# Medicare Part D Strategic Reassignment Enrollment Analysis
# June 15, 2009

## Issue

Strategic reassignment is defined as a process that assigns a beneficiary to the Prescription Drug Plan (PDP) with the highest match between the drugs used by that beneficiary and the drugs on the plan's formulary. Some critics have suggested that CMS modify the current random reassignment (RR) process to strategic reassignment (SR). This analysis assesses whether strategic reassignment provides better formulary coverage for reassigned beneficiaries than the current random reassignment process.

## Findings

Fu Associates, Ltd analyzed formulary coverage match rates for the current reassignment process and for a simulation of strategic reassignment. Random reassignment provides the optimal match rates for about two-thirds of reassigned beneficiaries. The remaining one-third of the reassignees would have been assigned to a more optimal plan via strategic reassignment than the plan assigned through the usual random reassignment process.

Strategic reassignment would improve coverage match rates by only 7.4 percent over random reassignment (99.0% compared to 92.2%). Reassigned beneficiaries utilized an average of 6.7 drugs in the last quarter of 2007. An improvement of 7.4% with SR means there would be an additional match of ½ of one drug per reassigned beneficiary on average with SR.

Beneficiaries using only protected class drugs were randomly reassigned to plans with optimal formulary matches almost 100% of the time. Most of the beneficiaries who would benefit from strategic reassignment used only non-protected class drugs.

## Background

On a daily basis, CMS randomly, auto-enrolls dual eligible beneficiaries into below-the-benchmark PDPs.[1] Each fall, in preparation for the following contract year, CMS randomly reassigns low income subsidy (LIS) beneficiaries to new PDPs if they are currently enrolled in plans where the premium will be above the regional benchmark the following year.

Beneficiary advocates have proposed to change the CMS process of random reassignment to a process that compares the drugs that these beneficiaries utilize to the formularies of prospective plans and then reassign beneficiaries to plans with the optimal matched formulary. This process is defined as "strategic reassignment".

Proponents of random reassignment suggest that this process aids beneficiaries by making a selection on their behalf for enrollment into a plan with a guaranteed $0 premium. This method of reassignment was also designed to reassign beneficiaries equally among available plans, and therefore not drive the market share of a particular plan receiving these beneficiaries. Opponents of this process believe that there are improvements that could be made to reduce potential clinical disruption that beneficiaries may experience when changing plans.

## Methodology

Fu Associates, Ltd conducted the analysis of formulary coverage match rates for the current reassignment process, and a simulation of strategic reassignment. All Medicare Part D beneficiaries who were randomly reassigned from 2007 to January 2008 were selected. Beneficiaries who died or changed plans in 2008 were included in this analysis. For the cohort of beneficiaries selected, Prescription Drug Event (PDE) data from 2007 were extracted on a beneficiary level. Claims for drugs received during the last quarter of 2007 were selected, and a

[1] http://www.cms.hhs.gov/States/Downloads/benchmarkPY2008.pdf

unique set of proxy National Drug Codes (NDCs) for each beneficiary was produced. Drugs were matched based on brand status, dosage, dosage form, and strength of administration. Multi-source generic drugs were matched to the same drug, but may have come from a different manufacturer.

Unique drugs for each beneficiary were compared to each 2008 formulary associated with below-the-benchmark plans in 2008. A drug coverage match meant that the exact drug (regardless of drug manufacturer for non-branded drugs) that a beneficiary was taking was matched to the same drug on a formulary. For each match rate calculated, the total number of distinct drugs per beneficiary was the denominator, and the number of matched drugs on the formulary was the numerator, resulting in a match rate for each beneficiary and formulary combination in a region.

We then determined the optimal match rate for each beneficiary. Where there are multiple plans below-the-benchmark in a region, there could be several match rates and there could be more than one optimal match as several plans could have the same amount of drug coverage or match for a particular beneficiary. We calculated the average match rate under the random reassignment process and the average optimal rate that would have been achieved under strategic reassignment.

Based on the highest match rate for each beneficiary, we separated the sample into two groups: those who were randomly reassigned to their optimal plan and those who were reassigned into a non-optimal plan (and would therefore have had better formulary coverage in a plan selected through strategic reassignment).

An example of calculating these match rates is shown below.

**Example**

Mrs. Smith was randomly assigned to a drug plan with Formulary A in January 2008. She used 6 unique drugs during the last quarter of 2007.

There are 3 PDPs in Ms. Smith's region. A match rate is calculated between her drugs and each formulary offered in her region. Formulary A covers 5 of the 6 drugs for a match rate of 83.3%. Formulary B covers 3 of the 6 drugs for a match rate of 50% and Formulary C covers all 6 of the 6 drugs for a match rate of 100%.

Ms. Smith's optimal match is 100% (Formulary C). The match for the plan she was randomly reassigned to was 83.3% (Formulary A).

For each PDP region, the average randomly assigned match rate and optimal match rate were calculated. Summary tables were created to display data at a national level and for all PDP regions.

Fu Associates also analyzed whether match rates differed for beneficiaries taking protected class drugs from those not taking protected class drugs. CMS has designated 6 classes of drugs, where Part D plans are required to cover all or substantially all of the drugs in these classes in their formularies, rather than the usual requirement of 2 drugs per class and category. These drugs include antipsychotics, antidepressants, anticonvulsives, antineoplastics, antiretrovirals, and immunosuppressants.

For each calculation, we determined the percent improvement of strategic reassignment (SR) over random reassignment (RR) using the following formula:

**Formula 1. Percent Improvement with Strategic Reassignment Over Random Reassignment**

$$[\%\ \textbf{Improvement with SR}] = \frac{(\text{Average SR match rate - Average RR match rate})}{\text{Average RR match rate}}$$

**Summary of Results**

There were approximately 1.1 million beneficiaries randomly reassigned for 2008. Approximately 795,546 beneficiaries who were randomly assigned, remained in the reassigned plan in January of 2008, and had drug utilization from October to December of 2007 were included in this study. These beneficiaries utilized an average of 6.7 drugs in the last quarter of 2007. There were 204,986 beneficiaries that had no drug utilization during this time period. These non-utilizers were excluded from this analysis to avoid the potential for overestimates of match rates. There were also about 113,158 beneficiaries who were excluded because they were subject to random reassignment but chose a plan on their own and therefore were not randomly reassigned in January 2008.

*Random vs. Optimal Coverage Match Rates*

CMS' current process of random reassignment provides a match rate of 92.2% nationally for all beneficiaries randomly reassigned for 2008. The optimal match rate possible was 99.0% nationally. Using the formula above (Formula 1), strategic reassignment would result in an improvement of only 7.4% in match rates over random reassignment. An improvement of 7.4% with SR means there would be an additional match of ½ of one drug per reassigned beneficiary on average with SR.

Overall match rates for RR varied by region from a low of 89.8% in Florida to a high of 98.9% in Illinois. Optimal match rates ranged from a low of 96.1% in Nevada to a high of 99.9% in Hawaii. In the mid-Atlantic region (Delaware, District of Columbia and Maryland), strategic reassignment would provide almost no improvement over RR ( that is, the average RR rate of 98.5% was almost equivalent to the optimal match rate of 99.0% for an improvement of only 0.6% ). For Florida and California, strategic reassignment would provide between 8% and 9% improvement.

**Table 1. Random Reassignment vs. Strategic Reassignment Drug Coverage Match Rates by PDP Region**

| PDP Region Code | PDP Region | Total Number of Randomly Reassigned Beneficiaries | Overall Match Rate: Randomly Assigned (RR) | Overall Match Rate: Strategic Reassignment (SR) | % Improvement with SR |
|---|---|---|---|---|---|
| 1 | Northern New England (New Hampshire and Maine) | 111 | 97.5% | 99.0% | 1.6% |
| 2 | Central New England (Connecticut, Massachusetts, Rhode Island, and Vermont) | 37,700 | 94.2% | 99.5% | 5.7% |
| 3 | New York | 97,593 | 92.4% | 99.6% | 7.8% |
| 4 | New Jersey | 15,035 | 92.4% | 99.1% | 7.3% |
| 5 | Mid-Atlantic (Delaware, District of Columbia and Maryland) | 95 | 98.5% | 99.0% | 0.6% |
| 6 | Pennsylvania, West Virginia | 17,127 | 96.0% | 99.5% | 3.7% |
| 7 | Virginia | 161 | 97.0% | 98.7% | 1.8% |
| 8 | North Carolina | 361 | 97.4% | 99.4% | 2.0% |
| 9 | South Carolina | 9,171 | 93.8% | 99.1% | 5.7% |
| 10 | Georgia | 690 | 96.1% | 99.6% | 3.6% |

| PDP Region Code | PDP Region | Total Number of Randomly Reassigned Beneficiaries | Overall Match Rate: Randomly Assigned (RR) | Overall Match Rate: Strategic Reassignment (SR) | % Improvement with SR |
|---|---|---|---|---|---|
| 11 | Florida | 79,095 | 89.8% | 97.0% | 8.0% |
| 12 | Alabama, Tennessee | 24,268 | 94.2% | 99.4% | 5.5% |
| 13 | Michigan | 29,308 | 95.6% | 99.6% | 4.2% |
| 14 | Ohio | 37,782 | 92.8% | 99.4% | 7.1% |
| 15 | Indiana, Kentucky | 117 | 98.9% | 99.6% | 0.7% |
| 16 | Wisconsin | 14,873 | 95.7% | 99.4% | 3.8% |
| 17 | Illinois | 291 | 98.9% | 99.9% | 1.0% |
| 18 | Missouri | 22,891 | 95.3% | 99.4% | 4.3% |
| 19 | Arkansas | 4,607 | 94.1% | 99.5% | 5.8% |
| 20 | Mississippi | 49 | 97.5% | 98.3% | 0.8% |
| 21 | Louisiana | 24,724 | 93.0% | 99.3% | 6.8% |
| 22 | Texas | 39,345 | 92.1% | 99.3% | 7.8% |
| 23 | Oklahoma | 14,078 | 94.9% | 99.5% | 4.8% |
| 24 | | 344 | 96.0% | 99.3% | 3.4% |
| 25 | Upper Midwest and Northern Plains (Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota an | 109 | 97.2% | 99.7% | 2.6% |
| 26 | New Mexico | 8,610 | 96.0% | 99.6% | 3.7% |
| 27 | Colorado | 9,463 | 94.2% | 99.3% | 5.4% |
| 28 | Arizona | 5,323 | 93.8% | 99.5% | 6.1% |
| 29 | Nevada | 6,597 | 92.6% | 96.1% | 3.9% |
| 30 | Oregon, Washington | 8,164 | 95.7% | 99.8% | 4.3% |
| 31 | Idaho, Utah | 4,907 | 95.1% | 99.5% | 4.6% |
| 32 | California | 279,758 | 90.6% | 98.8% | 9.1% |
| 33 | Hawaii | 2,773 | 95.3% | 99.9% | 4.8% |
| 34 | Alaska | 26 | 97.7% | 98.7% | 1.0% |
| | Total | 795,546 | | | |

*Randomly vs. Optimally Covered Beneficiaries*

Nationally, approximately two-thirds of beneficiaries (N = 533,622) randomly reassigned for 2008 were reassigned to a plan with the best possible match. The remaining one-third of the beneficiaries (N = 261,924) would have been assigned to a more optimal plan than the plan assigned through RR if strategic reassignment had been used. The match rate for this subgroup of beneficiaries was 78.3% nationally.

By PDP region, the Mid-Atlantic region (MD, DC, DE) had the smallest percentage of beneficiaries (4%) randomly reassigned to plans that were not optimal. Florida and California had the largest percentage of randomly reassigned beneficiaries (38% for both regions) in plans that were not optimal.

*Coverage for Beneficiaries with Protected Class Drugs*

While the number of reassigned beneficiaries impacts the overall match rates, the actual drugs utilized are a major factor in determining these match rates, specifically, with protected and non-protected drugs. As expected, the optimal match rates are consistent with the random reassignment for beneficiaries using only protected class drugs. Beneficiaries using only protected class drugs had the optimal match rate almost 100% of the time (N=8,639). Most of the beneficiaries who would benefit from strategic reassignment used non-protected class drugs (of the beneficiaries who were reassigned to a non-optimal plan, 70% (N=182,466) utilized only non-

protected class drugs). This pattern of match rates by protected class utilization was consistent even at a regional level.

**Table 2. Number of Beneficiaries Reassigned to Non-Optimal and Optimal Plans by Protected Class Drug Utilization**

| Protected Class Drug Utilization for Reassigned Beneficiaries | Reassigned to Non-Optimal Plan | Reassigned to Optimal Plan | Total |
|---|---|---|---|
| | 261,924 | 533,622 | 795,546 |
| No Protected Class Utilization | 182,466 | 380,983 | 563,449 |
| Only Protected Class Utilization | 168 | 8,639 | 8,807 |
| Both Protected Class and Other Drug Utilization | 79,290 | 144,000 | 223,290 |

*Relationship between Match Rates and Plan Stability*

CMS examined whether the regional match rates were related to the number of plans that were below the benchmark in their region for both 2007 and 2008. The regions that had the most plans that continued to offer below the benchmark plans from one year to the next were the regions where strategic reassignment offered the least improvements. Inversely, the regions that had the fewest plans that continued from one year to the next had the most potential for improvement, although the potential for improvement is minimal. The Pearson correlation between the percent of plans that offered below benchmark plans for both years and the percent of improvement offered by strategic reassignment was -.58. This means that the lower the number of plans offered for both years, the higher the potential for improvement with strategic reassignment.

**Conclusion**

Overall, the average match rate for random reassignment is close to the match rate that strategic reassignment would offer. Strategic reassignment would optimize match rates by only 7.4 percent over random reassignment. Approximately one third of the randomly assigned beneficiaries in 2008 would have been assigned to a more optimal plan than the plan assigned via the random reassignment process if strategic reassignment had been used. However, the current random reassignment process provides optimal access to drugs for a large proportion (over two-thirds) of reassigned beneficiaries.

The current formularies offered in Part D offer broad coverage, and there are safeguards in place for these vulnerable beneficiaries taking protected class drugs. The number of beneficiaries that need to be reassigned in consideration with the variation of formularies offered is also an important factor; however, this analysis shows there is an inverse relationship between plan stability and the potential for improvement with strategic reassignment. Strategic reassignment may be beneficial for selected individuals and as next steps, CMS proposes to identify and characterize this group of individuals.

CMS expects to further analyze the effects of strategic reassignment. For example, analyses will be conducted to determine the impact of strategic reassignment on plan risk scores. Specifically, we will assess whether the average risk score for plans via a SR process would substantially increase over their average risk score under RR. Changes in total premiums that would be paid under SR will be analyzed to estimate cost increases to the government.

*Limitations:*
It is important to consider the limitations of this simulation in relation to an actual implementation of SR. That is, the amount of data available for this simulation is more recent than the actual data that would be available if CMS were to implement SR. While this analysis included data from the

last three months of 2007 (which represents the most current drug utilization for the beginning of 2008), actual implementation of SR would be limited to PDE data from an earlier time period in the year.

Other factors, such as utilization management (UM) practices, may also impact a beneficiary's access to drugs. It may be important to consider the amount of UM that a plan has in relation to the number of drugs covered when selecting a best match. Our analysis did not consider this issue.