn customers to use at home to improve their healthcare. He is professioned in various programming languages and has a deep understanding of software development methodologies. When he's not working, Rohan enjoys spending time with his family.

Motivation

- Rohan wants to develop innovative healthcare applications that improve patient outcomes and provide value to healthcare providers.
- Rohan wants to collaborate with other developers and organizations to create more comprehensive and interoperable solutions.

Technology used



Challenges

- Find reliable sources of healthcare data.
- Work within the constraints of limited resources and time.
- Stay up-to-date with the latest healthcare regulations and standards.

Meilin Zhang



"I wanna find data to test digital health solutions."

Age: **31**

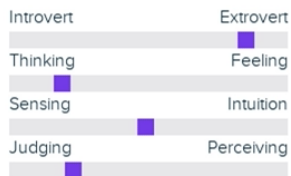
Work: **Product Manager at a digital health startup**

Family: **Married**

Location: **Shanghai, China**

Character: **hard-working**

Personality



Goals

- Test and validate a new digital health product.
- Validate the product's compatibility with the clinical system.
- Share and collaborate on simulated patient data.

Frustrations

- The data used for the product should be effective and configurable.
- Need to balance technical requirements with user needs and regulatory requirements.

Motivation

- Receive cost-effective, convenient and reliable data for product test
- Enable patients to take a more active role in managing their own health
- Want to be collaborative and communicative in their work with other innovators

Technology used



Bio

Meilin grew up in Shanghai and developed an early interest in healthcare technology. She pursued a degree in Biomedical Engineering and later a Master's in Health Informatics to learn more about the intersection of technology and healthcare. Meilin is now working as a product manager at a digital health startup named HealthKoala, and developing their new product, *Health Treasure*, for analyzing and managing user health information.

Challenges

- Difficulty in using clinical data, considering the privacy and product development cycle issues
- Managing data privacy and security
- Keeping up with new technologies and trends
- Overcoming technical limitations

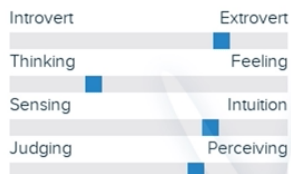
Ritu Pate



"I'm always looking for new ways to showcase MedicineOne's technology to potential clients and investors. The FHIR Studio could be a game-changer for our product demos."

Age: **34**
Work: **Marketing Lead at MedicineOne**
Family: **Single**
Location: **Melbourne, Victoria**
Ethnicity: **Indian**
Education: **Master's degree in Business Administration**

Personality



Goals

- Ritu Patel uses FHIR Studio to generate realistic and accurate simulated patient data for product demos, intending to showcase the capabilities of MedicineOne's product to potential customers and investors. She could customise patient data based on different customers for specific use cases demonstration. Using FHIR Studio, she could obtain data for product demos effectively and economically.

Frustrations

- Very difficult to have a suitable data set for health innovation product demonstration.
- It is difficult to customise data for product demos to highlight to customers what needs they care most about.

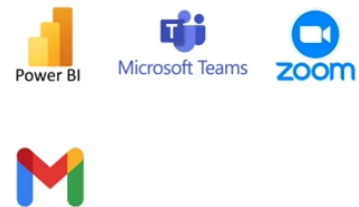
Bio

Ritu is a marketing professional with over eight years of experience in the digital health industry. She is one of the founders and marketing lead of MedicineOne, a startup health tech company. Ritu is not tech-savvy but passionate about new technologies and tools that can help her achieve her goals.

Motivation

Ritu's main goal is to increase revenue and investments for MedicineOne by promoting the company's products and services to potential customers and investors. She is responsible for organizing product demos to showcase the company's technology to potential clients. Ritu struggles with finding the right data for product demos, which can sometimes delay the sales cycle.

Technology Used



Challenges

- Difficult to find data for product demonstration.
- Difficult to customise data for product demonstration.
- Not tech-savvy.

Larry Andrews - Cardiologist



"Doctors should have an open mind and be willing to accept new science and technology in order to better serve patients."

Age: 49

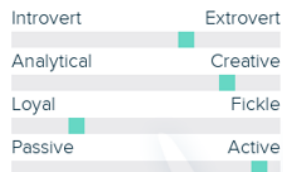
Work: **Cardiologist**

Family: **Married**

Location: **Sydney, NSW**

Character: **Healthcare Professional**

Personality



Goals

- Test his research output in the field of catheter-based heart valve treatment.
- Test FHIR standard data analysis pipeline in the development of new treatments.
- Improve success rate of catheter-based heart valve treatment and increase long-term efficacy of heart valve treatment.

Frustrations

- Unfamiliar with software operation.
- Hard to find reliable new treatments.
- New treatments cannot be safely tested.
- Hard to find simulation of real clinical data.
- Regulatory hurdles and red tape.

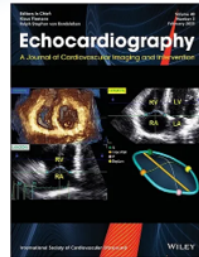
Bio

Dr. Larry Andrews is a 49-year-old interventional cardiologist who is dedicated to improving patient outcomes. He is currently leading a team developing a new catheter-based approach to treat heart valve disease, which involves closely monitoring heart rate, blood pressure, and oxygen saturation levels to ensure the best possible treatment for each patient. Dr. Larry is passionate about utilizing cutting-edge technology to deliver personalized care to his patients. He joined the FHIR project to simulate real clinical data and test its reliability and effectiveness in clinical applications of new treatments before their actual use. When he's not working, Dr. Larry enjoys hiking, cooking, and spending time with his family and friends.

Motivation

- Desire to improve patient outcomes.
- Passion for innovative technology.
- Drive to advance medical knowledge.

Technology used



Challenges

- Develop new catheter-based technology.
- Test the effectiveness of the FHIR standard data analysis pipeline.
- Ensure treatment efficacy across diverse patient populations.
- Navigate complex regulatory requirements.
- Ensure treatment safety before clinical trials

Wei Chen



"I contribute to the Validitron Sandbox that makes it easy for other healthcare application innovators to design, develop, validate and evaluate their products no matter their level of technical expertise. I believe this will help accelerate the development of innovative healthcare technologies."

Age: **27**

Work: **Validitron Sandbox Developer**

Family: **Married**

Location: **Melbourne, Victoria**

Ethnicity: **Asian**

Education: **PhD in Computer Science**

Personality



Goals

- Wei aims to integrate FHIR Studio's function into the Validitron Sandbox, making creating and sharing realistic data sets accessible and intuitive. He wants to ensure that the simulated data in Sandbox is reliable and user-friendly and meets the needs of a wide range of users, from researchers to other healthcare application developers.

Frustrations

- The current Validitron Sandbox Environment does not have an efficient way to generate FHIR standard clinical data.
- Letting users create these data manually will deteriorate the ability of the Sandbox.

Bio

Wei is originally from China and moved to Australia to pursue his PhD in Computer Science. He has always been interested in technology implementation in the health industry. In his free time, Wei enjoys hiking, trying new restaurants, and practising his calligraphy skills.

Motivation

Nowadays, testing and validating healthcare innovations is difficult, as very few organizations would take risks to provide the environment for testing unstable and uncertain new innovations. So Wei Chen joined the Validitron Sandbox developing team, which aims to provide a virtual environment to those innovators in the design, development, validation and evaluation phases.

Technology Used



Challenges

- The current Validitron Sandbox environment cannot generate a simulated clinical dataset.
- Users have to spend time creating their test clinical dataset.
- Simulation accuracy is essential.
- The FHIR studio should be stable and easily maintainable.