



Project Title: Comprehensive Digital Platform Implementation

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Award Category: Digital Government: Government to Citizen

State of Maryland

Point of Contact

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1 Executive Summary

The Maryland Health Benefit Exchange (MHBE) is an independent unit of state government that provides accessible, affordable health coverage to Marylanders. With the vision that all Marylanders will have and use the health coverage that is best for them, MHBE is responsible for the Maryland Health Connection, the state's health insurance marketplace under the Patient Protection and Affordable Care Act of 2010 (ACA).

MHBE has established and operates a competitive health insurance marketplace that offers health coverage options to individuals and families who are not covered through their employers. MHBE is one of the few Health Insurance Exchanges nationally that handles both Medicaid and Qualified Health & Dental Plans and simplifies complex processes to provide consumers with a single interface for all their health coverage needs.

With over 1.2 million customers enrolled in Medicaid and CHIP, Qualified Health Plans (QHP), Dental Plans, MHBE has had a significant impact on reducing the uninsured rate in Maryland and has increased its enrollment every year since its inception in October 2013.

In a challenging environment with the removal of the individual mandate for buying health insurance, health insurance exchanges need to engage consumers to maintain enrollment levels. MHBE has implemented an innovative, integrated digital platform that has transformed the experience for its customers and also its enrollment and marketing divisions. This is a unique technology platform for providing a highly user-friendly self-service interface to its over 1.2 million customers to easily access normally cumbersome government benefit services.

The MHBE Mobile app is one of the most heavily used public sector mobile apps with over 350,000 downloads, and the only integrated eligibility mobile platform of its type. Over 60% of customer traffic now comes on mobile devices, and marketing campaigns connect directly with a large consumer base to show unprecedented, 6 to 8-fold increases in traffic on its platform.

While healthcare.gov and multiple states saw a drop in their enrollment levels, MHBE's marketing and enrollment divisions were able to use the digital platform to analyze and segment consumer information and positively target lower enrolling groups, leading to increased enrollment levels, including demographic groups with historically lower health insurance rates including young adults, African Americans, Hispanic consumers, and in rural areas.

The MHBE Digital Platform is a major initiative that includes comprehensive Android and iOS mobile apps, a Digital API that can power the entire enterprise, a marketing portal for the marketing and enrollment team to analyze and engage directly with MHBE consumers and an AI & Natural Language Processing based Virtual Chat Assistant. The platform also includes complex integration with MHBE's eligibility rules engine, Customer Resource Management (CRM) system, and State and Federal systems including the IRS and SSA and the Experian credit rating agency.

The Digital Platform has enabled MHBE to provide best in class services related to health care coverage and benefits across public and private sector.

2 Concept

Health Insurance Exchanges (HIX) fostered a paradigm shift in health insurance and medical benefits allowing millions of people to buy health insurance individually as a retail product on the new health insurance marketplaces, while checking their eligibility for and enrolling in insurance affordability programs such as APTC, CSR, Medicaid and CHIP. HIX combines complex health insurance and government benefits processes, and the Federal Government and States struggled immensely in implementing HIX platforms. While HIX systems have stabilized, both healthcare.gov and States are providing basic services required for consumers and are struggling to respond to the growth in the retail segment of the market. They are working to drive consumer engagement and the situation is made more challenging by the removal of the individual mandate to buy health insurance.

MHBE wanted to beat this trend by implementing a best in class platform across public and private sector. It is critically important for health insurance exchanges to better engage customers to maintain their enrollment numbers, especially with the younger age demographics who are important to keep HIX and insurance companies economically viable. MHBE therefore undertook transforming its systems to implement a comprehensive digital platform for providing consumer services, driving consumer engagement, bringing efficiency to processes and empowering its enrollment and marketing teams.

This is a highly challenging undertaking as HIX systems are some of the most complex technology platforms anywhere that implement competitive marketplaces for health insurance with a self-service model for consumers providing straight through processing of their applications and combining this with government benefit processes. These platforms have been extremely expensive to build and have had a significant failure rate. MHBE has set a national standard by implementing a modern digital platform that implements market leading features while at the same time lowering the cost of HIX implementation by using open source software and implementing a full featured digital platform that has transformed its enterprise.

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Implementing the Digital Platform has made MHBE the only health insurance exchange nationally that provides comprehensive consumer services via an integrated web and mobile interface, allowing consumers to switch as required between web and mobile for self-service access to all of its services including:

- Quickly check potential eligibility for benefits including Medicaid, APTC (Advanced Premium Tax Credits) and CSR (Cost Sharing Reductions)

- Conveniently check their eligibility for buying insurance plans on the Exchange and comparison shopping for health and dental insurance plans
- Provide their information to enroll in health and dental insurance, and check eligibility for and enroll in related benefits including Medicaid, CHIP, APTC and CSR
- Conveniently upload their verification documents using the camera of their mobile device, making the most time-consuming process for government benefits more efficient
- Check the status of their enrollment process, and messages and notices from MHBE via the mobile app
- Chat with an AI & Natural Language Processing enabled Virtual Assistant (Flora) to get support related to their questions.

The MHBE digital platform also empowers the enrollment and marketing teams at MHBE by providing them the ability to analyze consumer traffic, segment consumer groups by various factors such as age, location, income levels, family composition, and communicate directly with them via context-based notifications.

The MHBE systems are now powered by a Digital API that implements a digital model for all its services. After implementing the mobile platform on the Digital API, the web portal is also being converted to use the same, highly scalable Digital API, which can be used as a standard for lowering maintenance costs at other Health Insurance Exchanges while improving the services they provide consumers.

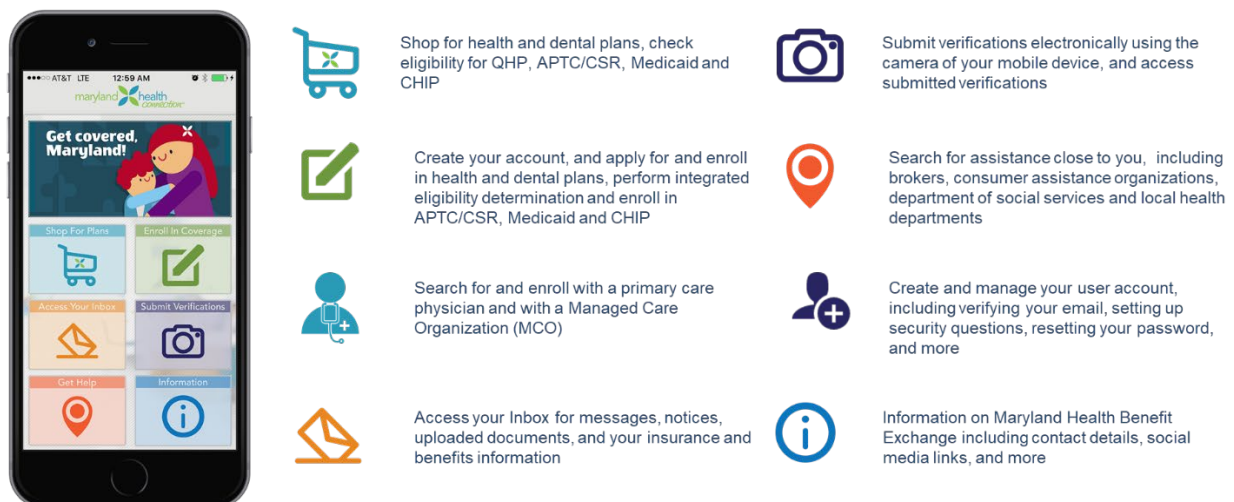


Figure 1: The MHBE MobileApp (Enroll MHC) provides a complete Mobile platform for consumers, with full integrated eligibility and enrollment for Medical Benefits including QHP, APTC/CSR and Medicaid

3 Significance

This is a unique, visionary digital initiative that implements the highest level of consumer service in the health insurance and government sectors that people normally get from leading private sector consumer brands such as Apple and Proctor & Gamble.

The digital platform:

- Provides the only comprehensive mobile platform nationally for enrolling in health coverage, government benefits, accessing account information, and submitting verification documents using mobile device cameras.
- Implements a powerful HIX Digital API that is highly scalable and reduces time, cost and risk for implementing features for health insurance and benefits.
- Developed using open standards and open source technology that is enabling and powering innovation with big data, AI, Natural Language Processing, analytics, NoSQL, and more

MHBE has used open source technology to implement the Digital Platform. At its core is a HIX Digital API, the only comprehensive API for HIX ever implemented that digitizes all the services of the Exchange. This stateless API is comparable to leading APIs like those provided by Facebook and Google, but for the much more complex business of health insurance and government benefits.

The Digital HIX API is saving MHBE significant cost on projects, such as upgrading their web portal, and positioning them for implementing several features which would have otherwise not been possible, including their AI based chatbot, NoSQL document repository, advanced analytics for consumer usage, and upcoming projects to apply the latest technologies.

The MHBE Digital platform is a transformational project that engaged the entire MHBE enterprise in its design and development. It was a collaborative effort that included executive sponsorship from and close collaboration among the IT, marketing, enrollment and operations departments. The project was led by IT and implemented in phases via an agile development process. Executives and senior staff from marketing, enrollment and operations developed the business case for the project, planned and implemented the enterprise-wide business plan required to make the project successful and measured its effectiveness and ROI.

It was important for MHBE to take a comprehensive approach in implementing the digital platform, involving business, operations, marketing and technology. Making the platform successful required active participation and executive sponsorship from all parts of the organization. Marketing, enrollment, operations and technology collaborated closely to design this highly complex and sophisticated platform and included in it features that helped bring about enterprise-wide transformation.

Marketing implemented specific campaigns to publicize the mobile apps in the platform and the services such as mobile enrollment, submitting verification documents via mobile device cameras,

accessing notices via the mobile app, checking eligibility for benefits, and security features that protect customer information.

The marketing and enrollment teams designed the functionality of the marketing portal that allows them to segment and target their customers to interact directly with them, increase their consumer traffic and reduce call center support volumes. It took a truly enterprise wide effort to successfully implement this project and achieve its ROI within a rapid timeframe.

4 Impact

The comprehensive Digital Platform has established MHBE as a market leader across public and private sector for providing consumer-oriented services related to healthcare coverage and benefits:

- It has helped in driving customer engagement. In an environment where healthcare.gov has seen a 3.8% drop in their enrollment, MHBE has a 2% increase, including increasing enrolment in multiple traditionally lower enrolling demographics including young adults, African Americans, Hispanic consumers, and in rural areas.
- It has helped provide dramatic improvement in customer service and engagement, reducing call center volume by 30%, abandoned calls by 67% and call wait time by 90%!
- It has empowered the MHBE enrollment and marketing team by providing an unprecedented ability for them to segment and communicate directly with their customer groups
- MHBE has implemented the only integrated eligibility mobile platform nationally that provides a comprehensive set of features to its consumers. It is also fully integrated with the MHBE web portal so that consumers can seamlessly switch between the web and mobile interfaces

Health Insurance Exchanges nationally, including healthcare.gov and State Exchanges are working to adapt to the consumerization of health insurance. While the ACA (Obamacare) has allowed millions to buy health insurance individually as a consumer product, they are providing only basic services required, and struggle for customer engagement. With the removal of the individual mandate to buy health insurance, healthcare.gov has seen a drop in consumer enrollment by 3.8% for 2019, and multiple States have reported downward trends. MHBE on the other hand has made strides in consumer engagement and enabling demographic groups with historically lower health insurance rates.

The MHBE Digital platform has played an important role in enabling these results. Numerous studies have shown that customers are accessing services and the internet in general using their mobile devices instead of traditional personal computers and laptops. The MHBE Digital platform has implemented the only full-featured mobile app for health insurance and government benefits nationally.

MHBE has seen their mobile consumer traffic increase to where 60-65% of their customers now access their services on mobile devices. This is particularly powerful as the MHBE Mobile app is one of the largest and most sophisticated apps ever developed. It provides their entire set of services, has 300+ screens, and integrates with state systems, IRS, SSA and Experian. Despite its size, its efficient design allows customers to use it easily. Customers use it actively for not just enrolling in services but also for submitting verification documents, reporting circumstance changes, accessing messages and notices, and more.

Customers have downloaded the MHBE mobile app over 350,000 times. They have uploaded 230,000+ verification documents via the app, viewed their notices and messages 2.5 million times, viewed enrollment information 4.8 million times and checked eligibility for benefits 300,000+ times, bringing efficiency to all consumer processes. The Digital Platform has enhanced self-service, increased operational efficiency and provided effective integration with the CRM and other systems, which has helped in dramatically reducing call center volume by 30%, abandoned calls by 67% and call wait time by 90%!

The digital platform's marketing portal empowers their marketing and enrollment teams to analyze and focus on customer segments. This has helped the MHBE marketing and enrollment teams that have worked to increase enrollment among young adults by 4%; African American population by 8%; and the Hispanic population by 2%. Each of these groups has demonstrated lower enrollment historically and was specifically targeted by MHBE's digital marketing strategies this year.

The marketing portal allows MHBE to directly interact with consumers. While MHBE normally sees peak customer traffic of about 900 concurrent users, sending a push notification through the marketing portal directly to consumers gets unprecedented levels of 5000+ concurrent users on their platform, demonstrating effective consumer engagement and the empowerment of the MHBE team.

The MHBE Digital Platform including the mobile app is a unique public sector project that has paved the way for states and federal government to understand how to provide digital services in government and observe its real-life impact. This provides a template for improving consumer-oriented government services nationally at a federal and state level.