

# INGENIX<sup>®</sup>

## EDI Today . . . HIE Tomorrow

Whether choosing to build or buy, payers need a flexible, standards-based approach to Electronic Data Interchange that delivers immediate benefits and lays the framework for future Health Information Exchange.

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## Executive Summary

Few prospects on the health care technology horizon offer greater opportunities to improve care and reduce costs than EDI (Electronic Data Interchange) and the pathway it opens to the future of true Health Information Exchange (HIE). HIE is a long-term vision in which open standards-based networks, applications, interfaces, and data formats create an interoperable and highly automated electronic infrastructure for swift, secure transfer of clinical, administrative, and financial information between all health care stakeholders.

Over the next several years, HIE advances will lead to better patient care because physicians will have real-time access to complete patient medical records online. HIE advances will also put eligibility and benefit information instantly at the fingertips of hospital and clinic care staff. Consumers will be able to control and manage their own health information, and health care affordability will improve as a result of streamlined adjudication, reduced processing errors, and optimized transaction costs. The flexible HIE solutions of tomorrow will simplify compliance with regulatory requirements, even as HIPAA and other mandates evolve to meet the varying needs of participants across the health care spectrum.

While development is progressing on many fronts, technical, economical, and cultural barriers persist, and a mature national HIE infrastructure remains a decade or more away. In the interim, Ingenix is implementing a comprehensive HIE strategy that leverages its established EDI infrastructure and administrative and financial data clearinghouse as the core of an expanding and extensible solution set. “Within the next two or three years, we will be one of the most effective and efficient ways of moving both clinical and administrative information,” asserts Dr. Kepa Zubeldia, senior vice president of interoperability technologies at Ingenix.

Ingenix offers health care payers and their trading partners a technology-neutral framework of software products and network services that can be implemented incrementally as part of an internally developed or entirely outsourced EDI Solution. Whether choosing to build or buy, payers can gain immediate and significant improvements in operational performance by integrating EDI capabilities into their IT infrastructures, and can also build their future HIE backbone.

## Our Industry Is at a Crossroads

The future of Health Information Exchange (HIE) is among the most critical issues facing health care today, as it drives significant financial and clinical value. HIE is a technology vision characterized by networks, applications, interfaces, and data formats that together form an interoperable electronic infrastructure for the exchange of health information between all health care stakeholders.

The flow of administrative, clinical, and financial information is the lifeblood of health care. New levels of online communications, integration, and interoperability are required in order to keep up and gain competitive advantages—making strides toward truly comprehensive HIE.

Health care payers interested in improving the flow of information face serious IT challenges. Today, all payers should be asking themselves these questions:

- How do we interact with multiple providers in a timely manner?
- How do we quickly authorize treatments and procedures?
- How can we remit prompt payment?
- How do we minimize unproductive administrative work?
- How can we minimize inconvenience for the provider and patient?
- How do we safeguard personal health information, ensuring HIPAA compliance and also meeting other data security standards?
- How do we remain compliant in the face of changing mandates, such as the revised ASC X12N and NCPDP standards now being recommended for inclusion in HIPAA?
- How do we integrate with clinicians, medical institutions, and organizations in order to share information and help to provide optimal care?

Many innovative technologies for easing information exchange are entering the mainstream health care market. Broadband networks, mobile computing, open standards-based applications and systems, and new levels of workflow and transaction automation present tremendous

opportunities for enhancing the efficiency of administration and patient care.

Health plan executives must assess their own unique organization's short- and long-term needs and act accordingly. For some, the answer is obvious: outsourcing. This is especially true for smaller organizations without sizable IT staff and other human and financial resources. But for others, internal IT talent may be the best resource for new applications and more sophisticated infrastructure. For many payer organizations, the choice is not so much a black-and-white case of buy versus build; it's more a matter of *how much* to buy versus *how much* to build. The characteristics, capabilities, and strategic objectives of each payer's organization will determine which option is the right one.

## Build, Buy, or Hybridize: All Options Are Open

When payers consider the big question of how much of their EDI solution to buy versus how much to build, they should carefully research, study, and evaluate many factors, including:

- Strategic advantage
- Price
- Dependability
- Privacy issues
- In-house technical capabilities

### STRATEGIC ADVANTAGE

One of the primary aspects of a payer's decision either to buy or build is determining the strategic advantage of the solution to the company. Is it important to have an in-depth, internal understanding of current EDI technologies and the HIE roadmap, or are those technologies part of the payer's non-strategic infrastructure, thereby compelling it to seek the services of a third party? In other words, is the payer better served by developing its own resources in this area, or by leveraging a third party's expertise? Finally, is there a strategic advantage in building the HIE backbone that others

don't have, or is it becoming an infrastructure component that all must have? The choices a payer makes today will ultimately affect its strategic and competitive position for years to come.

### PRICE

The next consideration is price. Buying a standard software solution is cheaper in virtually all cases. For the money, the software quality of a standard solution also tends to be higher than that of an application developed in-house. Subsequent enhancements and migration of standard solutions may be easier as well. Then again, there are implementation, training, and consulting fees that need to be calculated. Customization of standard solutions to meet business needs should be considered. There are also ongoing licensing and support costs for standard solutions. Finally, a payer needs to figure in infrastructure expenses, such as servers, databases, and networks.

When a company builds a solution, it is virtually guaranteed to meet the company's business requirements over time, as it's a custom solution from the outset. However, building a solution in-house needs to be managed carefully to minimize the potential for higher costs, and to ensure development costs can be offset by the ability to directly control and manage the system. Infrastructure costs to design, develop, test, train, and operate the solution are part of this equation, as are the costs and time associated with fixing bugs and making future enhancements.

### DEPENDABILITY

In the past, many payers have been disappointed with both product purchases and outsourcing to third parties. Any health care payer considering buying a software solution or turning over a significant portion of the project to an outside entity must consider the reliability and financial stability of that vendor. What would be the contingency plan if the vendor went out of business? What if the quality of service were unacceptable? How would such an issue be resolved? Vendor dependability is an important checklist item to consider before relinquishing control.

With an in-house-developed solution, dependability may be more governable.

## PRIVACY ISSUES

The topics of system security and information privacy enter into any buy-versus-build discussion. Security issues comprise a wide range of technical challenges, from securing data centers against both physical and virtual intrusion to encrypting data and communications, defining and enforcing access policies, documenting regulatory compliance, and much more. With regard to these security issues, payers need to decide how much responsibility they want to directly assume. Do they want or need to take on responsibility for data privacy, security, and HIPAA compliance? Do they want or need to develop and maintain that kind of expertise? Some payers will demand control, while others will gladly relinquish it. In some cases, the cost factor makes the decision easy.

## IN-HOUSE TECHNICAL CAPABILITIES

Throughout this document, the subject of in-house technical abilities has been raised several times—and for good reason. This is an extremely important consideration in the buy-versus-build decision. Payers need to be aware of their IT professionals' capabilities and what it would take in terms of training and staffing to bring their skills up to the level required to attain the necessary solution functionality and interoperability. Beyond installation of the solution, IT staff need scalable skills that enable them to maintain, troubleshoot, and upgrade systems over the long term. For example, proposed changes in ASC X12N and NCPDP standards for HIPAA will require new transaction types and modified message formats. Can payers afford to permanently retain the resources required to rapidly update in-house applications as these and other new mandates continuously reshape the security landscape? Payers need to determine the optimum size and use of their IT resources over the long term. It may make sense to rely more heavily on a vendor who can provide a rapid and accurate response to new requirements, rather than to permanently bolster one's own capabilities in anticipation of change.

**Regardless of the extent that a payer buys or builds, doing it right ensures a full spectrum of financial benefits:**

- **Cost reduction**
- **Revenue enhancement**
- **Productivity gains**

However, it is often the case that stakeholders favor analysis of one type of benefit over others within a category. Regarding financial concerns, for example, cost reduction may be preferred over long-term revenue enhancement or productivity gains.

## EDI: Insourcing, Outsourcing, or Both

Let's take a quick look at two opposite ends of the buy-versus-build continuum: buying an application service model and building an in-house application.

### RELYING ON A CLEARINGHOUSE SERVICE MODEL: PROS AND CONS

Some health care payers would prefer not to pay expensive in-house support staff to manage complex applications, preferring to hire an outside organization to buy the software and systems, maintain them, upgrade them, debug them, and make sure they are up and running 24/7. This solution, once known as the application service provider (ASP) model, is now called "software as a service" or the "service model."

#### Pros

- Payers gain access to deep subject matter expertise. Clearinghouses are often specialists in the health care IT industry. Implementing administrative transaction systems for payers may be all they do—and a payer can be confident they do it well.
- Implementation is faster, as clearinghouses can rely on their past experience and tend to make a point of being efficient.
- Payers realize the benefits of newly adopted software or business processes sooner.
- Based on pay-per-use, payers are charged for something close to their real usage—unlike perpetual licenses where pricing models normally require purchase of more capacity than is actually needed.
- Solutions offer scalability both in terms of people and infrastructure. Given a surge in business, a vendor can often deploy many people on a development or service task, thus solving problems faster. Vendors can also respond to an increase in demand by deploying more resources, servers, or application instances whenever necessary.
- Through specialization, vendors may be able to manage their on-demand software more efficiently than a payer's in-house IT organization can.

- Service providers are responsible for keeping up-to-date on government and industry standards to ensure seamless transaction processing, security, and compliance.

#### **Cons**

- Customization potential is limited, as a clearinghouse may tend toward a one-size-fits-all philosophy. The vendor applications may have too many or too few features. In addition, a vendor can't possibly know as much about unique business needs as an insider can.
- The solution may require customization to work with the payer's existing systems or IT infrastructure.
- Subscriptions for clearinghouse and processing fees can add up.
- Support and maintenance costs can prove to be expensive.
- Someone must manage the service agreement and service provider relationship.
- Vendors aren't on the payer's clock. They may not be able to drop everything and make a project their highest priority.

#### **RELYING ON A SOFTWARE APPLICATION MODEL: PROS AND CONS**

For the do-it-yourself payer organization with professionals on staff who know the development tools and applications, there are distinct competitive advantages to creating needed EDI applications and clearinghouse infrastructure in-house. In fact, it can be a sound, low-risk, and low-cost choice that can save money in the long run, as ongoing maintenance and support costs for commercial products can be expensive.

#### **Pros**

- When payer organizations assume most or all of the responsibility, they are in control.
- Customization potential is unlimited. Internal developers are knowledgeable about the organization's business processes and can modify applications accordingly.
- Expertise and availability of support, maintenance, troubleshooting, and more are always on the premises during business hours.
- Accountability is assured, as a payer knows whom to reward and whom to blame.

- Project speed can be maximized. Given the resources and control, a payer can initiate a development program virtually overnight; there's no need to wait for vendors who have other priorities.

#### **Cons**

- IT needs can be complex. A payer could learn the hard way that complicated applications should be purchased, due to the real risk of disrupting claims.
- In-house expertise may fall short. In fact, it may pale in comparison to the collective knowledge of vendors who benefit from having developed software that reflects the sum of all their other customers' needs. In other words, they've seen firsthand what works for the competition, and have built and enhanced their applications accordingly. A payer's in-house talent may be brilliant, but may not have as much experience building the specific types of applications the organization is looking for.
- Even the best in-house technical staff may find it difficult to keep the solution up-to-date and in sync with changing standards and regulations.

And for some organizations, the best approach may be a combination of insourcing and outsourcing.

## **Ingenix Supports the EDI Continuum**

Whether a payer is interested in strictly buying or building—or something in between—Ingenix can help. Ingenix is prepared to offer intelligent solutions for a variety of EDI challenges while helping organizations create the backbone for their future HIE.

#### **OVERVIEW OF INGENIX EDI TECHNOLOGY SOLUTIONS**

Ingenix EDI solutions enable the easy, reliable, and efficient exchange of quality administrative and financial information. These solutions range from basic paper claims conversion, direct data entry, and standard transaction validation services to automated connectivity between two trading partners—or between thousands of them—through a secure, broad-based virtual health care network.

Ingenix offers the bridge between existing EDI technologies and the fully interoperable HIE of tomorrow.

## HOW PAYERS LEVERAGE INGENIX EDI SOLUTIONS

Ingenix can tailor solutions to the needs of specific payers—from the largest plans, public sector agencies, workers' compensation, and property and casualty plans, to the smallest third-party administrators.

- Larger payers can choose to build EDI solutions themselves by licensing Ingenix software, purchasing the necessary hardware, and then managing the solutions themselves.
- Smaller payers may choose to have Ingenix do it for them. The customer defines its needs for connectivity, interoperability, functionality, and so on, and Ingenix provides and maintains the appropriate solutions.
- Another option is licensing the software while allowing Ingenix to manage the clearinghouse, help desk, and day-to-day operations. A payer that wants to take over servicing at some stage can do so at its convenience.

## BENEFITS OF USING INGENIX EDI SOLUTIONS

Ingenix Electronic Data Interchange solutions deliver:

- Administrative and financial transaction connectivity
- More efficient interoperability and automation
- Greater ROI and measurable savings
- Integral components of a future HIE platform

Ingenix can help payers better manage the processes beyond the transmission and acceptance of claims, increase auto-adjudication rates, improve accuracy, reduce rejection rates, decrease processing costs, and automate payment processing.

## Why Ingenix

Ingenix is one of the largest health care information and research companies in the industry. Ingenix unites the brightest minds in the health care industry with an extensive health care information database to provide accurate, insightful business intelligence to health care payers, providers, and Fortune 500 companies.

In 2006, Ingenix invested in the foundational platform for HIE by merging the expertise of two industry-leading

businesses: Claredi, an innovative leader in EDI software applications, and ENS Health, a full-service clearinghouse. The combined strengths of these two companies, together with many Ingenix products and services, form the basic building blocks of the next generation of health care information interoperability.

Beyond doing EDI better, Ingenix delivers HIE innovations across the entire spectrum of health care information that will positively affect all stakeholders in the industry: payers, providers, hospitals, group practices, employers, clearinghouses, vendors, financial services, the public sector, and most importantly, consumers.

## Making the Right Decision

Making the right decision with regard to buying or building an EDI solution—or some combination thereof—is one of the most important next steps many health care payers will take as they build their future HIE infrastructure. Be sure to research and evaluate all the options available:

- Talk to your in-house staff, then talk to external experts. Decide whether your in-house IT staff has the skills, time, and inclination to develop and maintain the applications you need.
- Go back to those key criteria for determining buy versus build:
  - Strategic advantage
  - Price
  - Dependability
  - Privacy issues
  - In-house technical capabilities
- Develop a plan for designing, developing, testing, implementing, supporting, and upgrading your EDI solution. Make sure you're laying the groundwork for future HIE.
- Set corporate-wide expectations.

After gathering all of the necessary information and sizing up the various options and key stakeholders, the right path should be relatively easy to discern.



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## Conclusion

While Ingenix offerings today are comprehensive, the long-term vision of HIE calls for continued innovation to ensure seamless and secure connectivity of administrative, clinical, and financial data. Ingenix will continue to lead the industry with such innovations, working closely with other industry leaders and government organizations to make the HIE of the future a reality.

Health care payers should begin embracing integrated EDI solutions early if they want to maintain a competitive advantage. Choosing the right solutions begins with careful research and assessment of available offerings. Payers need to ensure that any solution matches their own unique organizational short- and long-term needs.

Regardless of the extent that a payer buys, builds, or does both—Ingenix stands ready to help.

## Ingenix EDI Solutions Portfolio Today

Ingenix Transaction Exchange	Ingenix Transaction Manager	Claredi Testing and Certification Services
Ingenix Transaction Director	Ingenix Network Director	HIPAA Security Solutions
Ingenix Connectivity Director	Ingenix Gateways and Portals	Professional and Consulting Services

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