A Solution to the Move Health Data Forward Challenge:
An API For EDI to Json/Json to EDI Transformation That Can Be Easily Mapped to Any Existing Data Structure

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The "Business Case" for our proposed Solution

I. Executive Summary

Background: About Ready EDI and Associates

Ready EDI (readyedi.net) is a small, dynamic, technology driven organization that offers customized software solutions and cloud services. Our primary strength is delivering high quality systems that are highly performant, in less time and for costs well below industry standards. Our deliverables are highly standardized and maintainable. At the core of our work are two of our proprietary software tools – BluePrintORM™ and EDIOM™ – that are designed to address the challenges of large data management, data storage and inter-systems communication, while preserving data security.

Building on these software innovations, we propose creating an API for EDI to Json/Json to EDI transformation that can easily mapped to any existing data structure.

BluePrintORM™ is our software generation tool set that automates much of the work traditionally done by coders. Using BluePrintORM™, a software architect can design and build an entire system in a fraction of the time it takes a full team using traditional approaches. This innovative code generation tool allows users to develop software with minimal human interaction. By providing instructions through our process, the computer is able to generate a large portion of the code. We use this powerful tool on a daily basis for creating and enhancing software systems for all our clients. This tool, BluePrintORM™, can also be used to develop components (APIs and SDKs) that can interface with existing systems and are especially useful for cloud-based solutions.

Our other product, ***EDIOM***™ (Electronic Data Interchange Object Model), was developed to revolutionize how EDI is generated and processed, accelerating transaction times, and – like BluePrintORM™ – reduces labor costs, setup times, offering the customer significant and increasing savings over time. While we use EDIOM™ for a wide variety of industrial sectors, it was specifically designed to address the challenges of Medical EDI, including the standardization/security needs of HIPAA requirements and third party verification. These technologies can address the emerging needs of the Medical IT sector and those of many others private and public entities.

Both these products are highly customizable and adaptable for a wide range of business, information and transactional needs. Based on these technologies, we have designed software to address the challenge of asset inventory and tracking solutions that are scalable, flexible, adaptable and mobile for multiagency emergency preparedness and response. Such issues as interoperability for wide-scale communications, emergency incident management from the EOC to the field, and the custom needs of specific agencies are part of our self-initiated work.

Using EDIOM™ and BluePrintORM™, we provide custom solutions that save money and labor costs, automate coding, improve performance and create other efficiencies such as state of the art security and software development specifically designed to meet a user's emerging

needs. Our software will allow the user to dramatically reduce software development time, while providing built-in “Separation of Concerns,” forcing code standards, centralizing the dissemination of changes and providing automatic document generation. Using these technologies, we will develop an *API for EDI to Json/Json to EDI transformation* that can be easily mapped to any existing data structure. We understand that any information shared with us - along with any APIs we generate for other parties - are intellectual property of those parties and will be treated as such.

The API software generated references our Custom Authorization Manager. This component offers role based OAuth 2.0 authorization across multiple data systems, along with auditing capabilities.

We appreciate your consideration of our submission and thank you for your efforts to make medical information more accessible and secure. In that spirit, we would like to offer all other competitors access to our generating software. If they can provide the data models they require to support their idea, we will produce the API and SDK software for them at no cost. We understand that any information shared with us; along with any APIs we generate for other parties, are intellectual property of those parties and will be treated as such.

The Story of BluePrintORM™

Ready EDI co-founder and BluePrintORM™ creator, Chuck Forest, created a design pattern called Entity Factory (http://www.codeproject.com/Articles/354501/Entity-Factory-Design-Pattern-for-NET) to support a legacy EDI validation application that ran much too slowly. The result of his work was The Entity Oriented Architecture which provides a Design Pattern for generic transactions between the presentation and data layers of an application. Actions are defined within the Entity that can be utilized by the presentation layer without any knowledge of the structure of the data layer.

Conversely, data can be structured and stored in any way the database administrator sees fit, regardless of how the data is presented. For example, the front-end developer can instantiate an Entity, enter the identifying values and call the Load method of the Entity. They require no knowledge of where the data comes from. In fact, the architecture allows the Entity to load the data from a web API rather than a database, if desired.

To allow development of an end-to-end enterprise system, many other components have been created with Entity Factory to support the architecture. These include Collections, Transactions, Validators, Proxies, Exceptions and Notifications. Our architecture has everything it needs to support any enterprise system. The separation of tasks is only one of the ways BluePrintORM™ goes beyond anything other ORMs can offer. Existing Entities, or Blueprints, from other projects can be easily imported into a new project and modified to meet the needs of new projects. Fully developed APIs, SDKs and supporting documentation can be

generated with a push of a button. Documents that define all objects and their members can also be generated for the front-end and back-end developers.