

## **Agile Analytics: A Faster, Less Risky Approach To Tackling Big Data**

- Identify a high-potential business opportunity
- Determine enabling analytic methodologies
- Assess required data resources (internal and external)
- Merge data and methodologies to create intelligent insight
- Apply insight to business processes (pilot program – test and learn)
- Monitor results and determine effectiveness
- When successful, deploy broadly

# Agile Analytics: A Faster, Less Risky Approach To Tackling Big Data

## EXECUTIVE SUMMARY

In the face of dramatic industry change, with an undefined regulatory and reimbursement climate, healthcare delivery systems and health plans alike must respond to current and impending business requirements. With that reality, an effective data analytics strategy is critical to react to such change in a proactive manner. While the potential of 'big' data initiatives can be compelling, healthcare companies have much to gain from the impact and advantages that more targeted data analysis can achieve. Combining the right data with highly optimized methodologies through the use of analytic software can deliver rapid turnkey solutions and ultimately provide the foundation for an enterprise-wide analytics strategy. By deploying a 'think big, start small, move fast' approach, healthcare organizations can mitigate risk and develop institutional knowledge and control as they work towards peak analytic effectiveness.

## THE CHALLENGE

Market and regulatory initiatives such as the Affordable Care Act, new Medicare and Medicaid reimbursement rules and NCQA/CMS quality metrics are just a few of the forces complicating daily operations for those at the center of healthcare delivery. Moreover, the impending shift from volume to new value-based reimbursement programs manifests itself both through Accountable Care Organization (ACO) and Patient Centered Medical Home (PCMH) initiatives. These dynamics create a precarious balancing act between the need of the organization to stay financially viable and the potential loss of revenue via traditional avenues. The result is that frontline healthcare delivery systems are at the center of a challenging and painful transition period that demands thoughtful decision-making as the industry redefines itself.

Despite this turmoil, healthcare systems must still focus on the fundamentals: delivering quality patient care, keeping pace with emerging technologies, contracting with suppliers and managing day-to-day operations. A big part of the challenge and a hidden opportunity is having the ability to leverage existing resources for immediate advantage, while simultaneously positioning for the rapidly approaching landscape of value-based care

delivery. To respond effectively and under such industry conditions, an operationally effective data strategy is critical to the enterprise in order to provide information, visibility and the knowledge necessary to succeed.

The pivotal question is “How do you get there?”

## THE LURE OF BIG DATA

The complexity and difficulty of managing and making sense of big data in healthcare is an inevitable consequence created by the flood of information from EMRs, claims systems, consumer databanks and various other sources. Stemming from early adopter excitement and the lure that such rich information assets promise, the interest in big data innovations amongst healthcare companies is becoming commonplace. The ability to dissect and lay open all manner of truths and insights about the enterprise’s costs, operations and customers holds understandable appeal. The possibility for better, more informed decision-making through the execution of big data practices is real and ultimately achievable. However, embarking on a journey towards a future which consists of the consumption and application of unlimited data is fraught with many challenges, particularly if not handled in a practical manner and tied to more immediate business outcomes.

With the potential of big data comes the inevitable interest in finding ways to consume it and more importantly, utilize it to enable business results. Nevertheless, the operational word here is big, which ultimately equates to big planning initiatives, big infrastructure projects, big knowledge transfer and training commitments, big project scope and delivery timeframes and big demands for HIT human capital resources - all of which invariably signifies big risk and big investments. Though the challenges of big data initiatives may result in payoffs commensurate with the investment required, regulatory mandates and competing priorities will likely delay such efforts even if the desire and funding exists.

## A BETTER APPROACH - AGILE ANALYTICS

While a comprehensive, enterprise-wide data repository is certainly worth contemplating and even pursuing in many cases, today’s highly dynamic business requirements cannot wait years for its development. Healthcare delivery systems and health plans require visibility and knowledge about their patients, costs and exposure to risk and they need it now. During this time of industry turmoil, many healthcare companies do not have the luxury to pause other business imperatives in order to start and complete foundational data management and analytic projects.

Today's business climate makes it necessary for healthcare companies to identify and develop solutions to respond to immediate demands, often in parallel with broader data management strategies designed to position them for long-term success. Ideally, these short and long-term strategies can work in tandem and iteratively deliver pointed and timely business results while also creating building blocks for the future. Executed effectively, this approach can contribute in a systematic and modular fashion to the overall enterprise data architecture - think of this as Agile Analytics insight.

With this approach to data management and analytics design, the enterprise is able to deliver actionable solutions that allow the organization to respond nimbly and meet specific analytic needs, such as determining the likelihood of a costly readmission. This approach also arms the organization with quick analytic insights enabling test and learn processes to validate business results. The outcome solidifies business requirements which ultimately support an enterprise data management and analytics strategy.

The advantages of an Agile Analytics approach are significant given the rate of change and uncertainty that remain as the industry moves towards a more accountable, value-based care system. Enabling project scope to be shortened dramatically, an Agile Analytics approach accelerates a healthcare company's ability to address immediate business issues and helps mitigate the disruption to business operations. The approach allows healthcare leaders to leverage existing internal data assets alongside valuable external data to develop critical institutional knowledge. Such insight will prove to be invaluable in the advancement toward the goal of leveraging big data to its utmost potential.

The philosophy behind an Agile Analytics approach is to 'think big, start small, move fast.' The following outlines the recommended steps to the process:

- Identify a high-potential business opportunity
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## EXAMPLE BUSINESS OPPORTUNITIES IN HEALTH CARE

Dozens of high-potential opportunities exist today in most every healthcare organization. The following are examples of opportunities that healthcare systems and health plans can tackle quickly by using an Agile Analytics approach.

1. Discover patients most likely to re-admit after an inpatient stay, which enables customization of discharge planning and post-hospitalization follow-up activities. Avoidance of a single re-admit can save thousands of dollars per case, improve the health system's quality ratings and create a better scenario for the patient's health and well-being.
2. Discover individuals most likely to have specific medical procedures in the future (e.g., back surgery) and enable proactive outreach efforts designed to educate patients on alternative treatments, lifestyle changes and safety issues if a surgery is the best treatment path. Less invasive and less costly treatments often have similar or better patient outcomes.
3. Discover individuals most likely to have or acquire chronic conditions or who are most likely to consume healthcare resources in the future, therefore enabling efficient and proactive outreach efforts designed to improve health and wellness. A patient burdened with diabetes but compliant with standards of care costs much less on average than one who is non-compliant. The compliant patient also benefits from an improved quality of life.
4. Discover patients most likely to unnecessarily visit highest-cost, inefficient care settings (e.g., emergency room for routine services) and create incentives directing them to more appropriate settings or to address healthcare access opportunities that exist.

These examples clearly demonstrate the opportunities that can be enabled by enhanced analytic insight. Agile Analytics solutions exist today and allow companies to reap such benefits without investing millions or waiting years for the return on investment.

## A PRESCRIPTION FOR ACTION

Admittedly, the notion of big data can be both thrilling and transformative for any enterprise, including health systems and health plans. It's difficult to ignore the potential of the vast data sources healthcare organizations are just beginning to harness. However, rather than



embarking on an expensive and risky journey that could stretch out years into the future, a more attractive alternative is to arrive at the same place through a series of productive, self-contained analytic sprints.

At a time when the nation's healthcare system is perhaps at its least defined and most uncertain period, the sound strategy is the adoption of an Agile Analytics approach. This strategy enables organizations to respond to both critical business requirements in real-time, all the while steering the enterprise methodically toward the goal of leveraging big data.

## ABOUT COBALT TALON

Cobalt Talon specializes in innovative data management and analytics solutions for health plans, health systems, ACOs and PCMH organizations. Our offerings enable health-care organizations to respond effectively to the unpredictable market forces buffeting the industry. Cobalt Talon's data enhancement processes and analytic delivery solutions directly enable population health management initiatives, provider efficiency and effectiveness, and the movement to a consumer-based healthcare market. To learn more about Cobalt Talon and how our Agile Analytics approach can help your organization, visit us at [www.cobalttalon.com](http://www.cobalttalon.com) or contact Bill Chamberlain at [bchamberlain@cobalttalon.com](mailto:bchamberlain@cobalttalon.com).