TOPIC
Nextgen Patient Engagement using Mobility, Cloud & Big Data

DATE
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INTRODUCTIONS

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Agenda

- Digital Healthcare Trends

- Use Case: Next Gen Engagement Platform
  - Customer Experience
  - Data-Driven
  - Omni-Channel
  - Technology Enablers: Cloud, Mobility & Big Data
Digital Healthcare Trends
Succeeding in the Digital World

Personalized Care

“The patient can see you now”

Reimagined Workflows

Collaboration at the intersection of humans and machines

Platform Revolution

Connecting an ecosystem and industry

Intelligent Organization

Big data, smarter decisions

Outcome-Based Care

Focus on outcomes, not service
Biggest Challenges Facing Healthcare Industry

What are some of the biggest challenges facing the healthcare industry in 2017?

**Healthcare Providers**
- Managing costs
- Improving clinical efficiency and effectiveness
- Increasing value, quality, and cost transparency to consumers and health plans

**Life Sciences**
- Increased competition from the generics
- Developing comparative effectiveness strategies
- Shifting from volume to value

**Payers**
- Changing business models and operating strategies
- Managing employer and consumer expectations
- Adapting to changes from health insurance exchanges
Healthcare: Digital Transformation Enabled by Technology

Value Based Care
Enriched Patient Experience
Personalized Treatment
Anytime Anywhere
Efficient Clinical Trials
ENDLESS OPPORTUNITIES TO:
REDUCE COST, IMPROVE QUALITY OF CARE, & IMPROVE PATIENT OUTCOMES

UNIFYING SCATTERED PATIENT DATA

PATIENT 360

IDENTITY RESOLUTION

INTEGRATED HEALTHCARE PLATFORM

CONTINUOUS PATIENT ENGAGEMENT

CONNECTED DEVICES

CASE & CLAIMS MANAGEMENT

ADVANCED PRESCRIPTIVE DATA ANALYTICS
Key Healthcare Providers Trends

- Managing Data
- Privacy and Security Concerns
- Government Mandates
- Retraining Staff
- Improving the Patient Experience
- Reducing Costs
- Mobility and BYOD
- Alternative Care Models
Use Case: Next Gen Engagement Platform
A fully integrated welfare management platform will empower constituents and drive greater value.

- Connected World of constituents, agencies, insurance providers and partners
- Integrated data and constituent profile
- Single platform delivering continuous collaboration, engagement and care
- Best practice protocols and processes
- Informative document and resource library for members
- Proactive “at risk” assessment and monitoring
- Scalability, robustness, integrity, security and privacy
KEY STAKEHOLDER INTERACTIONS

- Care Provider
  - EOB Resolution & Payments
  - Share digitized Medical & Health Records
  - Secure electronic exchange of diagnosis, prescriptions and care plan
  - Bills
  - Schedule, Manage & Track Appointments

- Payer / Partner
  - Resolution, Adjudication, Reimbursement
  - Claims processing, escalation

- Moverlander
  - Benefits Details, Eligibility, Enrollment, Engagement
  - Plan Administration, Support, Collaboration, Case / Care Management

- MD Welfare Management
  - Healthcare Exchanges
  - Healthcare Plans

ONE TRUE INTEGRATED WELFARE MANAGEMENT PLATFORM
COMpletely INTER-OPERABLE
FROM

We share a complex network of websites, physical offices and support centers

I am reliant on others to help me navigate available programs and benefits

My access to services is limited by varying business hours and locations

Case managers use multiple workflows

I feel frustrated & overwhelmed

TO

We share a common tool for both end-users and employees

I have self-service options to understand and better manage my programs and benefits

I have 24/7 access to services & support

Case managers use analytics to make smarter workflow decisions

I feel confident & empowered
Marylander 360°
State Welfare, Simplified

A secure and seamless state welfare management platform. Marylander 360 will empower all the key stakeholders of the ecosystem to actively collaborate on a unified engagement platform providing greater user experience, empowering Constituents to navigate through options in a guided manner while easing decision making for agency case and care staff through the use of analytics.
DEMO
Marylander 360°

URL: https://vimeo.com/211424308

PASSWORD: Marylandsv04
4 Main Driving Factors

1. Customer Experience
2. Data-Driven
3. Omni-Channel
4. Technology Enablers
FEASIBILITY
Can this be built?

VIABILITY
Should we do this?

DESIRABILITY
Do people want this?

INNOVATION

THIS ALONE IS NOT DIFFERENT.
OUR APPROACH IS.
We've designed our process to focus on speed and end user validation. We have a bias for making things quickly in order to learn from them and move to the next best learning opportunity.
CXI APPROACH | UNDERSTAND

User research

Persona definition

Map the customer journey

Understand

Service Design & UX

Stakeholder interviews + Contextual inquiry | Testing assumptions | Synthesis | Problem framing

Governance

Daily Sync | Weekly Status Report (PDF)

Milestones

Kickoff & Contextual Inquiry

Customer Journey & Persona development

Key Findings Problem framing

Client presentation
WHAT'S DIFFERENT?

› Prototype (instead of documentation)
› Discover & Concept sprints are largely non-technical
› Focus is on outcomes instead of traditional “deliverables”
› Empirical and data-driven (to the extent possible)
4 Main Driving Factors

1. Customer Experience
2. Data-Driven
3. Omni-Channel
4. Technology Enablers
Key Business Questions that needs to be addressed through Analytics

1. Who are we? (What is the demographic and profile of our constituent population?)

2. How much are we spending by each profile segment? – looking at claims and administrative costs and comparing it with the benchmarks/goals?

3. Where are we spending? – focusing on the utilization of services (including where the services are provided)

4. What can we change? – focusing on targeted actions that drives the most impact: training, placement and other programs to enable independence from support
A DATA-DRIVEN APPROACH
To Analyze Existing Constituent Profiles & Proactively Accelerate “Independence from Support”

1. Constituent Segmentation
   - Create constituent segments based on service (adoption, child support, etc.) and financial assistance type (emergency, medical assistance, etc):
     a. New Constituents, Temporary Assistance
     b. Economically Disadvantaged
     c. Repeat Constituents
     d. Permanent Beneficiaries
     e. Fraud & Program Abuse

2. Profiling & Analysis
   - Profile segments by demographics (Age, Income, Gender, Occupation, Location, etc.)
     - For example, 25% of constituents are located in Howard County that contribute to 40% of $spend, having a median age of 55
   - Identify steps or measures that drive “self-sustenance”

3. Outcomes & Potential Actions
   - Proactively manage and prioritize spend stemming out of segmentation and profiling insights
   - Recommend most frequent path to “Independence from support” in each segment
   - Tweak enrollment and eligibility rules based on usage insights
Segmentation with Disjoint Clustering – Example (using K-Means) Algorithm

- Repeat Constituents
- Permanent Beneficiaries
- New Constituents, Temporary Assistance
- Fraud & Program Abuse

$\text{Economically Disadvantaged} \uparrow$

$\rightarrow \text{Time to "Independence from Support"}$

$\rightarrow \text{Analyze Historical Data}$

$\rightarrow \text{Total Cost of Support}$
Systematic Analytical Process

Turning Data Into Action

Analyze Historical Data → Assess Current Constituents → Conduct Profiling (Demographics & Digital Behavior) → Identify Measures (Self-Sustenance) → Recommend “Path to Independence From Support”

What happened?
Who are my constituents? (Identify Segments)
How do I proactively drive self-sustenance? (Analyze & Recommend)
DATA-DRIVEN OUTCOMES

Accelerate “Independence from Support” - Based on Historical Trends (Illustrative)

Segment: New Constituents, Temporary Assistance
Micro-Segment: Income <$20K, Age 45-55, Montgomery County Residents

New Constituents (Temporary Assistance) → 55%
- Food Supplement Program → 20%
  - Energy Assistance → 55%
    - Temporary Cash Assistance → 25%
      - Job Search & Placement → 65%
        - Supplemental Energy Program → 40%
          - Soft Skills Training → 55%
            - Independence from support → 65%

Based on Historical Trends (Illustrative)
Proactively Drive Independence From Support Using Data Analytics

Proactively Manage and Support Constituents Towards “Self-Sustenance”
Visualization & Insights

Geographical Distribution by County ($ Spend)

Constituent Segment Insights

Howard County

<table>
<thead>
<tr>
<th>Constituent Segment</th>
<th>Constituents</th>
<th>Total Spend</th>
<th>%</th>
<th>Average Spend Per Constituent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>12,000</td>
<td>$120,000,000</td>
<td>100%</td>
<td>$10,000</td>
</tr>
<tr>
<td>New Constituents, Temporary Assistance</td>
<td>4,400</td>
<td>$60,000,000</td>
<td>30%</td>
<td>$13,644</td>
</tr>
<tr>
<td>Economically Disadvantaged</td>
<td>2,000</td>
<td>$60,000,000</td>
<td>40%</td>
<td>$30,000</td>
</tr>
<tr>
<td>Permanent Beneficiaries</td>
<td>1,000</td>
<td>$10,000,000</td>
<td>5%</td>
<td>$10,000</td>
</tr>
<tr>
<td>Fraud &amp; Program Abuse</td>
<td>300</td>
<td>$4,000,000</td>
<td>2%</td>
<td>$13,333</td>
</tr>
</tbody>
</table>

Segment Distribution by Segment (# and $)

Demographics of Constituents

- Age
- Gender
- Income

- 70+: 17%
- 60-70: 23%
- 55-60: 20%
- 50-55: 15%
- 45-50: 25%
- 40-45: 20%

- Economically Disadvantaged
- Fraud & Program Abuse
- Permanent Beneficiaries
- Repeat Constituents
- New Constituents (Enrollees), Temporary Assistance
4 Main Driving Factors

1. Customer Experience
2. Data-Driven
3. Omni-Channel
4. Technology Enablers
A UNIFIED AND SECURE WELFARE MANAGEMENT PLATFORM

A comprehensive welfare management platform for all Marylanders with seamless, safe and secure information and data exchange between all key points of care and consumption.

<table>
<thead>
<tr>
<th>Health Care Provider</th>
<th>Case Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>End User</td>
<td>Information Technologist</td>
</tr>
</tbody>
</table>
# Functional Components

**Client**
- Omni-channel
  - Web
  - Mobile
  - Kiosk
- Contact center
- Notifications
- Marketplace
- Search & Discovery
- Digital services
- **AI Chatbots**
- Partner tools
- IoT Devices
- Social

**Experience Management**
- Authentication & Identity Access
- Content & Knowledge base
- Dashboards
- Visualization
- Sentiment analysis
- Predictive analytics
- Registration, Eligibility & Enrollment
- Case & Care Management
- Application & workflow configuration engine
- Continuous monitoring

**Centralized Policy Enforcement**
- Machine Learning

**Microservices and Modules**
- Data Tools
  - Data Exchange
  - Data Quality
  - Governance
  - Management
- Applications
  - Consumer
  - Service delivery
  - Plan management
  - Point of Sale
  - Tracking
  - Monitoring
  - Field force/Mobile Administration
  - Integration Engine

**Enterprise**
- **Other Data Sources**
- **Legacy Systems**
- **Other agencies**

**Back Office**
- **Integration Engine**
4 Main Driving Factors

1. Customer Experience
2. Data-Driven
3. Omni-Channel
4. Technology Enablers
TECHNOLOGY ENABLERS:
Driving Innovation Throughout the Continuum-of-Care

- Improved Quality of Patient Care
- Better Access to Care
- Lower Operational Cost Structure

- Seamless Cloud Migration
- Data Analytics
- End-to-end Mobility
- Managed Services
- Patient Privacy and Data Security
- Emerging Technology: AI & ML
Q&A

〉 Please ask any questions you may have to the GoToWebinar Chat Box
Thank You

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