FICO® Propensity Scores for Healthcare

Improve on the success of adherence, utilization, care and case management programs

Using world-class predictive methodologies, FICO® Propensity Scores for Healthcare can be used by the whole spectrum of healthcare entities to:

- Proactively identify behaviors of non-compliance with models customized to the desired performance measurement.
- Maximize patient engagement to improve outcomes with integrated communications for tailored dialogues, reminders, alerts and improved targeting and timing.
- Test and learn for continual improvement by learning where program and communication efforts will have the most impact.
- Reduce costs for all by matching the right actions to the right patients — based on their level of risk for noncompliance to reduce health setbacks and additional claims.

FICO® Propensity Scores for Healthcare can improve patient engagement for all the stakeholders in their care and treatment — including payers, providers, hospitals, retail pharmacies and pharmaceutical manufacturers. Predicting the propensity of a patient to react in a wide variety of health behaviors can support proactive outreach and better tailored healthcare programs to improve patient results. Through a proprietary combination of rich third-party data, analytic development techniques and flexible delivery options, FICO® Propensity Scores provide an accurate, actionable view of relevant patient behavior.

Better health outcomes, lower costs

As healthcare costs continue to soar for the individual as well as the industry, it becomes increasingly important to maximize limited resources while promoting better health and preventing unnecessary medical treatment. FICO® Propensity Scores can provide a clear picture of relevant patient behaviors, so each stakeholder can take more effective actions. Based on the expected behavior of the patient, you’ll know where your resources will have the greatest impact, and where greater effort or new tactics may be necessary.

By stratifying patients in terms of propensity, you’ll be able to allocate and manage communication and program budgets more efficiently. By knowing how likely a patient is to take a particular action — such as adhering to a medication regimen, enrolling in a wellness program or getting an annual flu shot — you can focus your efforts where they will be most effective.
FICO® Propensity Scores can provide insight into patient engagement for more targeted, effective action. Using a broad array of third-party data sources, these predictive analytic models give a clear picture of patients’ propensity toward a specific behavior in a defined timeframe such as 12 months.

**Identify health-related behaviors**

Using the same world-class predictive methodologies used to create the FICO® Score and the expertise from delivering a wide range of healthcare analytics, FICO consultants tailor the FICO® Propensity Scores to the desired performance measurements. Behavior analysis could be based on a disease class, a specific chronic condition or complex, long-term therapy. Some use cases we’ve been involved in:

- Patient segmentation for enrollment in a disease management or wellness program
- Conversion of retail to mail-order prescription drug refill
- Likelihood to be compliant with a medical procedure
- Complete an elective procedure
- Seek or avoid counseling
- Actively use a website or mobile device
- Be attracted to certain benefit designs or re-designs
- Attrition from an existing plan
- Response to a specific channel – voice vs text vs email
- Propensity to purchase nutritional supplement as doctor recommended
- Acquire and use prescribed medical device correctly
- Eligibility for a specific government-sponsored program

**Test and learn for continual improvement**

Take a more targeted approach by learning where your program and communication efforts will have the most impact. Predict a wide range of behaviors and influence outcomes with proactive outbound communications – such as text messages, emails, phone calls or promotional activities to engage patient to refill medicine, schedule follow-up labs, get nutrition information or make appointments tied to the prescribed regimen. Learn to innovate with new programs and adjust features to align with positive behaviors.

**Reduce costs across the industry**

Optimize marketing planning, targeting and spending by better stratifying across a patient base in terms of their natural propensity. The scores can help to allocate and manage marketing budgets more accurately and appropriately. Harnessing the predictive power of multiple, third-party data sources, use of the FICO® Propensity Scores can improve effectiveness of consumer marketing efforts, including acquisition, conversion, compliance and persistence.

**Solution architecture**

For healthcare providers who want to connect disparate data, analytics and decision components for prescriptive insights across the enterprise, FICO® Decision Management Suite (DMS) provides the connectivity and transparency that enable you to make decisions that are instantly executable and easily scalable. On premise or in the cloud, the FICO DMS provides a simple, cost-effective way to deploy any FICO® Propensity Score. This capability supports the integration of FICO® Customer Communication Services (CCS) for coordinated, cross-channel communications. The service supports real-time patient dialogue, immediate resolutions, timing text-messaging and closed-loop learning to take medicine, refill or schedule follow-up labs or appointments tied to the requirements of the medical regimen.

Through a custom analytic service, the creation of a FICO® Propensity Score for Healthcare establishes a direct connection between predictive analytics, action and reaction.
An analytic advantage

FICO® Propensity Scores deliver an accurate and actionable view of patient propensity by providing superior performance in three core areas:

Data — Quality data sources and the ability to use them are key components of advanced predictive modeling. FICO is able to create a more powerful scoring model through the use of novel third-party data sources and proprietary knowledge of how to turn that data into reliable predictions of patient behavior. FICO® Propensity Scores do not include credit risk information or depend on a single source of data.

For example, when scoring for propensity for medication adherence, traditional techniques would rely on claims data. Because FICO knows how to interpret multiple additional data sources, we are able to create a broader and more predictive profile.

Development — FICO is known worldwide for excellence in analytic development. FICO® Propensity Scores are built using analytic techniques developed through decades of experience helping thousands of clients. FICO® Propensity Scores are built on the same FICO DMS development platform that FICO has used to create the leading advanced analytic solutions across industries for decades. A statement of work will define the required analytic research, data analysis and validation of models customized to your data and the desired performance measurement.

Delivery — FICO is able to work with you beyond the initial development to implement the model into your operational workflow. FICO’s hosted solutions maintain relevant third-party data and deliver scores to you through the FICO® Analytic Cloud, a complete end-to-end platform and solutions ecosystem that provides access to data science tools, application development software, on-demand infrastructure, decision management applications and packaged analytic content. In addition to streamlining vendor relationships and ensuring data accuracy, this delivery hub allows you to make your scores available to partners and other stakeholders. If there are operational constraints or sensitivities around sharing data, FICO can develop models that sit behind your firewall. These models can be hosted on the preferred Decision Management Suite for rapid delivery and integration into modern and legacy systems.

Through this combination of rich third-party data, propriety analytic development techniques and cloud services, FICO is able to provide you with actionable insight into patient engagement so that all of your efforts to improve patient health are more impactful.

Features

Assist caregivers throughout the treatment cycle

• Predict a broad range of patient behaviors and preferences
• Segment patients who are most or least likely to enroll in a disease management program
• Focus resources on individuals with the highest risk of non-enrollment or non-compliance
• Identify the best channel for outreach or messaging to high-risk patients

Real-time intervention and engagement

• Use predictive scores to get ahead of expected patient behavior rather than a description of what has happened in the past
• Provide a clear picture of relevant expected patient behaviors so you can take more effective action

• Make a difference with timely wellness alerts, treatment reminders and other patient engagement actions

The FICO analytic advantage

• Achieve an accurate and actionable view of patient propensity that can be integrated with a communications and marketing system
• Leverage proven analytic methodologies developed through decades of experience of working with organizations and their data
• Gain a powerful scoring model through the use of third-party data sources and proprietary knowledge of how to turn that data into reliable predictions of patient behavior

A custom analytic service, creation of a FICO® Propensity Score establishes a direct connection between predictive analytics, action and reaction — closing the learning loop on program adherence.

Use of a FICO® Propensity Score can improve direct-to-consumer marketing and facilitate better health outcomes at every stage of a regimen. Healthcare providers can achieve better efficiencies and overall results through improved targeting of programs and resource management.

Learn how your organization can benefit from the most advanced predictive models for measuring patient propensity. Email us at info@fico.com.
Leading Pharmacy Benefit
Manager: Rx Mail-Order
Conversion Model

Mail-order pharmacy is widely used to help control Rx costs and increase utilization. Outbound telemarketing campaigns to convert patients to mail-order are very costly. FICO developed a retail-to-mail conversion model using prescription claims, patient and third-party data to identify the characteristics related to conversion. Allowing operations to rank-order campaign files so that those most likely to convert will be called first and those unlikely to convert via outbound telemarketing are pushed to other channels.

- FICO’s model improved conversion rates 34.8% over no targeting (business as usual in this case)
- A 3.5x higher conversion rate was seen in the top 10% of the file versus bottom 80% of the file
- Use of the model enabled the PBM to achieve 82% conversion rate by calling only the top 20%

¹Medication Adherence for 90-Day Quantities of Medication Dispensed Through Retail and Mail-Order Pharmacies, The American Journal of Managed Care