



PRECISION MEDICINE AND PREDICTIVE ACTION DRIVE MEASURABLE IMPACT FOR PATIENTS

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The Institute for Precision Medicine defines "Precision Medicine" as the "medical approach that proposes to prevent and treat disease based upon a person's unique genetic makeup and their lifestyle habits. Precision medicine, the ability to accurately measure specific predictors of patient outcomes, is implemented in personalized clinical care." Thanks to recent advancements in bioinformatics, big-data analytics and gene sequencing, precision medicine is now being developed for therapeutic areas beyond oncology: central nervous system (CNS), immunology and respiratory.

As the industry pivots to precision medicine, patients, alongside their caregivers and providers, will demand to customize and control their treatment plans to accommodate their lifestyle, comorbidities and communication preferences. High-touch, personalized engagement will be more important than ever to ensure patient safety, compliance and adherence. After all, their quality of life depends on it.

The Future of Data-Driven Patient Support Is Now



Last year 84% of life sciences companies invested in patient engagement, and 79% invested in data and analytics and other support technologies. It is clear COVID-19 accelerated digital health adoption, and life sciences companies are now more than ever focusing their innovation efforts to significantly improve patient outcomes. Although the use of health data technologies

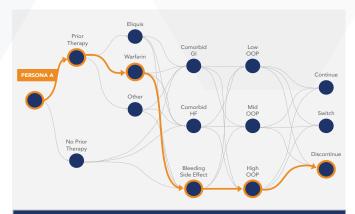
and analytics in the life sciences industry continues to evolve, many manufacturers are still crawling around in the dark. With limited in-person patient and provider-rep interactions in the midst of the COVID-19 pandemic, hubs that lack synergized technology and data are struggling to understand access and adherence barriers – and, most importantly, new and unexpected patient needs. These hubs are also unable to provide the manufacturers' commercial and compliance teams with actionable insights that allow them to personalize their messages to patients and targeted providers. As a result, manufacturers are missing more outreach opportunities than ever before. And faster, more direct treatment access for patients is becoming critical, as prescription fill rates and conversion to therapy rates are on the decline.

At EVERSANA, we help our clients drive therapy adoption and adherence with our highly configurable, scalable and HIPAA-compliant relationship management platform designed exclusively for healthcare: ACTICS Patient Relationship Management (also referred to as ACTICS PRM). Driven by predictive analytics and machine learning, ACTICS PRM allows manufacturers to rapidly identify patient behaviors and patterns to develop personas and predict the "next best action" for personalized engagement. ACTICS PRM can even predict the personas most likely to discontinue or switch their medication and then offer a corrective action to assist the patient. With deep insight into access, affordability and adherence barriers – and how corrective actions improve adherence - manufacturers can better serve patient needs with the right touch points at the right time.

The key for pharma brands that increasingly play a role in supporting patients through their care journey is to think about how predictions derived from patient support programs – considered real-life data – can inform the strategies and tactics of the commercial, compliance and channel management teams. A prediction alone is not productive, but a prediction that enables action and improvement is essential to product performance and

long-term success. With integrated commercial services support from ACTICS PRM, the ultimate result – improved patient outcomes – drives value for payers, providers and patients alike.

FIGURE 1



Variable	Description	Variable Predictive Value	
Discontinue Timing	<30 days		
Initial Fill (days)	Below 14 days	High	
Initiating HCP	Therapy Loyalist (50%+ scripts are Therapy)	Mid	
Comorbidity	Musculoskeletal Disorders High Blood Pressure High Cholesterol Non-Diabetic		Overall Model Accuracy F-1= 0.89-0.98
Payer Mix	Medicare, Assistance Programs, Commercial, Cash	1%	

- There are ~600 (0.7%) patients similar to Persona A
- The average initial Therapy fill for this cohort is 10 days
- The model can make up to 98% accurate predictions for this cohort
- \bullet This cohort is extracted from statistically significant classification exercise

Predictive Action With Measurable Impact

Figure 1 traces the path of one of the personas we created, Persona A, who discontinued a brand therapy. We developed a unified data set – consisting of demographics, income data, total Rx costs per year, estimated out-of-pockets and total cost of care – to train our model. Patients who matched Persona A were identified from the database at the time of hub enrollment and deployed/enrolled into the hub process. The results of our modeling showed a 98% accuracy rate in our ability to describe the types of patients, or personas, across the model. We found that by altering content and communication mediums and delivering a co-pay card via an app, we maximized Persona A's ability to refill his script two days ahead of scheduled refill. The system "learned" how well Persona A did with that action and improved its ability to predict – allowing us to successfully predict the next best action.

Embracing Data Innovation to Improve Patient Outcomes



Of all product launches, **66% do not meet expectations**. With increased competition, complex patient behaviors and higher operating costs, patient services

programs now demand integrated data and analytics across the patient journey to model value-based care.

As manufacturers invest in tools to navigate digital patient engagement, patient services teams need to be equipped with the right tools to maximize value across the patient journey and the product life cycle. Rapid advancements in science resulting in new therapies, such as CAR T-cell therapy, immuno-oncology, gene therapy and digital therapeutics, will require the industry to embrace data innovation and combine therapy advancements with artificial intelligence (AI) evolution. Evidence provided by ACTICS PRM will expand company understanding of access and pricing barriers and allow sales teams to execute a comprehensive market access strategy that enables payers, providers and patients to make better treatment decisions. By combining the power of analytics with ready-to-deploy, real-time actions, manufacturers can optimize product and patient outcomes with custom solutions, ultimately ensuring patients receive the full benefit of a lifechanging therapy.









