One Step to Goal®

The algorithmRx Statin Advisor (**aRx Statin Advisor**) provides evidence-based guidance to clinicians to support selection of the **most effective statin and dosage regimen for each patient with elevated low-density lipoprotein cholesterol (LDL-C)**.

Confronting Cardiovascular Disease

Cardiovascular disease (CVD) results in more than 800,000 deaths per year in the U.S. and contributes to tremendous emotional and economic burden on our population. Statins have shown significant benefits in reducing the risk for cardiovascular events by reducing LDL-C.[1-3] However, despite their safety and efficacy, only approximately half of the individuals who are prescribed a statin continue taking it for more than six months.[4]

These treatment failures are in part due to the traditional, costly, and time-consuming trial-and-error process to select the most effective statin and dosage from several commercially marketed statins. **aRx Statin Advisor's** precise and personalized approach significantly increases the probability that a prescriber will select the most effective statin-dose combination the first time for each patient. As a result, using **aRx Statin Advisor** can reduce costs while delivering improved healthcare outcomes faster.

aRx Statin Advisor is one of a suite of patent-pending, real-time, point-of-care healthcare algorithms designed to improve the treatment of common chronic health conditions.

Cardiovascular Disease Facts:

- Over 800,000 people die annually from cardiovascular disease, making it the #1 cause of death in the U.S.[a]

- More than 70 Million U.S. adults have elevated LDL cholesterol. Three out of four are either not treated or receive suboptimal treatment, placing them at elevated risk for CVD.[b]

- The associated healthcare costs reach almost $300 Billion annually and are expected to exceed $800 Billion annually by 2030.[c]

[a] AHA Heart & Stroke Statistics – 2014 Update. Circ. 127:e6-e245; 2013.

[b] Morbidity and Mortality Weekly Report 60(4); 2011. http://www.cdc.gov/mmwr/PDF/wk/mm6004

[c] AHA Policy Statement: Forecasting the Future of CVD in U.S. Circ. 123:933; 2011.

[1] Hayward RA, K., Zulman DM, Timbie JW, Vijan S (2010). *Optimizing statin treatment for primary prevention of coronary artery disease.* Annals of internal medicine 152(2): 69-77.

[2] Benge CD, M. B., McFarland MS (2012). *Role of aggressive LDL reduction in patients with coronary heart disease.* Southern Medical Journal 105(1): 48-55.

[3] Minder CM, B. M., Horne A, Michos ED, Kaul S, Blumenthal RS (2012). Evidence-based use of statins for the primary prevention of cardiovascular disease. American Journal of Medicine 125(5): 440-446.

[4] Latts LM (2001). *Assessing the results: phase 1 hyperlipidemia outcomes in 27 health plans.* The American Journal of Medicine 110(Suppl 6A): 17S-23S.

How it Works

aRx Statin Advisor is an adaptive clinical decision support tool for the treatment of hypercholesterolemia. The algorithm, validated in a study of almost one million patients, uses over twenty demographic, clinical and laboratory variables for each patient that are automatically extracted from the patient's electronic medical record. The algorithm compares the patient's results against those of millions of other patients treated with statins to calculate the effectiveness of each statin.
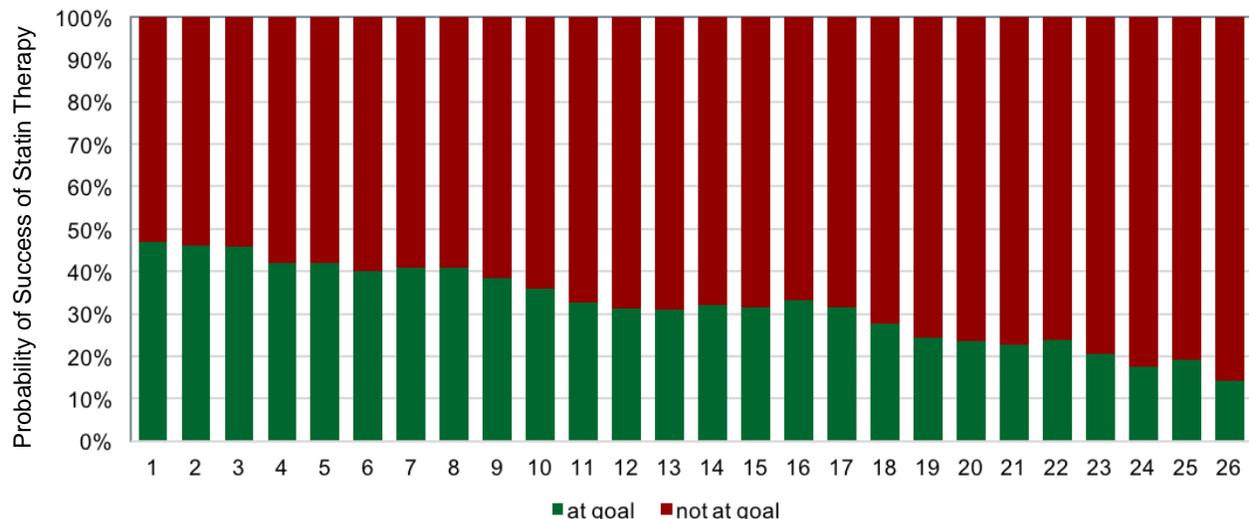
The algorithm provides a matrix of statin-dose combinations in descending order of the effectiveness of each statin-dose combination for that patient, allowing specific intervention customized to each individual's risk profile. This approach provides significant clinical decision support for the healthcare professional in picking the most successful medication, while allowing the clinician to take into consideration factors such as cost, insurance coverage, formulary, *etc.* for each patient.

Benefits of aRx Statin Advisor:

- Clinicians are more likely to prescribe the optimal medication regimen at the beginning of treatment

- Treatment goals will typically be attained faster

- Can be reliably and accurately operated by trained non-physicians, resulting in more effective use of clinician time

- Improves health outcomes and reduces healthcare costs

Probability of Success for a Statin-Dose Combination *vs. aRx Statin Advisor Rank Order*

In a retrospective study that analyzed patient prescription episodes from over 850,000 patients, there was a **three-fold greater success rate** for the top **aRx Statin Advisor**-recommended statin-dose combination *vs.* last pick, and a **50% improvement** over the clinician's choice. This highlights the significant potential benefit of using a CDSS to guide statin therapy *vs.* the traditional "trial and error" approach

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