

WHITE PAPER

# Pharmacy Analytics

Empowering payers to optimize pharmacy care  
and cost management

Ingenix Consulting is a premier, data-driven health and human services consulting organization. We have over 1,000 consultants with experience working with hospitals, physician practices, health plans, employers, government agencies and pharmaceutical companies. This scale and exclusive health and human services focus set us apart.

## Improved Visibility Through Decision Analytics

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Health plans and their pharmacy benefit managers have for years relied on competitive analysis, a focus on drug pipelines and negotiated rebates as primary strategies to optimize the performance of their pharmacy segments. Despite best efforts, drug costs have continued to outpace the increases in other health care costs and now represent approximately 20 percent of total health care costs. Appropriately, given that experience, health plan executives are beginning to take a more comprehensive look at the factors influencing pharmacy performance, and seeking tools to more effectively improve their decision-support on the way to better health outcomes and streamlined costs for patient care.

### **Time for a Transformative Approach**

The investments made throughout the health care industry to build core information infrastructure provide the foundation for a dramatic improvement in the analytical tools available to health plans as they seek to improve pharmacy performance. Key to accessing such tools is the willingness to look beyond the capacity of pharmacy benefit managers to provide trend analysis, formulary modeling and health outcomes research. It is noteworthy that 50 percent of the top 20 payers now in-source some or all of their pharmacy benefit programs—driven in part by the recognition that performance must be improved.

A look at the lessons learned when organizations outsource their I.T. functions is enlightening: while the rationale for outsourcing the expertise, procurement leverage, and staffing challenges of high performance information technology is often sound, no organization can afford to delegate the evaluation of the performance of its I.T. function, or the extent to which that function is optimally integrated with other mission-critical work of the organization. The availability of management information to evaluate the performance of the outsourcing model is vital in order to make certain key decisions are aligned with the organization's overall business and financial goals.

For health plans, the increasing availability of comprehensive, longitudinal health care data means payers can gain new insights into the factors driving pharmacy trends: beyond competitive analysis and drug pipelines, these include medical and prescription plan design; formulary design; consumer marketing; physician prescribing behavior; geography.

### **Critical Elements for Success**

#### *Data Warehousing and Data Management*

The challenge here is to manage enrollment, benefit, pharmacy, medical, and laboratory data from multiple sources. Data is transformed and organized to protect privacy and to provide efficient, reliable access to support timely decision making. Custom analytical tools are built on top of the warehouse to support analysis, product development and to automate mature analytic products. The housing of extensive historical data is the treasure trove for the potential to provide rich analysis and modeling of pharmacy trend.

#### *Trend Analysis and Forecasting*

Analysis of pharmacy claims activity, insight into pharmaceutical industry trends, drug level unit costs, changes in generic status, clinical studies, and new product launches all can and should be monitored, as well as tracking trend data that is pre rebate- and post rebate- adjusted.

With smaller trail-to-market product cycle, patent expiration for several blockbusters on the horizon and direct-to-consumer advertising on the rise, accurate and timely projection of drug spend and utilization has become an indispensable tool for the payers. A forecasting tool based on sound statistical methodology and driven by individual payer's own claims, benefits, and demographic information combined with pipeline and industry information can be a very effective tool in cost management.

#### *Formulary Management*

Decisions about formulary structure and rebate negotiations are informed by a deeper understanding of how patients are using individual drugs and groups of medications. Diagnosis reports (i.e. the percentage of users by indication), concomitant medication reports, compliance/persistence reports, baseline medication reports (i.e. the type of medications used prior to the medication of interest), dosing reports, and cost per patient reports provide the comprehensive data-set necessary for understanding a particular patient population's medication usage.

Furthermore, the pharmaceutical industry provides an extensive collection of information regarding the products they sell; however, manufacturers naturally try to position their product more favorably over a competing product. Outcomes research adds a layer of transparency to manufacturer claims and enables measurement of how manufacturers' claims hold up when considered in a broader data context.

#### *Drug Benefits Management*

Optimal setting of the co-payments, drug coverage rules and other benefit parameters is the most effective tool to manage patient behavior. However, the discussion in this regard has moved beyond the simple two vs. three tiers of drug placement decisions to consumer driven plans and to fourth and even fifth tiers of co-payments. These developments have opened up new opportunities and new challenges for the payers and the PBMs. Optimal benefit setup requires sophisticated analytic tools to identify measures which would move utilization to cost effective drugs without adversely impacting compliance and adherence. It also requires tools to allow the payers to do financial modeling based on realistic assumptions and it requires implementation tools to ensure that once a benefit plan is sold, it gets quickly and correctly installed.

#### *Pharmacoeconomic Analysis/Outcomes Research*

Formulary decision makers often base their decisions on cost and drug equivalency; however, this may fail to take into account the differences in drug effectiveness and/or side effect profile. Pharmacoeconomic analysis combined with outcomes research is used to compare two or more products and forecast the total health impact associated with their use by various demographic groups. Once outcome data is known, the pharmaceuticals with the best efficacy for each demographic profile can be promoted through formulary and benefit design as well as patient and physician education.

#### *Specialty Medication Analysis*

Specialty medications (those medications requiring a physician to administer) are projected to comprise 30 percent of all dollars spent on pharmaceuticals within the next two years. The additional medical costs associated with this class of drug, combined with few competing products, compounds the difficulties of gaining control over costs. New pharmacoeconomic analysis and modeling techniques, which examine the administration of these medications through the medical benefit as well as the pharmacy benefit, are helping provide insight into the costs associated with specialty medications. This analysis informs decisions on the optimal, most cost-effective, formulary selection and physician administration, providing the best outcomes.

**Health Plan Return on Investment**

Using current industry performance as a benchmark, payers see drug costs as approximately 20 percent of total health care costs—and project those drug costs to increase 10-20 percent every year. Effective use of pharmaceutical analytics tools for one year is estimated to provide a 2.5 percent reduction in drug trend—approximately \$12 million in savings for each 1 million lives insured.

**Proof of Concept**

A large national insurer used sophisticated pharmacy analytics to restructure their co-payments on a whole class of non-generic testing equipment. This led to greater patient adoption of the testing equipment and greater compliance by the patients with their prescribed testing regime. In addition, analytical modeling of the whole class provides a prediction that the increased compliance will result in a significant positive impact on the patients' long-term health outcomes. This positive long-term benefit, combined with appropriate rebate re-negotiations, should lead to a net-zero cost increase to the payer for this entire class of patients.

**Conclusion**

Use of advanced pharmacy analytical tools gives executives the information they need to make better, more fact-based, decisions. This insight leads to increased transparency, better informed drug rebate negotiations, and improvements in formulary and benefit design. Ultimately, this results in greater influence over the pharmacy cost trend and better health outcomes for patients.

## About Us

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## About the Authors

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