

## Why do Medicare-Medicaid Dual Eligibles Have High Cost-Related Medication Non-Adherence Rates?

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### Short Communication

The access barrier to medication has been a persistent challenge in care for the elderly in the U.S. Twenty-six percent of the elderly do not take medication as prescribed due to a cost barrier, [1] and such a persistent access barrier to health care has become a hotly contested topic raised by the Democratic presidential campaign this year [2,3]. Despite the institution of the Medicare Part D outpatient prescription drug program, the first comprehensive prescription drug benefit ever offered under the Medicare program and the most significant improvement to senior health care in nearly 40 years, [4] cost-related medication non-adherence (CRN) has not decreased or has even worsened among the sickest patients, including those with multiple chronic conditions, depression, and stroke survivors [5-8].

Among the sickest patients with the most need for assistance to pay for medications, one subgroup poses a unique challenge to increasing access to health care, medicare-medicicaid dual eligibles (dual eligibles). The dual eligibles consist of about 9 million Americans, including low-income seniors and younger people with disabilities, who have complex and often costly health care needs [9]. The dual eligibles received low-cost prescription drug coverage through the Medicaid program prior to the institution of Part D, and were auto-assigned to the stand-alone prescription drug plans after Part D was instituted. In addition, the dual eligibles, including qualified medicare beneficiaries (QMB), specified low-income medicare beneficiaries (SLMB), qualified individual eligibles (QI), and qualified disabled working individual eligibles (QDWI), qualify for additional assistance to pay all or some of medicare's cost sharing amounts (i.e., premiums, deductibles, and copayments) for medications [10]. Hence a common misperception is that the cost-related access barrier to medications should be low among the dual eligible since the out-of-pocket payments (OOPs) are nominal if any, but research suggests the contrary. For example, a study of 171,573 part D-enrolled respondents (weighted N=14,572,827; response rate 48%) showed higher CRNs rates among those dual eligibles and individual eligibles receiving supplemental security income (22.2%) than those who were not low-income applicants (14.7%) [11]. Another study using a nationally representative sample also suggested that among the Medicare patients with diabetes, the CRN rate among dual-eligible diabetes patients was 21%, compared to 16% among non-dual-eligible diabetes patients [12].

The high CRN rates among dual eligibles poses a significant challenge to health care for the poor. Since the dual eligibles often have complex medical conditions which require costly interventions, the high CRN rates may further worsen patients' health and place them in a downward spiral of worsening health and costlier care. On the other hand, since dual eligibles have already received additional assistance in paying for premiums, deductible, and copayments, more research is

needed to understand why cost barriers still exist despite generous insurance coverage.

There are several possible reasons why dual eligibles have higher CRN rates despite additional assistance to pay for medications. First, the dual eligibles have monthly income limits of 100% federal poverty level (FPL) + \$20 (QMB), 120% federal poverty level (FPL) + \$20 (SLMB), 135% FPL + \$20 (QI), and 200% FPL + \$20 (QDWI) [13]. In general, the lower the income, the more relatively expensive the consumption is for patients compared to purchasing any other goods and services including basic needs, making the medication less affordable. Hence, for those at the bottom of the economic ladder, even small amount OOPs may influence patients' decision to purchase medications. Thus, policy should directly minimize cost-sharing in prescription drugs given the low income and high price sensitivity among the dual eligibles.

Second, because dual eligibles often have multiple chronic conditions which require concurrent treatments, the cumulative effect of OOPs to pay for multiple medications may exacerbate the cost burden to those who are already struggling to decide between paying for their basic needs and medications. A recent study suggests that after the implementation of Part D, significant reductions in spending less on basic needs were observed in the general medicare population including both groups with good and poor self-reported health, [5], however, it is unclear this was due to lower OOPs because of Part D, an increase of inclusion of people with higher income because of expansion of the medicicaid program, or a change in prescription utilization patterns such as generic substitutions. More importantly, there is no data how dual eligibles are making trade-offs between basic needs and prescription drug purchases. The fact that CRN has not decreased or has even worsened among the sickest patients may be indicative of that the cumulative effect of OOPs has not been alleviated after the implementation of Part D. More research is much needed to illuminate the decision-making process by the dual eligibles in medication use, and hence target those areas which the medication treatments have high benefits and the OOPs should be eliminated in their entirety.

Third, the dual eligibles have higher disability rates. This is particularly true for the younger dual eligibles as the reason they qualify for dual eligibility is because of disability. Such high disability level may indirectly increase CRN as higher transportation costs may be required for dual eligibles to seek care and fill prescriptions, and receive informal care from care givers. All these are parts of the total costs of care but may not be covered by either the medicare or medicicaid program, and hence this may stand as another significant barrier to medication adherence.

Fourth, dual eligibles have been the focus of many recent initiatives and proposals to improve the coordination of care aimed at both raising the quality of their care while reducing costs [9]. One such initiative is to expand the managed care program in the state-operated medicaid plan for dual eligibles. Thus, many prescription drug programs implemented formularies which limit the number of drugs covered and require high OOPs for those drugs not in the preferred drug lists. This may have significantly increased the burden of drug costs to dual eligibles, and increased CRN. More research is much needed to study the adverse consequences of such cost-cutting initiatives.

In summary, the dual eligibles face a significant challenge to accessing health care because of their complex and often costly healthcare needs, price sensitivity to medications, and other barriers due to disabilities. Dual eligibility is a complex risk factor for CRN, and since it reflects multiple constructs of barriers, caution needs to be taken when interpreting its role in CRN, and more research is needed to understand the patient's decision to be non-adherent, the effect of insurance benefits design on drug utilization, and to develop interventions to reduce CRN and improve patient-centered outcomes.

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