

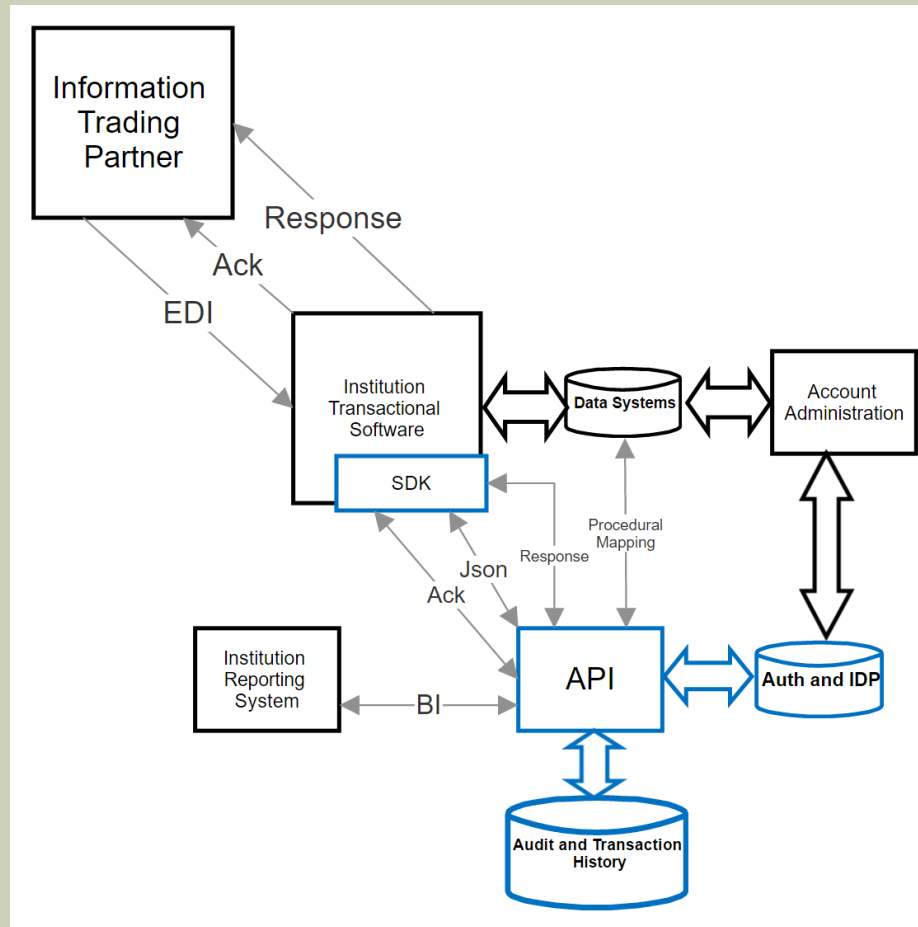
**A SOLUTION TO THE MOVE HEALTH DATA  
FORWARD CHALLENGE:  
AN API FOR EDI TO JSON/JSON TO EDI  
TRANSFORMATION THAT CAN BE EASILY  
MAPPED TO ANY EXISTING DATA  
STRUCTURE**

*Submitted by*  
Ready EDI and  
Associates

# SOLUTION WILL INCLUDE

- EDI Validation and Acknowledgement
- OAuth 2.0 Authentication (a HEART guideline)
- Built-in Identity Providers (IDP) that meet open ID connect specifications and HEART guidelines
- SDKS for both .Net and Java platforms
- Accelerated Development using our proprietary EDI tool set (EDIOM™) and Application/API generator (BluePrintORM™)
- Procedure driven data mapping
- Meet HIPAA Compliant standards
- Hosting available through Ready EDI
- Auditing and transaction history

# DATA-FLOW DIAGRAM



INFORMATION TRADING PARTNERS CAN SUBMIT THEIR EDI REQUEST, IN EITHER A STANDARD EDI STRING OR JSON STRING, TO THE RECEIVING INSTITUTION. OUR SDK, AVAILABLE TO REFERENCE BY THE INSTITUTION'S TRANSACTIONAL SOFTWARE, CAN BE USED TO TRANSPORT THE RECEIVED STRING TO OUR API. THE API MAY RESIDE WITHIN THE INSTITUTION NETWORK OR ON OUR AWS CLOUD NETWORK.

THE API WILL VALIDATE THE STRING AND RETURN A 997 ACKNOWLEDGEMENT TO THE INFORMATION TRADING PARTNER IN EITHER EDI OR JSON FORMAT. FOR REQUESTS REQUIRING A RESPONSE, SUCH AS AN ELIGIBILITY REQUEST, INSTITUTIONS WITH EXISTING SOFTWARE TO SUPPORT THIS CAN TRANSPORT THE RESPONSE TO THE API THROUGH THE SDK FOR VALIDATION AND TRANSFORMATION. INSTITUTIONS THAT DO NOT CURRENTLY HAVE THIS CAPABILITY, CAN UTILIZE THE BUILT-IN PROCEDURAL MAPPING. THE API PROVIDES PROCEDURAL STUBS THAT CAN BE USED TO MAP THE RESPONSE TO THE INFORMATION IN THEIR DATA SYSTEMS.

AUTHORIZATION, ROLES AND IDENTITIES CAN BE  
MANAGED BY EITHER USING EXISTING INFORMATION IN  
THE INSTITUTIONS SYSTEM THAT CONNECT WITH MAPPING  
PROCEDURES, SIMILAR TO THOSE PROVIDED FOR  
RESPONSE, OR THROUGH A USER INTERFACE WE WILL  
PROVIDE. ALL TRANSACTIONS ARE RECORDED IN THE  
AUDIT AND TRANSACTION HISTORY REPOSITORY,  
WHETHER THEY PASS AUTHORIZATION OR NOT. THIS  
INFORMATION CAN THEN BE COMPILED AND REPORTED BY  
ANY EXISTING BUSINESS INTELLIGENCE SYSTEM THE  
INSTITUTION MAY HAVE OR THROUGH CANNED REPORTS  
WE PROVIDE.

# THE SPECIFIC PROBLEM BEING SOLVED

- Many smaller medical facilities lack the IT resources to comply with data interchange standards. The API solution we propose along with supporting applications will offer an affordable alternative to the facilities. By leveraging our toolsets to produce this solution with very low overhead, we will attempt to offer these services to small institutions at little or even no cost. Creating a large group of users will better enable us to market our services to the larger institution that can afford our standard rates, while still offering a great return on investment.

# THE SPECIFIC PROBLEM BEING SOLVED

- The centralization of service will prevent individual institutions from taking on this endeavor on their own. As new techniques for data interchange develop, we will extend our service to incorporate them, leaving the burden on the centralized resource rather than the individual organizations. This includes changes in the HIPAA standards for data interchange and meeting those compliances.



- Our Custom Authentication Manager extends the Service Authorization Manager that drives the IIS Access Core. This allows us to trap the HTTPS request before the API is invoked. It is here that we analyze the OAuth credentials and recognize the incoming identity by using the IdentityServer 4 and Json Web Token Handler libraries. The results are recorded in the audit table and the user is either sent a 403 unauthorized response or the request is passed on to the API method being called with the appropriate connection string information.