



## Healthcare Organization Simplifies Claims Process, Expects 40 Percent Productivity Rise

### Overview

**Country or Region:** United States  
**Industry:** Healthcare

### Customer Profile

Molina Healthcare is a health-maintenance organization based in Long Beach, California, that employs more than 2,800 people. Its 2009 revenues were U.S.\$3.6 billion.

### Business Situation

Employees responsible for the submission of claims and encounters had difficulty working with data from multiple sources and needed labor-intensive IT assistance to address common problems.

### Solution

Molina Healthcare built a Web-based application that uses Microsoft Silverlight to present data and applications to users in a visual, intuitive, and unified way.

### Benefits

- Expected productivity rise of up to 40 percent
- Optimized value for existing applications
- Platform for continuing improvements

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Neeraj Sharma, Manager, Care Systems, Molina Healthcare

Molina Healthcare serves 1.4 million people in nine states through a provider network of more than 100,000 physicians, nurses, dentists, and other healthcare professionals. To reduce the complexity of the process by which it submits claims and encounters to the states for reimbursement, the company needed to give employees a clear view of data as it travels among the many data sources and applications involved in the submission process. To do that, the company created a solution based on Microsoft Silverlight and the Microsoft .NET Framework that presents data in a unified, highly intuitive fashion. As a result, business users will be able to perform analyses and reporting largely without assistance from IT, for an anticipated rise in their productivity of up to 40 percent. In addition, the company will be able to optimize the value of existing applications.

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## Situation

Founded in 1980 and headquartered in Southern California, Molina Healthcare is a health-maintenance organization that serves individuals who are insured under Medicaid and Medicare. Molina Healthcare has six health plans accredited by the National Committee for Quality Assurance, a private, nonprofit organization that is dedicated to improving healthcare quality. Through its 20 clinics and other facilities in more than a dozen U.S. cities, Molina Healthcare serves about 1.4 million people.

Similar to any other organization that is part of the U.S. healthcare industry, Molina Healthcare faces a challenge in managing the complex connection between healthcare service providers and the entities that pay for the services. That challenge is especially daunting for Molina Healthcare because the company conducts business in nine U.S. states, so it must work with nine different government entities that manage Medicaid and Medicare dollars in nine different ways.

Central to the success of this collaboration is the process of submitting claims and encounters (that is, information about interactions between an individual and his or her healthcare provider) to the states. At Molina Healthcare, more than 300 individuals are engaged in this process, which involves four steps: (1) collecting the data from a half-dozen separate sources, (2) preprocessing and validating the data according to compliance and reporting rules mandated by the states, (3) integrating the data for conversion into a claim or encounter, and (4) submitting the claim or encounter to a given state.

At any point in the process, the individuals doing this work may also use the data for analysis, reporting, and addressing any issues that might arise. One problem

common to this process, not just at Molina Healthcare but throughout the industry, is a data-entry error in a diagnostic code, provider name, or an array of other variables that results in a mismatch between claims and reference data.

To resolve the problem, Molina Healthcare employees might need to initiate formal communications with patients, providers, or payers—tasks that require a “big picture” view of the data and its progress through the various steps, according to Neeraj Sharma, Manager of Care Systems at Molina Healthcare. Until recently, however, the people who were trying to resolve such problems lacked the comprehensive overview of the data that they needed.

“Whether users were encounter data specialists, analysts, managers, directors, member services experts, or executives, they were unable to easily understand the data as it travels across multiple systems, each of which transforms the data to address specific business needs,” Sharma explains. “As a result, these individuals were unable to resolve problems without involving the IT staff—which meant opening a service ticket, enlisting a research team, and exchanging e-mail among up to a half-dozen people.”

## Solution

To give their employees better access to needed information, Molina Healthcare executives decided to build a solution that would simplify the claims and encounters submission process by exposing data to the business users in a more visual and intuitive manner. Having used the Microsoft .NET Framework and other Microsoft development technologies in the past, Sharma and his colleagues selected the Microsoft Silverlight 3 browser plug-in technology as the foundation of the solution.

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Neeraj Sharma, Manager, Care Systems,  
Molina Healthcare

With the Silverlight-based solution for claims and encounters, Molina Healthcare employees enjoy an inviting and intuitive way of accessing essential information.

“We wanted to create a rich Internet application that would feature sophisticated visual effects and require minimal training for users,” Sharma says. “This made the selection of Silverlight an obvious one.”

Development took place over a six-week period and, according to Sharma, went smoothly, thanks to the team’s prior experience working with Microsoft .NET technologies. In addition to the .NET Framework and Silverlight, the team used the Microsoft Visual Studio 2008 development system, Windows Communication Foundation, and Microsoft Expression Studio design software for development. The team also employed Telerik controls to build interactive data tools, such as charts, grids, grouping, and graphs into the solution.

The team deployed the solution into a server environment based on the Windows

Server 2003 operating system and Microsoft SQL Server 2005 data management software, first to a pilot group of 15 and then to a select group of 40 business users. When the rollout is complete—which is anticipated to happen in late 2010—up to 400 people will use the solution on a regular basis.

## Benefits

With the Silverlight-based solution for claims and encounters submission, Molina Healthcare is empowering its business users to be more productive. The company is operating more efficiently overall because it is deriving more value from core platforms, operational data stores, and other existing systems, such as its inbound gateway system and outbound submission system. The company also is enhancing its industry leadership and competitive position by improving the quality of its processes and services.

## Boosting Productivity by Up to 40 Percent

As Sharma describes it, the Silverlight-based solution enables users to access claims and encounters data from all sources simultaneously in a highly intuitive fashion. Users can easily view a given file, the different data sources that are “touched” as a claim or encounter passes through the submission process, the number of claims or encounters that are pending, the status of each of them, and more.

“With this solution, users have a seamless view of information and direct access to the knowledge they need for addressing the challenges involved in claims and encounters submission,” Sharma says. “Not surprisingly, users themselves are saying that they believe this solution will help them to reduce the work required for a given submission by up to 40 percent—and



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as we do the rollout, users in states that do not yet have the solution are clamoring for it.”

#### **Gaining More Value from Existing Technology**

At Molina Healthcare, it is not just employees' time and efforts that are being optimized, but also the value of core business systems, especially the applications and data sources that provide the primary data for users who create the claims and encounters submissions. These systems include the main core platform at Molina Healthcare, which contains information about members, providers, business rules, and more; an operational data store; a Web portal through which providers submit claims; an outbound database for encounters; the company's gateway staging database for claims; and a legacy staging database.

“Because the Silverlight-based solution gives users a clearer view into data and applications, they are using core business applications a lot more effectively,” Sharma says. “This helps the company to optimize its significant IT investment.”

By making the most of both human and IT resources, Molina Healthcare also will raise the quality of its service. “We will know easily where any claim or encounter is within the submission process, and why, so that if there is a delay, we can correct the error responsible for the delay,” Sharma explains. “Once the solution is fully deployed, we expect to be able to deliver submissions to the states sooner than before and with improved quality. We will enhance our image, thereby solidifying our leadership and competitive standing.”

#### **Extending Functionality**

Once the initial release of the solution is fully deployed, Sharma and his team will phase in additional functionality, including more intelligence about reporting and workflow and enhancements to tracking. They also will incorporate capabilities that extend productivity benefits to the users who handle the front end of claims and encounters—when the information about services rendered is first received at Molina Healthcare from physicians and other providers.

For Sharma and his colleagues at Molina Healthcare, implementing such enhancements is made easy with the Silverlight-based platform in place. “More than any other technology we considered, Silverlight offers us exactly what we have been seeking: a rich, visual feel; power in the platform; and value for the business,” he says. “With Silverlight, we have a foundation for continuing improvement and enhancement of this solution, and for building other solutions to come.”

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