

Acquisition of Blood Glucose Monitoring Supplies is Associated with Mortality in Medicare Beneficiaries with Diabetes

Late-breaking Data from the American Association of Clinical Endocrinologists (AACE) Annual Scientific & Clinical Congress

The Centers for Medicare and Medicaid Services' (CMS) [Competitive Bidding Program](#) (CBP), a program mandated by Congress requiring Medicare to implement a competitive bid process for selected medical equipment, was implemented on January 1, 2011 in nine test markets across the country.¹ In 2012, CMS stated the program was a success, noting that beneficiary access to supplies was not compromised; however, changes in acquisition of self-monitoring blood glucose (SMBG) supplies were not reported.

Late-breaking Data: New Analysis Shows Correlation between Obtaining Diabetes Testing Supplies and Mortality in Medicare Beneficiaries²

Background: In light of the recent implementation of the CMS competitive bidding program, the National Minority Quality Forum (The Forum) is investigating the potential disruption of patient access to SMBG supplies and its impact on health outcomes.

Methods: The Forum identified all beneficiaries in these markets with a prescription for insulin to analyze how their access to SMGB supplies was impacted by the CBP. This included 43,939 beneficiaries in the TEST markets and 485,688 in the NON-TEST markets.

Findings:

- Negative association between four-year survival and acquisition of self-monitoring blood glucose supplies.
 - Four-year survival was negatively associated with partial SMBG acquisition or no SMBG record in both study groups $p < 0.0001$. (Figure at right)
- Higher mortality among beneficiaries who obtained fewer supplies than the year before.
 - In both study groups, the mortality rate was higher among beneficiaries with full SMBG acquisition in 2010 who migrated to partial SMBG acquisition or no SMBG record in 2011 compared with maintaining full SMBG acquisition: TEST, 11.5% vs. 6.6%; NON-TEST, 11.7% vs. 6.2%.
- Lower mortality among beneficiaries who obtained more supplies than the year before.
 - The mortality rate was lower among beneficiaries with partial SMBG acquisition or no SMBG record in 2010 but migrated to full SMBG acquisition in 2011: TEST, 8.2%; NON-TEST, 7.2%.

What Can You Do to Help?

This analysis showed a significant association between SMBG acquisition and mortality, demonstrating the importance of Medicare beneficiaries with diabetes having a proper supply of blood glucose monitoring tools. We believe that safeguards are urgently needed to identify and lessen any disruption in access to life-saving supplies.

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References:

1. DMEPOS Competitive Bidding. (2014, July 15). Available at <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/DMEPOSCompetitiveBid/index.html?redirect=/dmeposCompetitiveBid/>.
2. Christopher G. Parkin, Gary A. Puckrein, Liou Xu and Jaime A. Davidson. "Acquisition of Blood Glucose Monitoring Supplies is Associated with Mortality in Medicare Beneficiaries." Poster presented at American Association of Clinical Endocrinologists (AACE) Annual Scientific & Clinical Congress 2015.

Figure 1. 4-Year Survival Probability

