



# Testimonials Do Not Convert Patients from Brand to Generic Medication

### Citation

Beshears J, Choi JJ, Laibson D, Madrian BC, Reynolds G. 2013. "Testimonials Do Not Convert Patients from Brand to Generic Medication." American Journal of Managed Care 19(9): e314-e31.

## **Published Version**

http://www.ajmc.com/publications/issue/2013/2013-1-vol19-n9/Testimonials-Do-Not-Convert-Patients-From-Brand-to-Generic-Medication

# Permanent link

http://nrs.harvard.edu/urn-3:HUL.InstRepos:11920070

## Terms of Use

This article was downloaded from Harvard University's DASH repository, and is made available under the terms and conditions applicable to Open Access Policy Articles, as set forth at http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#OAP

# Share Your Story

The Harvard community has made this article openly available. Please share how this access benefits you. <u>Submit a story</u>.

**Accessibility** 



# NIH Public Access

**Author Manuscript** 

Am J Manag Care. Author manuscript; available in PMC 2014 January 27.

#### Published in final edited form as:

Am J Manag Care. 2013 September ; 19(9): e314-e331.

## Testimonials Do Not Convert Patients from Brand to Generic Medication

#### John Beshears, Ph.D,

Stanford University, National Bureau of Economic Research Graduate School of Business, Stanford University, 655 Knight Way, Stanford, CA 94305-7298

#### James J. Choi, Ph.D,

Yale University, National Bureau of Economic Research Yale School of Management, 135 Prospect Street, P.O. Box 208200, New Haven, CT 06520-8200

#### David Laibson, Ph.D,

Harvard University, National Bureau of Economic Research Harvard University, Littauer Center M-12, Cambridge, MA, 02138

#### Brigitte C. Madrian, Ph.D, and

Harvard University, National Bureau of Economic Research John F. Kennedy School of Government, Mailbox 114, 79 JFK Street, Cambridge, MA 02138

#### Gwendolyn Reynolds, M.T.S

National Bureau of Economic Research National Bureau of Economic Research, 1050 Massachusetts Ave, Cambridge, MA 02138

#### Abstract

**Objectives**—To assess whether the addition of a peer testimonial to an informational mailing increases conversion rates from brand-name prescription medications to lower-cost therapeutic equivalents, and whether the testimonial's efficacy increases when information is added about an affiliation the quoted individual shares with the recipient.

**Research Design and Methods**—5,498 union members were randomly assigned to receive one of three different informational letters: one without a testimonial (No Testimonial Group), one with a testimonial from a person whose shared union affiliation with the recipient was not disclosed (Unaffiliated Testimonial Group), and one with a testimonial from a person whose shared union affiliated Testimonial Group).

**Results**—The conversion rate for the No Testimonial Group was 12.2%, which is higher than the Unaffiliated Testimonial Group rate of 11.3% and the Affiliated Testimonial Group rate of 11.7%. The differences between the groups are not statistically significant.

**Conclusions**—Short peer testimonials do not increase the impact of a mailed communication on conversion rates to lower-cost, therapeutically equivalent medications, even when the testimonial is presented as coming from a more socially proximate peer.

#### Keywords

Testimonial; peer information; social proximity; communication; generic medication

Healthcare organizations often try to change individuals' health behaviors using printed communications (Sedjo and Cox). We hypothesized that adding a peer testimonial to an informational letter would significantly increase the letter's efficacy, and that the testimonial's effectiveness would be increasing in the perceived social closeness of the peer to the recipient. Testimonials may work because individuals imitate their peers (Duflo and

Saez; Sacerdote), and studies show that the influence of a peer is increasing in the peer's social proximity (Christakis and Fowler; Hoxby; Soetevent and Kooreman).

We conducted a randomized controlled trial to assess whether adding a peer testimonial to a mailing increases conversions from brand-name prescription medications to lower-cost equivalents. In coordination with a pharmacy benefit manager (PBM), 5,498 union members were randomly assigned to receive one of three informational letters. Members were selected for the study if they had, in the six months prior to May 2011, filled a brand name prescription that had a cheaper therapeutic equivalent.

Members in the No Testimonial Group received a letter listing cheaper therapeutic equivalents available for the recipient's brand name prescription medication and the associated cost savings to the recipient from switching to each of these alternatives. Members in the Unaffiliated Testimonial Group received a letter identical to the No Testimonial letter except for the addition of the following testimonial from a member of their union: "Switching to a lower-cost generic medication puts money back in my pocket every month." Beneath the testimonial appeared the quoted member's first name, last initial, city, and state. Members in the Affiliated Testimonial Group received a letter identical to the Unaffiliated Testimonial letter except for the addition of the quoted member's first name, last initial, city, and state. Members in the Affiliated Testimonial Group received a letter identical to the Unaffiliated Testimonial letter except for the addition of the quoted member's union affiliation below the testimonial.

The letters were sent on May 1, 2011. The PBM measured the targeted members' prescription drug claims for six months after the mailing.

The conversion rate to lower-cost alternatives for the No Testimonial Group was 12.2%, which is higher than the Unaffiliated Testimonial Group rate of 11.3% and the Affiliated Testimonial Group rate of 11.7%. The differences in the conversion rate between the control and the treatment groups are not statistically significant, and adding demographic controls does not change the significance or the rank order of the groups' conversion rates (Table 1, columns 1–3).

The differences between the control and the treatment groups in the percent of employees who converted to a cheaper alternative and never reconverted to the brand name are also not statistically significant, and including demographic controls does not change their significance (Table 1, columns 4–6).

In conclusion, we find that adding a short peer testimonial to a letter about the benefits of generic drugs did not increase the likelihood of the recipient converting to a lower-cost therapeutic alternative, even when the testimonial was marked as coming from a member of the recipient's union. These results suggest that organizations need not expend the considerable effort required to solicit short testimonials from peers of their health communication recipients.

#### Acknowledgments

We thank Express Scripts for collaborating on the design of the mailing, conducting the field experiment, and providing the data. We thank Luca Maini, Christopher Clayton, John Klopfer, and Michael Puempel for excellent research assistance. We acknowledge individual and collective financial support from National Institutes of Health grants P30-AG-034532, R01-AG-021650, and P01-AG-005842.

#### References

 Sedjo RL, Cox E. The influence of targeted education on medication persistence and generic substitution among consumer-directed health care enrollees. Health Serv Res. 2009; 44:2079–2092. [PubMed: 19780849]

Am J Manag Care. Author manuscript; available in PMC 2014 January 27.

- 3. Sacerdote B. Peer effects with random assignment: Results for Dartmouth roommates. Q J Econ. 2001; 116:681–704.
- Christakis NA, Fowler JH. The spread of obesity in a large social network over 32 years. N Engl J Med. 2007; 357:370–379. [PubMed: 17652652]
- 5. Hoxby C. Peer effects in the classroom: Learning from gender and race variation. NBER Working Paper 7867. 2000
- 6. Soetevent AR, Kooreman P. A discrete-choice model with social interactions: with an application to high school teen behavior. Journal of Applied Econometrics. 2007; 22:599–624.

-
$\leq$
ᆕ
亡
Τ
$\mathbf{\Sigma}$
5
$\geq$
Ŧ
Ithor
Ξ.
>
$\geq$
lan
2
5
õ
≚.
σ
+

# Table 1

Conversion Rate to Cheaper Therapeutically Equivalent Alternatives

	Dependent variabl	Dependent variable: Converted to Cheaper Alternative	eaper Alternative	Dependent variable: Co Follow-up Period	Dependent variable: Converted to Alternative and Did Not Reconvert in the Six Month Follow-up Period	vot Keconvert in ine Six Mon
	(1)	(2)	(3)	(4)	(5)	(9)
Unaffiliated Testimonial Group	-0.865 (1.059)	-0.726 (1.097) -0.671 (1.098)	-0.671 (1.098)	-0.680 (1.004)	-0.504 (1.037)	-0.490 (1.039)
Affiliated Testimonial Group	-0.501(1.061)	-0.561 (1.098)	-0.393 (1.100)	-0.381 (1.006)	-0.345 (1.038)	-0.215(1.040)
Age (years)		0.057 (0.042)	0.069 (0.044)		0.053~(0.039)	$0.056\ (0.041)$
Female		-0.832 (0.902)	-0.925(0.903)		-0.903(0.853)	-1.026 (0.855)
Number of Family Members Covered by Rx Drug Plan		0.098 (0.336)	0.046 (0.343)		0.027 (0.318)	-0.002 (0.324)
Constant	$12.165^{**}(0.745)$	9.269** (2.757)	$10.036^{**}(3.010)$ $10.718^{**}(0.706)$	$10.718^{**}$ (0.706)	8.228** (2.608)	9.325** (2.848)
Demographic Control Variables from Outside Marketing Firm	No	No	Yes	No	No	Yes
Observations	5,498	5,078	5,078	5,498	5,078	5,078
$\mathbb{R}^{2}$	0.000	0.001	0.00	0.000	0.001	0.008

demographic controls, the sample size falls due to missing values. The demographic control variables from an outside marketing firm are 24 indicators for membership in Nielsen Life Stage Groups and Nielsen Social Groups.