



## MAKING HCOS RESPONSIVE, IN REAL TIME

### Abstract

Integration and Collaboration Services, along with a little foresight, can go a long way in making Healthcare Organizations agile and customer friendly

## Introduction

Why is it easier to evaluate and compare automobiles online, rather than ask questions about your health insurance? Why is it that you can easily look up every transaction in your frequent flyer program but not easily review your medical history? Why does every question you ask about your health plan get a 'canned' response

online, or even when you are lucky enough to speak to a live person? Why can't your doctor tell you what is covered under your plan while you wait at her office? Don't Healthcare Organizations (HCOs) have all the information required to answer your questions?

We can easily shop online for everything from books to vacations based on

price, date and several parameters of our choosing. For personal financial management, comprehensive online tools allow us to evaluate stocks, bonds and mutual funds in great detail. Yet, when it comes to selecting, using or inquiring about our healthcare, we are usually faced with a confusing array of information that is often difficult to retrieve or impossible to access.



## The Impossible Dream?

Seemingly, very few HCOs are able to consolidate and present data on membership, claims, billing and plans in real time to enable members and providers to make informed decisions. What consumers really want is no mystery; they have been demanding more for years. A recent industry article reports: "... members want to be able to enroll online, where they expect to find assistance in choosing benefit options. They also want self-service for administrative functions — in real time. That means they expect that a requested change will be made or an issue resolved the first time around."<sup>1</sup>

Lack of appreciation for the return on investment is also not to blame. Gartner reports that investment in Customer Service and Support (CSS) has a 10 percent to 25 percent greater impact on customer loyalty and revenue than sales or marketing initiatives.<sup>2</sup>

And it certainly isn't for a lack of trying. HCOs have for many years made significant investments in call centers and more recently in online endeavors. According to a 2003 Aberdeen Group study <sup>3</sup>, the top five contact center investments are:

1. Analytic tools for the contact center (61% of respondents)
2. Multi-channel contact center (51%)
3. Interactive self-service (50%)
4. Enterprise routing (49%)
5. Workforce management (49%)

However, the challenge of integrating these technologies and processes usually falls upon the HCO. One reason for this is the lack of progress on the part of vendors. Gartner Research analyst Michael Maoz writes: "A major challenge for many vendors is to recover from the poor investment of funds — for example, extravagant granting of stock options and grandiose marketing campaigns. Funds should have been used to merge useful service technologies



— such as e-mail, voice recognition, natural-language processing, chat, content management and browser sharing — with customer service applications, such as problem resolution, technical support and case/account/activity management."<sup>4</sup>

Internal HCO issues have also impeded progress. In the Aberdeen Group study, executives listed maintaining or improving customer satisfaction and service levels, maintaining or improving service levels with reduced budgets, and managing confusion and uncertainty over the introduction of new technologies as their top three issues with regard to their contact centers.

Does this mean that HCOs must wait for vendors to deliver the requisite integration in their products? Do HCOs have to consider significant investments before progress can be realized?

The answer to both of these questions is no.

Web services and development technologies have evolved to a point where

process and data integration is possible without replacing core systems. In fact, integration can be done on the client side. Finally, powerful new information worker tools available now can deliver a collaboration environment that enables vastly improved customer service, agent productivity, and real-time data access and business process integration.

## Integration and Collaboration Services

Maoz, along with Wendy Close and Esteban Klosky, suggest that: "... the future of CSS will shift to analytically driven service processes that calculate lifetime customer value, optimal service levels by customer type and service activity, and to delivering a consistent customer experience on two axes:

- Across departments and lines of business
- Across interaction types (Web, e-mail, kiosk, contact center and field service)<sup>5</sup>

At a minimum, future HCO customer service and support systems should be able to:

- Present a complete/unified view of the member
- Leverage and extend existing Line-of-Business (LOB) applications
- Enable multi-channel information and process flows
- Be deployed in a modular fashion
- Support open standards (e.g. XML, SOAP, WSDL)
- Support single or simplified sign-on
- Provide the highest degree of security and privacy

Taking this a step further, by definition a true customer service and support system must extend outside the enterprise. But rather than a system, it is really a service or a set of services that provides a holistic solution to the needs of your business.

At Infosys, we call it Integration and Collaboration Services (ICS). The notion of ICS is consistent with a Service-Oriented Architecture (SOA) approach to application, process and data integration and robust leverage of Web Services (as defined by the W3C 6).

A conceptual framework of ICS is shown in Figure 1.

The notion of a common user interface for viewing data from disparate application systems is not in itself unique; screen “scrapers” and screen “pop” utilities have been around for years. But when linked to the latest generation EAI engines with workflow orchestration tools, the UI is no longer just for viewing data.

When data from LOB applications can be accessed and parsed bi-directionally, a transaction can be effected outside or among disparate systems. This means that existing business rules and data stores are preserved in their native state, avoiding the expense of recoding and recompilation required for server-side integration. This phenomenon also applies to functional applications, such as CRM. The “intra” application transactions must, of course,

reference their own business rules as well as some means of managing data abstraction (metadata). ICS must therefore have its own business rules and data management layer.

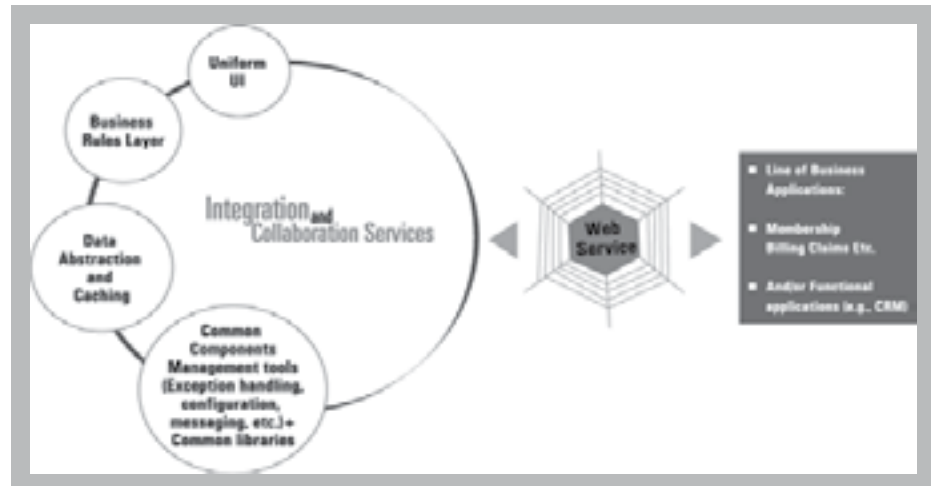
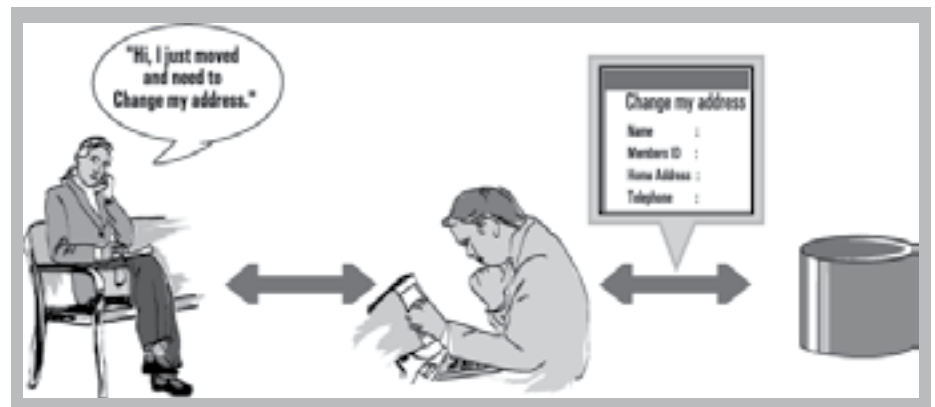
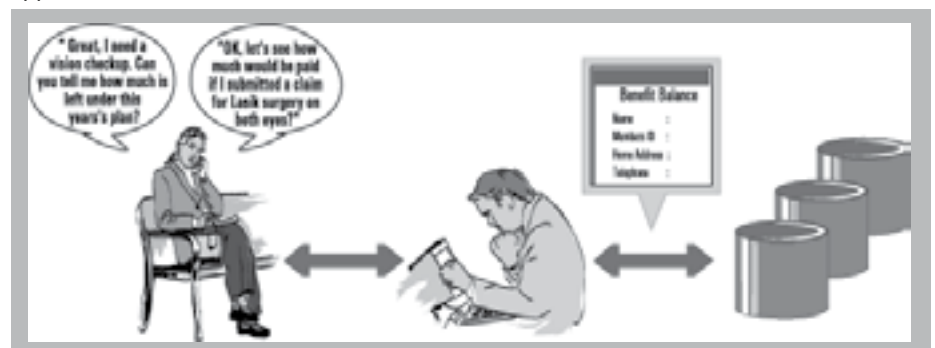


Figure 1: Integration and Collaboration Services

Finally, the mechanism for working with existing LOB and functional systems is where Web services are employed. When source data can be encapsulated in SOAP (Simple Object Access Protocol) envelopes and referenced as XML (Extensible Markup Language) data objects, then the need to disturb existing applications is minimized if not eliminated. Let’s consider how ICS might affect some common transactions that occur countless times every day. In our scenario, a member telephones her plan’s member services group. Her first request is to change her address. This is a fairly straight forward transaction and the customer service representative typically requires access to a single system, usually membership. The figure below represents this interaction.

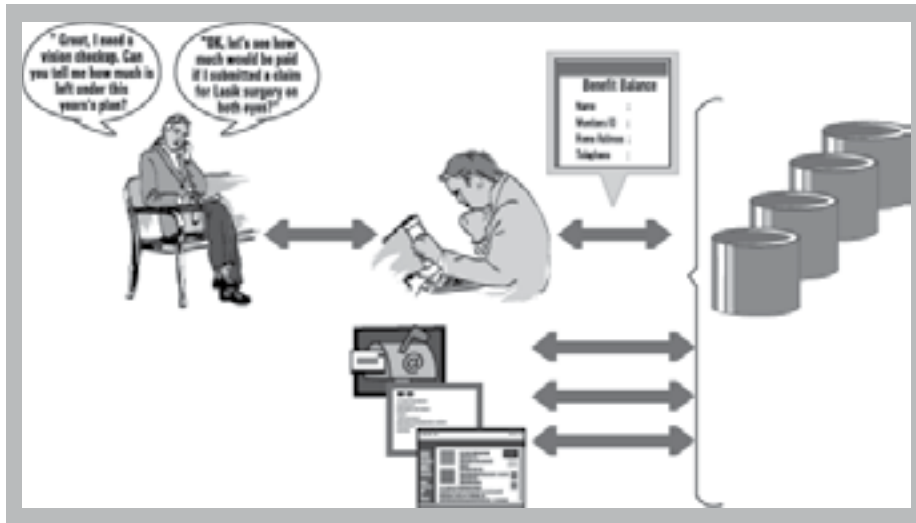


But what if during the same call, the member asks other questions or wants to process a specific transaction, such as a pre-treatment estimate? Things quickly get much more complicated as these transactions require access and coordination among multiple applications and data stores as shown below.





Finally, the ICS concept is not restricted to a particular application or access modality. One of the key benefits is the ability to support multiple messaging channels, including voice, Web, chat and email. So the member can execute the same queries and transactions in a variety of ways as the diagram below illustrates.



Other benefits of ICS include modular build-out (i.e. a channel at a time), leveraging of existing applications and data stores, and the freedom to use LOB applications without degrading customer service capabilities. Because ICS is based on SOA and XML Web Services, an HCO can also capture the benefits of ICS even if some components of customer support are provided externally. For example, if a LOB application or process such as enrollment processing is managed by a third party, an

HCO can remain the common 'face' to the member by leveraging the ICS as the 'front end' for customer support.

### A Pragmatic Approach

Like any development project, the deployment of ICS should be built on a defined vision, specific objectives and an explicit statement of scope. Many HCOs have focused on cost reduction as the core objective of contact center investments. But

with the higher return on customer service investments over sales and marketing programs, consider an ICS rollout as a low-cost approach to enhanced customer service and integration. But that doesn't suggest objective metrics should not be defined and measured. These include call abandonment rates, call time reduction, enablement of new channels (e.g. instant messaging), customer satisfaction ratings and so forth.

Second, start small. If your organization is not well experienced with Web services and SOA, consider piloting an ICS solution on a single channel first. You can add others over time.

Third, ensure broad participation. ICS is not a technology concept but a transformative approach to enabling superior customer service. Be sure to include representatives from core support functions including membership, claims, billing, etc. in addition to existing contact center customer service representatives.

Finally, look for technology and services partners that share your vision and understand both the promise and the implications of transformative customer support. Customer (member) satisfaction is a journey, not a destination.



## About the Authors:

**Brian Armstrong** is a Senior Manager with Infosys in the Insurance, Healthcare and Life Sciences business unit. Brian has nearly 18 years of experience in professional services and software companies. His work with leading healthcare organizations includes data warehousing development, back office systems conversion, distributed computing infrastructure migration, process reengineering and systems development for membership, billing and product development, IT risk analysis, and business and information systems strategic planning.

**Beena Nair** is a Business Analyst with Infosys in the Insurance, Healthcare and Life Sciences business unit. She has about 6 years of IT experience working with leading US based healthcare clients. Her primary focus has been healthcare pharmacy applications, new products, HIPPA 837, state mandates, behavioral health, and disease management.

**Cherag Mehta** is a Project Manager with Infosys in the Healthcare and Life Sciences business unit. Cherag has 7 years of experience in the Information Technology area and 4 years experience working with leading US Healthcare clients. His healthcare experience includes projects for Complaints and Appeals, Member Rights for HIPPA and Automated Quoting Center. These projects were implemented in J2EE and .NET technologies.

**Priya Rajesh** is a Solution Champion with Infosys in the Insurance, Healthcare and Life Sciences business unit. She has over four years of professional experience in business consulting for Healthcare and Life sciences companies. She has experience in design, implementation and maintenance of core healthcare applications and has worked on numerous strategic initiatives, identifying and managing relationships with joint venture partners, helping business partners evaluate IT needs and provide technology and business solutions across various business functions.





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For more information, contact [askus@infosys.com](mailto:askus@infosys.com)



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