

A Division of Salient Management Company

Salient Medicaid Enterprise Management

Enabling a Data-Driven Approach to Achieving the Triple Aim

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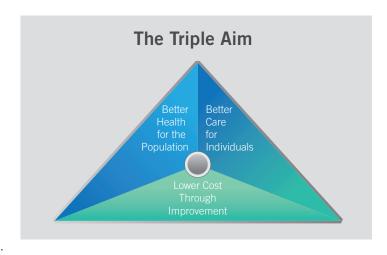
Introduction

Improving population health and patients' experience of care while reducing per capita costs—i.e., achieving the Triple Aim—requires state Medicaid agencies and their stakeholders to adopt a data-driven approach to program management and reform initiatives. Salient's Medicaid Enterprise Management solution enables such an approach by putting actionable data in the hands of providers, care coordinators, and program oversight staff through a powerful and intuitive visual data mining platform.

Today's fraught fiscal and political climate has coalesced with massive and rapid changes to the healthcare ecosystem wrought by the Patient Protection and Affordable Care Act (PPACA) to create a perfect storm for state Medicaid agencies. The number of enrolled beneficiaries is increasing inexorably both by traditional eligibility as well as the PPACA expansion in the 31 states that have adopted it as of September 2015. Notwithstanding the (time-limited) federal funding for the expanded eligibility pool, stagnant or shrinking revenues and competing budgetary priorities are requiring states to do more with less. Meanwhile, improper payments are increasing—jumping to nearly \$17.5 billion nationwide in fiscal year 2014, representing 6.7% of all Medicaid payments that year² (compared to a total of \$14.4 billion and an error rate of 5.8% in FY 2014). And against the backdrop of these financial pressures, the Centers for Medicare and Medicaid Services (CMS) have made the Triple Aim—improving patient care, improving population health, and reducing per capita healthcare costs—the guiding principle of PPACA implementation.

Accountable care, coordinated care, evidence-based treatment, meaningful use, payment transformation—far from simple buzzwords, these concepts define the landscape of healthcare reform in the United States today.

As states seek to reform their Medicaid enterprises to address their financial challenges and the Triple Aim, these concepts are front-and-center. And in addition to their centrality to Medicaid reform, these concepts share another defining characteristic: the absolute necessity of usable, timely data to implement and administer them effectively. To help states successfully



address these challenges, Salient Management Company (Salient), a worldwide provider of performance management solutions for business

and government, introduces its Medicaid Enterprise Management solution. Built upon Salient's Collaborative Intelligence Suite, a Gartner-recognized COTS business intelligence and analytics technology platform, Salient's Medicaid Enterprise Management application offers states a proven Medicaid analytical data model and a visual data mining user experience that facilitates putting actionable program data into the hands of those who need it, when they need it, in time to improve outcomes.

In this narrative, we will outline the need for a data-driven approach to achieving the Triple Aim. In this approach, we acknowledge the challenges inherent in the meaningful and effective use of healthcare data and we demonstrate how our technology platform and Medicaid Enterprise Management application help to overcome these difficulties. We then illustrate how our solution is helping achieve these outcomes today in New York State, the nation's second largest Medicaid program by total spending and a recoganized leader in Medicaid reform, by facilitating the understanding and effective use of the vast quantities of healthcare data that are required to properly implement reform initiatives, manage them, and monitor their results.

"Improper Medicaid payments jumped to nearly \$17.5 billion nationwide in FY 2014"

A Data-Driven Approach to Achieving the Triple Aim



Vision and Challenges

The contemporary healthcare ecosystem—of which Medicaid comprises one of the largest entities in every state—is progressing from fee-for-service to a performancebased and value-based paradigm through models like Accountable Care Organizations (ACOs), Delivery System Reform Incentive Payment (DSRIP) programs, and bundled payments. Care coordination and evidencebased medicine as embodied in Patient-Centered Medical Homes (PCMH) and Health Homes are becoming ever more ubiquitous. These phenomena are accompanied by an explosion in healthcare information technology electronic medical records (EMRs), health insurance exchanges, health information exchanges, groupers and the data they generate. Gone are the days of Medicaid programs as a claims payer—today's Medicaid is a healthcare management enterprise with not only claims and encounters, but also quality measures, episodes of care, preventable events, risk adjustments, patient satisfaction surveys, and even clinical data at its disposal. But all this data is useless unless it can be made available to stakeholders in a usable and timely manner to enable them to make decisions to improve outcomes and lower costs.

Providers and care managers must have the ability to view the entire universe of available data on their patient populations—and within it the patterns and trends that signal challenges and opportunities in the ever-shifting healthcare world—with the capability to drill down to detail-level data such as office visits, admissions, prescriptions, test results, etc. We see these as the keys to treatment based on clinical best practices and optimal coordination among multiple providers.

The ability to identify areas for improvement, to monitor the effects of reform initiatives, and to quickly and easily investigate root causes gives program managers both the depth of information and adequate time to make intelligent mid-course corrections and enhancements.

Program executives have always had an eagle's-eye view of the entire program through summary reports—but this is no longer enough. With equal ability to pursue their intuition ad-hoc through many layers of summary down to root cause details, they gain the benefits of full transparency and accountability.



"I can have the answer to any question in seconds...
Salient tames a tidal wave of data."

Mary Kay Delgiacco
Manager of IT Services,
Division of Technology & Business Automation, NY OMIG

The Challenge: Reversing the Intelligence Distribution Model

As every state likely has experienced, however, getting data into the hands of decision-makers in a usable and timely fashion represents a significant challenge. Traditional data analytics and business intelligence paradigms have an orientation toward data producers rather than data consumers. In this orientation, data consumers (providers, care managers, oversight staff, program executives) rely upon data producers (typically IT experts) for access to data. Nowhere does this tendency manifest itself to a greater degree than in the healthcare enterprise.

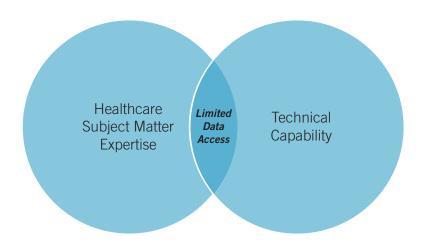
Healthcare presents a particular dilemma for the effective use of data. The high level of clinical and/or claims expertise needed to produce meaningful insights naturally limits the number of capable data consumers, while the sheer volume of data traditionally necessitates complex tools—requiring a high level of technical capability to operate—to produce meaningful information. Very few individuals possess both these skill sets.

Additional challenges that complicate the effective use of healthcare data to improve costs and outcomes include:

Expertise: There exists a gap that must be bridged between analytics experts with limited healthcare knowledge and healthcare experts with limited technical knowledge of query writing and data analytics. The healthcare experts cannot trust the outcomes of the analytics without a means to communicate needs and validate results.

Collaboration Challenges among Experts: Technical and healthcare experts look at data from different perspectives, meaning that the findings of one may benefit the other and that unnecessary overlap of effort may exist. A means to share information more effectively can significantly improve results and reduce effort.

Complexity of the Healthcare Environment: Healthcare's combination of complexities presents a unique challenge. Data records involve numerous discrete elements: beneficiaries, providers, diagnoses, procedures, services, drugs, etc. Multiple payers—Medicare, Medicaid, TRICARE, managed care organizations, third-party insurance—add an additional layer of complexity; rarely is the entire



picture of a provider or beneficiary available to the analyst. Detailed knowledge about beneficiaries and providers—assets, legal issues, etc.—costs money and comes from multiple sources. Specialized healthcare knowledge, from basic drug or diagnosis information to quality-of-care or drug-to-diagnosis relationships, is also widely dispersed and frequently costs money to obtain. In addition to the direct costs associated with obtaining access to these data sources, additional costs accrue to integrate the data and provide the knowledge to utilize it correctly.

Time Required to Sift through Data: Healthcare analysis involves massive volumes of data and frequently requires longitudinal (i.e., over time) perspectives and identification of associations between claims or between data sources. Queries using standard relational technologies produce inconsistent response times that can run into minutes or tens of minutes.

Indeed, getting meaningful information into the hands of those who need it represents the ultimate challenge for effective use of healthcare data. To achieve the desired goals of improved quality at reduced costs, the Medicaid enterprise needs to put data mining tools in the hands of more stakeholders to marry their "boots on the ground" experience and subject matter expertise with the data. An effective solution would support iterative, stream-of-thought questioning by program experts. The ideal platform would have both the scalability and ease-of-use to enable subject matter experts to produce their own information, or at least to interact effectively with the data produced by expert analysts.

The Solution: A New Healthcare Analytical Enterprise Architecture

Salient's unique visual data discovery platform removes the traditional barriers to the effective use and exploitation of large, complex datasets like those found in healthcare and human services. Salient's Gartner-recognized technology platform accomplishes this through visual data mining user interfaces that bypass technically complex query language and enable point-and-click pursuit through layers of summary to the root cause details behind the outlier, and an ultra-fast analytical data mart that provides nearinstantaneous responses to user queries. This combination addresses the ubiquitous issue of getting actionable healthcare intelligence quickly enough into the hands of those who can best use it—providers, care managers, and program oversight staff—but who typically do not have the IT background to access data from multiple silos and synthesize them into a coherent picture of patient health, quality of care, and cost effectiveness.

These characteristics of Salient's technology platform represent a paradigm shift from traditional reporting platforms. Such platforms often present static views of data and require significant query writing to create new views or modify existing ones—effectively placing such creation and modification outside the ability of the enduser absent significant IT support. Salient's software, by contrast, presents users with a 100% visual, point-and-click interface allowing them to navigate through the available data, perform numerous types of analyses, drill down to detail-level data to examine root causes, and create bookmarks for later reference and sharing with the organization—all without the need for query writing.

Salient's unique in-memory analytical data mart also addresses the pervasive issue of time required to sift through voluminous healthcare data. Salient has optimized its architecture to provide ultra-fast responses in Big Data applications like healthcare: to illustrate, the New York Medicaid system, containing over 1.6 billion claims representing over 350 billion paid dollars, averages a response time to user requests of one second and responds to over 96 percent of requests in under five seconds. These fast responses, coupled with the Salient software's visual discovery interface, allow users to intuitively explore and

interact with data at the speed of thought rather than wait for a response. By giving users the ability to immediately follow up and ask the next question that comes to mind, the technology facilitates the identification of novel insights and findings that a slower, less interactive system would inhibit.

The speed and self-service analytical capability offered by Salient's technology have proven in practice to increase the user adoption of the tool dramatically; for example, at the New York State Office of Medicaid Inspector General (OMIG), 70% of end users continued to use the Salient software three months after implementation compared to 10% for two business intelligence/data mining implementations previously utilized by OMIG. The increase in users actively utilizing data discovery and analysis yields improvements in staff productivity as well as enhanced outcomes.

The data model developed by Salient in its UXT software also uniquely positions the platform as a single source for data discovery and analysis across the healthcare enterprise. Salient's associative data model allows the UXT software to consolidate data from disparate sources throughout the Medicaid enterprise to provide undivided visibility of all available data in its context.

Salient's software goes far beyond merely displaying subreports from individual siloed data sources on a single page. Rather, UXT's multidimensional, associative data model links together all possible relationships among data entities regardless of their source, providing users with a transparent, source-agnostic, integrated view.

Our solution further enriches the data available through our user interfaces via our Knowledge Manager collaboration component. The Knowledge Manager panel offers a location to provide users with additional information that places data in context. Information presented in Knowledge Manager can include narrative text, hyperlinks to other dashboards or external resources, documents such as data dictionaries, graphics, and videos. Below, we present an example of a dashboard containing multiple analyses with explanatory information provided in the Knowledge Manager panel.

NYS Medicaid Enterprise System

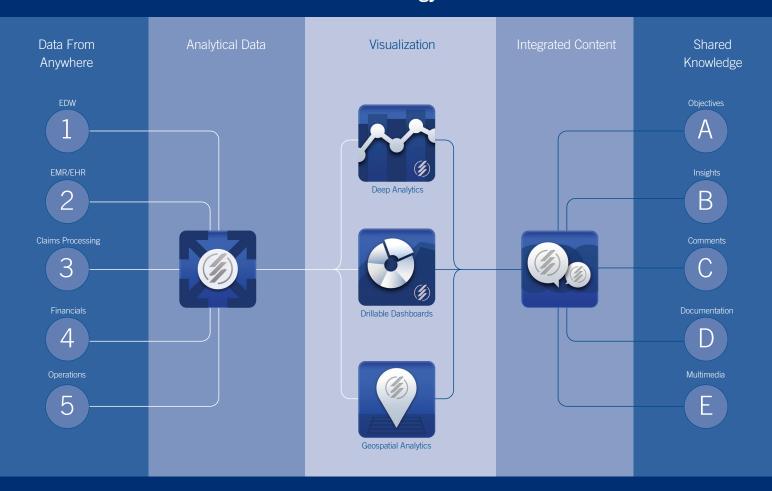
Over 1.6 billion claims representing over 350 billion paid dollars

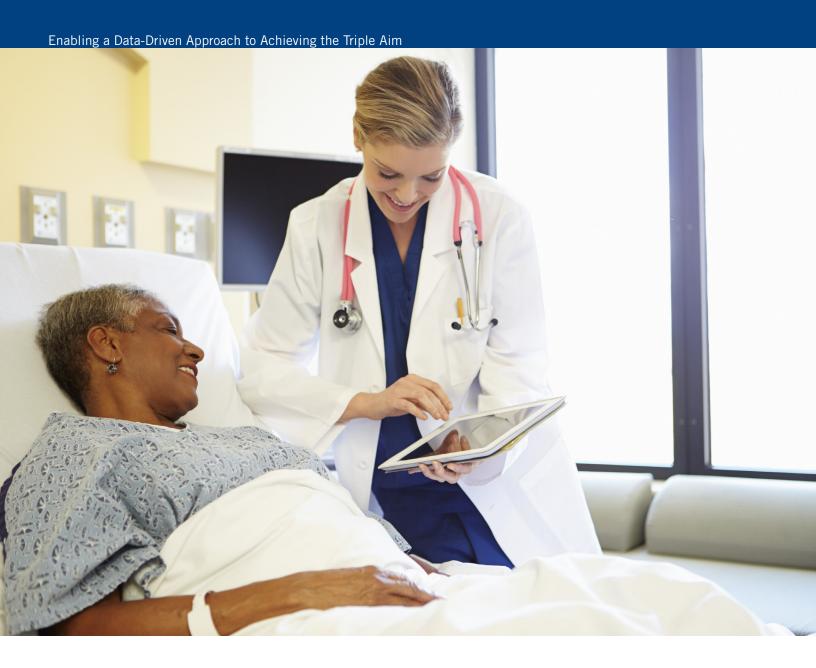
Average response time to user requests:

1 second

70% of end users continued to use the Salient software three months after implementation.

Salient's Technology Structure





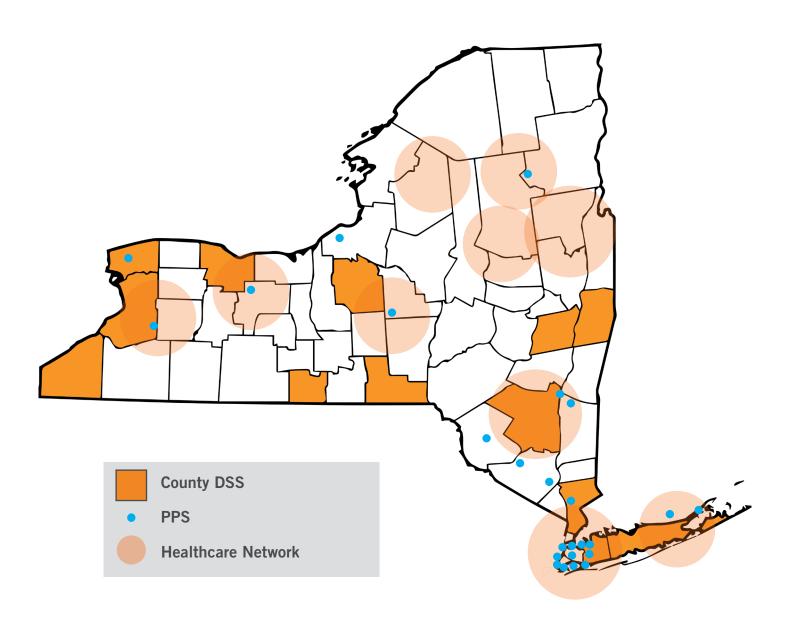
The data model employed in Salient's analytical data mart facilitates rapid initial deployment as well as subsequent additions and changes to data sources that commonly occur within healthcare programs. Unlike many competitors, Salient's solution does not require pre-aggregation of data to provide its fast response times; consequently, data design and integration does not include this very cumbersome effort. Likewise, later additions or changes require minimal effort and disruption, generally requiring only minor adjustments to the solution schema and data feeds.

To illustrate, Salient completed the initial implementation of the New York Department of Health's Medicaid system, including analytical database design and loading of billions of rows from seven major data sources, in a mere four months. Moreover, Salient has supported the transition to

a new Medicaid Data Warehouse and has provisioned the solution to support additional initiatives, including policy and planning requirements, cost control initiatives, etc. with no disruption to existing users and at a fraction of the time and effort that other Bl/analytics platforms would require.

The Salient platform's data integration and visualization capabilities position it as an investment that states can leverage across multiple initiatives—and consequently, provide greater value and lower total cost of ownership. As we will illustrate in the next section, Salient's partnership with the New York State Department of Health demonstrates the flexibility and scalability that are the hallmarks of our solution and that have made Salient the data visualization and analytics provider of choice for New York's Medicaid program.

Salient Users in New York State



The Evolution of Medicaid Program Integrity

From Program Integrity through Program Management, Accountable Care and Beyond



Reducing Costs, Improving Services

Salient's technology has a decade-long track record of success in providing visibility into Medicaid expenditures, including the ability to zero in on fraud, waste and abuse among providers and recipients. Our first client in healthcare was Chemung County, New York, a county with around 25 percent of its population on Medicaid. Due to a New York state law requiring counties to shoulder a percentage of Medicaid costs for their residents enrolled in the program, the county struggled with the rising costs of providing coverage. Recognizing the need to gain greater understanding and control of these costs, Salient entered the healthcare market in 2005 with its Medicaid application for counties.

Integrating fee-for-service pharmacy and service claims, managed care encounters, and enrollment data, Salient's application gives counties unprecedented visibility into the cost and delivery of care to their Medicaid populations. Salient's human services solution provides a means for case workers and examiners to enhance processes, intervene with recipients when appropriate, and to understand recipients in relation to all services provided (TANF, SNAP, and other means-tested benefits in addition to Medicaid).

Salient's success led to rapid expansion to Onondaga County (Syracuse) and Monroe County (Rochester), whose overall Medicaid spending analyzed by the Salient solution neared \$2 billion—more than the total Medicaid budget of many states. The scope of use also expanded to include pharmacy and recipient fraud investigations, yielding tens of millions of dollars in potentially improper payments and millions in actual recoveries. Salient continued to expand its presence in Medicaid, gaining nine of the largest counties in New York as clients by 2008—including Nassau County, Suffolk County, Westchester County, Albany County, and Niagara County.

Marrying Boots on the Ground with Hands on the Data

Taking notice of several counties' success in using the Salient Medicaid application to detect and identify improper and fraudulent claims, New York State's Office of the Medicaid Inspector General (OMIG) partnered with Salient in 2009 for a statewide pilot of the system that led to full implementation in 2010. OMIG sought to arm more staff—a user community of approximately 150—with the ability to directly and swiftly access and interact with data to improve targeting, resource recovery, audit, and investigation functions.

Implementation of Salient's solution for New York's OMIG began on March 1, 2010. The project team included representatives from OMIG, Salient, and the data center vendor. The project required minimal effort from OMIG's IT department: three to five staff participated periodically for network and desktop management. Salient dedicated six to 10 staff to the implementation and training plan, while the data center vendor dedicated two to three staff to the technical implementation. Salient completed the analytical database design and loaded billions of rows from seven major data sources in time for training in early July 2010—a mere four months. The project was completed on-time and within budget.

New York's Medicaid Inspector General at the time, James Sheehan, considered Salient's software such a revolutionary solution that he attended each new training session to communicate and reinforce its importance in attaining the OMIG's objectives. Three months post go-live, the culture-changing nature of the solution was clear—the user adoption rate was 70 percent, compared with a 10 percent adoption rate for each of the two BI applications previously implemented at OMIG.

"This could revolutionize the way we manage healthcare."

Expanded staff interaction with data: a "force multiplier"

In the past, OMIG's auditors, investigators, and analysts depended on a small number of data specialists to create the reports, ad hoc queries, algorithms, and analytical products they needed to do their jobs—a bottleneck that reduced organizational productivity and efficiency. The Salient technology's visual data mining paradigm overcomes this bottleneck, with a point-and-click interface that requires no knowledge of programming or query writing. The ease of use of the Salient platform allows non-technical staff to engage in data analysis independently and provides a new tool for data specialists to add to their resources. This expanded interaction with the actual data allows auditors and analysts to utilize their time more productively, interactively exploring and pursuing possible patterns of fraud rather than waiting for query or report development to confirm their investigative intuition.

Improved targeting: a "sentinel effect"

The strong visual analytics provided by Salient's software allow OMIG staff to leverage their knowledge of health-care data more effectively to mine claims data visually, identifying new targets for investigation and recovery. In addition to supporting independent discovery, the Salient platform also helps to communicate, prioritize based on client defined criteria, define, and refine analytics algorithms, models, scoring, etc.

Effective claims auditing requires continually surveying and drilling into the universe of claims data to determine outliers and targets for action. Traditionally, high dollars or claim volumes, surges in activity, and tips have driven the majority of targeting. By utilizing the Salient solution, OMIG can incorporate different types of investigative methods and information into the targeting process, such as relationships among providers, pharmacies, and recipients; comparisons of diagnoses and drug use; and geographical considerations.

The improved targeting capabilities afforded by Salient's software yielded improved results almost immediately. For example, spurred by news reports of a raid yielding

"OMIG has expanded by three to four times the pool of staff that can ask and answer Medicaid data questions themselves."

numerous arrests for sale of prescription drugs, one OMIG investigator used the Salient tool to investigate beyond the names of the arrested individuals and look at all oxycodone prescriptions by county. She discovered that the county where the raid occurred, with a population of fewer than 500,000 people, was number one in the state in terms of Medicaid-paid oxycodone. Total Medicaid spending on oxycodone in that county increased from \$494,000 in 2008 to \$1.1 million in 2010, and the number of pills dispensed increased from 500,000 to 1.4 million in the same period. With a few clicks of the mouse, the Salient software provided the investigator with a complete list of providers writing oxycodone prescriptions in that county—and the ability to rank them by number of prescriptions, pills dispensed, dollar value of claims, and more.

In addition to representing targets for potential recovery, New York leverages these findings to educate targeted providers and their peers about these billing patterns—and the fact that the state can detect them—to create a "sentinel effect" yielding even greater savings through cost avoidance.

"This is really transformative...
it actually feels like we are
managing the program in
a live, active way."

Greg Allen
 Director of Financial Policy & Planning
 NY Office of Health Insurance Programs

Increased investigative efficiency

The speed and visual data mining capabilities of Salient's software enable staff to test hypotheses and follow their train of thought through on-the-fly drill paths (without losing the original path), learning more about the behavior of providers and beneficiaries than with previous platforms. The Salient platform provides immediate, repeatable gains in productivity that creates a positive reinforcing effect.

The ability to sort through and slice and dice large stores of data in seconds, look at data in new ways, ask the next question, get an immediate answer, and continue to pursue or change direction based on results has proven highly valuable in practice. For example, OMIG's Claims Analysis Unit worked with the agency's subject matter professional on dentistry—a licensed dental hygienist—who suggested they examine providers who were charging Medicaid for "consultation" fees of \$87 versus \$29 for a regular office visit. While the higher fees require a referring provider on record, as well as a written report, OMIG discovered through the Salient software an enormous amount of referral claims without referrers, and identified which providers were billing the highest percentage of the enhanced office visits. The Claims Analysis Unit estimated the total recovery for this specific instance at \$6 million to \$7 million, which went directly toward the team's annual recovery goal of \$20 million. In fact, a senior OMIG program integrity manager estimated that the unit could recover more than half its total goal in dental investigations alone.

Enhanced collaboration

The Salient platform's collaboration capabilities, as well as the experience of Salient's consultants, improve information exchange and collaboration from multiple perspectives. The software's Knowledge Manager component provides a forum for sharing structured and unstructured data in a collaborative environment. Users can share notes, documents, and images, as well as link to external information resources (e.g., medical dictionaries), data dictionaries, case management systems, and document management systems. Salient staff helps to facilitate the exchange of good ideas across the agency through ongoing training and creation of global bookmarks (reusable analytical views).

Quantifiable results

With a user community of over 150, OMIG has expanded by three to four times the pool of staff that can ask and answer Medicaid data questions themselves. No longer must subject matter experts with "boots on the ground" make requests of IT experts and wait for the results. The system's ease of use and fast responses have contributed to a user adoption and continuity rate of 70 percent a six-fold increase over previous solutions. The application has met and exceeded OMIG's goals of identifying better targets, expanding staff interaction with data, helping staff work faster and more intuitively, and enhancing collaboration within the agency and with external stakeholders—and yielded nearly \$10 million in potential recoveries in its first year of operation alone. Moreover, OMIG reported recoveries of more than \$851 million in improper payments in 2013—New York's highest total ever—bringing the state's recovery total in the first three years after implementing the Salient solution to over \$1.73 billion. New York's OMIG recoveries are the highest on record for any state Medicaid program integrity unit.

New York State Senator Tom O'Mara pointed to the report as highlighting the effectiveness of Salient's software in combating Medicaid fraud, waste and abuse. "It's important news that our efforts to aggressively target

Medicaid abuse, fraud and waste are beginning to pay off the way they should," said O'Mara, noting that the Legislature created the OMIG in 2006. "It also serves to highlight the effectiveness of New York State's utilization of the cutting-edge, data-mining technology offered by our local Salient Management Company to identify and prevent this fraud. I've long called for the more widespread use of Salient's fraud prevention software in this ongoing effort to stop Medicaid waste. It's a wise, cost-effective investment that should be expanded."

"Three years after implementing the Salient Solution, NY state's recoveries are the highest on record for any state Medicaid program integrity unit at \$1.73 billion."

Program Management



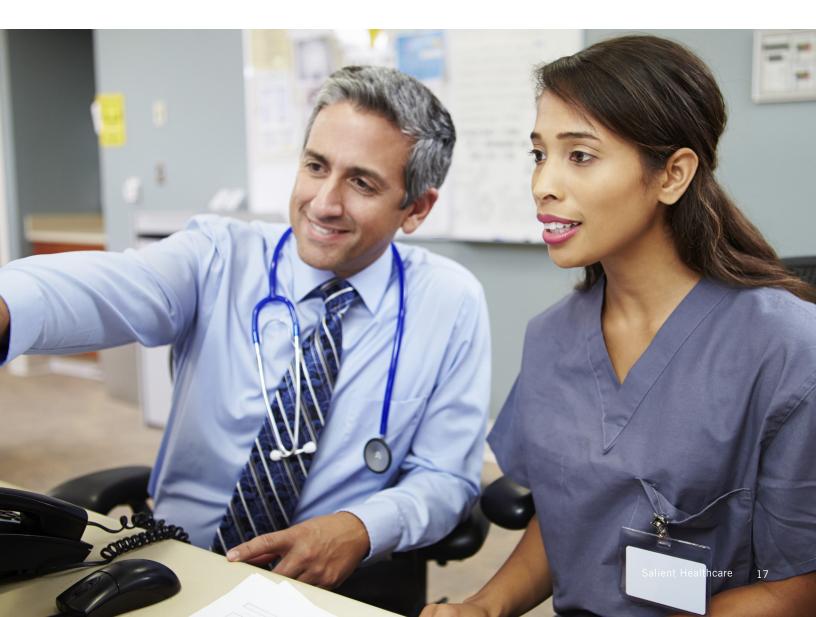
Identify and Track Reform Initiatives

In January 2011, New York's newly inaugurated Governor Andrew Cuomo created the Medicaid Redesign Team (MRT) and tasked it with finding ways to cut over \$2 billion from the Medicaid budget while improving care and outcomes. Department of Health (DOH) leadership recognized the potential of the Salient Medicaid application to help them understand areas for potential action and to track and monitor the effect of initiatives.

Salient's program management application for healthcare brings together claims data with quality scoring (preventable events), budget data, and cash tracking data to provide stakeholders with comprehensive visibility of an entire healthcare ecosystem. In New York State, users ranging from analysts to agency executives use the system to track the progress of 70 cost-saving initiatives.

The MRT's July 2012 report prominently featured Salient's program management application—the only product or vendor so mentioned—and credited it with helping the state maintain its global spending cap.

Moreover, Salient's platform also provides executive dashboards to key leaders that include the DOH commissioner and State Medicaid Director, allowing them to track progress against reform initiatives at a glance as well as to drill down into specific areas of interest. Salient's MRT dashboard caught the attention of New York's Spending and Government Efficiency (SAGE) Commission, which included the dashboard in its February 2013 Final Report, as an exhibit of a statewide best practice in performance management and transparency.



Population Health Management



Patient-Centered Medical Home

Improving Care Coordination, Costs, and Outcomes

Although the concept of the patient-centered medical home (PCMH) is not new—indeed, many states already have recognized their benefits and have made significant progress in implementing them—Salient's Medical Home module, introduced in 2010, helps PCMHs to realize their full potential by integrating three distinct silos of data: medical claims, electronic medical records (EMRs) or electronic health records (EHRs), and practice operational/workflow data. This integration allows payers, providers, and care managers within PCMH models of care delivery to measure their performance on patient engagement, access to care, quality of care, care coordination, costs, and outcomes.

By integrating electronic medical record data with Medicaid claims data at the provider site, Salient's Medical Home application allows physicians to develop specific disease management strategies and measure the outcome of these strategies. This ability also assists in improving the healthcare status of patients by developing targeted outreach efforts, and helps to identify patients with multiple providers and prescribers of drugs to coordinate their care efficiently.

Health Homes

Enabling Care Management for Vulnerable Populations

To help bring about its vision of "Care Management for All," the MRT recommended that New York establish Health Homes to improve health outcomes and costs for high-usage, high-cost populations with complex chronic conditions. Health Homes endeavor to address patients' needs in a comprehensive manner by facilitating communication among caregivers under the coordination of a care manager.

Successful implementation of health home initiatives involves numerous data-intensive processes: identifying candidates for inclusion in the program, assigning them to appropriate health homes, and tracking costs and health outcomes for health home populations. Consolidating risk and acuity scoring, loyalty data, quality of care metrics, and health home tracking data with

claims and encounters, Salient's Health Home module supports the case mix adjustments and quality and cost performance management necessary to effectively establish health homes. Once the health homes are established, Salient's Health Home module provides DOH staff with the data they need to track their effectiveness. The application enables continuous program oversight to identify whether the program overall is progressing toward its goals and at what pace; performance profile "scorecards" to provide a snapshot of how well each health home is performing; trigger events to identify at-risk health home enrollees; payment integrity to detect improper health home payments; shared savings analysis capabilities; and ad hoc analyses.

The Health Home module likewise assists health homes in coordinating care for their entire patient population, while focusing specifically on the high-cost medically-complex patients who tend to drive overall spending. By segmenting their patient pools into distinct groups, health homes become better equipped to track costs and outcomes and, consequently, to optimize the delivery of care to minimize spend while maximizing overall individual and group health. Salient integrated Health Home-specific dashboards into DOH's Medicaid Analytics Performance Portal alongside a care management application to facilitate an integrated care management experience for health home providers. Below is an example of a health home performance dashboard provided through the Salient system.

The ability provided by Salient's application to DOH staff, care managers, and providers to interact effectively with these voluminous and complex data thus provides indispensable support to the goal of providing accountable care to vulnerable populations.

Delivery System Reform Incentive Payment (DSRIP)

Performance Management for Accountable Care in Medicaid

In 2014, New York received CMS approval to implement a Delivery System Reform Incentive Payment (DSRIP) program as part of its Section 1115 Waiver. This \$8 billion program represents an aggressive continuation of New

York's Medicaid reform efforts to create a "high-performing State-wide health system" under the leadership of Governor Andrew Cuomo and the vision of Medicaid Director Jason Helgerson. The primary objectives of New York's DSRIP program are to reduce unnecessary hospital admissions by 25 percent over five years; measure infrastructure transformation and community population health project domain progress against agreed-upon goals; and maintain progress on the MRT's 70 initiatives. As the mechanism for achieving these ambitious goals, New York's DSRIP program establishes Performing Provider Systems (PPSs), an ACO-like network of providers assembled at the community level.

DOH recognized from the outset that democratization of its wealth of Medicaid data would be indispensable to the success of the DSRIP program. Providers would need access to data to form networks, determine community health needs, develop their program applications, and formulate project plans for DOH approval. Yet at the same

time, the sensitivity of healthcare information made data security and integrity paramount considerations. DOH turned once again to Salient, its trusted partner in Medicaid reform, to help it facilitate this groundbreaking initiative.

In the first phase of the DSRIP PPS formation and application process, Salient created a public-facing dashboard portal with a subset of the Medicaid Enterprise Management dataset to give providers the insights they needed to identify networks and begin assessing community health needs in their regional catchment areas. These public-facing dashboards, utilizing cleansed and de-identified data as well as other technical means to maintain HIPAA compliance, afford providers and the general public unprecedented insight into the performance of the healthcare system for Medicaid beneficiaries. Salient embedded documentation and use aids directly into the dashboards to realize a user-friendly, zero-training environment.



In the second phase, PPSs in the process of formation and project plan development obtained access to the full Medicaid Enterprise Management solution through Salient's robust no-PHI security capability, ensuring that no sensitive protected data would be compromised while still giving analysts the deep access to Medicaid data they needed to formulate effective strategies and plans to serve the local population.

The third phase, now under development, integrates the DSRIP performance measures into the Medicaid Enterprise Management application and embeds PPS performance dashboards into the Medicaid Analytics Performance Portal. The data used to formulate these measures includes Medicaid claims as well as Potentially Preventable Events, risk stratification data, quality measures, survey data, and features innovative technical means to overcome claims lag to make the data more up-to-date and actionable.

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About Salient Healthcare

Salient Management Company is a worldwide provider of advanced performance management and decision support systems for a wide range of industries and the public sector.

Salient's Healthcare division is currently assisting dozens of local and state government agencies to achieve peak performance in policy oversight, governance, and financial management. Salient's solutions enable provider organizations to more effectively leverage their data to drive value-based care and Population Health Management results by utilizing business, claims, and clinical data in a secure HIPAA-compliant environment.

Founded in 1986, Salient serves more than 115,000 users in 61 countries. For more information, visit salienthealthcare.com

