Cigna White Paper

Medication ADHERENCE



"Drugs don't work in patients who don't take them."– U.S. Surgeon General C. Everett Koop

What is it?

Medication adherence can be defined as the degree to which a customer follows their health care professional's guidance in taking their medications. It includes three important factors – adherence to dose (e.g., 10mg), adherence to frequency (e.g., b.i.d., which means two times a day) and following special instructions (e.g., p.o., which means by mouth; p.c., after meals; h.s., at bedtime). Adherence to dose and frequency are the easiest to measure and usually involve standard industry measurements such as medication possession ratio (MPR) and persistency (e.g., via Kaplan-Meier curves).

To accurately measure adherence to special instructions and address any related barriers, coaching and consultation through direct or indirect means with a customer are the preferred methods. The root causes for non-adherence may involve information gaps, lack of motivation and/or ineffective behavioral skills. The most typical customer-cited reasons for non-adherence are: complex therapies, cost, cultural or religious beliefs, disagreement with their diagnosis, forgetfulness, health literacy, irregular lifestyle and side effects.

Why is it important?

Medication non-adherence increases the cost of health care and can lead to worse outcomes. An estimated \$300 billion in direct and indirect costs annually are attributed to non-adherence to prescription medications. 1-2 Corroborating studies point to increased emergency room visits, hospitalizations and all-cause mortality rates as the most significant factors for such estimates. 3-4 Customers experience the effects of non-adherence through preventable emergency room and inpatient visits, deterioration of health and wellness, reduction in quality of life, increased disability and lower productivity in the workplace. 5-6 Customers also experience the financial impacts of non-adherence through higher health care costs. Improvements in medication adherence result in total health care cost savings.

In a study* conducted by Cigna, customers who improved their adherence to the level defined as "clinically optimal" showed annual total health care cost savings of nearly \$1,100 or \$2.90 per person, per month. And, any customer who improved their adherence level, even if they didn't achieve "optimal" levels yielded \$500 in annual total health care cost savings. Those savings were net of the increased drug costs due to being more adherent.

Another interesting finding was that the relationship of adherence to total cost savings is not one of diminishing returns. In other words, even those who had already achieved clinically optimal adherence, but were able to push their adherence higher still, could experience annual savings up to \$2,110 or \$3.77 per person, per month.

*2011 Cigna Analytics. n = 688,741. July 2008 - June 2010. Conditions included were depression, diabetes, hyperlipidemia and hypertension.

How does Cigna Pharmacy Management impact adherence?

Cigna has aligned programs and processes to help customers understand the importance of adherence, their likelihood for becoming non-adherent and ways to help them stay adherent. In addition, we leverage the health care professional network and align incentives with health care professionals and pharmaceutical manufacturers.

What: Well Informed, Cigna's gaps in care program, uses an evidence-based set of clinical rules that is run against lab, claim and pharmacy data to identify deficiencies, gaps,





and omissions in care that can occur when customers don't receive or adhere to care consistent with clinically proven guidelines for treatment. The program focuses on five potential gap categories including medication adherence, patient safety, achieving key clinical targets, monitoring and appropriate therapy or drug to evaluate customers based on their health information.

Reasons to believe: Average gap closure rate of 25% (as a result of our interventions – mailings or outreach by phone) (best in class as high as a 68% gap closure rate).

We'll guarantee it: The Return on Health Guarantee is tied to our ability to close evidenced-based gaps in care. Value = difference in emergency room (ER) rates x average cost of ER admit for those with vs. without gaps and value = difference in inpatient admission rates x average cost for those with vs. without gaps.

What: Cigna Home Delivery Pharmacy is the mail service pharmacy of Cigna. We are a customer focused pharmacy with high standards of quality, accuracy and individual care providing prescription medication dispensing for over 12 years. Cigna Home Delivery Pharmacy fills approximately six million prescriptions a year and provides services like QuickSwitch, helping customers move their prescriptions from retail via direct contact with their health care professional, and QuickFill which provides automated refill reminders.

Reasons to believe: 20% gain in adherence for customers using Cigna Home Delivery Pharmacy.

What: CoachRx is a service provided to all of Cigna's pharmacy benefits customers. CoachRx encourages individuals to understand their likelihood for becoming non-adherent to their prescription medications, and provides tools to them, such as text and email reminders, as well as direct contact with licensed pharmacists, that prevent non-adherence from becoming a problem.

Reasons to believe: 22% improvement in clinically optimal adherence for those enrolled in CoachRx – for all five conditions studied (asthma, depression, diabetes, hyperlipidemia, hypertension). Compliance to adherence related gaps in care increased following enrollment in Coach Rx. 11% increase in the number of treatments filled solely through home delivery pharmacy after participation in CoachRx.

What: End to end alignment of incentives. Cigna was the first health services company to establish outcome based

contracts with pharmaceutical manufacturers. These include, among other things, an element tied to adherence to the drugs for conditions that include diabetes and multiple sclerosis. Contractual arrangements with collaborative accountable care organizations also include medication possession ratios.

Reasons to believe: The results of the first-in-industry outcome based contract, for which Cigna won the 2011 Pharmacy Benefit Management Institute's Rx Innovation award, showed an average increase in medication adherence to 87% for people taking Merck's diabetes drugs, Januvia® and Janumet®.

Stay adherent, stay healthy

Medication adherence is critical in driving improved health outcomes and lower overall health care costs today and into the future. Its value, net of the increased cost of medications, is quantifiable and meaningful to clients. As an integrated health services company, Cigna is uniquely positioned to help customers we serve and their health care professionals understand the risks, provide the tools, and align incentives to drive improved results in this area.

References

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