IBM

UnitedHealthcare prescribes online services for members' well-being.

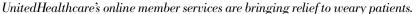|	
Application	Online provider directory, member services
Business Benefits	Traffic exceeds 6.5 million hits a month, expected to reach 10 million; 95% savings over call center transactions; $70,000 saved in printing costs for one customer
Software	IBM WebSphere™ Application Server, Advanced Edition IBM WebSphere Performance Pack IBM DB2® Universal Database™ for AIX® IBM SecureWay® Network Dispatcher IBM MQSeries® for AIX IBM WebSphere Studio IBM VisualAge® for Java™ IBM CICS® IBM Net.Data®
Hardware	IBM RS/6000® IBM S/390®
Services	IBM Global Services

Why do so many healthcare organizations treat patients like they're all the same? After all, people aren't machines — they need special care from someone who understands their individual needs. Fortunately, there's one healthcare company that actually listens. Instead of summarily telling patients what's right for them, it asks, "What works for you?" The company is UnitedHealthcare, the second largest healthcare company in the United States. No doubt, its customer-friendly corporate credo has helped make it a popular choice in the healthcare marketplace.

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– Martin Toomb, Director of Business Systems Development, UnitedHealthcare

UnitedHealthcare's online member services are bringing relief to weary patients.

e-business

It's about business, not just technology.

The online provider directory makes it easier for patients to find a doctor who understands their unique needs.

UnitedHealthcare designs and operates health benefits systems for commercial, Medicare and Medicaid products. The company serves more than 14 million individual consumers as members of its healthcare programs and arranges access to care through more than 340,000 physicians and 3,500 hospitals across the United States and abroad. With such an extensive customer base, finding the right patient-doctor match can be painful. But it isn't. That's because UnitedHealthcare has discovered the power of e-business.

The company's Web site, *www.uhc.com*, is not only making it easy for members to access information about its health services, but also enables it to lower the costs of providing these services. Powered by a range of IBM e-business technologies from the Application Framework for e-business—including IBM WebSphere Application Server, Advanced Edition, IBM WebSphere Performance Pack, IBM DB2 Universal Database and IBM MQSeries—the Web site has recorded phenomenal growth. With online traffic reaching 6.5 million hits a month, and expected to exceed 10 million by year end, it's obvious customers appreciate the online conveniences offered.

Finding the right caregivers online

One such convenience is an online provider directory, designed to help members locate participating physicians, hospitals, pharmacies and healthcare providers. Members can search the database for primary care physicians (PCPs) or healthcare plans based on eligibility or location. They can also download detailed information about the providers, their practices, driving directions, maps and much more.

Stored in DB2 Universal Database for AIX, the online provider directory has helped UnitedHealthcare save $70,000 in printing costs for one corporate client and significantly improve customer service overall. Says Martin Toomb, UnitedHealthcare's director for business systems development, "By offering directory services online, we've been able to reduce the volume of paper directories we're printing. So, we're seeing substantial savings in printing costs."

Treating customers right

Recently, UnitedHealthcare launched new services that will enable members and healthcare providers to transact business with UnitedHealthcare over the Internet. The company receives 40 million customer service calls annually at its call centers. Toomb points out that with such volumes, customers sometimes need to wait before service representatives can attend to their calls. "By providing our customers with around-the-clock, online self-service and redirecting some of the telephone calls online, we're significantly improving customer service," says Toomb. "And, we're also reducing costs. Online transaction costs are 95 percent lower than call center costs. The potential savings will be even greater as more customers use the online service."

"Our application is a perfect example of how the Application Framework works—it has all the components we need, and we can easily integrate these with our existing systems to continue expanding our e-business strategy."

–Martin Toomb

With password-authorized access, members who register for the service will be able to view their accounts to track claims status, request new ID or prescription cards and change PCPs. Healthcare providers will be able to submit requests for eligibility verification online and receive immediate confirmation.

Anticipating future growth

Initially testing the solution with nearly 3,000 of its own employees—who can access the services at *www.myben.com*—UnitedHealthcare reported a 50 percent acceptance rate within the first two months. "Eventually we will extend this service to all 14 million members, 340,000 physicians and 3,000 hospitals," Toomb says. "With this escalating volume in mind, we selected technology that we were confident could handle extremely high transaction volumes. We know that with the WebSphere product family and DB2 Universal Database, our site will scale with growing online traffic." One of the first clients to avail itself of these member services is IBM—more than 60,000 IBM employees will be able to register for the online services.

UnitedHealthcare's Web applications run on a cluster of IBM RS/6000 servers. Two network servers run IBM SecureWay Network Dispatcher, a component of WebSphere Performance Pack. Two Web servers run WebSphere Application Server, Advanced Edition. And two database servers host DB2 Universal Database for AIX Version 6.0 and MQSeries for AIX Version 5.1. Net.Data provides dynamic connectivity to the 20-gigabyte DB2 database, while MQSeries enables connectivity with the back-end legacy IBM CICS applications—such as claims processing—residing on IBM S/390 parallel enterprise servers. Front-end application development was done using IBM VisualAge for Java and IBM WebSphere Studio.

Says John Santelli, director of technical development at UnitedHealthcare, "Over time, as our customers demand greater accessibility, we'll want to further enhance our ability to ensure 24-hour-a-day, 7-day-a-week online services. MQSeries will play a significant role in facilitating this by providing asynchronous messaging with our legacy systems. It will prove to be an important asset in our architecture."

The servers are configured using IBM High Availability Cluster Multiprocessing (HACMP) software to provide redundancy and fault resilience. This ensures there will be no interruption in service even if a server is temporarily down. The system—hosted at IBM Global Services' Southbury, Connecticut facility—currently handles approximately 15,000 visitor sessions a month, and is designed to handle more than 2 million visitor sessions monthly.

"The tremendous scalability of DB2 … has helped us sustain this growth and move closer to our goal of becoming the largest and best company addressing the health and well-being marketplace in the U.S."

–Martin Toomb

At www.uhc.com patients can quickly locate the pharmacies closest to them.

Defining a technology roadmap

Although the entire solution, from concept to pilot, was completed in five months, the project is far from over. New services, such as online explanation of benefits, are in the pipeline. With UnitedHealthcare's e-business continuing to evolve, Toomb notes the advantages of being able to rely on a clear technology roadmap defined by the Application Framework for e-business. "We didn't actually begin with the Application Framework in mind, but in retrospect, it really makes sense," Toomb explains. "In fact, our application is a perfect example of how the Application Framework works — it has all the components we need, and we can easily integrate these with our existing systems to continue expanding our e-business strategy. Or we can easily plug in a product from another vendor, if necessary."

Although this seems a logical choice now, selecting the best technology for a system this large was not as simple as it appears. "When we first began almost one year ago, we sat down with IBM Global Services and had extensive discussions on the best technology to use," recalls Santelli. "Given our needs for scalability and open standards — to handle high volumes and ensure integration with back-end systems — the WebSphere product family was really the ideal choice."

Santelli continues. "For us, the most intriguing feature of WebSphere Application Server was its support for multiple platforms. The rate at which our traffic volume is growing, if we ever need to deploy our Web application on an S/390 server, we can. The portability between platforms also proved useful during application development. We could develop on a Microsoft® Windows NT® server and test on the AIX server, which allowed us to reduce our development time."

Its multiplatform capabilities and scalability are also what make DB2 Universal Database a solid data repository for UnitedHealthcare. Says Toomb, "There's been dramatic growth, not only in the size of our database, but also in the access we provide to it and the number of customers who come to visit it. The tremendous scalability of DB2, which is at the center of our e-business solution, has helped us sustain this growth and move closer to our goal of becoming the largest and best company addressing the health and well-being marketplace in the U.S."

Santelli agrees and is proud that UnitedHealthcare has, in his words, "enabled true e-business. That means we've extended core business processes to the Web, truly empowering customers to manage their accounts." He shares credit for this achievement with the IBM experts who worked with UnitedHealthcare's development teams. Toomb concurs. "We've gained from each other's experience — and IBM has plenty when it comes to e-business — not just during this project but at other marketing and industry forums. The commitment and service we get from IBM reflects the high customer-service standards we set for ourselves," says Toomb. "Ours is not a vendor-buyer relationship — it's truly a partnership we value."