

EXCEEDING EXPECTATIONS
FROM INNOVATION

Introduction:

- **Company Profile:**

Computer Arithmetic, a woman-owned small business with 20+ years of experience, offers technical solutions in healthcare finance and pharma industries. Approved by the U.S. General Services Administration (GSA) for federal projects.

- **Services Offered:**

- Software Development
- Project Management
- Quality Assurance & Testing
- Managed IT Services
- Staff Augmentation

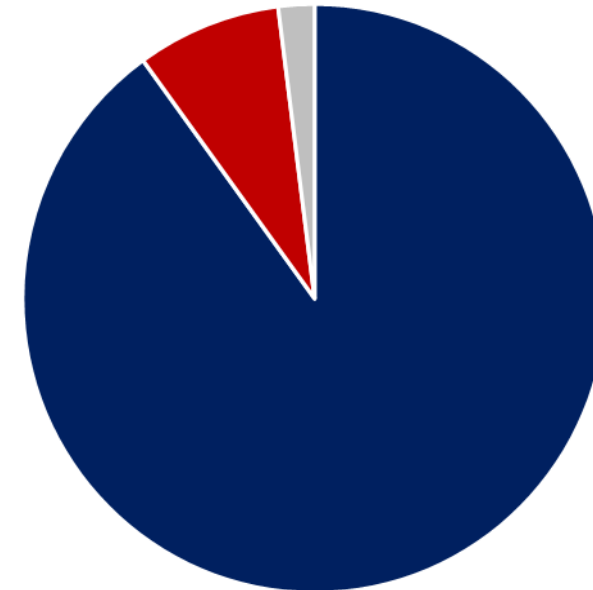
Overview of Health Insurance Market

U.S. Individual Health Insurance Market

Market Size Value in 2023	\$1.6 trillion
Revenue forecast in 2030	\$2.54 trillion
Growth rate	CAGR of 6.08% from 2023 to 2030

Source: <https://www.grandviewresearch.com/>

US Individual Health Insurance Share, by Demographics, 2022 (%)



■ Seniors ■ Adults ■ Minors

Source: <https://www.grandviewresearch.com/>

Challenges faced by US Health Industry

Technical Challenges

Compatibility and Integration

Data Security

Regulatory Compliance

HIPAA Requirements

Implementation of ASC X12N Standards

Operational Challenges

Operational Burden

Standardization vs. Customization

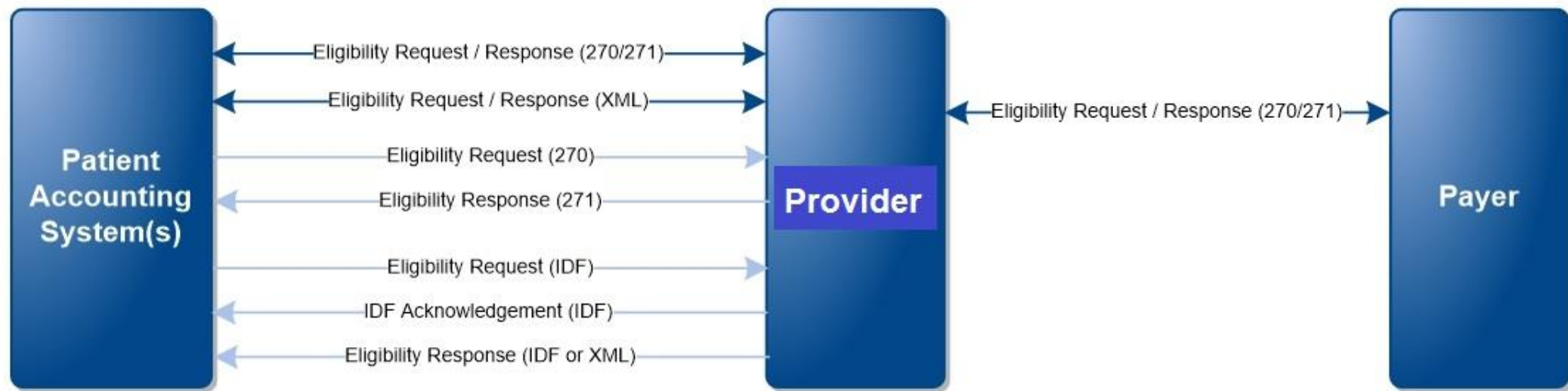
CA Capabilities to Resolve Technical Challenges

Compatibility & Integration – Real Time Eligibility Check

Eligibility verification process is the crucial initial step in the revenue cycle and any errors at this point can jeopardize billing revenue. Implementing a streamlined insurance verification process can have positive benefits for any practice or healthcare facility, including:

- Decreasing the number of claim denials, avoid inaccurate billing and late or missed payments
- Avert HIPAA violations

Computer Arithmetic has capability to deliver the response payload from the payer in an easily digestible JSON format.



Legend: Real-Time Batch

Data Security

Given the sensitive nature of healthcare data, it is imperative for healthcare providers to have a robust information security system in place. It means data security in healthcare should not only revolve around safeguarding healthcare data but also predicting and protecting it from cyber assaults.

Some of the measures for security Computer Arithmetic implements:

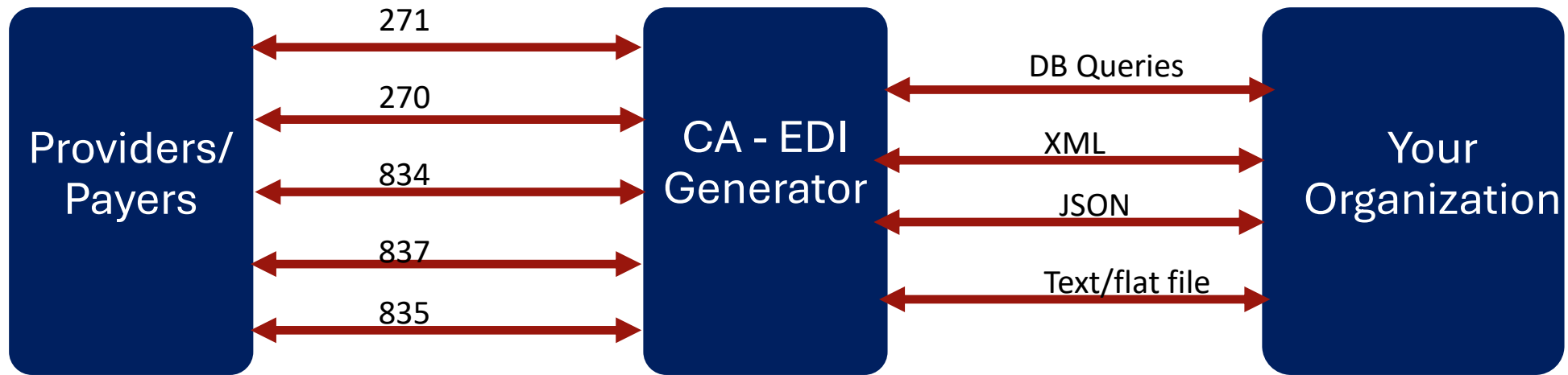
- Comprehensive cybersecurity program.
- Review and update security protocols.
- Clearly defined security means how staff should interact with technology e.g. implement two-factor identification strong password, change passwords every 30 or 60 days etc..
- Train staff on the risk and responsibilities.
- Offer comprehensive training to their employees on the importance of data security.



CA Capabilities to Resolve Regulatory & Compliance Challenges

Implementation of ASC X12N Standards

Implementing, maintaining, and supporting EDI doesn't have to be complex, time-consuming, and a potential distraction. We can transform EDI from a potentially expensive and unavoidable overhead into an opportunity to reduce complexity and improve performance. Our experienced teams handle the entire implementation process, provide proactive monitoring of your EDI flow, and provide ongoing maintenance and support, giving you peace of mind and allowing you to focus on what you do best.



■ Implementation of HIPAA Requirements

Every entity dealing with Protected Health Information (PHI) is required to comply with these rules. This includes Healthcare providers, from large hospitals to private practices. Health insurance companies and clearinghouses.

1. The Privacy Rule

The standards set by the Privacy rule address subjects such as:

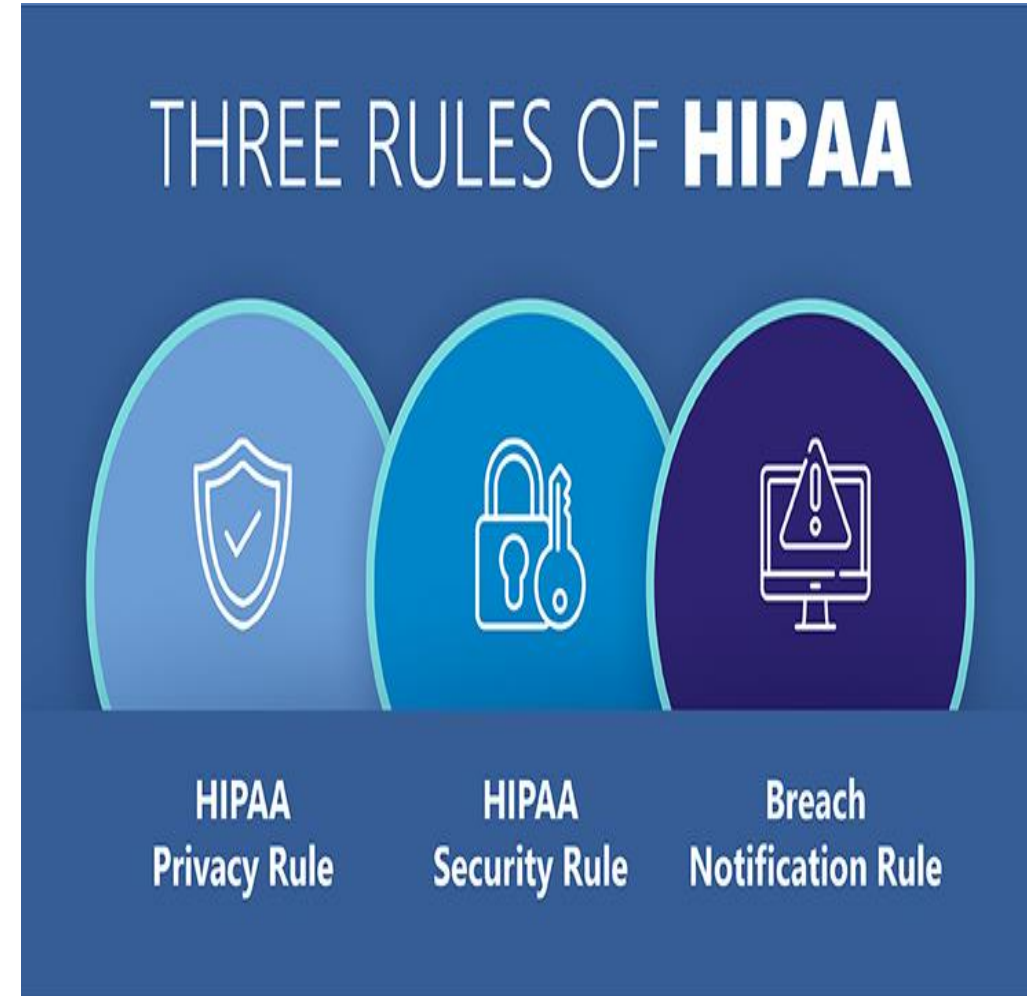
- Which organizations must follow the HIPAA standards
- What is protected health information (PHI)
- How organizations can share and use PHI
- Permitted usage and disclosure of PHI
- Patient's rights over their health information

2. The Security Rule

- Ensure the confidentiality, integrity, and availability of the PHI
- Protect the ePHI against all threats to its security and integrity
- Protect it against impermissible use or disclosure
- Train employees, and ensure compliance with the security rule
- Adapt suitable policies and procedures

3. The Breach Notification Rule

HIPAA considers all PHI usage or disclosures that aren't permitted under the Privacy rule as a breach. The alerts have to be sent to affected individuals and HHS within 60 days of the breach.



CA Capabilities to Resolve Operational Challenges

Data & analytics services

We combine data and analytics, cutting-edge tools and technology, and our domain expertise to power smarter insights resulting in better outcomes.

What we do:



Curated data

Data assets that span across commercial, Medicare and Medicaid populations, as well as augmenting the data with your own or a desired third-party's data sets.



Digital technologies & advanced analytics

Drive smarter outcomes while improving provider & consumer experiences.

- Machine Learning
- Text Mining & Natural Language Processing
- Network Analytics



Data management

We help you transform your disparate data into a trusted, strategic asset.

- Data strategy development
- Data governance rules
- Tool-agnostic data management capabilities
- Enterprise-wide data architecture
- Data visualization and reporting tools

Challenges with EOBs

Complexity and Confusion

Errors and Inaccuracies

Lack of Standardization

Delayed Issuance

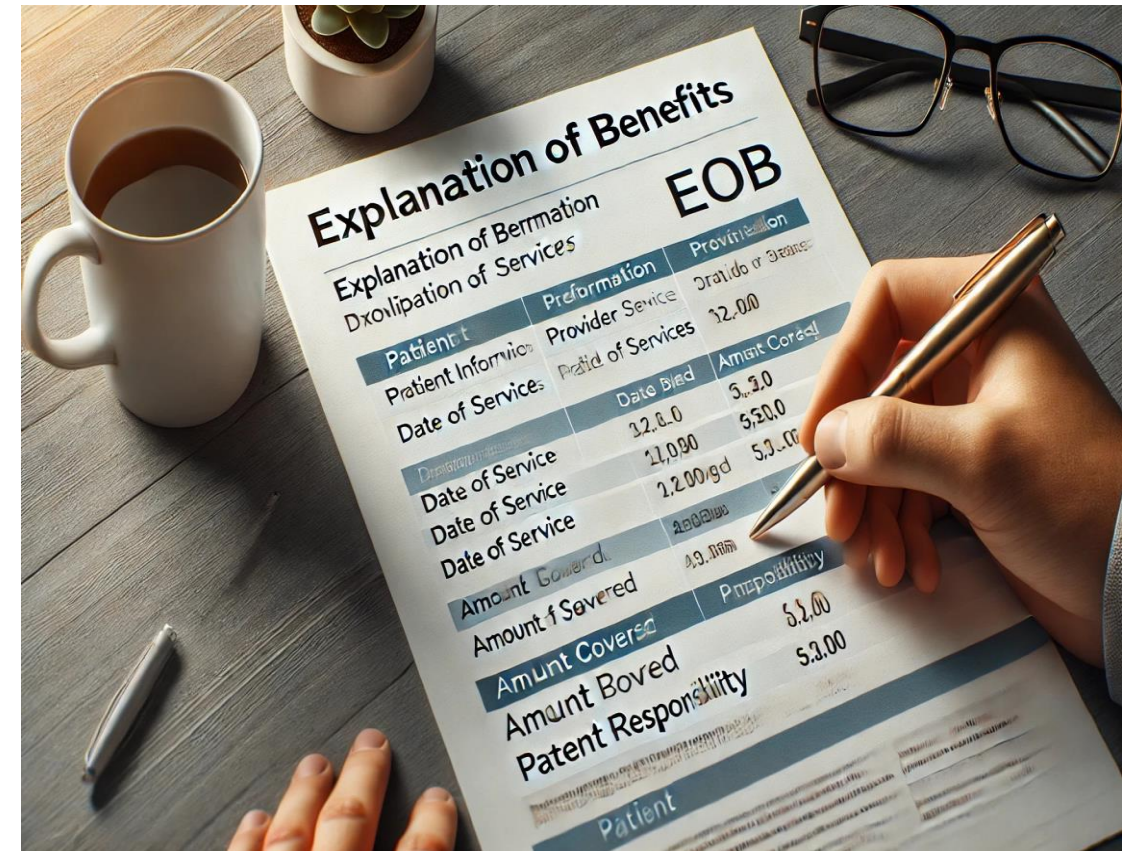
Insufficient Details

Accessibility Issues

Privacy Concerns

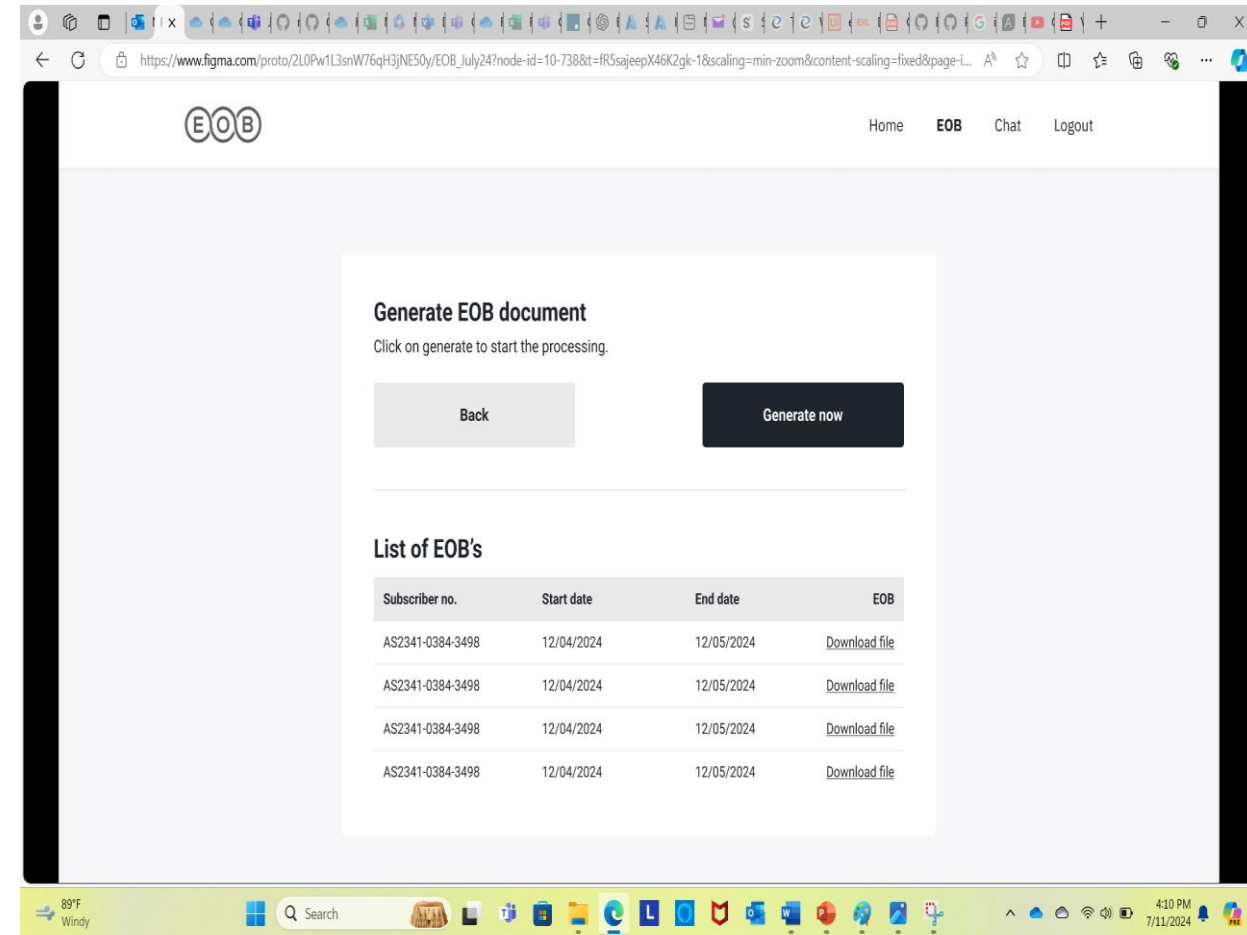
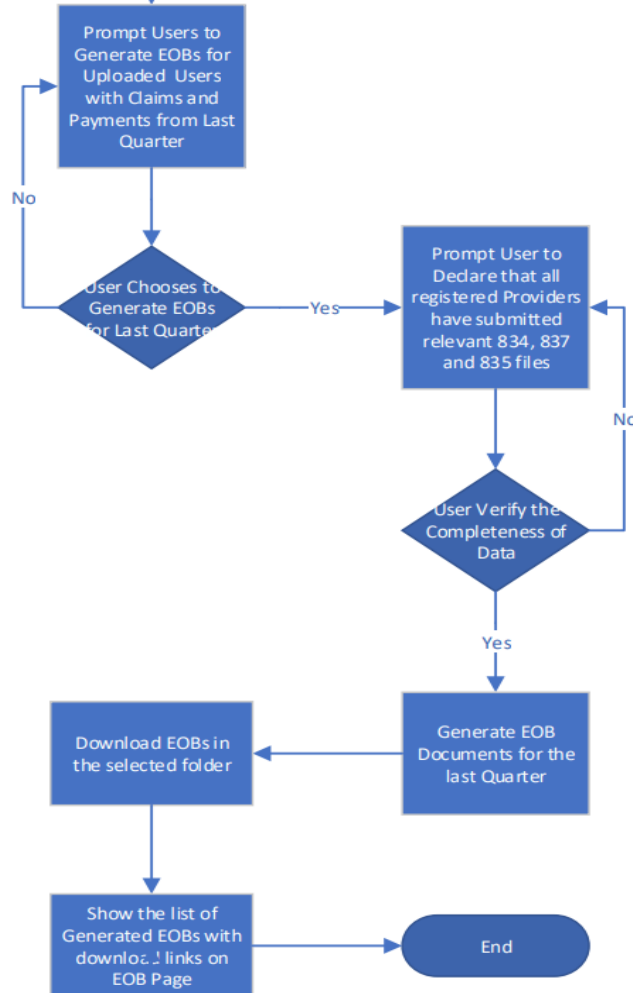
Communication Gaps

Explanation of Benefits (EOB) is not a bill, but it can help member understand how much his/her health plan covers and what he/she will pay when they get a bill from their provider.



Explanation of Benefit (EOB)

Computer Arithmetic has capability to provide automated EOB generation to save time and improve clarity.



AI Model for Quick Response to User Questions

Problem Statement: It currently takes one to two weeks to answer data-related questions from executives. Although there are products in the market that offer solutions, they often require complete data migration to a new service provider, which is a long and costly project.

Solution: Computer Arithmetic has capability to build natural language bots that can answer business questions in response to either typed or spoken requests. These bots will initiate a chain of agents that write SQL queries and generate visualizations. The results will be presented to the user with relevant context. This enhances customer service's effectiveness .

5 Problems That Can Be Solved By Implementing AI In Claim Operations

1 Fraud Detection and Prevention

2 Image and Video Analysis for Assessment

3 Predictive Analytics for Risk Assessment

4 Customer Support

5 Continuous Learning and Improvement

CA Capabilities to Resolve Challenges with skilled resources



Market Gap & Challenges:

Market Gap

- Significant gap between tech graduate supply and industry demand.
- Talent shortage in healthcare, life sciences, and pharma industries.

Challenges

- Talent Shortage, high Demand vs. Limited Supply & Specialized Skills.
- Time-Consuming, hiring Process & Lengthy Recruitment Cycles.
- High Competition, attracting Talent & Employee Retention.
- Cost Constraints, high Recruitment Costs.
- Rapid Technological Changes.
- Regulatory Requirements & Contractual Obligations.
- Quality of Candidates.



Solution & Benefits:

Solution

- Access to a global talent pool
- Custom software solutions
- Comprehensive QA services
- Experienced project managers
- Managed IT services

Benefits

- Cost Reduction
- White-Glove Customer Service
- Continuous Process Improvement
- Highly Skilled, Fully Vetted Talent
- Strategic Implementation Partner



Partnership Approach:

Collaboration

- Communication and feedback loops
- Customization to meet specific needs

Flexible Options

- Contract staffing
- Contract-to-hire
- Direct hire
- Managed services

Cost-Effective Solutions

- Transparent pricing models
- Competitive rates
- Value for money



Success Stories:



EDS for BCBSMA

Led the effort to implement the Provider Portal and Provider Directory for BCBSMA within a very short timeline.

CCA

Delivered the Payment Integrity solution to CCA under budget and on time.

Tufts Health Plan

Managed Member Portal project from requirements, development, testing and deployment. Provided PM support for the project.



“Thank you, Computer Arithmetic, for being a great implementation partner during the Provider Portal and Provider Directory implementation. Your team was quick to understand the scope and take ownership of the project. You helped us deliver this project within a short timeline.”

Bob – Implementation Manager EDS for BCBSMA

“Unmatched team's dedication to the Member Portal project. We could not have done it without your help. Thank you, Computer Arithmetic.”

Bill – Manager Web development Team at Tufts Health Plan

“It has been great to work with your team on the Payment Integrity Program. I will let others know to go to you for any custom development and testing.”

Angela – Program Manager CCA

Some of the Clients We Serve:



Unique Advantages CA Provides Over Competitors

Differentiators highlight CA's commitment to providing high-quality, reliable, and innovative solutions tailored to meet the specific needs of its clients in the healthcare sector.

- **Experience, Certification and Quality:**

Woman-owned, Approved by the U.S. General Services Administration (GSA) for federal projects, which assures quality and reliability.

- **Comprehensive Service Offerings:**

Software Development, Project Management, Quality Assurance & Testing, Managed IT Services, Staff Augmentation

- **Technical Capabilities and Client Focus:**

Expertise in implementing and supporting EDI standards such as ASC X12N, transforming complex processes into opportunities for performance improvement. Real-time eligibility check integration to decrease claim denials, avoid billing errors, and prevent HIPAA violations. Advanced data security measures, including comprehensive cybersecurity programs and regular updates to security protocols.

- **Data and Analytics Services:**

Combines data and analytics with cutting-edge tools and technology to provide smarter insights and better outcomes. Services include data strategy development, data governance, enterprise-wide data architecture, and data visualization and reporting tools. Utilizes advanced analytics techniques like machine learning, text mining, and network analytics.

- **Custom Solutions and AI:**

Ability to build natural language bots to answer business questions quickly, enhancing customer service effectiveness without the need for complete data migration to new service providers. Automated EOB generation to improve clarity and save time.

Unique Advantages CA Provides Over Competitors

Differentiators highlight CA's commitment to providing high-quality, reliable, and innovative solutions tailored to meet the specific needs of its clients in the healthcare sector.

- **Operational Efficiency:**

Handles the entire EDI implementation process, providing proactive monitoring and ongoing maintenance, reducing complexity and improving performance.

- **Regulatory Compliance Expertise:**

In-depth knowledge and implementation of HIPAA requirements, including Privacy, Security, and Breach Notification rules. Ensures compliance with regulatory standards while safeguarding PHI.

- **Skilled Resource Management:**

Access to a global talent pool with specialized skills in healthcare, life sciences, and pharma industries. Comprehensive QA services, experienced project managers, and managed IT services. Flexible hiring options, including contract staffing, contract-to-hire, and direct hire.

- **Cost-Effective Solutions:**

Offers transparent pricing models and competitive rates. Delivers strategic implementation with a partnership approach to ensure continuous process improvement and customer satisfaction.

- **Client Success and Testimonials:**

Proven track record with successful project deliveries, such as the Payment Integrity solution for CCA, Provider Portal and Provider Directory implementation for EDS (BCBSMA), Member Portal implementation at Tufts Health Plan and Supporting Clinical Trials for Biogen and Parexel.

Contact Information:

Email: contactus@computer-arithmetic.com