Enterprise analytic methods: Build or buy?
Five considerations for making the right decision for your business

Introduction
Healthcare payers are facing a changing marketplace that demands business model transformation and the redesign of operational processes. In this new paradigm, breaking down data silos and developing an information-centric strategy can help payers compete.

By investing in enterprise data warehouses (EDWs) and resources to bring more analytics activities in-house, payers are reducing analytic latency to drive nearer real-time insights and informed business decisions. This is typically accomplished by building proprietary methodologies or licensing pre-configured analytics that integrate with existing infrastructure.

So, which approach is right for your organization —build or buy? Here are five considerations that may help you decide.

1. **Do you have the skills you need?**
   Building analytic methodologies is time- and resource-intensive, requiring a team with a diverse set of skills. In addition, that team may need additional software and hardware to test model performance, benchmark for clinical validity and support its workload.

   If you build: If you don't already have one, you'll need a team of certified coders, data scientists, analysts, clinical consultants, quality assurance specialists and technical writers—skilled labor that can be in short supply and difficult to find. You'll also need those same resources to support ongoing maintenance and updates to your analytic models.

   If you buy: You can shift the resource burden to a third party that specializes in healthcare analytics. This can free up your internal staff to focus on value-added services, such as consulting with various stakeholders and working with advanced analytic insights to drive strategic initiatives for you and your clients.

2. **Is your dataset robust enough?**
   An advanced dataset is needed to build, test and validate analytic models; to assess the predictive power of different models; and to benchmark against for comparisons. It should contain all the necessary data elements and types, the volume to support a variety of scenarios, and the breadth to handle trending and comparisons over time.

If you build: You'll need to assemble or purchase a research database if the data is not already available, in addition to maintaining updates on a regular basis. You'll also need to acquire industry-focused datasets to support benchmarking capabilities.

If you buy: You can pass the time and expense of procuring and maintaining a robust research database on to a third-party vendor, whose analytic methods are then developed against such a dataset.

3. **Do your algorithms and methodologies work together?**
    Interconnected analytics build upon and enhance one another, allowing you to drill down from a global, patient-level view of healthcare data to an episode-of-care, to events (e.g., admission or outpatient events) and to service-level views. This interconnectivity and linkage is what provides the analytic continuity and integrity you need to deliver action-driving insights across the enterprise.

    If you build: You'll need the expertise and team coordination to develop algorithms that are connected and build upon one another. To mitigate reporting discrepancies downstream, you must standardize specifications for important factors such as how a disease is defined, or what constitutes an episode of care.

    If you buy: Select a reputable vendor with both industry and analytic expertise who offers a suite of interconnected analytics designed to generate consistent, reliable information more efficiently.

4. **How will you operationalize analytics?**
    Output from analytic methods needs to be easily incorporated into workflows that feed the reporting and information needs for a variety of stakeholders. A framework needs to be in place for populating the EDW, data model and business intelligence (BI) tools with data enriched by your analytics.

    If you build: You'll need to ensure that analysts and data scientists have access to your methodologies from the EDW using BI tools. This ease of access can help facilitate a feedback loop, helping analysts provide action-driving insights quickly, thereby growing the business and helping set business priorities.

    If you buy: Analytics from some third-party vendors can easily interact with your existing Extract, Transform and Load (ETL) software, data model and BI tools. This allows you to add an advanced analytics layer without changing your underlying IT infrastructure and framework for operationalizing analytics. Look for a vendor with an analytics platform that has a unified data input specification that feeds multiple

analytic methods. This can significantly decrease implementation and ongoing production efforts, while significantly increasing speed to value.

5. **How will you maintain your methodologies?**
   Diligent maintenance is important to protect the integrity of your analytics. But just like building methodologies, maintaining them also requires significant time and resources.

   If you build: You'll need significant resources to monitor and update industry coding additions and changes, recalibrate models as new data becomes available, update technical guides and end-user documentation, and manage new version releases.

   If you buy: You can shift many of these activities to a qualified vendor, which frees up more time for analysts, data scientists and other team members to focus on valued-added analytics, creating new products and services, and executing on strategic business initiatives.

Summary
In today's complex healthcare marketplace, the path to success for payers will require a greater reliance on enterprise data — and the critical insights that can be derived from it.

Enriching data from the EDW with advanced analytics licensed from a credible vendor can drive efficiencies by shifting key resource burdens to an outside partner, and freeing up more time for analysts and data scientists to focus on higher-value initiatives that drive business transformation.

Payers interested in leveraging a buy approach should identify vendors with not only deep analytic and healthcare experience, but also the technical capabilities to help them maximize their underlying technology investments.

Flexible Analytics for Payers
With Flexible Analytics from IBM Watson Health™, you can license the methodologies you need, when you need them, from a suite of analytic methods that can integrate with your existing IT infrastructure — helping you reduce the time and resources required to analyze enterprise data and accelerate time to value.

Learn more at truvenhealth.com/payer/flexibleanalytics.