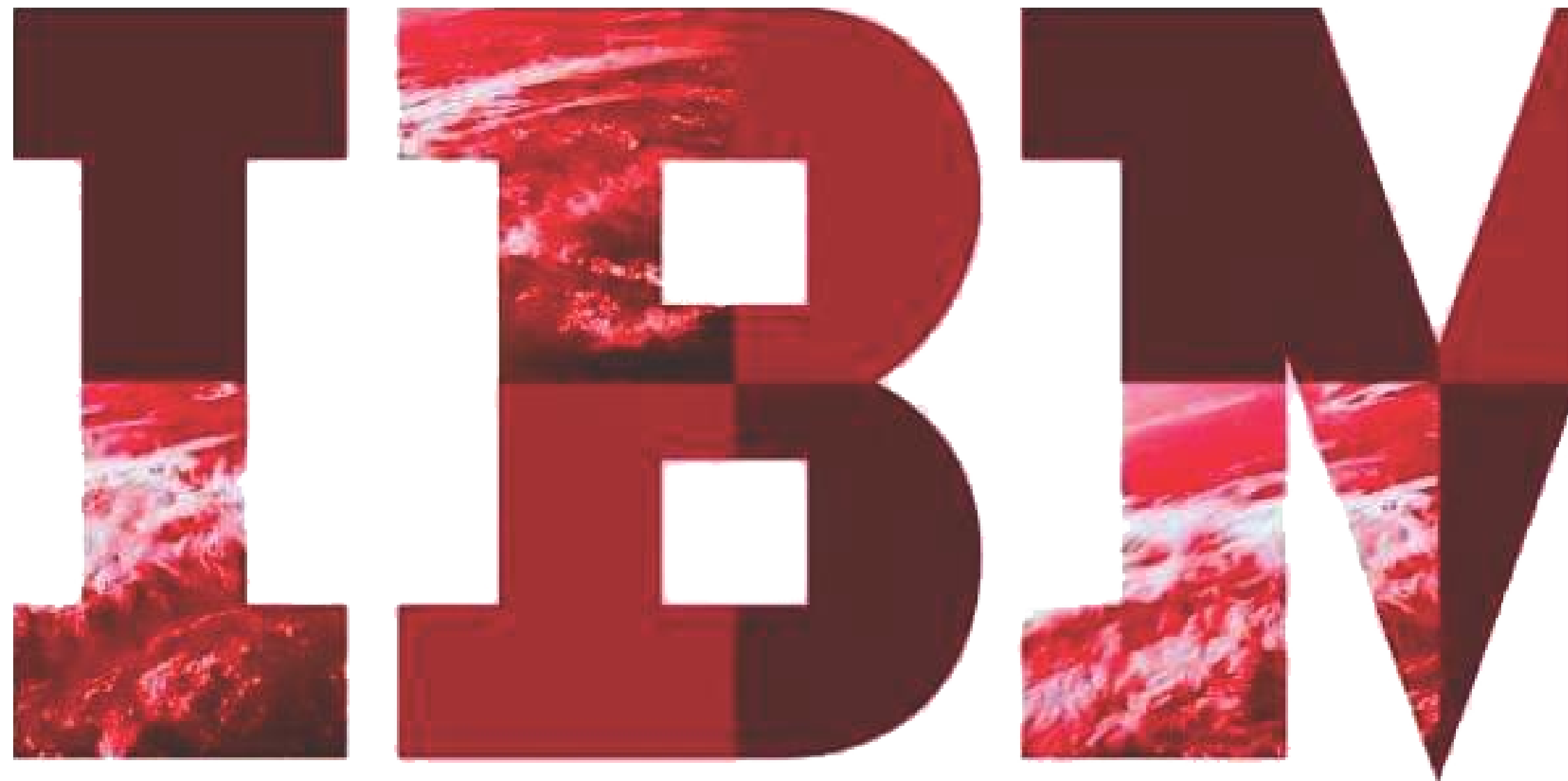


Smarter Healthcare: Improving Payer-Provider Collaboration

TriZetto® and IBM® deliver performance and reliability to reduce operating expenses and improve care efficiency





Payer Challenges and Supportive IT Solutions
Escalating Provider Costs and Risks
Need Real-time Payer-Provider Collaboration
Advanced Eligibility Solution at Providers' Location
Provider POS Direct Solution at Payer's Location
High Performance and Reliability
Solution Architecture Enhancing Payer-Provider Collaboration
Infrastructure Matters: IBM Workload Optimized Systems
Smarter Healthcare Software from IBM Improves Agility and Operational Efficiency
For more information

Executive Summary

Healthcare payers and providers today face enormous challenges in transitioning to the accountable care model where provider reimbursements are tied to the quality and cost of care. The quality aspect has three factors: safety; value; and appropriateness. Central to addressing these factors is the issue of data integrity and connectivity. Payers and providers need the right information at the right time to ensure correct decision-making to optimize care. From a technology standpoint, IT collaboration between payers and providers is fundamental to this goal.

Payers must continue to gain administrative efficiencies, implement innovative payment models to better align incentives towards health outcomes and disease prevention, and build new alliances with consumers and policymakers to reduce costs. Likewise, providers must improve the efficiency of current delivery models and must move away from a reactive mode of care delivery to a proactive mode. This requires robust information technology (IT) solutions to provide faster, more efficient healthcare delivery with fewer errors, especially in the context of today's changing regulations.

An industry leader with decades of experience in delivering innovative healthcare IT solutions, TriZetto helps improve administrative efficiency and quality of care at lower cost by enabling a more collaborative healthcare community, committed to transforming the way health is managed and care is delivered. These offerings include comprehensive enterprise solutions for core administration, care management, portals,

payer-provider collaboration, revenue cycle management and others. To enable the necessary quality of service, these solutions require a robust, enterprise IT infrastructure.

For over 25 years, IBM and TriZetto have had a deep partnership and technical collaboration, with IBM supplying the infrastructure required to run TriZetto software. IBM provides an optimized enterprise-class IT infrastructure consisting of servers, storage, networking and software to deliver data integrity and connectivity for TriZetto solutions. Components include:

- Servers: IBM Power Systems™, x86 servers
- Storage systems: IBM DS8000®, IBM XIV® Storage System, IBM Storwize® family, IBM FlashSystem™ family
- Pre-configured, pre-integrated infrastructure: IBM PureFlex® System
- Networking
- Software: IBM WebSphere®, IBM Sterling Connect:Direct®

This comprehensive integrated architecture offers payers and providers a very secure, reliable, high performing and scalable IT environment that enhances collaboration to improve operational efficiency.

Together IBM and TriZetto support small to very large-scale deployments with multiple applications integrated to provide a robust solution for payers and providers of all sizes. Regular performance testing and benchmarking provides proof points for TriZetto clients of a well-supported, optimized, resilient, and secure solution.

Executive Summary	Challenges for Payers and Providers	Payers and Providers Must Collaborate	IBM and TriZetto: A Premier Partnership	TriZetto Provides Superior Healthcare Solutions	IBM Systems Optimized for TriZetto
-------------------	-------------------------------------	---------------------------------------	---	---	------------------------------------

Challenges for Payers and Providers

Payers and providers today face enormous challenges in transitioning to the new models of care where provider reimbursements are tied to the quality, cost of care, and patient experience.

One of the greatest barriers to progress is coordination. Payers and providers need the right information at the right time to allow optimal decision making, but too often it is locked up in a siloed system.

Today, data integrity is compromised in two ways. First, data is scattered and isolated in several different silos. This is true for both ‘big’ data relating to information about diseases and their treatment and ‘small’ data generated by an increasing proliferation of sensors and devices attached to patients to monitor their condition. The data is often separated by technology, administrative, and political barriers that make it very difficult for providers to design timely and optimal care and for payers to validate reimbursement claims.

Second, semantic differences cause confusion. Even common medical conditions such as hypertension or diabetes are described in several different ways in patient records by different hospitals and doctors. And these in turn may be described differently in claims records. Coding errors also creep in during the data entry process. All of this can result in significant differences between claims data and clinical data for the same medical condition. And when patients undergo treatments at multiple hospitals during a course of treatment, all of the above is exacerbated.

The following figure depicts key participants in today’s emerging healthcare ecosystem including payers and providers who must be connected and must exchange trusted data. This requires robust information technology (IT) solutions to provide faster, more efficient healthcare delivery with fewer errors.

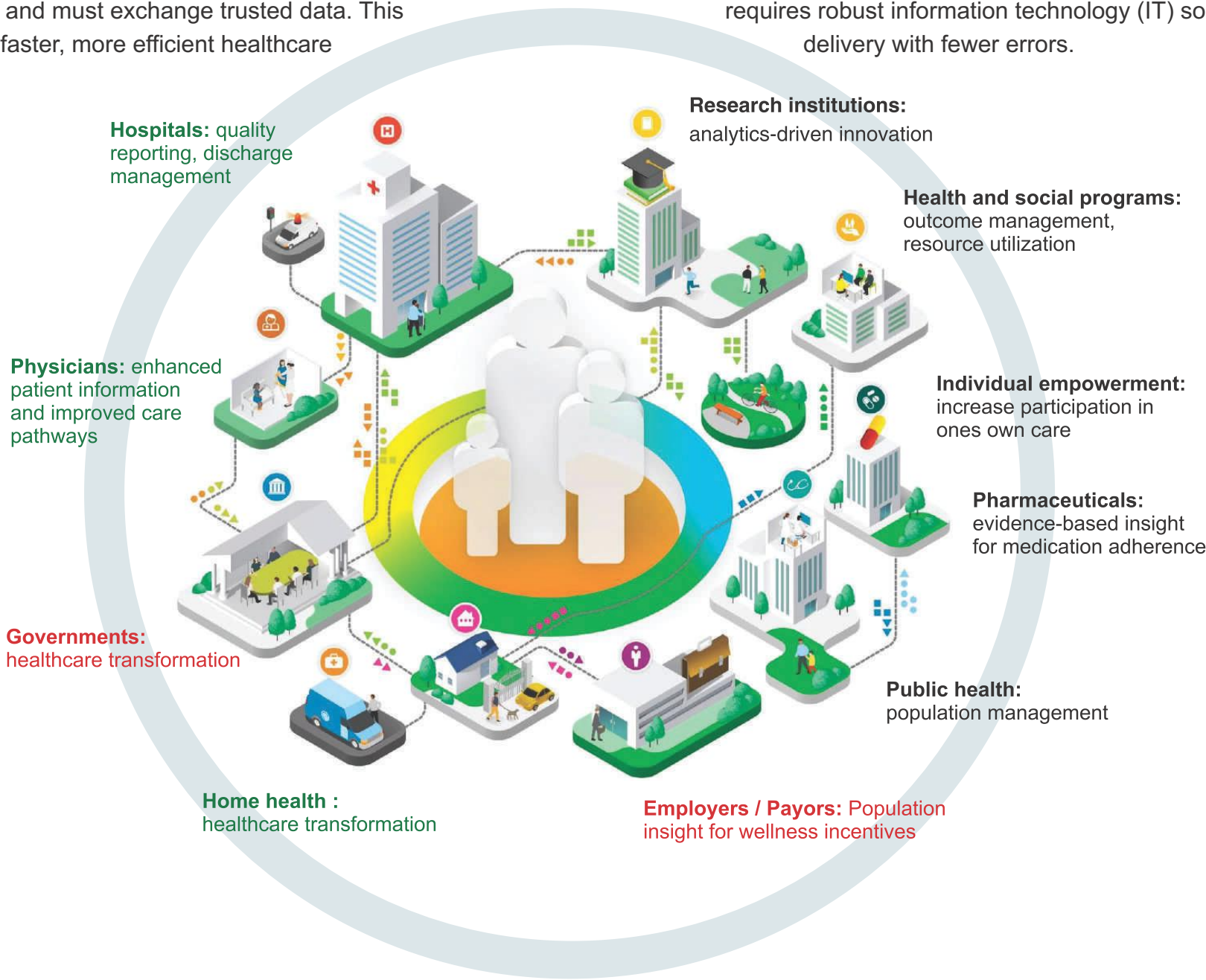


Figure 1: The Healthcare Ecosystem

Executive Summary	Challenges for Payers and Providers	Payers and Providers Must Collaborate	IBM and TriZetto: A Premier Partnership	TriZetto Provides Superior Healthcare Solutions	IBM Systems Optimized for TriZetto
-------------------	-------------------------------------	---------------------------------------	---	---	------------------------------------

Payers and Providers Must Collaborate

New models of care require a comprehensive effort on the part of both payers and providers involving modifications to culture, processes, and technology. From a technology standpoint, a unified IT collaboration between payers and providers can be fundamental to this endeavor.

Payer Challenges and Supportive IT Solutions

Payers' primary challenges include member retention through customer satisfaction. Further, providers expect effective payer practices that reduce processing time of transactions. To overcome these challenges, payer organizations are focusing on care management that reduces administrative costs in addition to improving the efficiency of their operations. For better results, payers and providers of all sizes should invest in modern healthcare IT that enables them to automate operational tasks associated with core healthcare management.

Escalating Provider Costs and Risks

Today, as patients face rising costs for healthcare services, providers are being forced to take on payment responsibilities and risks. Complex manual, labor intensive, error-prone and duplicate administration and payment transaction processes prolong providers' revenue cycle. Providers should reduce time and money spent on collecting patient payments and the administrative tasks.

Need Real-time Payer-Provider Collaboration

There is an urgent need to create a trusted relationship between the payer and provider communities to improve operational efficiencies for payment and other critical administrative processes and to comply with new healthcare programs. Real-time payer-provider collaboration will help transform core healthcare provider business processes, enabling them to reduce costs and risks. For example, with increased transparency on eligibility detail for decision making at the point of care and real-time access to claims information, providers can prequalify patients for care procedures in real-time while reducing payment risks and time and money spent in collections. The following figure illustrates many different healthcare organizations interact with the individual and therefore need to collaborate to deliver higher care quality at reduced costs.

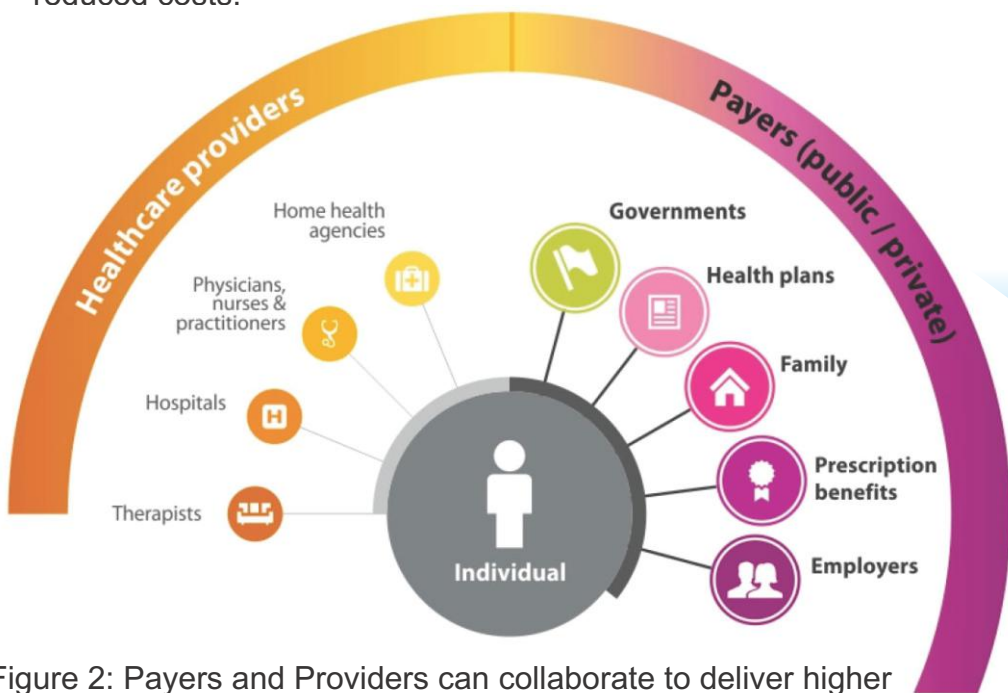


Figure 2: Payers and Providers can collaborate to deliver higher care quality at reduced costs



Figure 3: Value of Payer Provider Collaboration

Executive
Summary

Challenges for Payers
and Providers

Payers and Providers
Must Collaborate

IBM and TriZetto:
A Premier Partnership

TriZetto Provides Superior
Healthcare Solutions

IBM Systems Optimized
for TriZetto

IBM and TriZetto: A Premier Partnership

With over 25 years of partnership and technical collaboration, TriZetto and IBM are transforming the way health is managed and care is delivered. Key attributes include a portfolio of solutions that address the ever increasing healthcare industry challenges such as rising costs, regulatory changes and increased customer expectations.

Payers and providers of all sizes benefit from this long-term collaboration, deep healthcare industry experience and a range of solutions and technology enabling payers and providers to:

- Reduce administrative costs and business risk
- Support clients' compliance requirements with new regulations in the [Patient Protection and Affordable Care Act \(PPACA\)](#)
- Improve communication and collaboration
- Achieve higher patient/member satisfaction
- Improve patient outcomes at reduced costs of care

IBM and TriZetto address these requirements through their:

- Innovative capabilities
- Reliable, and consistently high-performing solutions
- Outstanding support backed with regular and rigorous performance benchmarking and testing.

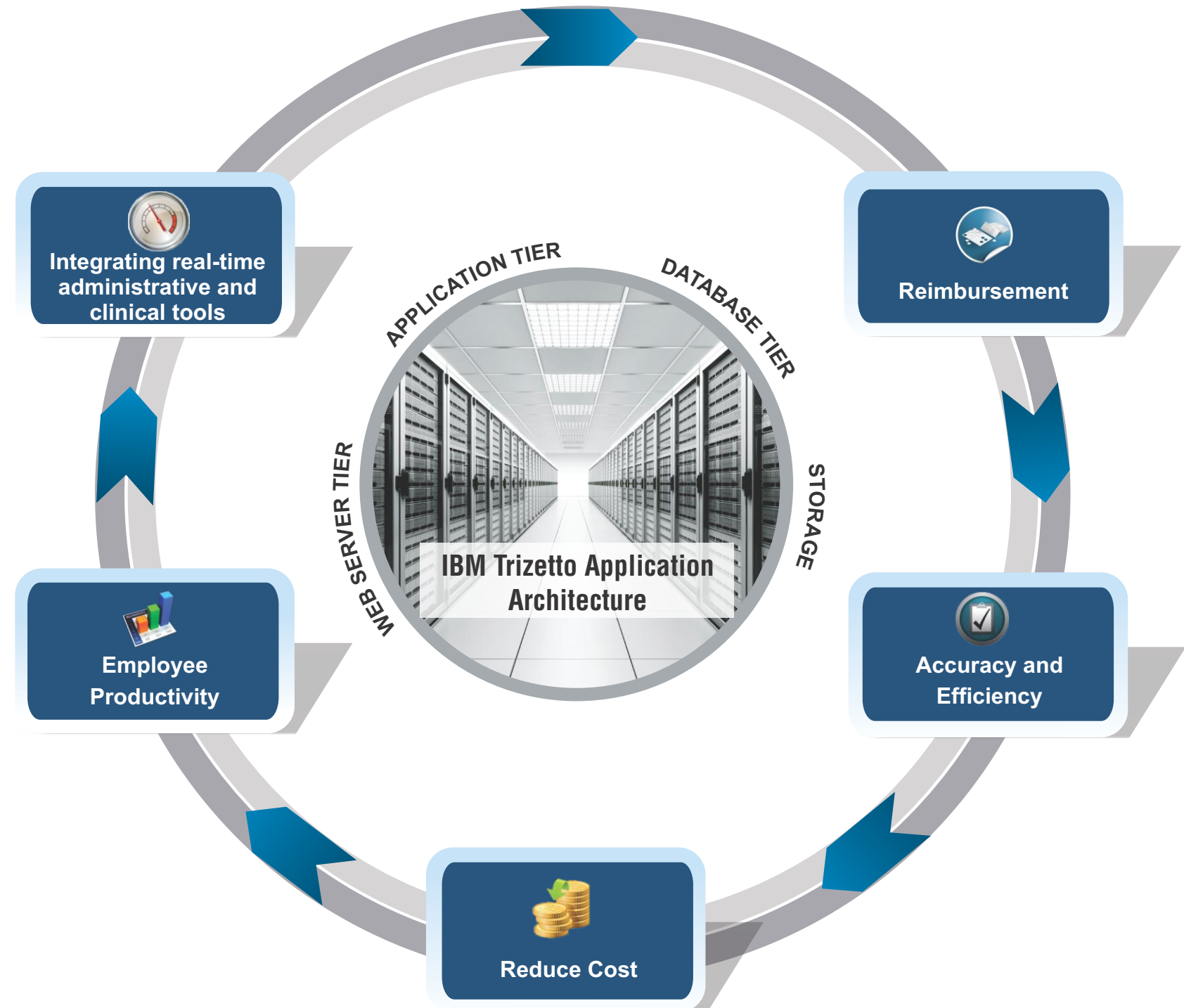


Figure 4: IBM-TriZetto Partnership

Executive
Summary

Challenges for Payers
and Providers

Payers and Providers
Must Collaborate

IBM and TriZetto:
A Premier Partnership

TriZetto Provides Superior
Healthcare Solutions

IBM Systems Optimized
for TriZetto

TriZetto Provides Superior Healthcare Solutions

An industry leader with decades of experience in delivering innovative healthcare IT solutions, TriZetto improves administrative efficiency and quality of care at lower cost by enabling a more collaborative healthcare community, committed to transforming the way health is managed and care is delivered. TriZetto partners with more than 350 health plan and benefit administration clients serving more than 180 million healthcare consumers and more than 230,000 care providers. TriZetto's comprehensive portfolio of software solutions benefits both payers and providers.

[TriZetto's Revenue Cycle Management \(RCM\) solutions](#) help physicians, hospitals and health systems simplify business processes and get more accurate payments quickly. More than 230,000 care providers trust TriZetto medical claims processing solutions to simplify claims reimbursement and revenue management. Over 400 Practice Management (PM) /Electronic Health Record (EHR) solution providers are also under contract with TriZetto. Key benefits for providers include:

- **Payment collection at the point of service (POS).** Providers can more accurately calculate patient financial liability and adjudicate claims at the point of service, enabling them to collect payment when services are rendered, rather than days or weeks later.
- **Streamlined interaction with payers.** Connect the providers who deliver care in real-time to the health plans that pay for it, to reduce waste, paperwork and phone traffic that slow the flow of revenue and increase the cost of healthcare.

- **Reduce the cost of collecting payment.** Reducing the claims processing cycle from days or weeks to potentially a matter of seconds helps to cut costs, increase efficiency and shorten the revenue collection cycle. This helps to lower the cost of care and enable providers to improve care quality.

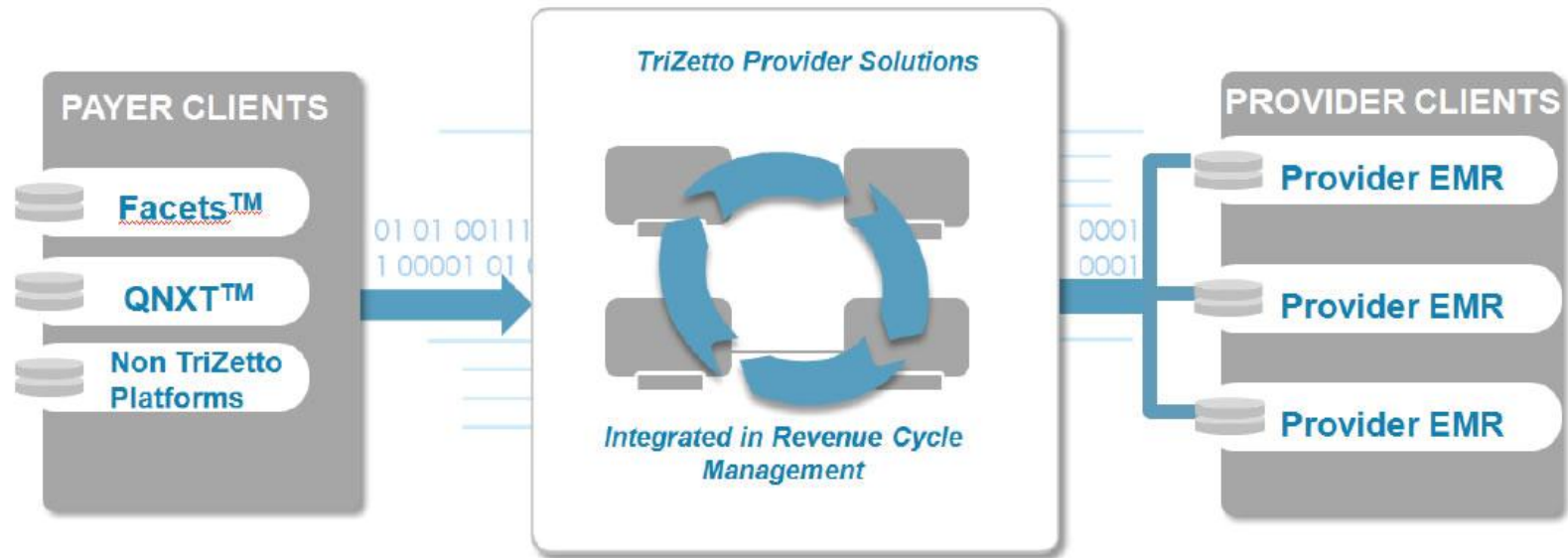


Figure 5: Integrated Functionality and Value Across Enterprise Business Cycles for Payers and Providers

Advanced Eligibility Solution at Providers' Location

TriZetto offers a broad set of solutions that payers and providers can use to help improve collaboration and exchange data in real-time. This includes the Advanced Eligibility Solution – a lightweight portal connected to a rich portfolio of back-end enterprise class applications implemented at payers' locations. This solution makes it easy for providers to better calculate accurate patient payment responsibility at the point of service and can help reduce bad patient debt and the time and money providers spend collecting patient payments.

With just a few clicks, the [Advanced Eligibility Solution](#) allows providers to:

- Instantly calculate a patient's payment responsibility, including co-pays, deductible balance and co-insurance, based on services entered at the time of query.
- Identify potential payment delays, such as the need for prior authorization and services not covered by a patient's insurance.
- Run a query typically within seconds at any point during the patient encounter before they arrive, at check-in and/or before they leave the office.

Unlike other “real-time” eligibility tools, TriZetto’s solution directly connects providers through payers’ Point of Service (POS) to back-end claims processing systems, providing a level of eligibility detail found previously only with claim submission. Now, provider scan receive detailed and accurate patient liability information based on provider-specific contracting, payer network rules, co-insurance, co-pays, deductibles, patient not covered items and services covered by Health Reimbursement Arrangement (HRA) funds.

A pilot test of the Advanced Eligibility Solution with 60 providers in the BlueCross BlueShield of Tennessee network found the solution running on IBM Power Servers and IBM Storage Systems, provides the infrastructure needed to analyze all the required data and support the solution. This enabled better customer service, lowers health care expenses and provides better medical management.

Additionally this test found that the advanced eligibility solution:

- Reduced calls to payers—more than 55% reduction for some practices¹
- Eased patient liability collections.

“With the Advanced Eligibility Solution, we can let patients know what services are not covered and how much they are going to owe, even before their appointment. This helps increase patient revenue from the get-go and improves patient relations by helping them make informed decisions about the services they receive,” said an office manager and administrator at a Tennessee pediatrics practice.

Provider POS Direct Solution at Payer’s Location

This TriZetto solution, calculates patient financial liability at the point of service. Providers can collect payment at the time services are rendered—or, in some cases, even before the patient’s visit—rather than days or weeks later. That means providers get faster payments and payers get fewer surprise costs.

The provider POS Direct solution gives providers online access (through portals like the Advanced Eligibility Solution) to the payer’s core administration system in order to update, submit or view relevant data. The provider’s staff can use the application to submit transactions in real time when scheduling appointments or when the patient is checking in or out. This can be accomplished via a standard web browser or Electronic Data Interchange (EDI). With Provider POS Direct, payers can:

- Increase administrative efficiency by reducing call volumes from members and providers, and by reducing pending/rejected claims that require manual intervention.
- Improve member and provider satisfaction and reduce the cost of churn.
- Reduce the cost of care by incentivizing providers to offer better discounts when negotiating contracts.

The following figure shows integrated functionality where providers get advanced payment adjudication and payers get fewer surprise costs.

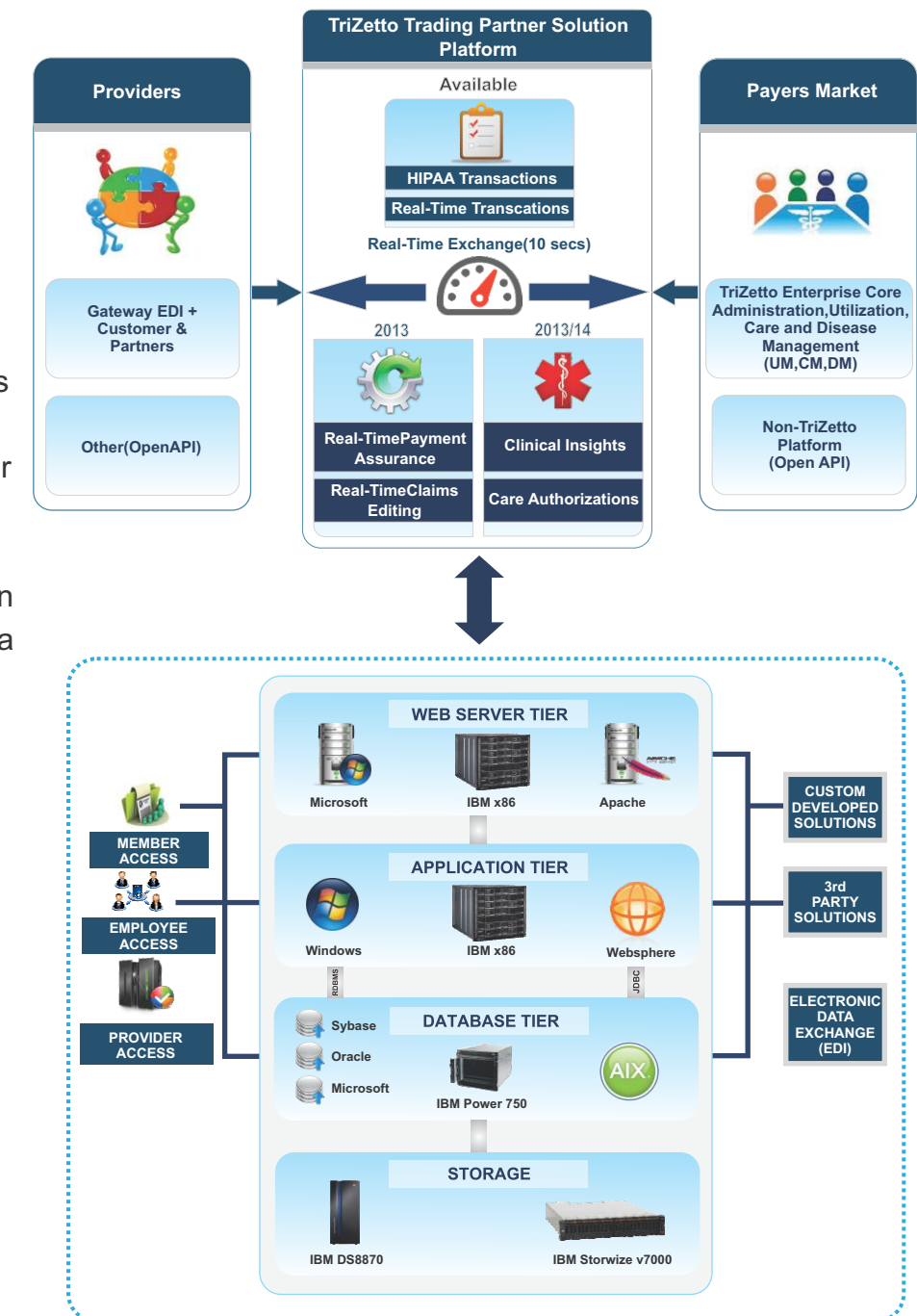


Figure 6: Payer Provider Collaboration Model Workflow

Executive
Summary

Challenges for Payers
and Providers

Payers and Providers
Must Collaborate

IBM and TriZetto:
A Premier Partnership

TriZetto Provides Superior
Healthcare Solutions

IBM Systems Optimized
for TriZetto

IBM Systems Optimized for TriZetto

IBM and TriZetto continue to have a strong, long-standing partnership that provides technical collaboration to drive continuous improvement and customer value. IBM provides a robust, reliable, high-performing platform to host TriZetto applications. **Today, approximately 90% of TriZetto Facets Sybase and Oracle® applications run on IBM Power Systems™ providing superior levels of reliability, scalability, performance and security.**

High Performance and Reliability

TriZetto regularly benchmarks its applications so that they scale properly and can support upper tier workloads. In fact, the Facets system recently satisfied the demands of one of the largest health plans using a 20-million member database. **TriZetto's customer hosting division has enjoyed over 99.998% uptime across nearly 170 IBM Power Systems servers over a 9 month period in 2013².**

A Robust Solution Architecture Enhancing Payer-Provider Collaboration

The IBM-TriZetto technical solution architecture for payers and providers consists of *three application tiers*:

1. Provider tier with portal solutions including the Advanced Eligibility Solution; 2. Point of Service (POS) tier implemented at the payer tier, and 3. Enterprise Web Application tier implemented at the payer tier.

The provider tier requires minimal infrastructure for deployment and works in a standard browser environment with a few key web services and connects to the POS tier at a payer's location.

The TriZetto Provider POS® application consists of several additional high-value web services and uses [IBM WebSphere Application Server \(WAS\)](#) running on an [IBM Power System](#) or x86 server. This POS tier connects to TriZetto's core enterprise applications tier providing providers and payers with functionality for more streamlined near real-time business collaboration.

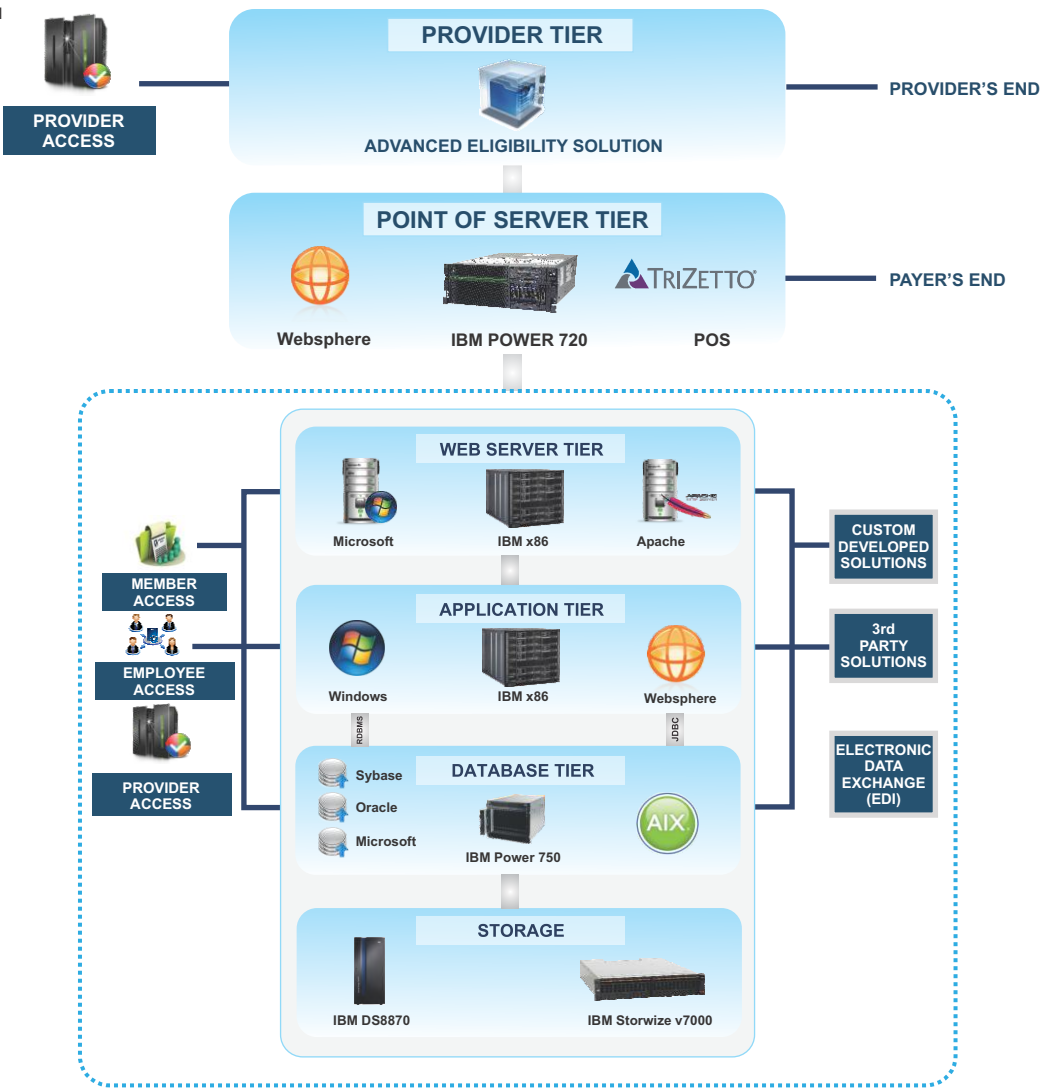


Figure 7: Technical Architecture

This third enterprise applications tier consists of four key infrastructure tiers. The web server and application tiers typically run on x86 servers. The critical database tier benefits from the reliability, performance and security of the IBM Power System running AIX. The storage tier, options include [IBM System Storage DS8000](#) and/or [IBM Storwize V7000](#) storage systems for example, provides the intelligent foundation to manage the vast volume of data generated by TriZetto applications. [IBM PureFlex System](#) integrates and optimizes all compute, storage and networking resources to deliver infrastructure-as-a-service (IaaS) out of the box, thereby providing another platform option for this TriZetto solution.

Infrastructure Matters: IBM Workload Optimized Systems Provide Firm Foundation

IBM offers unique high value solutions that make it easy to deploy, manage and run TriZetto's enterprise applications with high performance, virtualization and scalability.

[IBM Power System](#) is an open server platform that optimizes Big Data & Analytics performance to maximize business insight in real-time. In addition to speed, the scale-out economics of the system provide the confidence to move more data-centric applications to the cloud with encryption built into the foundation. With continuous innovation built into the platform, it removes the constraints imposed by commodity architecture and enables future integrated hardware solutions that dramatically accelerate compute and data-intensive tasks. The POWER server helps avoid unplanned downtime, and provides payers and providers unmatched functionality for more streamlined near real-time business collaboration. [IBM PowerVM®](#) provides a secure and scalable server virtualization environment to control cost and maximize resources.

Executive Summary	Challenges for Payers and Providers	Payers and Providers Must Collaborate	IBM and TriZetto: A Premier Partnership	TriZetto Provides Superior Healthcare Solutions	IBM Systems Optimized for TriZetto
-------------------	-------------------------------------	---------------------------------------	---	---	------------------------------------

IBM System Storage portfolio offers robust, high-performing, scalable systems to meet the needs of healthcare organizations of all sizes.

- **DS 8000** storage systems are designed to manage a broad scope of storage workloads that exist in today’s complex data center. Organizations worldwide, including many in the healthcare industry, use this flagship IBM disk system for its extraordinary resiliency, scalability and performance, as well as for its ability to address the demanding requirements of the critical data at the heart of busy data centers. Being optimized for large-scale complex workloads, DS8000 manages the vast volume of data generated by TriZetto applications, helping harness huge amounts of data for greater insight and productivity. Additionally, the storage system’s world-class high availability and exclusive integration with IBM enterprise servers, including Power Systems, deliver extraordinary value for IT operations.
- **XIV** is a high-end disk storage system that leverages a unique grid architecture. The system delivers consistent high performance, extreme ease of use and excellent data economics, making it an ideal choice for midrange to large enterprise healthcare organizations. It is ideal for cloud, with easy provisioning, autonomic data placement, and simplified management. XIV also provides high service levels for dynamic, mixed workloads as well as efficient deployments tapping rich OpenStack, hypervisor and other integrations.

- **Storwize family** systems deliver innovative, virtualized storage for software-defined environments and are ideal for TriZetto deployments. Available in a wide range of storage systems to accommodate entry level to midrange environments, Storwize family delivers sophisticated capabilities that are easy to deploy, yet also help control costs for growing businesses. Technologies that will boost efficiency include automated tiering with IBM Easy Tier® to optimize high-performing disks and flash storage. And IBM Real-time Compression™ can help store up to 5 times as much data with no application performance impact³.

“TriZetto chose the IBM StorwizeV7000 for its On-Demand Environment not only because of its technological capability: clustering, bundled services such as dynamic tiering, FlashCopy, thin-provisioning and no-charge host-level multipath software, but also for the client business needs of: ease of use, rapid deployment and flexibility, both for AIX (IBM Blade Center) and VMware”. - Pete Gill, Senior Technical Architect, TriZetto.

The TriZetto Performance Lab and the separate On Demand Environment (ODE) defined use cases to include:

- New customer product orientation
- Training, demonstrations and application test-drives
- Customer-specific pre-production application configuration
- Data conversion and validation
- Benchmark and scalability testing
- Product stability, release management and quality assurance
- Ad-hoc projects requiring elasticity for rapid spin-up and deployment

- **IBM flash portfolio** including the market leading FlashSystem family, will drive extreme performance to enable real-time business decisions, the efficiency around the data ecosystem, and the resiliency to make the data available and accessible. FlashSystem family includes richly featured software-defined flash solutions. Additionally IBM also offers flash-optimized **Elastic Storage software**, XIV, Storwize V7000 and DS8000 storage to bring greater performance, IBM MicroLatency™, efficiency and resiliency to the IT infrastructure.

IBM PureFlex System is a fully integrated infrastructure platform that supports a mix of compute (Intel and Power), storage, and networking resources and can be optionally accessible through the IBM SmartCloud® Desktop - a virtual desktop infrastructure (VDI) solution which allows mobile access from anywhere. Healthcare payers and providers can accelerate time-to-value with the built-in broad patterns of expertise and proven guidelines in systems management, applications, and hardware maintenance.

Smarter Software from IBM Improves Agility and Operational Efficiency

With IBM software, payers and providers can further improve business agility, collaborate more effectively and implement innovative healthcare business services while reducing risk, improving security and ensuring compliance. When integrated with IBM systems, these smarter IBM software solutions greatly improve infrastructure reliability, performance and scale.

Executive Summary	Challenges for Payers and Providers	Payers and Providers Must Collaborate	IBM and TriZetto: A Premier Partnership	TriZetto Provides Superior Healthcare Solutions	IBM Systems Optimized for TriZetto
----------------------	--	--	--	--	---------------------------------------

IBM WebSphere is a leading integration and application infrastructure software platform that enables service oriented architecture (SOA) solutions for dynamic, interconnected business processes. TriZetto customers rely on the security, performance, reliability, scalability and flexible deployment options of WebSphere Application Server to provide their members and employees continuous access to their mission critical systems. IBM WebSphere Application Server on IBM Power Systems provides an excellent platform for server consolidation with continuous availability - a critical requirement when many providers are supported on the same payer system.

IBM Sterling Connect:Direct is a security-rich cloud infrastructure that helps payers and providers exchange documents more securely with customers and business partners, regardless of size, location or communications preferences, through a single connection. It facilitates real-time processing not only with external business partners, but also helps gather information and data from disparate sources.

Specifically, this comprehensive process visibility helps payer and provider improve strategic decision-making with accurate, real-time data. It lets them enhance the customers' experience through complete audit trail of data movement.

For more information

To learn more about this IBM Healthcare solution, contact your IBM sales representative or visit:

- IBM Healthcare Solutions: ibm.com/industries/healthcare
- TriZetto healthcare solutions: www.trizetto.com
- IBM Power Systems: ibm.com/power
- IBM System Storage: ibm.com/storage
- IBM PureFlex Systems: ibm.com/pureflex

Footnotes

¹Results from pilot test of the Advanced Eligibility Solution with 60 providers in the BlueCross BlueShield of Tennessee

²Internal TriZetto measurements, January – September, 2013

³IBM lab measurements, April 2012.



Copyright IBM Corporation 2014
IBM, Route 100
Somers, NY 10589
U.S.A.

Produced in the United States of America
July 2014
All Rights Reserved

IBM, the IBM logo, ibm.com, System x, Power System, AIX, System Storage, DS8000, XIV, Storwize, FlashSystem, Easy Tier, Real-time Compression, MicroLatency, PureFlex, POWER7, POWER8, PowerVM, WebSphere, Sterling Connect:Direct, SmartCloud are trademarks or registered trademarks of International Business Machines

Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at: ibm.com/legal/copytrade.shtml

TriZetto, the TriZetto logo, TriZetto Provider POS, Facets and QNXT are trademarks or registered trademarks of TriZetto, Inc. Portions of this document are the proprietary property of TriZetto and are provided with permission by TriZetto Corporation.

Other product, company or service names may be trademarks or service marks of others.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.



Executive
Summary

Challenges for Payers
and Providers

Payers and Providers
Must Collaborate

IBM and TriZetto:
A Premier Partnership

TriZetto Provides Superior
Healthcare Solutions

IBM Systems Optimized
for TriZetto



Please Recycle