### BE THE (MEDICARE) STAR!

Improve STAR Rating with ANALYTICS powered Therapy Adherence strategy





### Importance of Medicare STAR rating – are they relevant?

Improving the quality of care and services to patients and enrollees is one of the key imperatives of Affordable Care Act (ACA). Several initiatives and measures have been put in place to make this imperative an operational reality across the entire healthcare landscape.

For several years, CMS has posted quality ratings of Medicare Advantage plans (STAR Ratings) to help Medicare beneficiaries. All Medicare Advantage plans are rated on a one-to-five-star scale, with one star for poor performance, three for average, and five for excellent. The ratings are based on 53 performance measures derived from plan and beneficiary information collected from 5 different rating systems — HEDIS (Healthcare Effectiveness Data and Information Set), CAHPS (Consumer Assessment of Healthcare Providers and Systems), CMS (Centers for Medicare and Medicaid Services), HOS (Health Outcomes Survey), and IRE (Independent Review Entity). For example, the performance measures include whether enrollees received the appropriate screening tests, the number of complaints CMS received about the plan, and how enrollees rated the communication skills of the plans' physicians. CMS assigns quality ratings at the contract level rather than for each individual plan; this means that every Medicare Advantage plan covered under one contract receives the same quality rating. Most contracts cover multiple plans.

The health reform legislation (Affordable Care Act) ties federal reimbursement rates for insurance carriers administering Medicare Advantage products to performance, as measured by the Stars rating system. Plan's bonus payments are attached to STAR rating. CMS will have the authority to use its discretion to terminate the contracts of Part C and D sponsors that fail to achieve at-least a 3-star plan rating for 3 consecutive years beginning 2015. However, financial benefit and penalties represent only one dimension of the importance and relevance of the Medicare STAR ratings. It has also evolved into a key competitive advantage for the plans competing for Medicare beneficiaries. By design of Medicare STAR rating, any eligible Medicare beneficiaries can switch over to a 5 star rating plan any time during the year and not only during the open enrollment period. This is an immense advantage for good performing plans.

Many have doubted (and still do!) the sensitivity and ability of the beneficiaries to measure the value they perceive in a plan and hence the impact STAR rating can bring about. In a recent study, conducted by HealthPocket, Inc., CMS star ratings for Medicare Advantage(MA) plans have been found to be directly correlated with MA plans' voluntary attrition rates among members. The study found the average MA attrition rate for two-star plans — the lowest level in the current ratings — to be 22%, compared with just 2% for the highest-rated (i.e., five-star) plans. The attrition rate rises steadily with each drop in star ratings (see table). While it is acknowledged that there could be several other factors impacting the attrition rates, still the results of this study bring up an important insight into Medicare consumer behavior.

### **Lower Star Ratings Correlate with Greater Attrition**

| Star Rating    | Percentage of Enrollees Leaving Plan Annually |
|----------------|---|
| **             | 21.50%  |
| ★★ 1/2         | 17.48%  |
| ***            | 14.79%  |
| <b>★★★</b> 1/2 | 9.27%   |
| ***            | 6.92%   |
| ★★★★ 1/2       | 4.89%   |
| ****           | 1.91%   |

Source: Analysis based on study of 463 Medicare Advantage contracts and conducted by HealthPocket, Inc. Released by HealthPocket June 25, 2013.

# How Therapy Adherence is relevant in Medicare STAR ratings?

Three of the 53 measures used to calculate Star Ratings indicate whether beneficiaries take statin, oral diabetes, and hypertension medications as directed by their doctors. Adherence measures are weighted heavily because they are considered "intermediate outcome" measures; together, they account for about 10-12 percent of the overall Star Rating for MA plans. The impact of adherence measures on overall Star Ratings doubles (to about 20-22 percent) when the value of adherence measures is combined with other clinical quality measures in the Star Ratings that typically improve with greater adherence to appropriate medications (i.e., cholesterol control and blood pressure control measures).

This program is spurring new attention and new investments in medication adherence programs among Medicare Advantage plans.

#### Medicare measures for chronic conditions

| Measure   | Weight |
|---|--------|
| Care for older adults – annual medication review (Special Needs Plans only) | 1      |
| Osteoporosis management in women who had a fracture                         | 1      |
| Diabetes care – blood sugar controlled                                      | 3      |
| Diabetes care – cholesterol controlled                                      | 3      |
| Controlling blood pressure  | 3      |
| Improving bladder control   | 1      |
| Reducing the risk of falling  | 1      |
| Plan all-cause readmissions with 30 days of discharge                       | 1      |

Blue – Medication therapy management

Green - Indirect adherence measure

Orange – Direct adherence measure

Source: Medicare Health & Drug Plan Quality and Performance Ratings 2013 Part C & Part D Technical Notes.

## Why is Therapy Adherence management a critical problem?

Therapy Adherence management has been a critical problem plaguing healthcare system for some time now. In a recent study published in New England Journal of Medicine the rates at which people discharged from the hospital after a heart attack were adherent to cardiovascular medications (antihypertensives, beta-blockers, and statins) were relatively low (41 percent, 49 percent, and 55 percent, respectively), even after the insurer waived patients' out-of-pocket costs.

Similarly in another study published in Journal of Managed Care Pharmacy among patients who started medicines for diabetes, bone density, and glaucoma, rates of adherence after six months were just 66 percent, 56 percent, and 47 percent, respectively.

The total economic impact of medication non-adherence — which contributes to costly health complications, worsening of disease progression, and preventable utilization — has been estimated to be as much as \$300 billion – billions that healthcare payers can ill afford.

It is no surprise that payers have been in the fore front in leveraging several strategies to tackle this huge leakage problem. Strategies like lowering drug cost, promoting generic drugs, adherence quality measures and medical counselling have been employed by payers, healthcare provider and to some extent pharmaceutical companies alike. In many a cases they have joined forces to encourage a more compliant adherence behavior from patients ex. Outcomes based contracts such as one between Cigna and Merck which was focused towards improving health outcomes for Type 2 Diabetes patients by improving drug regime adherence.

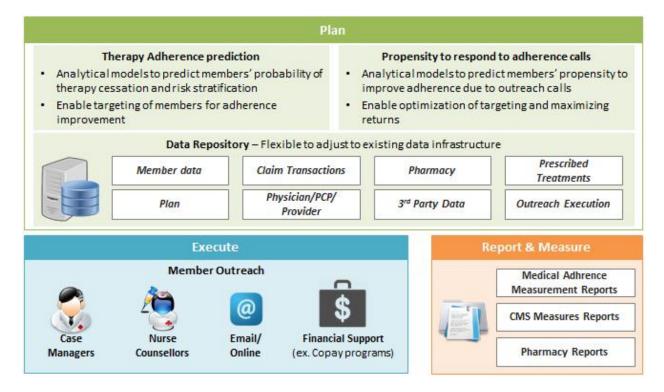
While these steps are in the right direction, they put a huge strain on the financial ecosystem of the healthcare entities. Several payers employ a large force of trained nurses which act as medical counsellors to educate and encourage patients to follow their therapy regimes. Such a medical counsellor force is a big investment, even when outsourced to a low cost center like ones in Philippines. Even with such large setup then why do many of these programs don't achieve the desired level of improvement?

The key lies in personalization and more targeted interventions that aim to understand the behavior of every patient and prevent non-adherence from occurring rather than merely treating it once it does.

### Analytics powered Medical Adherence Management Programs

The coupling of "big data" and advanced analytic techniques enabled by health technology is an innovative and effective lever which can be used to make remarkable progress on medication adherence rates, including monitoring adherence at a population level, identifying patients at risk of non-adherence, and developing better evidence on what types of interventional strategies designed to improve adherence work best and for which patients.

### **Analytics Powered Integrated Therapy Adherence Program**

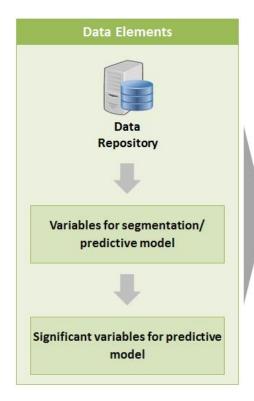


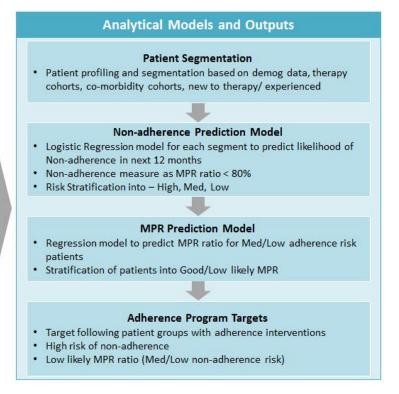
It is important to implement an Analytics power Medical Adherence program which follows a planexecute-measure paradigm.

In any medical adherence patient outreach program there are two points of failure – are we reaching out to the right patient with right message and is she going to respond to our intervention? Getting these aspects right will provide an intelligent ecosystem to enable personalization and drive improved adherence rates.

Ability to predict medical adherence behavior of a patient and quantify the risk of therapy cessation is a key tool to stratify the vast patient population into a focused cohort of at-risk patients. With such a mechanism payers can focus their limited resources to a smaller yet most relevant group of patients (via multiple channels – counselling, medical education, financial incentives and others) and drive a comprehensive behavior modification approach leading to much higher impact.

The remarkable improvement in the availability, management and integration of the underlying member and patient data infrastructure makes the implementation of adherence prediction analytical process extremely viable. Such an analytical process aims to predict patient adherence behavior and filter out high-risk members for timely and focused targeting. The models and the analytical process can be used for weekly prediction to proactively identify low adherence members. Care Management programs and teams can hence target focused yet most relevant and high risk members & devise strategies on patient education programs (medical counselling, financial incentives, calls, letters and if viable multi stakeholder programs).





While payers have been traditionally leveraging channels like mails, emails or contact center phone calls to reach out to patients for educating them or for refill reminders, their efforts have only been moderately effective.

With predictive analytics providing the intelligence that was unavailable before, these interventions can be much more effective due to the ability to prioritize and target the patients with high risk of medication non-adherence.

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In addition to the traditional channels, in the more recent times, community pharmacies have emerged as a very important medium for imparting patient education and delivering programs to help improve medication adherence. Because of their accessibility and medication expertise, pharmacists are well-positioned to help solve the non-adherence problem. Analytics embedded systems to provide the most updated and complete information regarding patients' chronic medications and risk profile are being implemented to be made available to pharmacists. Equipped with such insights and intelligence, pharmacists represent a very valuable resource in tackling the non-adherence problem.

In conclusion, leveraging the power of advanced analytics, payers (and specifically Medicare Advantage plans) can derive significantly higher impact of their medical adherence programs. This will not only improve their return on investment on adherence programs but also have profound impact on their STAR ratings - leading to a substantial competitive advantage and improved bonuses.



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