



CASE STUDY

Improving of Health Care Delivery Through Knowledge Sharing

Premier Inc. Healthcare Alliance™



ABOUT PREMIER INC.

The Premier healthcare alliance represents more than 2,300 U.S. hospitals and 63,000-plus healthcare sites, working together to improve healthcare quality and affordability. As a world leader in helping deliver measurable improvements in care, it is Premier's stated mission is "to analyze and share knowledge nationwide to improve the health of communities." In keeping with this goal, it facilitates the sharing of clinical knowledge and experience among its member hospitals and health systems allowing them to improve patient care and operate more efficiently.

The Business Challenge

Premier prides itself on many attributes of its business. Two attributes that stand out are that it maintains the nation's most comprehensive knowledge bank of clinical, financial and outcomes information while promoting a business culture of knowledge sharing and collaboration. Enhancing knowledge and comparative data across Premier's hospital network subscribers helps members reduce costs, improve care and share best practices. The strategy Premier sought to enable was to provide its member hospitals and healthcare systems with a single platform for all change concepts, best practices and key learning from across its membership alliance. This level of knowledge transfer and collaboration did not come without careful planning and overcoming classic information management barriers, such as:

- Information spread through many independent systems and locations – making the cost of delivering the right information to information seekers high. And keeping information fresh and up to date with the latest research, practices and regulation, which further increased the cost of information management.
- Shifting through volumes of general information in an effort to locate authoritative, accurate, relevant information that could be shared with member communities as best practices.
- Recognizing that there were gaps in their content and knowledge bases and how Premier could devise a method to fill in the gaps with best practices that were locked in practitioners' heads. They needed to capture knowledge from their cadre of experts consulting at member hospitals without taking too much of the expert's time away from the hospital.
- The need to separate knowledge and information that actually improves performance as opposed to flooding information seekers with volumes of data that has to be sifted through first.
- The requirement to address each of the scenarios above, in an automated manner, on scale and without taking on significant cost of delivery.

Just like many large enterprise companies, Premier had invested heavily in IT infrastructure to enable and automate their business operations. They investigated applying existing IT tools to address their business requirements. With highly specialized document and content management systems, Premier assessed the ability to extend these systems to produce the collaboration and knowledge sharing platform they desired. Although these systems possess competencies for content/document sharing and searching, they failed to address the knowledge capture from people (not documents) as subject matter experts who address ad-hoc questions or to capture new learning from practitioners in the field in a streamlined manner.

Premier also investigated best in class Web 2.0 tools that specialized in knowledge sharing and collaboration. While these tools helped bridge the gap of capturing information locked in subject matter experts' heads, they found these systems lacked the necessary rules engines and data stewardship capabilities required for Premier to meet regulatory and privacy rules. The other option considered was to

build out a custom application but this was quickly ruled out because of high initial cost of building the application, ongoing expenses and staff resources necessary to maintain the systems over time.

The Role of StreetSmarts® in Premier's Business Strategy

To enable knowledge sharing across Premier's broad member alliance, it was necessary to blend legacy content, regulatory procedures, best practices and change concepts, along with the insights provided by subject matter experts. And it was just as important to combine these knowledge sharing requirements with Premier's needs to adhere to their compliance and risk mitigation standards. For example, it is important that the right information is applied to a specific situation to avoid compliance and regulatory risk.

StreetSmarts® was already proving successful for knowledge sharing across its sales force, so Premier already had a tried and tested solution within one of its lines of business. It was important to assess StreetSmarts® for its wider information management and knowledge sharing initiatives without the need for complicated deployments or long IT initiatives. Premier found that StreetSmarts® could be extended as a platform that would support multiple lines of business from a single hub, rather than creating individual silos of StreetSmarts® for each line of business application.

For a start, the StreetSmarts® platform allowed Premier to create a single source that tapped into information stored across multiple information silos. This allowed staff as well as member hospitals to locate information without end users needing to know where the data was located or to log into multiple systems to locate the desired information. The benefit of this was immediate; in that this unified information retrieval started to reduce the time it took for members to find information that was already available.

StreetSmarts® allowed users to ask questions and the system routed these to be answered by experts. With its built in intelligence engine, users did not even need to know who those experts were. The answers were also fed back into the system to be reused if and when similar questions arose. To ensure quality and relevance of knowledge and to eliminate the challenges with information overload, users were provided easy to use tools to rate and score answers which allowed all users to get to the one right answer they required, much faster than ever before. Premier also satisfied their specific compliance and risk mitigation challenges since all answers were routed through approvals workflow before being passed as 'authoritative'.

Premier also found they could overcome the classic challenges of user adoption. This was particularly important for an organization such as Premier, since their knowledge and best practice was being

Premier Inc. Business Requirements

- ✓ *Tap into existing information systems to index and tag all content so it could be cataloged for search.*
- ✓ *Allow for Subject Matter Experts to be defined so ad-hoc questions can be addressed by experts, and automatically captured in StreetSmarts®, so knowledge is not lost but rather reused.*
- ✓ *Allow community members to contribute their own know-how and best practices.*
- ✓ *Rate and score answers to help with build relevance and effectiveness for future searches, which eliminated shifting through mounds of data to get the one, right answer.*
- ✓ *Embed within existing systems (portals, MS Outlook email, etc) so people don't have to learn a new application and organizations could overcome traditional user adoption issues.*

disseminated across hundreds of hospitals. The StreetSmarts® solution was completely ubiquitous in its operation, meaning that it was easily embedded within systems that member hospitals used daily. For example, StreetSmarts® could be accessed from a portal as the preferred choice for some end users, while other communities preferred to use StreetSmarts® directly from Microsoft Outlook email. In effect, users were not required to learn a new application. This meant Premier bypassed the typical barriers to user adoption that so many IT initiatives are challenged with.

Premier Achieves Tangible Business Results with StreetSmarts®

Premier found they could re-use and apply StreetSmarts® to other projects and initiatives, which eliminated the need for redundant IT systems. Premier put their strategy in action by designing a knowledge sharing portal (later named the Performance Improvement Portal). The aim of the Performance Improvement Portal was to tap into the best practices from top-performing hospitals and deliver this knowledge on-demand as a virtual coach to their broader member institutions.



HQID Initiative – One of the first applications for the Performance Improvement portal and StreetSmarts® was the Hospital Quality Incentive Demonstration (HQID) initiative. The Centers for Medicare & Medicaid Services (CMS) is one of 11 agencies with the US Dept. of Health and Human Services. The CMS plays a key role in the overall direction of the health care system in the United States. Its mission is to ensure effective, up-to-date health care coverage and to promote quality care for beneficiaries. And the CMS states it will achieve its mission by continuing to transform and modernize America’s health care system.

In 2003, CMS and Premier introduced the HQID project, the first of its kind hospital-based, pay-for-performance program (http://www.cms.hhs.gov/HospitalQualityInits/35_HospitalPremier.asp). The HQID project provides financial rewards to hospitals that demonstrate high quality performance in a number of areas of acute care. HQID rates the quality of care provided to inpatients suffering from key conditions such as heart attack, heart failure, and pneumonia.

Premier was selected for as the sole program partner with CMS because of its database of hospitals performance benchmark, measures and procedural best practices. StreetSmarts® and Premier’s Performance Improvement Portal play a vital role as the “engine” for the HQID program. Over the first four years, the HQID program was credited with saving the lives of nearly 4,700 heart-attack patients and improving overall quality of patient care by an average of over 17 percent. CMS awarded incentive payments totaling \$36.5 million over the past four years. This represents incremental revenue for each of the recipient hospitals. More information about the HQID project can be found at the following link: www.streetsmarts.com/healthcare.

Premier’s QUEST Program - StreetSmarts® and Premier’s Performance Improvement Portal were applied to Premier’s next strategic initiative called QUEST: High Performing Hospitals, a dynamic program that assists hospitals and healthcare systems in driving healthcare to new levels of performance (www.premierinc.com/quest). Building on the success of the HQID initiative, the QUEST program reflects the desire of hospitals to accelerate the improvement of American healthcare cost and quality.

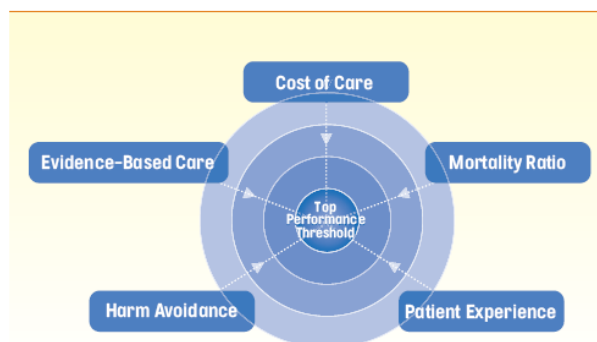


Susan DeVore is CEO for Premier, and in her press briefing for the launch of QUEST shared how QUEST will revolutionize healthcare delivery (see the video at www.streetsmarts.com/premierinc-overview-video). She credits the Performance Improvement Portal (StreetSmarts®) as the system that drives all the change concepts, promotes knowledge sharing of all the best practices and collecting and sharing of new learning for continuous improvement.

Premier's QUEST program is designed to provide tangible, measurable results across five areas for hospitals and healthcare systems (see diagram below). StreetSmarts® is used in QUEST as the knowledge sharing engine and delivery compendium of best practices to act as a roadmap and playbook to participating organizations (a community). Hospitals and healthcare systems are actively identifying key areas of focus, learning from top performers and collaborating with others to develop detailed plans for rapid improvement.

QUEST's performance improvement targets are:

- ▶ **Save Lives** – Reduce the expected mortality rate
- ▶ **Safely reduce the cost of care** – Reduce inpatient costs per patient among participating hospitals
- ▶ **Deliver the most reliable and effective care** – Increase the delivery of every recommended evidence-based care measure for patients
- ▶ **Improve patient safety** – Prevent incidents of harm in more than 20 categories, including healthcare-acquired infections and birth injuries
- ▶ **Increase Satisfaction** – Dramatically improve the patient's care experience



On October 21, 2009, Premier, Inc published QUEST's first year's results and the results were eye-popping:

- **Reduced mortality rates, saving an estimated 8,023 lives in 2009**
- **Improved efficiencies which reduce healthcare costs by \$577 million during the same period**
- **Lowered serious safety event rates by 18% annually, on average across member hospitals**

To date, QUEST has been rolled out across more than 160 hospitals, benefiting more than 2.3 million patients annually. StreetSmarts® has laid a foundation for Premier to launch a new online community and new business model with QUEST that is contributing to the company's top-line performance and it has also contributed to key performance metrics at over 160 participating hospitals and healthcare systems.

Looking to the Future with StreetSmarts®

Using StreetSmarts® as the engine for the Performance Improvement platform, Premier is able to apply and reuse all the Performance Improvement platform across multiple initiatives. This compresses the time necessary to launch new services by months and saves hundreds of thousands of dollars in costs. Premier applied these "reuse" principles to its first program outside the US market. NHS North West is England's largest strategic health authority and they have launched the country's first hospital-based pay-for-performance (P4P) effort, called "Advancing Quality." StreetSmarts® allowed Premier to model out the change concepts necessary to support a national healthcare model used in England as well as facilitate knowledge sharing between two countries separated by a common language. For example, the ease with which StreetSmarts can rationalize vernacular differences or adapt Anglicized spellings and terminology as in "standardize = standardise".

Premier has also benefitted from the flexible nature of the StreetSmarts® platform. When President Obama signed the American Recovery and Reinvestment Act of 2009 into action on February 17, 2009, numerous provisions went into affecting health information management, impacting all hospitals and health information technology vendors, including Premier Inc. This created change requirements for Premier in HIPAA compliance and other information sharing that had a knock-down effect on their Performance Improvement Portal. Because of StreetSmarts® flexible rules engine, these changes could be made in the product in days rather than months, compared to other technology platforms, and immediately activated for a member community spanning over 2,300 hospitals and provider systems. In an industry facing sweeping reform and policy changes, this flexibility is not a luxury, it's a necessity.

Special Recognition

Leslie Schultz, Ph. D. and Director of Knowledge Transfer at Premier Inc. is a nationally recognized expert in documenting and sharing reliable, evidence-based best practices among hospitals. At Premier, Inc. she oversees the Performance Improvement Portal shaping supporting the clinical improvement professionals improving quality and standards of care industry-wide. Leslie and her team are credited with the innovative planning and execution that led to Premier's Performance Improvement Portal and the innovative manner this platform has been applied to Premier's strategy.

ABOUT STREETSMARTS®

StreetSmarts® was first introduced in the market in 2003 as an Internet application with innovative capabilities - An enterprise-class application built upon one of the first consumer-focused "word of mouth" recommendation platforms for the Internet. StreetSmarts® evolved further in 2004 and released the first SaaS platform combining social networking, collaboration, knowledge and content management, to provide an enterprise knowledge automation solution designed to collect, capture and disseminate valuable organizational knowledge the moment it is required – available via any device, application or through the web. Unlike the social media tools available today, StreetSmarts® is engineered for organizations from the bottom up, with the appropriate business processes, security and auditing capabilities so necessary for social media initiatives across the enterprise.

StreetSmarts® continued its rich heritage of innovation with the release of StreetSmarts® v5.0 in January 2009. This release marked capabilities to help companies drive organizational performance across multiple lines of business, throughout their diverse and distributed workforce, from a single application platform. StreetSmarts® takes a unique approach to the market by connecting to existing business systems to leverage an organization's existing knowledge bases, capturing know-how that was previously locked in peoples' heads and disseminating relevant information to people on-demand so they can do their jobs better.

Because of its adaptive, lightweight nature and built in usability features, StreetSmarts® is able to provide a working solution specific to each client's business requirements in a matter of days, rather than months of complex software deployments. In addition, this also allows clients to quickly react to changing new business practices and external market conditions without the need for massive customization or programming.

For more information on StreetSmarts®, visit www.streetsmarts.com, email info@streetsmarts.com or call +1 650 351 1890

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