STARS RATINGS: ADJUSTING FOR SOCIO-ECONOMIC VARIATION AND HEALTH DISPARITIES AMONG DUAL ELIGIBLES

There is an evolving body of work that supports the unique characteristics of the Medicare/Medicaid dual eligible ("Dual") population. Duals tend to be sicker, poorer, less educated, have lower health literacy, be members of a racial/ethnic minority population, and have more housing and income instability than non-Dual Medicare beneficiaries. The Medicare star quality rating system measures the average Medicare beneficiary's experience, not that of members with the health, education and economic characteristics of the dual eligibles. The Medicare Advantage Stars ratings system should be modified to accurately measure this unique population: in the short term applying weighting factors to more appropriately reflect the needs of dual eligibles and in the long term creating a unique set of dual-specific quality measures.

As the table below illustrates, the demographics of the dually eligible population indicates a need for a quality evaluation methodology that is both sensitive to the health disparities of this population and measures a health plan's success with its care management.

Demographic Factors of Dual Eligibles and Non-Dual Eligibles[1]

Factor	Duals	Non-Duals
Income	60% $10,000 or less	9% $10,000 or less
	0% > $40,000	24% >$40,000
Years of Schooling	29% 0-8 Years	7% 0-8 Years
	25% 9-12 Years	13% 9-12 Years
	25% High School Grad.	32% High School Grad.
	4% Vocation/Tech.	8% Vocation/Tech.
	10% Some College	17% Some College
	7% College Degree	24% College Degree
Race/Ethnicity	43% Minority	19% Minority
	58% White	81% White
	20% Black	8% Black
	12% Hispanic	7% Hispanic
	11% Other	4% Other
Disease Prevalence	8% Alzheimer's	3% Alzheimer's
	25% Pulmonary Disease	17% Pulmonary Disease
	30% Diabetes	25% Diabetes
	15% Stroke	10% Stroke
Smoking Status	23% Current Smoker	12% Current Smoker
Health Status	19% Excellent/Very Good	44% Excellent/Very Good
	52% Fair/Poor	24% Fair/Poor
Functional Limitation	70% Mobility Limitation	46% Mobility Limitation
	26% No Limitations	57% No Limitations
	20% IADL Only	13% IADL Only
	26% 1-2 ADLs	20% 1-2 ADLs
	28% 3-6 ADLs	10% 3-6 ADLs
	63% >1 Physical Condition	53% >1 Physical Condition
	20% >1 Mental/Cognitive Condition	5% >1 Mental/Cognitive Condition
	38% Both Physical and Mental/Cognitive Conditions	17% Both Physical and Mental/Cognitive Conditions
Residential Status	84% Community	98% Community
	16% Long-Term Care	2% Long-Term Care
	16% Live with Spouse	55% Live with Spouse

[1] CMS, Medicare Current Beneficiary Survey, *Characteristics and Perceptions* data book and tables, 2008. http://www.cms.gov/Research-Statistics-Data-and-Systems/Research/MCBS/Data-Tables-Items/CMS1253279.html and Medicare Chart Book, 2005, Kaiser Family Foundation. http://www.kff.org/medicare/7284.cfm.

Health Status

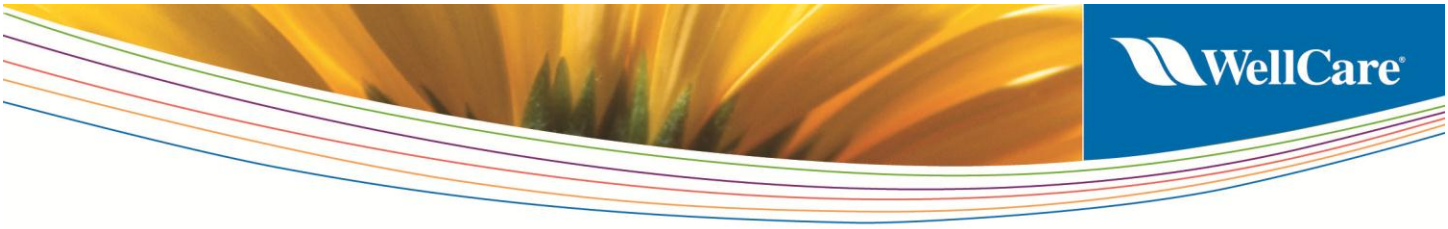
The health status of Medicare beneficiaries at the point of health plan enrollment impacts stars scores. Stars measures rate health status, access to care, care coordination and patient satisfaction for Medicare beneficiaries over a two-year period,[2] but the measures do not adequately account for the existing health and mental status of an individual upon enrollment. Because duals enter the survey sample in poorer health compared to non-Duals, there is an inherent disadvantage for the plans that serve them.

- 20% percent of Duals report poor health status, compared to 7% of non-Duals.[3] Beneficiaries in poor health are over two times more likely to have an unfilled prescription and are three times less likely to see a doctor when having a problem.[4]
- 30% of Duals are diabetic, compared to 25% of non-Duals.[5]
- 43% of Duals have at least one mental or cognitive impairment.[6]
- 60% of Duals have multiple chronic conditions[7]
- 19% of Duals live in institutional settings, compared to 3% of non-Duals;[8]
- Duals are more likely to use the hospital OPD/ER as their usual source of care;[9]
- Duals are the least likely Medicare population to see a doctor or share their concerns about sickness.[10]

Co-morbidity among dual eligibles is common. According to the Kaiser Family Foundation, Duals are more likely to: have more than one physical condition (63% compared to 53% of non-Duals); have more than one mental/cognitive condition (20% compared to 5% of non-Duals); and, have both a physical and mental/cognitive condition (38% compared to 17% of non-Duals).[11] "Co-morbidity of physical and mental conditions increases care complexity and poses additional problems in coordination and access to needed services."[12]

Significant co-morbidities make service use high and care coordination across Medicaid and Medicare challenging. Duals rely on both programs to meet their medical and supportive care needs. More than 75% of persons with multiple conditions relied on Medicaid to pay for Medicare cost sharing.[13] Duals with multiple chronic conditions rely more heavily on Medicare for hospital services and turn to Medicaid to provide long-term services and supports. Use of inpatient hospital is substantially greater for Duals with multiple conditions. In fact, one study found that 37 to 50% of individuals with more than 1 condition (mental/cognitive or physical) were hospitalized during the year.[14] The same study found that Medicare-covered post-acute services through Skilled Nursing Facilities or Home Health Agencies were also higher among these groups with 17 to 38% residing in a community-based long term care facility.[15] The Stars rating system should be modified to accurately measure this unique population. The more significant the individual's health care needs, the longer it will take to show health care improvement and the harder it is to design metrics that can isolate health care needs that a plan can impact versus those issues that cannot be changed by care intervention.

[2] CMS uses the Medicare Health Outcomes Survey (HOS) to measure health status, access to care, care coordination, and patient satisfaction. HOS uses a random sample of Medicare beneficiaries from each participating Medicare Advantage Organization surveyed every spring. Two years later a small cohort of the same respondents are surveyed again.
[3] Medicare Current Beneficiary Survey, 2008: http://www.cms.gov/Research-Statistics-Data-and-Systems/Research/MCBS/Data-Tables-Items/CMS1253279.html.
[4] Ibid.
[5] Medicare Chart Book, 2005, Kaiser Family Foundation.
[6] CMS, Medicare-Medicaid Coordination Office Fact Sheet, "People Enrolled in Medicare and Medicaid," August 2011.
[7] Ibid.
[8] Ibid.
[9] Medicare Current Beneficiary Survey, 2008: http://www.cms.gov/Research-Statistics-Data-and-Systems/Research/MCBS/Data-Tables-Items/CMS1253279.html.
[10] Ibid.
[11] Judy Kasper, Molly O'Malley Watts and Barbara Lyons, Chronic Disease and Co-Morbidity Among Dual Eligibles: Implications for Patterns of Medicaid and Medicare Service Use and Spending, The Henry J. Kaiser Family Foundation Issue Paper, July 2010.
[12] Ibid.
[13] Ibid.
[14] Ibid.
[15] Ibid.



Income

Research indicates that poor people (income below 100% FPL) are less likely than high-income people (at or above 400% FPL) to have a usual primary care provider or to receive pneumonia vaccines, mammograms, colorectal or osteoporosis screenings; and are more likely to have hospital admissions of short-term for complications of diabetes, deaths for hospital admissions with acute myocardial infarction, or treatment for a major depressive disorder.[16] Fifty nine percent of Duals have incomes below 100% FPL, compared to 9% of non-Duals.[17] Dual eligible members tend to be sicker and report lower health status than non-dual eligible members. Research has also shown that dual eligibles are more likely to be disabled, and more likely to be racially and ethnically diverse than the non-dual Medicare population.[18] Coupled with the challenges of outreach, health plans with high dual eligible membership are at significant disadvantage when competing with dissimilar health plans.

Education and Health Behavior

The dually eligible population has less education than their non-dually eligible Medicare counterparts. In fact, data from the Medicare Current Beneficiary Survey (MCBS) shows that 55% of Duals did not graduate from high school, compared to 23% of non-Duals.[19] According to the Robert Wood Johnson Foundation, "People with more education are likely to live longer, to experience better health outcomes…, and to practice health-promoting behaviors such as exercising regularly, refraining from smoking, and obtaining timely health care check-ups and screenings."[20] One study found that college graduates can expect to live at least 5 years longer than individuals who have not finished high school.[21] Additionally, adults with greater educational attainment are more likely to rate their health as very good.[22]

"More education can lead to higher-paying jobs, which enable people to obtain health care when needed, provide themselves and their families with more nutritious foods, and live in safer and healthier homes and neighborhoods with supermarkets, parks and places to exercise – all of which can promote good health by making it easier to adopt and maintain healthy behaviors."[23] Educational attainment can lead to improved health by increasing health knowledge and healthy behaviors. For example, researchers found that while rates of smoking have declined in every education group, the gaps between college graduates and those with less education appear to have widened. "Social and psychological factors linked with education can influence health through pathways related to stress, health-related behaviors, and practical and emotional support."[24]

The low level of educational attainment among Duals and its correlation to low income, health disparities and unhealthy behaviors must be accounted for in judging the performance of health plans that predominantly serve Duals. An unweighted comparison of the performance of Duals plans to plans consisting of individuals with high levels of income and educational attainment would result in an unfair weighting against plans seeking to deliver care to those hardest to treat.

Health Literacy

The elderly have very low levels of health literacy.[25] According to the CDC, adults age 65 or older were more likely to have below basic or basic health literacy than those under 65 and health literacy skills decrease with age: 51% of adults 65 to 75 and 70% of adults over 75 had below basic or basic literacy skills.[26] Adults without insurance or who are on Medicaid or Medicare had even lower health literacy: 60% of individuals on Medicaid, 57% of those on Medicare; and 53% of the

[16] National Healthcare Disparities Report, AHRQ, 2010.
[17] Avalere: Blum, Jon, Lukens, Ellen, and Murphy, Lisa. (2007) Medicare Advantage Special Needs Plans/Six Plans' Experience with Targeted Care Models to Improve Dual Eligible Beneficiaries' Health and Outcomes, Prepared for the Association of Community Affiliated Plans.
[18] Medicare Payment Advisory Commission, June 2007 Data Book, Section 3, http://www.medpac.gov/chapters/Jun07DataBookSec3.pdf.
[19] Ibid.
[20] Robert Wood Johnson Foundation, Commission to Build a Healthier America, Issue Brief 6: Education and Health, September 2009: *Education Matters for Health.*
[21] Ibid.
[22] Ibid.
[23] Ibid.
[24] Ibid.
[25] U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, Health Communication Activities, *America's Health Literacy: Why We Need Accessible Health Information:* http://www.health.gov/communication/literacy/issuebrief/ .
[26] Ibid.

uninsured had below basic or basic literacy skills.[27] As with income and educational attainment, assessing the quality of care delivered by plans focused on individuals with the lowest levels of health literacy in the same manner as plans focused on individuals with higher levels of health literacy unfairly fails to account for the barriers in compliance, self-advocacy and care planning participation that results from an individual's low level of health literacy.

Minority Populations View Their Care Differently

Forty-one percent of dual eligibles are members of a minority population, compared to 19% of non-duals. Among Duals, 19% of the population is Black, 12% is Hispanic and 59% is White.[28] Black and Hispanic Medicare beneficiaries are more likely than White beneficiaries to be in poorer health, have one or more functional limitations, have two or more chronic conditions (including diabetes and hypertension), and are less likely to fill a prescription.[29] In addition to having more complex health needs, minority populations report lower healthcare satisfaction than other populations.[30]

Results from the MCBS show that Black and Hispanic Medicare beneficiaries were less likely to report satisfaction with general care, access to doctors, information they received from the doctor and their doctor's concern for their health, than White beneficiaries.[31] In addition, "…patients from racial and ethnic minority groups reported significantly less positive perceptions than whites on the Satisfaction with Physician Style Scale and the Trust in the Physician Scale."[32] And Asians/Pacific Islanders reported worse experiences with care than Whites on access to care, promptness of care, and communication with providers, according to an analysis of the National CAHPS Benchmarking Database.[33] In fact, Carolyn Clancy, Director of AHRQ and Daniel Stryer (formerly of AHRQ) recommended, "…the analysis … of CAHPS data found that patient ratings and composite scores were not consistent, raising important questions about the role of patient expectations. These observations should prompt serious reflection regarding both conceptual underpinnings and specific measurement strategies… In short, clarity of purpose and strategies for measurement and improvement await the best efforts of health services researchers."[34]

A 2012 national study of patient satisfaction and utilization found that "more satisfied patients were more likely to rate their health as excellent and had better physical and mental health status than less satisfied patients."[35] The study also found that patient satisfaction increased with education, household income, and decreased with the number of chronic diseases.[36] Satisfaction also seems to be tied to patient behavior as more satisfied individuals were less likely to use the emergency department; and "satisfied patients are more adherent to physician recommendations."[37] If the results of this study are an indication, then it is likely that these demographic features increase the likelihood that dual eligibles consistently report overall lower satisfaction on surveys, presenting a negative bias against the plans that serve these populations.

Homelessness

One of the unique challenges facing some Duals and the plans that serve them is the surge of homelessness in the U.S. According to the National Alliance to End Homelessness, homelessness among the elderly is expected to increase by 33% by 2020 and more than double between 2010 and 2050.[38] One study found that the number of people over 55 in Massachusetts using shelters increased by 60% from 1999-2002.[39] Although many older adults are entitled to Social Security benefits, these benefits often fail to cover the cost of housing; and even if the SSI grant covers housing, few

[27] Ibid.
[28] Medicare Current Beneficiary Survey, 2008: http://www.cms.gov/Research-Statistics-Data-and-Systems/Research/MCBS/Data-Tables-Items/CMS1253279.html
[29] Ibid.
[30] Ibid.
[31] Ibid.
[32] Clancy, CM and Stryer, DE. (2001) Racial and ethnic disparities and the primary care experience. Health Services Research. 36, 979-986.
[33] Ibid.
[34] Ibid.
[35] Fenton, Joshua J., Jerant, Anthony F., Bertakis, Klea D., Franks, Peter. The Cost of Satisfaction: A National Study of Patient Satisfaction, Health Care Utilization, Expenditures and Mortality. Archives of Internal Medicine, February 13, 2012.
[36] Ibid.
[37] Ibid.
[38] http://www.nationalhomeless.org/factsheets/Elderly.pdf.
[39] Ibid.

dollars remain for other expenses,[40] including health care. SSI maximum benefits remain well below the poverty line (with a monthly payment amount of $698 for 2012)[41] and the waiting list for affordable housing is often 3 to 5 years.[42]

Clearly the homeless population presents unique challenges for providers and plans in trying to contact them to ensure follow-up care is received, but this population also experiences more health problems and greater health disparities. According to the Health Resources and Services Administration, "Elderly people who are homeless are more likely to experience multiple medical problems and chronic illnesses that may have gone untreated for years. In addition to illnesses common to aging such as diabetes, cardiac disease, circulatory problems, and hypertension, the health of an elderly person who is homeless is also compromised by the harsh environment of homelessness (e.g., exposure, hypothermia, frostbite). For an elderly person who is homeless in a "survival mode" and trying to find a safe place to sleep every night, addressing his or her health care quickly loses priority. Elderly people who are homeless or recently homeless and lack social supports are especially prone to depression, dementia, and other mental health problems. An elderly demented person may present with significant memory problems, cognitive impairments, poor judgment and poor comprehension."[43]

Homeless individuals tend to have many of the demographic differences described above, such as race/ethnicity, and require culturally and linguistically tailored communications. The homeless population is disproportionately Black non-Hispanic, Hispanic, and Native American.[44] According to the National Health Care for the Homeless Council, "The growing number of homeless clients from diverse racial, ethnic and cultural backgrounds, often with limited English proficiency, demonstrates the need for culturally and linguistically competent services." [45]

Plans that provide care to Duals confront the issue of homelessness and the related issue housing instability on a daily basis but even plans with robust care management programs and community connections are limited in their ability to provide access to safe and affordable housing. The stars measures nonetheless penalize the plans that focus on these hard-to-reach populations by applying weights that disadvantage plans with large populations of beneficiaries with conditions that are beyond a plan's control.

Challenges for Dual Plans

Given the unique characteristics of the dually eligible population, the stars process measures, which require less frequent contact with members, are far more accurate measures of plan quality than the outcome measures, which are influenced by existing health status, housing stability, health literacy and income as described above. Examples of measures CMS currently classifies as outcomes measures include controlling high blood pressure (C21), blood sugar control in diabetes (C19), cholesterol control in diabetes (C20) and the three medication adherence measures -- taking oral diabetes medication as directed (D15), taking blood pressure medication as directed (D16) and taking cholesterol medication as directed (D17). The technical specifications identify the challenge -- not only does the member with diabetes require an LDL cholesterol screening, but the result (outcome) needs to be less than 100dl. This HEDIS measure is valid and a true reflection of current clinical practice guidelines. But the outcome is dependent upon regular provider visits and screenings; diet and exercise compliance; elimination of contributing factors such as smoking, medication treatment, and adherence to the regimen.

Socio-economic, geographic, and disparity issues impact successful outreach to dually eligible members. Traditional telephonic outreach attempts often fail; community based and health plan "feet on the street" resources are often insufficient to reach these members. Outcome measures also often require multiple provider visits. As a result, the impact of member contact efforts are multiplied four- to five-fold. While health plans serving duals have developed strategies to improve outreach and communication with these hard-to-reach populations, it is unreasonable to use the same measures for these unique populations as are used for other populations. For example, control and adherence measures were unexpectedly tripled for the 2012 Star calculations placing health plans with high dual eligible membership at an even greater disadvantage when compared to similar plans with lower dual eligible membership. This triple rating factor for

[40] http://www.healthandtheaging.org/?page_id=1438.
[41] http://www.ssa.gov/oact/COLA/SSIamts.html
[42] http://www.nationalhomeless.org/factsheets/Elderly.pdf
[43] http://bphc.hrsa.gov/policiesregulations/policies/pdfs/pal200303.pdf
[44] http://www.nhchc.org/wp-content/uploads/2011/10/CulturalCompetence0406.pdf
[45] Ibid.

control and adherence measures has been carried forward in the 2013 Stars rating calculations despite the disadvantage it creates for health plans with high dual eligible membership.

WellCare Recommendations

We recommend the following in order to adjust for socio-economic, disability, and geographic population variances as a short-term solution:

1. CMS should apply an adjustment factor to the overall Stars rating score to represent the unique challenges faced by plans with a high population of hard-to-reach members (dual eligibles and DSNP). Specifically, since CAHPS and HOS rely on patient recall, measures for dual eligible and DSNP plans should be adjusted to account for the higher prevalence of members diagnosed with dementia and other cognitive impairments.
2. WellCare recommends that CMS identify plans with a high percentage of dually eligible members, including DSNP enrollees, for example, plans meeting a threshold of 15% dual/DSNP membership, and unweight those measures that focus on control and treatment plan adherence that negatively impact outcome measures for plans with a high proportion of dual eligibles.
3. CMS should apply a secondary factor weighting each measure to be used at the end of the calculation to reward plans that have shown "significant improvement" over the past year. An example might reward those plans serving a threshold number of hard-to-reach enrollees (dual eligibles and DSNP) with an adjustment credit when their Stars' score increases by .5 Stars year-over-year. We recommend each measure be adjusted individually for improvement year-over-year, rather than using a single overall measure for improvement.
4. CMS should consider a single measure of drug adherence, rather than three separate drug adherence measures, to reduce the unintentional impact on plans with a high population of hard-to-reach members (dual eligibles and DNSP).
5. In the longer term, WellCare recommends that the Center for Medicare collaborate with its CMS colleagues in the Center for Medicaid and CHIP Services and the Medicare-Medicaid Coordination Office and a national accrediting body such as NCQA or URAC with input from national organizations focused on quality measurement development, advocacy groups, industry stakeholders and others to develop measures specifically appropriate for plans serving large populations of dual eligibles/DSNP members.
6. WellCare also recommends that CMS continue to work with NCQA to make HEDIS more sensitive to health disparities.