



# Patient Centricity a Paradigm Shift

## A Roadmap for Designing with Patients not just for Patients

Professional stakeholders, and patients advocate for greater involvement in the development of treatments and digital health tools. However, most stakeholders still wonder how to do so. *When is the right point in development to engage with patients? What are the potential benefits of this collaboration?*

Two years ago, the Executive Office of Health and Human Services (OHHS) in the state of Rhode Island (RI) was one of these concerned stakeholders. Their vulnerable patients struggled with managing the long-term effects of HIV and managing mental health. Patient activation levels were low. Through designing with patients not just for them, the work at OHHS suggests how user-centered development of appropriate technology can change outcomes.

## The Patient Companion

The Rhode Island Health and Human Services (OHHS) Ryan White Part B program provides care to the most vulnerable population living with HIV. While the majority of patients achieved viral load suppression, these individuals struggle with mental health, co-morbidities, and in, some cases, substance abuse.

RI OHHS, in partnership with their patients, sought innovative methods to improve psychosocial outcomes and address Social Determinants of Health.

## The Population

The patient population struggles day-to-day in the face of daunting practical challenges. 21% are homeless or in unstable housing and 33% report clinical levels of depression which can be traced to having a stigmatized condition and being socially isolated. 50% report symptoms that they need help to manage. Health and technology literacy are also low. 20% of these people did not have their own phone and 40% did not have a smartphone before this program began.



In order to provide care, OHHS is able to assign each patient a case manager. Unfortunately, case managers are spread thin. They are saddled with a large variety of tasks ranging from securing basic resources for patients to trying to get these patients to see health care providers regularly. In general, case managers have to focus on the most immediate patient needs such as locating basic services and providing emergency financial help. The educational, psychological, and support needs are not often met. Case managers knew something about the levels of depression and symptoms in the population but did not have the bandwidth to help.

## The Solution

In 2016, the Administrator for Medical Services, RI Executive Office of OHHS, began to look for an innovative way to address the unmet needs of their population, decrease the workload of case managers, and find a cost-effective solution to improve patients overall health.

The Administrator instinctively understood that by introducing the right technology into the programs, he could deliver a better patient experience and thus, improve health outcomes. Because of changes in legislation, funding became available to pursue this goal: *"This is a by-product of reform, this is the opportunity for us to harness the digital technology a way that we knew was unattainable before.... Because we can't afford it".* To kickstart this project the administrator had to overcome logistical hurdles. He states, *"I had to convince layers and layers of leadership that this is a good idea".*



*The root of all of this in the beginning starts not with an idea of an app not with an idea about what they need, but with an idea that our twenty seven member consumer advisory board, people living with HIV, were at the heart of the research and development process."*

- Paul Loberti

Administrator for Medical Services, RI Executive Office of OHHS

The next step was to identify the right technology. *"I had to do a lot of research and I decided I was done after I looked at about a thousand apps and I wasn't finding the one that I really needed".* However, when the administrator came across an organization (360Medlink) and its product TAVIE<sup>®</sup>, he realized that he had the right platform, well positioned to help and together they could customize the right solution.

OHHS and 360Medlink examined the problem, putting the needs of this vulnerable population first and designing the optimal technology for those individuals. To do so, the OHHS office in collaboration with 360Medlink readjusted their thinking *"the root of all of this in the beginning starts not with an idea of an app not with an idea about what they need, but with an idea that our twenty seven member consumer advisory board, people living with HIV, were at the heart of the research and development process."*



The Office of Health and Human Services, in partnership with this technology partner, began the process of customizing a truly patient-centric solution. The team met with patients and care managers, gathered user needs, and learned about the cultural context. Through iterative design and ongoing interaction with a board of 27 patients, the team developed a novel digital application, TAVIE-RED.

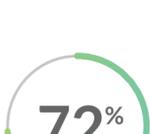
After the development period, in addition to getting a case manager, access to medications and support services, patients under the care of OHHS receive a smartphone preloaded with the app. They login daily, interact with a virtual coach of their choice, receive tailored content, and engage with the gamified app. The app virtual and real rewards engage users to come back over time.



users of first version would recommend



users of new version would recommend



say it helped them take medications



say it helped them manage their health.

Despite having little experience with technology, patients adopted the technology quickly. After using an early version of the application, 75% would recommend it to others. They cite medical benefits of use. 72% say it helped them take medications and 71% say it helped them manage their health. Users of the mature platform have even more positive reactions. They cite the same benefits and they all say they would recommend the application.

One user put it succinctly saying, *"Wonderful, efficient, productive and free!".* Users express delight with a digital health application.



*I like that the app helps to remind and encourage me to take my meds as prescribed. Thank you, TAVIE-RED!"*

- Anonymous HIV Patient

TAVIE-RED, HIPAA Compliant.



The patient-centered component was key. Involving patients from the initial R&D stage and onward ensured that the project met their needs. One simple example is the design of the coach in the app, a humanized virtual nurse that is culturally adapted to the targeted population. The coach looks like them, speaks the same language, and has the same accent, making the emotional connection seamless.

Patient centricity is now a key goal in healthcare enterprise – but few people know how to go about achieving it. The experience with OHHS illustrates how putting patients at the center of healthcare from design to execution can make health care delivery more efficient, *engaging and impactful.* This is a paradigm shift and we are proud to be the catalyst!

For more information, reach out to us

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