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# DRUG BENEFIT NEWS

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## Amid Skepticism, Express Scripts Claims It Can Better Predict Rx Nonadherence

Express Scripts, Inc. thinks it may have found the “holy grail” of health care solutions with a new predictive model that could reduce medication nonadherence before it starts. With this program, the PBM says it’s redefining the way predictive modeling is done and used. But while several other PBMs and health plans strive to solve the adherence issue with similar models, one competitor says such programs lead to insignificant results.

Express Scripts claims its new model, unveiled last month, is able to accurately predict up to a year in advance which patients are most at risk of falling off their prescription drug regimen. It then uses this information to “intervene in customized ways” before those patients actually stop taking their medications.

“People have been talking about predictive models in healthcare forever, and insurance companies try to predict who the high-risk patients are,” Steve Miller, M.D., chief medical officer at Express Scripts, tells *DBN*. “However, after looking at all the literature, we determined that our model is significantly better at discerning who will take their medication and who won’t.”

According to Miller, the technology has proven 85% accurate in predicting the top 10% of people who are least likely to be adherent.

The model builds on Express Scripts’ entire behavioral economics and consumerology platform, which touts the benefits of personalized health care. Miller says the program is “a truly personalized model” that takes into consideration past patient behavior and demographics, and characteristics of the particular medical condition and prescription drug, among several other factors.

But Express Scripts isn’t alone in this endeavor. The PBM’s new model is one of a growing number of programs to predict and prevent medication nonadherence.

Competitor CVS Caremark Corp., for example, is also developing a program that predicts nonadherence, which it plans to start using next year. Company spokesperson Christine Cramer declines to give fur-

ther details on the program, as the results of one study are being published in a few months.

“Everybody’s trying similar efforts in terms of how to predict adherence,” George Van Antwerp, general manager of pharmacy solutions at Silverlink Communications, tells *DBN*. “But there hasn’t been a model that has proven itself as being a good predictor. Maybe

Express Scripts has cracked the code....I would assume that if you can accurately predict who is going to be adherent, that will be a good tool.”

Medco Health Solutions, Inc., though, disagrees. The PBM deployed predictive modeling technology back in 1992, and while it was effective, it was “difficult and expensive to execute long term,” spokesperson Jennifer Luddy tells *DBN*. “And we realized that it only goes so far.”

Medco’s research shows that approximately 50% of patients do not remain compliant with their chronic medication within the first six months of therapy, and two out of every three patients dealing with chronic conditions will experience a gap in care. “We don’t need a tool to tell us that,” Luddy contends. “It’s more effective to have immediate intervention with a patient upon seeing an issue.”

That is where Medco’s Therapeutic Resource Centers and specialist pharmacists come into play, she adds. These services “have been proactively reaching out to patients to close gaps in care such as refill/adherence issues, missing a vital medication in their therapy profile based on national clinically recognized guidelines, or potential drug-drug interaction or duplicative therapy.”

The company also recently launched a new web-based tool that provides “real-time interventions” by messaging each member directly “to close that gap in care, or contact a specialist pharmacist with a question instantly 24/7.”

### Express Scripts Takes Proactive Approach

But Miller argues that it’s more effective to catch bad behavior before it starts. “Everyone else is driv-

ing forward looking through the rearview mirror," he says. "They're watching behavior over a six-month period and in retrospect determining that patients are nonadherent. And by that point, they've already developed horrible habits."

There is no one "silver bullet" for why people don't adhere, Miller explains. "There's a small group of patients that care about cost. For others it's about forgetfulness, and for some it's convenience. So we can now reach out to each of these patients as individuals and customize solutions for them."

Therefore, a predictive model could determine if a patient needs to enroll in a copayment-assistance program if there is a cost issue, a mail-order program if there is a convenience issue and refill reminders if the person struggles with forgetfulness. "For everyone it would have to be a customized solution," Miller

maintains. "And because you can target them more effectively, you can afford to do that."

Other interventions to improve adherence include consultations with a pharmacist and auto refills and renewal assistance.

However, attempting to change behavior in the top 10% of patients likely to be nonadherent will be tough, Van Antwerp contends. "The industry is still waiting for that proof," he maintains. "If we can predict that patients are adherent but can't change behavior, then the model doesn't do us much good."

Instead, he suggests focusing on the people who are likely to be adherent and developing ways to enable them to be more adherent.

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