

The Unintended Consequences of the Competitive Bidding Program: Late-breaking Data from the American Diabetes Association 75th Scientific Sessions

The Unintended Harmful Impact of the CBP on Beneficiaries with Diabetes

On January 1, 2011 the Centers for Medicare and Medicaid Services (CMS) implemented the [Competitive Bidding Program](#) (CBP) in nine pilot markets.¹ The intent of the competitive bidding program was to reduce out-of-pocket expenses for fee-for-service Medicare beneficiaries and provide cost-savings to Medicare for certain durable medical equipment, including self-monitoring blood glucose (SMBG) supplies, while ensuring beneficiary access to quality items and services.¹ One year following implementation of the program, CMS reported that there was no disruption in access to SMBG supplies among Medicare beneficiaries with diabetes in the test sites and no negative healthcare consequences as a result of competitive bidding.² With these positive reports, the program was implemented nationwide, enrolling all Medicare beneficiaries in July 2013. Recognizing the potential benefit of reducing expenses for Medicare beneficiaries, particularly among minority populations, the National Minority Quality Forum (The Forum) engaged some of the nation's leading endocrinologists to undertake a study to confirm CMS's conclusions for beneficiaries with diabetes whose use of insulin required them to access SMBG supplies. However, The Forum's original hypothesis regarding the potential benefits of the program was incorrect. New late-breaking data presented at the American Diabetes Association 75th Scientific Sessions reveal that access to these life-saving supplies was dramatically disrupted by the CBP.³

Methods

- The Forum obtained CMS data from 2009-2012 to assess the impact of CBP on acquisition of SMBG supplies by Medicare beneficiaries with a diagnosis of diabetes (n=778,083).³
- Within the data, The Forum identified all beneficiaries with a prescription for insulin; these records were separated into two cohorts:³
 - TEST Markets: n=43,939
 - NON-TEST Markets: n=485,688
- Propensity score matching was adopted to reduce selection bias due to imbalance in study covariates. Propensity score matched cohorts include:³
 - TEST Markets: n=15,538
 - NON-TEST Markets: n=15,538

Results

Change in How Beneficiaries Received SMBG Supplies³

Between 2010 and 2011, a significant number of beneficiaries in the nine CBP test markets (TEST) switched from mail order to retail sources, indicating that beneficiaries who were previously obtaining their SMBG supplies through the mail were now acquiring them through retail pharmacy sources, likely due to changes caused by the implementation of the CBP in 2011.³

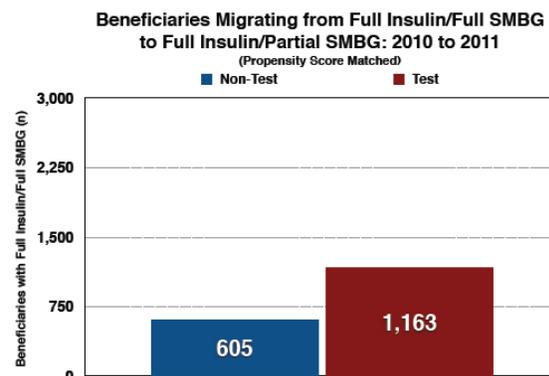


Figure A

Increased Gaps & Notable Shift in Acquisition of SMBG Supplies^{3,4}

The analysis tracked SMBG acquisition before and after implementation of the CBP and classified beneficiaries as either Full SMBG (full acquisition of SMBG supplies) or Partial SMBG (gaps in SMBG acquisition). As previous analysis has shown, long term survival is negatively affected by gaps in SMBG acquisition with higher mortality among beneficiaries who obtain fewer supplies than the year before.⁴

- The percentage of beneficiaries with partial SMBG acquisition increased 23.0% in TEST markets vs. 1.7% in NON-TEST markets.
- From 2010 to 2011, a notable shift in acquisition occurred in the TEST market. Analysis showed (**Figure A**):
 - A significant decrease (14.4%, p<0.0001) in the number of TEST beneficiaries who maintained Full SMBG acquisition.
 - A significant increase (58.1%, p<0.0001) in the number of TEST beneficiaries who migrated from Full to Partial SMBG acquisition.

Greater Risk for Mortality, Hospitalization & Healthcare Costs³

Overall, the disruption in acquisition of diabetes SMBG supplies has placed a significant percentage of beneficiaries with diabetes at increased risk for mortality, hospital admissions and high healthcare costs.

- The disproportionate migration from Full to Partial SMBG acquisition groups resulted in 42 additional deaths within the TEST group (**Figure B**).
- More than twice as many inpatient hospital admissions were seen among TEST beneficiaries who migrated from Full to Partial SMBG acquisition compared with NON-TEST beneficiaries (**Figure C**).
- More than double the associated costs for TEST vs. NON-TEST beneficiaries who migrated to Partial SMBG acquisition (**Figure D**).

Deaths in 2011: Migrating to Full Insulin/Partial SMBG
(Propensity Score Matched)

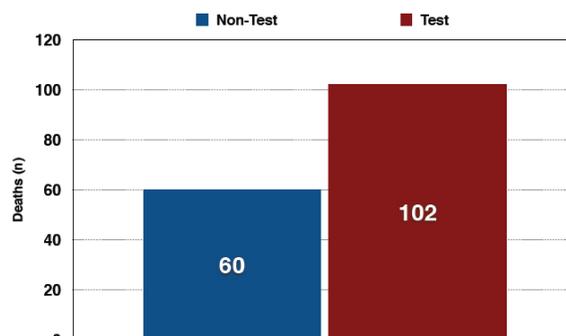


Figure B

Inpatient Admissions: 2011

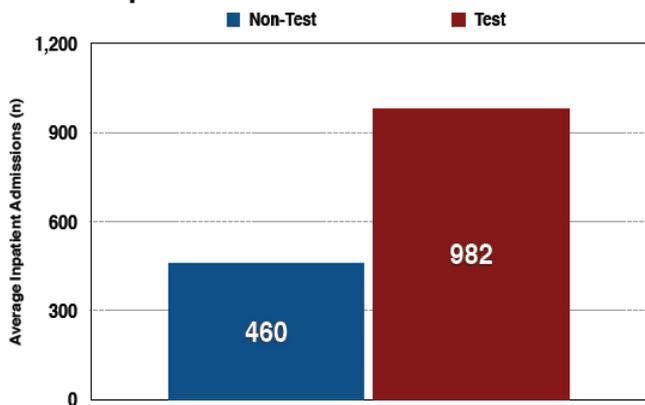


Figure C

Inpatient Costs (\$ millions): 2011

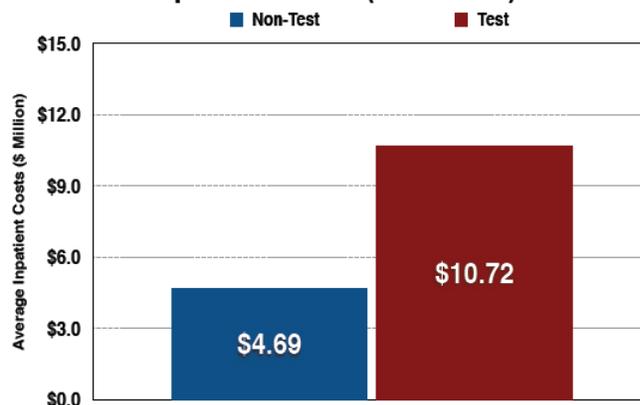


Figure D

Unanticipated, Deleterious Consequences Must Stop

While specific causes of migration to partial SMBG acquisition could not be identified from the CMS data, it is clear that acquisition of SMBG supplies was somehow disrupted in the test markets, leading to increased hospitalizations and mortality. We recommend more careful monitoring of the competitive bidding program and its impact by CMS. We are willing and open to work with CMS to find solutions to serve this Medicare population and maintain patient access to important testing supplies. To learn more, download the [full abstract](#).

Acknowledgments

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References:

¹ DMEPOS Competitive Bidding. (2015, June 3). Available at <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/DMEPOSCompetitiveBid/index.html?redirect=/dmeposCompetitiveBid/>

² Centers for Medicare & Medicaid Services (CMS). Competitive Bidding Update—One Year Implementation Update April 17, 2012. Accessed August 1, 2014, from <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/DMEPOSCompetitiveBid/Downloads/Competitive-Bidding-Update-One-Year-Implementation.pdf>

³ Gary A. Puckrein, Farhad Zangeneh, Gail Nunlee-Bland, Liou Xu, Christopher G. Parkin and Jaime A. Davidson. "CMS Competitive Bidding Program Disrupted Access to Diabetes Supplies with Resultant Increased Mortality." Poster presented at American Diabetes Association (ADA) 75th Scientific Sessions.

⁴ 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 (AAE) Annual Scientific & Clinical Congress 2015.