Voice Biometrics in Health Insurance Claims and Consumer Authentication

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TradeHarbor, Inc.
• Problem Definition - HIPAA Compliance
• The Solution and the Resulting Benefit
• Four Case Studies in Health Insurance
• Learnings
Beyond Biometrics

Enabling Trusted Interactions

We are all unique - Our voices are unique

Now your voice can be your signature
On the telephone or over the Internet
• **Authentication**
  - The identity of a remote participant is scientifically confirmed in a user-friendly manner.

• **Authorization**
  - The cooperative act of a VSS user is analogous to the user signing a document providing authorization.

• **Audit trail**
  - Provides an audit trail to show that the authorization originated from an identified source.
No PII Ever Transmitted
Authentication & Signatures - Customer Lifecycle

Report a Claim
- Phone, Online, Mobile
Claim Settlement
- Agent2Sign™
- Email2Sign™

Increase “Close Ratios”
- Agent2Sign™
- Email2Sign™
Account Enrollment
Pre-Agent Authentication
Product Cross-Sell Up-Sell

Online Billing
Pay By Phone
Mobile Payments
- PayItByVoice™
Pay Now
Funds Transfer

Pre-Agent Authentication
IVR Self-Service
Web Self-Service
Mobile Self-Service
Change Authorization
Secure Password Reset
- PasswordByVoice™
ROI is Critical to Justify Implementation

Time Savings Study - Major Cable Provider
Shared Secrets = from 45 seconds to 4 minutes
Voice Signature Service\textsuperscript{SM} = Less than 10 seconds
ROI >10 to 1
Channel Independent Capability

- Telephone
- Email
- Social Media
- IM/Chat
- Web
- Mobile
- IVR
- Call Center
- Retail
“this is so incredibly easy it is not even funny - awesome - takes 20 seconds” Private Wealth Advisor

“Cool” Managing Director, leading financial advisory firm

- Used By More Than 300,000 Insurance Individuals for Health & Life Applications and HIPAA Release Forms for Claims Processing
- Accepted as a Legally Binding Signature:
  - 48 State Departments of Insurance
  - USDA for SNAP Benefits
  - CMS for Medicare & Medicaid Benefits
  - IRS Office of Chief Counsel - (Rev.Proc.) IRS Form 8850 & IRS Form 9061
### SUPPLEMENTAL HEALTH CARE EXHIBIT - PART 1 FOR 2013
### AGGREGATED TOTALS NATIONWIDE

**Includes States and U.S. Territories**

<table>
<thead>
<tr>
<th>Business Subject to MLR</th>
<th>Comprehensive Health Coverage</th>
<th>Mini-Med Plans</th>
<th>Expatriate Plans</th>
<th>Student Health Plans</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Individual</td>
<td>Small Group Employer</td>
<td>Large Group Employer</td>
<td>Individual</td>
</tr>
<tr>
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<td>8,909,036</td>
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<td>60,456</td>
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<td>199,845,917</td>
<td>476,119,913</td>
<td>1,173,163</td>
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</tbody>
</table>

**OTHER INDICATORS**

1. Number of Certificates/Policies
2. Number of Covered Lives
3. Number of Groups
4. Member Months

- Amount of run-off premiums reported in report Columns 1 through 9: $2,542,288,641
- Amount of run-off claims included in report Columns 1 through 9: $1,954,705,451
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Federal Program Spending ($ in billions)</td>
<td>$913.4</td>
</tr>
<tr>
<td>Medicare Benefits</td>
<td>$591.9</td>
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<tr>
<td>Total Medicaid</td>
<td>$309.5</td>
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<tr>
<td>CHIP</td>
<td>$11.5</td>
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<tr>
<td>Other Spending</td>
<td>$0.5</td>
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<tr>
<td>Total Program Management ($ in millions)</td>
<td>$5,556.7</td>
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<tr>
<td>Total Appropriation</td>
<td>$4,091.7</td>
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<tr>
<td>Other Sources</td>
<td>$1,465.0</td>
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<tr>
<td>Total Health Care Fraud &amp; Abuse Control Funding ($ in millions)</td>
<td>$1,557.3</td>
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<tr>
<td>FTE Employment</td>
<td>6,333</td>
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</tbody>
</table>

*Program Management figures in FY 2014 are preliminary and subject to change.

*Medicare Benefits, including Health Information Technology Incentive Payments.
HIPAA Release Form must be signed by the insured prior to an Agent taking any PHI (Personal Health Information) to submit and process an insurance claim.
HIPAA Regulations
Administrative Simplification Regulation Text
U.S Department of Health and Human Services
Office for Civil Rights

HIPAA Administrative Simplification Regulation Text
45 CFR Parts 160, 162, and 164
(Unofficial Version, as amended through **February 16, 2006**)
HIPAA Administrative Simplification

HIPAA Administrative Simplification Regulation Text

**March 2006**

These regulations include the HIPAA OMNIBUS FINAL RULE released by HHS on **January 17, 2013**
A major purpose of the Privacy Rule is to define and limit the circumstances in which an individual’s health information may be used or disclosed by covered entities.

Protected Health Information. The Privacy Rule protects all "individually identifiable health information" held or transmitted by a covered entity or its business associate, in any form or media, whether electronic, paper, or oral. The Privacy Rule calls this information "protected health information (PHI).”

De-Identified Health Information. There are no restrictions on the use or disclosure of de-identified health information. De-identified health information neither identifies nor provides a reasonable basis to identify an individual.
Voice Signatures and Authentication in Health Insurance

- Company “A” - A major health & life insurance provider (NDA)
- unum Group - large employee benefit insurance provider
- Company “B” - large employee benefit insurance provider (NDA)
- ChartaCloud - SaaS application service provider
Hosted Applications

Agent2Sign™ Email2Sign™
On-Demand Document Signatures

Transfer2Sign™
On-Demand Document Signatures

SECURED BY
Voice Signature Service℠
Agent2Sign™ Process

1. Agent Logs In to the Voice Signature Application
2. Agent connects with Applicant by phone
3. Agent enters a unique ID for the Applicant
4. The Application Displays the Phone number and extension

5. Agent calls and connects in the Voice Signature Service
6. Applicant hears the “Signature Statement” and provides their Voice Signature
7. The Voice Signature record is encrypted and stored in the database
8. The Application displays the Voice Signature record including a unique Session ID

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Email2Sign™ Process

1. Agent Logs In to the Voice Signature Application
2. Agent enters Signer email address and the text of a "Signature Statement"
3. The application sends an email to the Signer for Signature
4. Signer clicks on the link in the email to the Webpage
5. Signer reads the "Signature Statement" and clicks on the Voice Signature button
6. Signer calls the phone number on the Webpage to provide their Voice Signature
7. The Voice Signature record is encrypted and stored in the database
8. The application sends an email to the Agent with a Voice Signature Session ID and the digital digest.

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Mobile Voice
Conference 2015
The Intelligent Connection

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Email2Sign™ Process

1. Upload PDF to Email2Sign
2. Create Document Digital Digest SHA1
3. Locked Document
4. Voice Signature Process
   - Create Voice Signature Session - Pass Identity Claim & SHA1 of the Document
5. Create Envelope Digital Digest using PDF, SHA1 & VSS Session ID
6. Signature Confirmation Email to Signer(s) and Agent

Locked Envelope
Requester/ServiceProvider/Hosted App/VSS
VoiceSigMobile™ Process

1. Request VSM Session - Pass ID
2. Start VSM Session
3. Voice Signature Recording
4. Recordings played back
5. Voiced Signature Analysis
6. Returned Result
7. VSM Session Result
8. Feedback to the App

Device-Based Voice Signature Interactions
iOS (iPhone & iPad) and Android Devices

All sensitive information remains behind the firewall - no secure information is exposed on the device

Voice Signature Service
ChartaCloud
Technologies

SECURED BY
TRADEHARBOR

Voice Signature Service™
Learnings:

• Security and Fraud Reduction have not been the drivers

• ROI is critical to justifying the implementation

• Workflow and process improvement is critical

• CSAT has been a huge driver as well