

To Your Good Health *Salem Health Solutions mines strategic healthcare information with an IBM® solution from Champion Solutions Group*



Data has become the lifeblood of most organizations. But for Salem Health Solutions, it takes on very human and critical dimensions. That's because the data Salem Health collects today is a prescription for better healthcare tomorrow.

Salem Health Solutions, a new health management information subsidiary of North Carolina's Novant Health Inc., fulfills a growing new need – providing major healthcare organizations with information about what happens to thousands of patients.

“Clinical information, such as an analysis of outcomes from different medical procedures, can help our customers, payors, employers, research organizations and healthcare providers - improve healthcare and keep costs down,” explains Geoff Wood, President and CEO of Salem Health Solutions. “The data allows them to develop proactive strategies for improving treatment before patients become critically ill.”

“We provide immediate analysis to our clients through Web reporting,” adds Richard Bryant, Chief Information Officer of Salem Health Solutions. “Using our products, the Chief Medical Officer (CMO) of a hospital can securely access our extranet whenever analytic information is required. The CMO can then easily direct further inquiry and analysis of variances because all users can have access to the same information appropriate to their security levels.”

As a startup company, Salem Health Solutions' knew it could count on Champion Solutions Group, an IBM Premier Business Partner, to help it develop an infrastructure capable of analyzing millions of medical and insurance records, and quickly deploying customized analysis of this information. At the same time, the solution had to support Salem Health's aggressive growth plan.

In the end, Champion recommended IBM eServer™ pSeries™ and IBM eServer™ xSeries™ servers, IBM Fibre Array Storage Technology (FAST), combined with IBM's DB2® database software - a solution that puts complex information at everyone's fingertips. It's definitely what the doctor ordered.

Industrial-strength hardware and software: getting better all the time

Salem Health Solutions was founded to integrate huge quantities of disparate medical data into a single source of cohesive, accurate and thorough clinical and administrative healthcare information. Salem Health needed to create an environment capable of both analyzing the clinical information supplied by its parent company and also one that would support customers nationwide.

And that's where Champion Solutions Group has made the difference. Champion, a technology infrastructure company, has earned a national reputation for helping data dominated businesses effectively access, utilize, grow, store and protect mission critical information, on a 24x7x365 basis.

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Richard Bryant, CIO, Salem Health Solutions



"We selected Champion as our vendor because of its reputation for responding quickly," says Mr. Bryant. "I know that if I have a service problem, they'll be here the next day."

Further, as an IBM Premier Business Partner, Champion brought a significant value proposition to the table. "This is an industrial-strength business, and we know that IBM can provide us with technology robust enough to grow with us, as we grow," adds Mr. Wood.

A place to grow

Today, the technology that Salem Health relies on is a powerful IBM eServer pSeries server, a workhorse that features IBM's award-winning POWER4 64-bit microchip and runs AIX® 5L (Advanced Interactive eXecutive, IBM's implementation of UNIX®) and Linux technology.

To store and process the data, IBMs DB2 Extended Enterprise Edition database software – combined with four IBM eServer xSeries servers – keeps the solution robust and remarkably scalable, explains Chris Serrano, the Senior Solutions Architect for Champion. "Each server can comfortably store five terabytes of data using IBM's Fibre Array Storage Technology."

"It allows us to quickly compare the data we receive from any one provider to all the data in our universe," says Mr. Wood. "Our clients can use that analysis to track and improve their patient outcomes, identify overall trends, and develop best practices. In the long run, they will be able to use it for disease management, wellness and clinical research initiatives, and analysis of healthcare finances."

All together now

Beyond scalability, Salem Health also looked to IBM for a single integrated solution – middleware, storage and servers – capable of

IBM Business Partner:	Champion Solutions Group
Specializations:	Data Management, High Availability Clustering, Storage and Server Consolidation, Backup and Recovery
Territory:	United States
Customer Target:	Life Sciences, Small and Medium Business, Cross Industry, Manufacturing, Retail/Distribution, Banking & Finance

deploying cutting-edge applications. Salem Health runs advanced statistical and reporting tools, sophisticated software that encrypts all patient data to ensure anonymity, and proprietary artificial intelligence that can filter data and predict outcomes.

"We knew that IBM was the company that could provide everything that we needed, in one package," says Mr. Bryant.

"If you're going to provide the most comprehensive and effective solution to meet a customer's business needs today while laying the foundation for growth to meet the business needs of the future, you want to lay the groundwork with the best of the best," adds Ernie Cavasinni, Client Manager for Champion Solutions Group. "And IBMs best-of-breed technology is not only built by IBM, it's supported by IBM, maintained by IBM, and backed by IBM."

Power plus

Power, speed and versatility were also key objectives. That's where the IBM eServer pSeries really shines. "It's not only affordable,

it's a mid-sized system of phenomenal performance – for today and well into the future," points out Mr. Serrano. "Salem Health will be able to accommodate up to 16 1.1 gigahertz POWER4 processors, up to 128 gigabytes of memory, and up to 60 I/O (input/output) adapters for system expansion."

The system can run large workloads, or be divided into as many as 16 "virtual" servers, offering the opportunity to consolidate applications. "That allows Salem Health to create multiple logical subsystems, so they can run different customers separately," explains Mr. Serrano.

Looking to IBM for more

IBM is demonstrating keen interest in solutions like this for small- and medium-sized markets. Indeed, IBM has a Life Sciences team dedicated to promoting this segment of the industry.

As for technology, "this business is anything but static," says Mr. Wood. "We'll always be looking to Champion and IBM for the latest storage and processing solutions."

And that's a good prognosis for America's healthcare providers, and their patients.

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