EBRI Issue Brief

October 22, 2020 • **No. 516**

Do People Choose Wisely After Satisfying Health Plan Deductibles? Evidence From the Use of Low-Value Health Care Services

By Paul Fronstin, Ph.D., Employee Benefit Research Institute; M. Christopher Roebuck, Ph.D., RxEconomics, LLC; Jason Buxbaum, Harvard University; and A. Mark Fendrick, M.D., University of Michigan

AT A GLANCE

The use of high health plan deductibles is an increasingly common strategy to enhance health care consumerism and lower health care spending. Proponents speculate that high levels of cost sharing enhance consumers' tendency to discriminate between high- and low-value care. In other words, cost sharing is a tool for teaching members to "choose wisely" throughout the plan year when it comes to the services they use. But does this work?

In this study, we examine the extent to which members who satisfy their plan deductible continue to discriminate when it comes to services used. To quantify whether deductibles help patients learn to "choose wisely" and avoid low-value care once deductibles have been met, we compared the use of six commonly overutilized imaging, screening, and pre-surgery testing services among 1.5 million individuals enrolled in commercial health plans with a deductible who had, and had not, satisfied the deductible.

We found that the likelihood of receiving low-value health care services increased by as much as 83 percent, depending on the service, for those who had satisfied their plan's deductible relative to those who had not. We also examine cancer screenings and find that use of these screenings is higher among those who do not meet the age recommendations once deductibles are met. Strategies in addition to high plan deductibles may be needed to reduce the use of low-value care.

This study was conducted through the EBRI Center for Research on Health Benefits Innovation (EBRI CRHBI), with the funding support of the following organizations: Aon Hewitt, Blue Cross Blue Shield Association, ICUBA, JP Morgan Chase, Pfizer, and PhRMA.

Paul Fronstin is Director of the Health Research and Education Program at the Employee Benefit Research Institute (EBRI). M. Christopher Roebuck is President and CEO of RxEconomics, LLC. Jason Buxbaum is a Ph.D. candidate in Health Policy at Harvard University. A. Mark Fendrick is the Director of the Center for Value-Based Insurance Design, a Professor of Internal Medicine in the School of Medicine, and a Professor of Health Management and Policy in the School of Public Health at the University of Michigan. This *Issue Brief* was written with assistance from the Institute's research and editorial staffs.

Suggested citation: Paul Fronstin, M. Christopher Roebuck, Jason Buxbaum, and A. Mark Fendrick, "Do People Choose Wisely After Satisfying Health Plan Deductibles? Evidence From the Use of Low-Value Health Care Services," *EBRI Issue Brief*, no. 516 (October 22, 2020).

Report availability: This report is available on the internet at www.ebri.org

Table of Contents

Figures

Do People Choose Wisely After Satisfying Health Plan Deductibles? Evidence From the Use of Low-Value Health Care Services

By Paul Fronstin, Ph.D., Employee Benefit Research Institute; M. Christopher Roebuck, Ph.D., RxEconomics, LLC; Jason Buxbaum, Harvard University; and A. Mark Fendrick, M.D., University of Michigan

Introduction

Between 2007 and 2018, the percentage of individuals with private insurance who were enrolled in a high-deductible health plan (HDHP) increased from 17.4 percent to nearly one-half (Fronstin and Roebuck 2019). Employers have adopted HDHPs as a way to manage the cost of providing health benefits to workers and their families. More specifically, they adopted HDHPs to reduce use of low-value health care services — services that offer little to no net benefit in specific clinical scenarios. HDHPs are expected to reduce use of low-value health care services by enhancing consumerism and promoting shopping for medical care (Capretta and Dayaratna 2013). These health care services likely cost private and public health care purchasers hundreds of billions of dollars every year (Lyu et al. 2017) (Sisko et al. 2019).

Proponents of HDHPs argue that high cost sharing can enhance consumers' tendency to discriminate between high- and low-value health care services (Madison and Jacobson 2007). However, a proportion of enrollees will satisfy health plan deductibles, no matter how high. Patients who have met their deductible may pay little or nothing for subsequent care, whereas members still under their deductible generally face 100 percent cost sharing. It is possible that when a plan deductible is met, relatively low levels of cost sharing thereafter release pent-up demand for care, including low-value medical services. Alternatively, meeting a health plan deductible may be associated with less patient scrutiny over the value of health care services being prescribed by health care providers. Research to date has not examined how satisfying plan deductibles impacts patterns of low-value health care receipt.[1]

In this paper, we examine how use of low-value health care services is affected when a plan member reaches the deductible. Examining the relationship between health plan deductibles and use of low-value health care services is important given the increasing prevalence of HDHPs as a way to manage use of health care services and overall spending more generally. It is important to examine deductibles not only due to the growth in the adoption of HDHPs but also because deductible levels themselves have been increasing across all plan types.[2] Using claims data from 2015 on 1.5 million full-time employees with employment-based health benefits, we found that meeting the deductible was associated with an increase in use of commonly overused low-value health care services of as high as 83 percent. We also examine cancer screenings and find that use of these screenings is higher among those who do not meet the clinical indications once deductibles are met. These findings have implications for deductible-level setting specifically and future benefit designs more generally as they relate to efforts to reduce use of low-value health care services.

Data and Methods

To study the impact of having satisfied the deductible on use of low-value health care services, we made use of the Truven Health Analytics MarketScan® Commercial Claims and Encounters Databases (CCAE) and the Benefit Plan Design (BPD) Database (copyright © Truven Health Analytics, all rights reserved) for 2015. The BPD Database was created by Truven Health via a statistical analysis of the CCAE data to infer values for plan-level design elements such as deductibles, coinsurance rates, and copayment amounts. Our analytical dataset consisted of 1.5 million full-time employees with employee-only coverage between ages 18 and 64 who were continuously enrolled in employment-based health insurance during 2015. Members in capitated health plans were excluded.

Informed by previous related research (Mafi et al. 2017), diagnosis codes, procedure codes, and individuals' age and gender were used to construct measures of six low-value health care services. These specific services — selected

because they could be reliably studied through administrative claims data — represented a variety of different types of low-value care (e.g., imaging, screening, and laboratory work) and were relevant to a range of populations. Inappropriate delivery of the following services was examined:

- Imaging for low-back pain.
- Imaging for uncomplicated headache.
- Pre-operative testing before outpatient hernia repair.
- Laboratory testing for vitamin D deficiency.
- Screening for prostate cancer (men of any age).[3]

We also examined how screenings for breast cancer, cervical cancer, and colorectal cancer were affected when individuals reached deductibles by the recommended age for the screening. Screenings before or after specific ages are often considered low-value health care services. Precise sample sizes for each health care service examined are provided in Figure 1 along with the percentage of the relevant sample receiving the service by whether or not the deductible had been reached. Further information on the construction of each measure of low-value services use is available in Figure 2.

Figure 1
Sample Sizes, by Receipt of Various Health Care Services

	Total	Met Deductible Prior to Receiving Service	Did Not Meet Deductible Prior to Receiving Service
Low-Back Pain Without Red Flags Diagnosis	203,744	8,664	195,080
% receiving imaging within 6 weeks	29%	31%	29%
Uncomplicated Headache Diagnosis	48,861	2,699	46,162
% receiving imaging within 6 weeks	11%	14%	10%
Inguinal Hernia Repair	5,157	370	4,787
% receiving blood testing within 30 days pre-op	42%	50%	41%
% receiving chest x-ray within 30 days pre-op	10%	17%	10%
Eligible for Vitamin D Testing	1,228,552	67,680	1,160,872
% receiving vitamin D testing	1.0%	1.8%	0.9%
Eligible for prostate-specific antigen (PSA) Testing, Men	259,930	28,818	231,112
% receiving PSA testing	1.8%	2.5%	1.7%
Women, Ages 40+	487,551	30,607	456,944
% receiving breast cancer screening	5.0%	5.9%	4.9%
Women, Under Age 40	328,767	20,488	308,279
% receiving breast cancer screening	0.4%	0.6%	0.4%
Women, Ages 21+	814,086	50,964	763,122
% receiving cervical cancer screening	3.4%	3.7%	3.4%
Women, Under Age 21	2,232	131	2,101
% receiving cervical cancer screening	2.4%	3.5%	2.3%
Men and Women, Ages 50+	501,877	30,602	471,275
% receiving colorectal cancer screening	1.9%	3.0%	1.8%
Men and Women, Under Age 50	874,371	49,311	825,060
% receiving colorectal cancer screening	0.4%	0.9%	0.4%

Figure 2
Measures of Low-Value Services Use

The following dichotomous dependent variables were created and analyzed.

Service	Description	Source
Imaging for low-back pain	Whether patients diagnosed with low-back pain received imaging (i.e., X-ray, computed tomography (CT), magnetic resonance imaging (MRI)) within 6 weeks following diagnosis, as well as 120 days post-diagnosis. Individuals with complicating conditions (e.g., cancer, injury, substance abuse) were excluded.	National Committee for Quality Assurance (2014)
Imaging for uncomplicated headache	Whether patients diagnosed with headache received imaging (i.e., CT, MRI) within 6 weeks following diagnosis, as well as 120 days post-diagnosis. Individuals with complicating conditions (e.g., cancer, injury, substance abuse) were excluded.	Schwartz et al. (2015)
Pre-operative testing	Whether individuals for outpatient inguinal hernia repair received any of the following tests within 30 days prior to surgery: complete blood count, metabolic panel, or chest X-ray.	Benarroch-Gampel et al. (2012)
Vitamin D testing	Whether the member received testing for vitamin D deficiency within each calendar month.	Holick et al. (2011)
Prostate cancer screening	Whether males received prostate-specific antigen testing within each calendar month.	National Committee for Quality Assurance (2014)
Breast cancer screening	Whether females under the age of 40 received a mammogram within each calendar month.	National Committee for Quality Assurance (2014)
Cervical cancer screening	Whether females under the age of 21 received a pap smear within each calendar month.	National Committee for Quality Assurance (2014)
Colorectal cancer screening	Whether members under the age of 50 received a colonoscopy within each calendar month.	National Committee for Quality Assurance (2014)

The key independent variable — having met the deductible — was constructed by summing the paid amounts in the deductible field on all medical claims, and comparing this total to the individual deductible level of the plan in which the member was enrolled. An indicator was coded, which reflected whether the deductible had been satisfied prior to a selected time point. For low-value services 1–3, this single anchor event was the diagnosis (low-back pain or headache) or the inguinal hernia repair date. For 4–8, no such decision point was obvious — i.e., individuals could decide to consume these low-value services at any time. Therefore, for each person, we constructed 12 monthly observations of having met the deductible prior to the beginning of each month.

A logistic model was estimated for use of each low-value service as a function of having met the deductible. In order to reduce the risk of biased results, we also included the following measures in the logistic model: age, age-squared, sex, Charlson Comorbidity Index,[4] geographic region, and health plan type. Odds ratios, a measure that represents the odds that an individual will use a low-value health care service given that they reached their deductible, were calculated for each of the low-value health care services and cancer screenings examined in this paper. For the low-value health care services related to a screening, p-values were based on standard errors clustered by individual to account for the 12 monthly observations for each person.

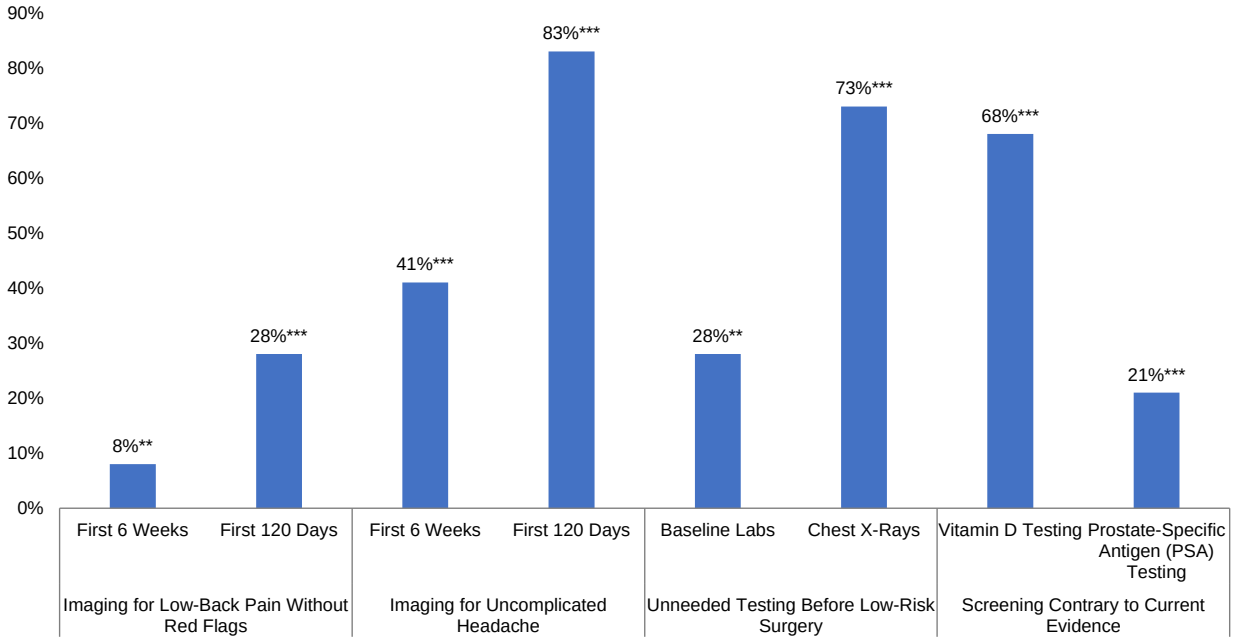
This methodological approach has limitations. First, the Truven Benefit Plan Design Database, and specifically the prevailing health plan deductible, is inferred from claims data, which may be subject to inaccuracies. Because of the way deductibles are determined, there are no $0 deductible plans in the database. Second, measures of low-value health care service delivery based on claims are inherently limited given the lack of nuance available in administrative claims data. Nevertheless, this approach is common in the literature on low-value care (Schwartz et al. 2014) and

would only bias our key findings if the tendency to inaccurately identify low-value services varies by having satisfied the deductible.

Evidence of Increased Odds of Low-Value Services Usage

The use of the specified low-value health care services was demonstrably higher among patients satisfying their plan deductible when compared with patients who had not met their deductible. Our specific findings can be seen in Figure 3. Overall, we find that the increased odds of receiving low-value health care services after having met the health plan deductible ranged as high as 83 percent, depending on the service.

Figure 3
Increase in Odds of Receiving Low-Value Health Care Services After Having Met Health Plan Deductible



Source: Authors' analysis of 2015 Truven MarketScan.
*p< 0.05, **p<0.01, ***p<0.001.

Use of imaging for low-back pain within six weeks of diagnosis was 8 percent higher among plan members who reached their deductible as compared with those who did not. When we look at use of imaging for low-back pain within 120 days of onset, those who reached their deductible were 28 percent more likely to use the service than those who did not. Similarly, individuals reaching their deductible were 41 percent more likely than those not reaching their deductible to have received imaging for an uncomplicated headache within six weeks of being diagnosed and 83 percent more likely within the first 120 days of diagnosis.

Among patients having outpatient hernia repair — a common low-risk surgery — individuals who had reached their deductible were 28 percent more likely than those who did not reach it to have had baseline blood tests within 30 days before the surgery. These individuals were also 73 percent more likely to have had chest X-rays preoperatively.

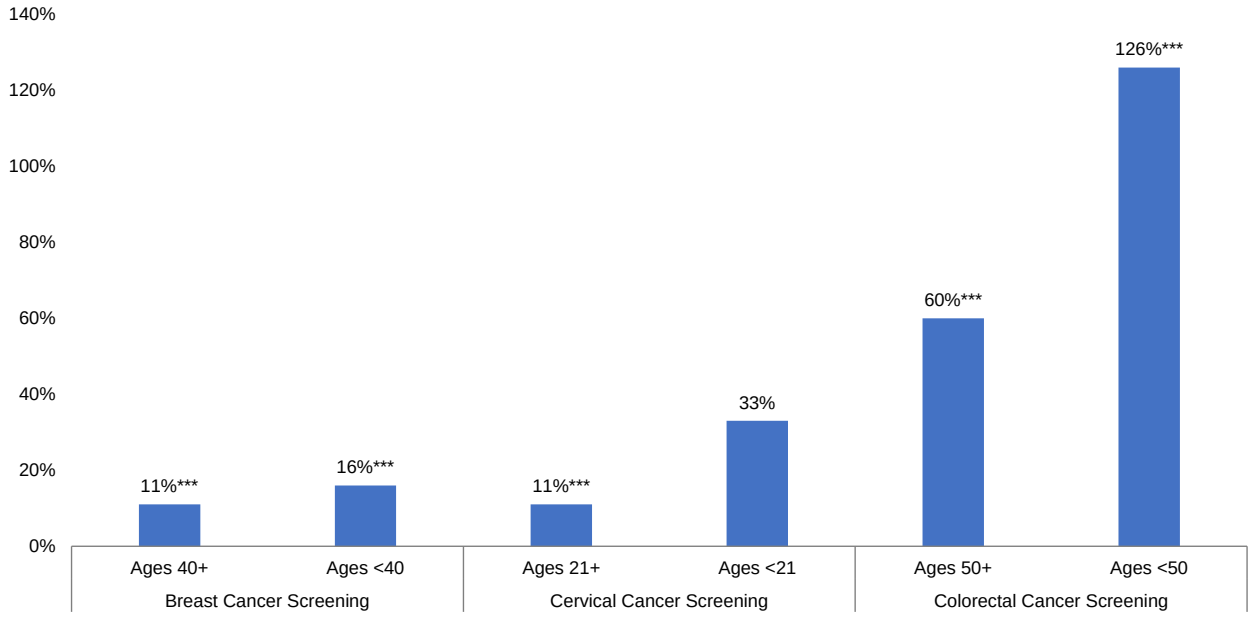
Receipt of screenings that were not clinically indicated was also higher among patients who had reached their deductible. Those who had reached their deductible were 68 percent more likely to have had a vitamin D test and 21 percent more likely to have had a prostate-specific antigen (PSA) test relative to individuals who had not reached their deductible.

While we examined our findings separately for individuals in HDHPs and individuals not in HDHPs, there were no differences in the findings by deductible level. As a result, our model is neutral on the level of the deductible. In other words, where we find that use of low-value services increased after reaching the health plan deductible, the result was the same regardless of whether the plan member was in an HDHP.

Our findings related to screening for breast cancer, cervical cancer, and colorectal cancer are shown in Figure 4. We find that use of these screenings is higher among those who do not meet the clinical recommendations once deductibles are met. The largest effect is seen for colorectal cancer screenings. We found a 126 percent increase in use of colorectal cancer screenings once individuals reached their deductible among individuals under age 50 (evidence-based guidelines recommended screening of average-risk individuals beginning at age 50 in 2015), whereas screenings increased 60 percent among individuals ages 50 and older. It is possible that the large effect among individuals ages 50 and older, where colorectal cancer screenings are clinically indicated, has to do either with a lack of understanding that these services are not subject to cost sharing or confusion regarding when they might be subject to cost sharing. Thus, people may wait until reaching deductibles to receive the service to minimize any potential cost sharing.

Smaller effects were found for breast cancer and cervical cancer screening. While the women under 21 were three times as likely as women 21 and older to receive cervical cancer screenings once deductibles had been met, the estimate for women under 21 is not statistically significant. This may be due to the fact that there are so few women in this age group.

Figure 4
Increase in Odds of Receiving Cancer Screening After Having Met Health Plan Deductible, by Recommended Age of Screening



Source: Authors' analysis of 2015 Truven MarketScan.
*p< 0.05, **p<0.01, ***p<0.001.

Missed Opportunities and "Blunt" Tools

Promoted as a tool to better engage consumers and reduce use of low-value care, deductibles have been increasing. Among a large national population with employment-based insurance, we found that those who satisfied health plan deductibles were more likely to receive low-value services compared with those who had not. These findings suggest that deductibles may not be the most effective tool to teach members to "choose wisely" throughout the plan year.

These findings are consistent with the literature on the relationship between HDHP enrollment and low-value care service receipt. Reid, Rabideau, and Sood (2017) studied commercial enrollees switching from a traditional plan to an HDHP. Examining overall use of 26 commonly overused services, the authors found no significant reduction in spending on these low-value services relative to changes in a control group. Hong et al. (2017) examined use of low-value imaging for back pain prior to and after the release of relevant *Choosing Wisely* recommendations among the commercially insured.[5] HDHP enrollment did not lead to greater avoidance of this low-value service than enrollment in traditional plans. Importantly, these studies compare HDHP with non-HDHP enrollees. To our knowledge, ours is the first study to explicitly compare the behavior of enrollees who do and do not satisfy the deductible, irrespective of deductible level.

A lack of nuance in plan design regarding coverage of low-value services may contribute to the observed patterns for those enrollees who satisfy their deductibles (or expect to). Plan sponsors likely miss opportunities to encourage smarter shopping when commonly overused services are treated no differently than unambiguously high-value services for purposes of cost sharing. In short, the development and implementation of plan designs that consistently and continuously discourage the use of specific low-value services may be called for to more precisely address this issue rather than oft-satisfied "blunt" deductibles. Examples of this are the State of Oregon's public employees plan, which imposes consumer surcharges for certain commonly overused services (Kapowich 2010). This policy led to a 13 percent reduction in the use of specified overused services (Gruber et al. 2020). Other examples are Aetna's and Cigna's changes in their policies to no longer cover population-based vitamin D screening.[6]

In addition to more nuanced plan designs that effectively discourage low-value care, these findings underscore the need to implement provider-facing initiatives to reduce low-value care — and ensure that policies are aligned with consumer cost sharing to achieve low-value-care avoidance. The use of measures of low-value-care delivery in new payment models, learning collaboratives for providers, and performance feedback are among the tools that may help reduce the delivery of low-value care (Buxbaum, Mafi, and Fendrick 2017) (Buxbaum, Chernew, and Fendrick 2017).

Conclusion

For beneficiaries meeting their plan deductibles, current benefit designs do not consistently address low-value care. Additional strategies, such as targeted benefit designs and provider-facing policies, are more promising routes for low-value-care elimination.

References

Benarroch-Gampel, Jaime, Kristin M. Sheffield, Casey B. Duncan, Kimberly M. Brown, Yimei Han, Courtney M. Townsend Jr., and Taylor S. Riall. 2012. "Preoperative Laboratory Testing in Patients Undergoing Elective, Low-Risk Ambulatory Surgery." *Annals of Surgery* 256 (3): 518-528. doi:10.1097/SLA.0b013e318265bcdb.

Buxbaum, Jason D., Michael E. Chernew, and A. Mark Fendrick. 2017. "Tackling the Epidemic of Low-Value Spending and Medical Overuse:." https://vbidhealth.com/docs/TF-LVC-%20White%20Paper%20-%20October%20Draft.pdf

Buxbaum, Jason D., John N. Mafi, and A. Mark Fendrick. 2017. "Tackling Low-Value Care: A New "Top Five" for Purchaser Action." *Health Affairs Blog.* https://www.healthaffairs.org/do/10.1377/hblog20171117.664355/full/

Capretta, James C., and Kevin D. Dayaratna. 2013. "Compelling Evidence Makes the Case for a Market-Driven Health Care System." *Backgrounder* (The Heritage Foundation). http://thf_media.s3.amazonaws.com/2013/pdf/BG2867.pdf

Charlson, M. E., P. Pompei, K. L. Ales, and C. R. MacKenzie. 1987. "A New Method of Classifying Prognostic Comorbidity in Longitudinal Studies: Development and Validation." *Journal of Chronic Disease* 40 (5): 373-83.

Deyo, R. A., D. C. Cherkin, and M. A. Ciol. 1992. "Adapting a Clinical Comorbidity Index for Use with ICD-9-CM Administrative Databases." *Journal of Clinical Epidemiology* 45 (6): 613-9.

Fronstin, Paul, and M. Christopher Roebuck. 2019. "Persistency in High-Cost Health Care Claims: "It's Where the Spending Is, Stupid"." *EBRI Issue Brief, no. 493* (Employee Benefit Research Institute). https://www.ebri.org/docs/default-source/ebri-issue-brief/ebri_ib_493_highcostclaims-24oct19.pdf?sfvrsn=ced83c2f_6

Gruber, Jonathan, Johanna Catherine Maclean, Bill J. Wright, Eric S. Wilkinson, and Kevin Volpp. 2020. "The Effect of Increased Cost-sharing on Low-Value Service Use." *Health Economics* 29 (10): 1180-1201.

Holick, Michael F., Neil C. Binkley, Heike A. Bischoff-Ferrari, Catherine M. Gordon, David A. Hanley, Robert P. Heaney, M. Hassan Murad, and Connie M. Weaver. 2011. "Evaluation, Treatment, and Prevention of Vitamin D Deficiency: an Endocrine Society Clinical Practice Guideline." *The Journal of Clinical Endocrinology & Metabolism* 96 (7): 1911-1930. doi:10.1210/jc.2011-0385.

Hong, Arthur S., Dennis Ross-Degnan, Fang Zhang, and J. Frank Wharam. 2017. "Small Decline In Low-Value Back Imaging Associated With The 'Choosing Wisely' Campaign, 2012–14." *Health Affairs* 36 (4): 671-679. doi:10.1377/hlthaff.2016.1263.

Kapowich, Joan M. 2010. "Oregon's Test Of Value-Based Insurance Design In Coverage For State Workers." *Health Affairs* 29 (11): 2028-2032. doi:10.1377/hlthaff.2010.0809.

Lyu, Heather, Tim Xu, Daniel Brotman, Brandan Mayer-Blackwell, Michol Cooper, Michael Daniel, Elizabeth C. Wick, Vikas Saini, Shannon Brownlee, and Martin A. Makary. 2017. "Overtreatment in the United States." *PLoS ONE* 12 (9). doi:doi.org/10.1371/journal.pone.0181970.

Madison, Kristin, and Peter D. Jacobson. 2007. "Consumer-Directed Health Care." *University of Pennsylvania Law Review* 156: 107-125. scholarship.law.upenn.edu/penn_law_review_online/vol156/iss1/19

Mafi, John N., Kyle Russell, Beth A. Bortz, Marcos Dachary, William A. Hazel, and A. Mark Fendrick. 2017. "Low-Cost, High-Volume Health Services Contribute The Most To Unnecessary Health Spending." *Health Affairs* 36 (10): 1701-1704. doi:10.1377/hlthaff.2017.0385.

Moyer, Virginia A. 2012. "Screening for Prostate Cancer: U.S. Preventive Services Task Force Recommendation Statement." *Annals of Internal Medicine* 157 (2): 120-134. doi:10.7326/0003-4819-157-2-201207170-00459.

National Committee for Quality Assurance. 2014. *HEDIS 2014 Volume 2: Techical Specifications.* Washington, DC: National Committee for Quality Assurance.

Quan, H., P. Halfon Sundararajan, A. Fong, B. Burnand, J. C. Luthi, L. D. Saunders, C. A. Beck, T. E. Feasby, and W. A. Ghali. 2005. "Coding Algorithms for Defining Comorbidities in ICD-9-CM and ICD-10 Administrative Data." *Medical Care* 42 (11): 1130-9.

Reid, Rachel O., Brendan Rabideau, and Neeraj Sood. 2017. "Impact of Consumer-Directed Health Plans on Low-Value Healthcare." *The American Journal of Managed Care* 23 (12): 741-748. https://cdn.sanity.io/files/0vv8moc6/ajmc/0a0b693bfa7966b34b9bf5bc1b1d227ae0eb3531.pdf

Schwartz, Aaron L., Michael E. Chernew, Bruce E. Landon, and J. Michael McWilliams. 2015. "Changes in Low-Value Services in Year 1 of the Medicare Pioneer Accountable Care Organization Program." *JAMA Internal Medicine* 175 (11): 1815-1825. doi:10.1001/jamainternmed.2015.4525.

Schwartz, Aaron L., Bruce E. Landon, Adam G. Elsbaug, Michael E. Chernew, and J. Michael McWilliams. 2014. "Measuring Low-Value Care in Medicare." *JAMA Internal Medicine* 174 (7): 1067-1076. doi:1067-1076. doi:10.1001/jamainternmed.2014.1541.

Sisko, Andrea M., Sean P. Keehan, John A. Poisal, Gigi A. Cuckler, Sheila D. Smirth, Andrew J. Madison, Kathryn E. Rennie, and James C. Hardesty. 2019. "National Health Expenditure Projections, 2018–27: Economic And Demographic Trends Drive Spending And Enrollment Growth." *Health Affairs* 38 (3): 491-501. doi:10.1377/hlthaff.2018.05499.

Endnotes

[1] Fronstin and Roebuck (2019) do find that 50–60 percent of high users of health care services not only reached their deductible but also reached their out-of-pocket maximum. High users were defined as the 10 percent of the population who accounted for 70 percent of health care spending.

[2] Among individuals with a deductible, the average deductible increased from $446 to $1,846 from 2002 to 2018 among those with employee-only coverage. And it increased from $958 to $3,392 among those with family coverage. See Figure 4 in Fronstin and Roebuck (2019).

[3] While subsequent recommendations have changed, the U.S. Preventive Services Task Force applied a Grade "D" recommendation to PSA testing during the time period of our study. See Moyer (2012) for more information.

[4] The Charlson Comorbidity Index (CCI), which is widely used in the extant literature as a gauge of general health status, was derived from medical claims for every individual in our sample. More information about the CCI can be found in Charlson et al. (1987), Deyo, Cherkin, and Ciol (1992), and Quan et al. 2005).

[5] The Choosing Wisely campaign promotes conversations between clinicians and patients to help patients choose care that is supported by evidence and truly necessary. The campaign includes recommendations from various medical societies. One example comes from the North American Spine Society which recommends against the use of imaging of the spine within the first six weeks of an acute episode of low-back pain in the absence of red flags. More information can be found at https://www.choosingwisely.org/

[6] See https://cignaforhcp.cigna.com/public/content/pdf/coveragePolicies/medical/mm_0526_coveragepositioncriteria_vitamin_D_testing.pdf and http://www.aetna.com/cpb/medical/data/900_999/0945.html

EBRI Issue Brief is registered in the U.S. Patent and Trademark Office. ISSN: 0887–137X/90 0887–137X/90 $ .50+.50