

JASON SHAFRIN

Personal Statement

A highly motivated thought leader in the field of health economics, I have over 10 years of consulting experience with a proven track record of producing high-quality research, leading multi-disciplinary teams, and generating new business through meeting client needs.

Contact Information

Precision Health Economics
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Education

Ph.D., 2009 (Economics) | University of California, San Diego
B.S., 2002 (Business & Public Policy) | University of Pennsylvania (Wharton)
B.A., 2002 (Spanish) | University of Pennsylvania (School of Arts & Sciences)

Professional Experience Summary

2013 – present	Senior Director, Policy & Economics	Precision Health Economics
2016 – present	Director of Research	Innovation & Value Initiative
2006 – present	Founder and Editor	Healthcare Economist
2009 - 2013	Policy Lead	Acumen, LLC
2008	Instructor	UCSD, Dept. of Economics
2004 - 2009	Teaching Assistant	UCSD, Dept. of Economics
2002 - 2004	Financial Analyst	General Electric

Selected Honors, Scholarships, Fellowships and Grants

2017	<i>Value in Health</i> , Editor's Choice research study (Vol. 20, Issue 7)
2016	JMCP Award for Excellence for best scholarly work of 2016
2015	AMCP Annual Meeting Platinum Award winner
2010	AHRQ Multiple Chronic Conditions Research Network, R24 grantee
2008-2009	Institute for Humane Studies Fellowship
2002	Government Scholars Fellowship, NYC Housing Authority

JASON SHAFRIN

Professional Experience Details

Precision Health Economics

Senior Director, Policy & Economics (2018 - present)

- Managed 9 individuals focused on producing high quality health economic research
- In charge of business development for 6 client accounts
- Research includes publications in top-tier journals such as: *Health Affairs, Health Economics, Health Services Research, JAMA, and Value in Health* among others

Director, Health Economics (2016 - 2017)

- Lead multiple project portfolios simultaneously, including research using quality metric heat maps, group-based trajectory modeling and decision tree modeling.
- Generated \$1.5m of sales in 2017

Senior Research Economist (2014- 2016)

- Lead internal review of study protocols on topics related to quality metrics, and value-based purchasing agreements, and value frameworks
- Managed 5-7 projects simultaneously worth \$2m in revenue

Research Economist (2013- 2014)

- Lead projects in a variety of disease areas (cardiovascular disease, mental health, oncology) using a variety of techniques including claims analyses, indirect treatment comparisons, discrete choice experiments, and simulation modeling.
- On-boarded new staff

Innovation and Value Initiative

Director of Research (2016-present)

- Managed the execution of all research conducted by the Innovation and Value Initiative
- Lead the development of IVI's Open-Source Value Project (OSVP) process, including IVI's first OSVP model in rheumatoid arthritis

Healthcare Economist

Founder and Editor (2006-present)

- Founder and editor of blog with nearly 4,000 posts covering the topics of health economics, health policy, innovation, and pharmacoeconomics
- Healthcare Economist site has been ranked as one of the top health blogs by the *Economist, Slate, Wikio*, and other independent observers.
- Interviewed on NPR's *Here and Now* (2016) and *Al Jazeera English* (2008) among others

Acumen, LLC

Policy Lead (2009 - 2013)

- Lead projects to implement value-based purchasing programs for hospitals, home health agencies, physicians, and skilled nursing facilities for the CMS Innovation Center
- Developed an improved methodology for estimating geographic differences provider cost

JASON SHAFRIN

- Proposed methodologies to improve long-run national health expenditure projections for the CMS Office of the Actuary
- Won multiple SBIR grants from the National Institute of Health
- Participated in the AHRQ Multiple Chronic Conditions Research Network

University of California, San Diego

Instructor (2008)

- Instructor for two intermediate macroeconomics classes
- Student approval ratings of 88% and 89% respectively

Teachers' Assistant (2004-2009)

- Teacher's Assistant for over 20 different economics classes

General Electric

Financial Analyst (2002-20014)

- Completed GE's Financial Management Program (FMP) with rotations in Hartford, CT; Charlotte, NC; and Barcelona, Spain.
- Led high-level sales revenue analysis for GE's \$6 billion Industrial Systems unit
- Helped to create an internal website allowing managers to view daily sales data broken down by date, region, product line, P&L, etc.
- Worked with an international team in Barcelona, Spain to evaluate the present value of outstanding patents for GE products

Peer-Reviewed Publications

1. **Shafirin, Jason**, Michelle Skornicki, Michelle Brauer, Julie Villeneuve, Michael Lees, Nadine Hertel, John R. Penrod, and Jeroen Jansen. "An exploratory case study of the impact of expanding cost-effectiveness analysis for second-line nivolumab for patients with squamous non-small cell lung cancer in Canada: Does it make a difference?." *Health Policy* (2018).
2. **Shafirin, Jason**. "Making Precision Benefit Design Patient-Centered." *J Clin Pathways* 4, no. 7 (2018): 41-43.
3. **Shafirin, Jason**, Katalin Bognar, Katie Everson, Michelle Brauer, Darius N. Lakdawalla, and Felicia M. Forma. "Does knowledge of patient non-compliance change prescribing behavior in the real world? A claims-based analysis of patients with serious mental illness." *ClinicoEconomics and outcomes research: CEOR* 10 (2018): 573.
4. **Shafirin, Jason**, Mahlet Gizaw Tebeka, Kwanza Price, Chad Patel, and Kaleb Michaud. "The Economic Burden of ACPA-Positive Status Among Patients with Rheumatoid Arthritis." *Journal of managed care & specialty pharmacy* 24, no. 1 (2018): 4-11.
5. MacEwan, Joanna P., Alison R. Silverstein, **Jason Shafirin**, Darius N. Lakdawalla, Ainslie Hatch, and Felicia M. Forma. "Medication Adherence Patterns Among Patients with Multiple Serious Mental and Physical Illnesses." *Advances in therapy* 35, no. 5 (2018): 671-685.

JASON SHAFRIN

6. Bogнар, Katalin, **Jason Shafrin**, Michelle Brauer, Lauren Zhao, Rick Hockett, Michael O’Neil, and Anupam Jena. "The potential value of rapid, cloud-enabled onsite testing for the diagnosis of rheumatoid arthritis in the United States." *Journal of medical economics* (2018): 1-10.
7. Turakhia, Mintu P., **Jason Shafrin**, Katalin Bogнар, Jeffrey Trocio, Younos Abdulsattar, Daniel Wiederkehr, and Dana P. Goldman. "Estimated prevalence of undiagnosed atrial fibrillation in the United States." *PloS one* 13, no. 4 (2018): e0195088.
8. Kabiri, Mina, Michelle Brauer, **Jason Shafrin**, Jeff Sullivan, Thomas M. Gill, and Dana P. Goldman. "The Long-Term Health and Economic Value of Improved Mobility among Older Adults in the United States." *Value in Health* (2018).
9. Linthicum, Mark T., M. P. A. Jennifer Bright, and **Jason Shafrin**. "Open-Source Tools for Value Assessment: A Promising Approach." *J Clin Pathways* 4, no. 5 (2018): 37-39.
10. **Shafrin, Jason**, Anshu Shrestha, Amitabh Chandra, M. Haim Erder, and Vanja Sikirica. "Evaluating Matching-Adjusted Indirect Comparisons in Practice: A Case Study of Patients with Attention-Deficit/Hyperactivity Disorder." *Health economics* 26, no. 11 (2017): 1459-1466.
11. **Shafrin, Jason**, Jeff Sullivan, Dana P. Goldman, and Thomas M. Gill. "The association between observed mobility and quality of life in the near elderly." *PloS one* 12, no. 8 (2017): e0182920.
12. Sussell, Jesse, Kata Bogнар, Taylor T. Schwartz, **Jason Shafrin**, John J. Sheehan, Wade Aubry, and Dennis Scanlon. "Value-Based Payments and Incentives to Improve Care: A Case Study of Patients with Type 2 Diabetes in Medicare Advantage." *Value in Health* (2017).
13. Schafer, Jeremy, Dominic Galante, and **Jason Shafrin**. "Value Tools in Managed Care Decision Making: Current Hurdles and Future Opportunities." *Journal of Managed Care & Specialty Pharmacy* (2017). Harvard
14. **Shafrin, Jason**, Jenny Griffith, Jin Joo Shim, Caroline Huber, Arijit Ganguli, and Wade Aubry. "Geographic Variation in Diagnostic Ability and Quality of Care Metrics: A Case Study of Ankylosing Spondylitis and Low Back Pain." *INQUIRY: The Journal of Health Care Organization, Provision, and Financing* 54 (2017): 0046958017707873.
15. Lakdawalla, Darius N., **Jason Shafrin**, Ningqi Hou, Desi Peneva, Seanna Vine, Jinhee Park, Jie Zhang, Ron Brookmeyer, and Robert A. Figlin. "Predicting Real-World Effectiveness of Cancer Therapies Using Overall Survival and Progression-Free Survival from Clinical Trials: Empirical Evidence for the ASCO Value Framework." *Value in Health* (2017).
16. **Shafrin, Jason**, Taylor T. Schwartz, Tony Okoro, and John A. Romley. "Patient versus physician valuation of durable survival gains: implications for value framework assessments." *Value in Health* 20, no. 2 (2017): 217-223.
17. **Shafrin, Jason**, Jeff Sullivan, Jacquelyn W Chou, Michael N Neely, Justin F Doan, J Ross Maclean. "The effect of medication nonadherence on progression-free survival among patients with renal cell carcinoma." *Cancer Management and Research*. Vol 9. (2017)
18. **Shafrin, Jason**, Suepattra G. May, Anshu Shrestha, Charles Ruetsch, Nicole Gerlanc, Felicia Forma, Ainslie Hatch, Darius N. Lakdawalla, and Jean-Pierre Lindenmayer.

JASON SHAFRIN

- "Access to credible information on schizophrenia patients' medication adherence by prescribers can change their treatment strategies: evidence from an online survey of providers." *Patient preference and adherence* 11 (2017): 1071.
19. Blanford, Larry, **Jason Shafrin**. "The Clash: Treatment Advances and Value Measurements in Oncology" *Journal of Clinical Pathways*. Vol 3, no. 3, (2017).
 20. **Shafrin, Jason**, Arijit Ganguli, Yuri Sanchez Gonzalez, Jin Joo Shim, and Seth A. Seabury. "Geographic Variation in the Quality and Cost of Care for Patients with Rheumatoid Arthritis." *Journal of managed care & specialty pharmacy* 22, no. 12 (2016): 1472-1481.
 21. MacEwan, Joanna P., Felicia M. Forma, **Jason Shafrin**, Ainslie Hatch, Darius N. Lakdawalla, and Jean-Pierre Lindenmayer. "Patterns of Adherence to Oral Atypical Antipsychotics Among Patients Diagnosed with Schizophrenia." *Journal of managed care & specialty pharmacy* 22, no. 11 (2016): 1349-1361.
 22. **Shafrin, Jason**, Taylor T. Schwartz, Darius N. Lakdawalla, and Felicia M. Forma. "Estimating the Value of New Technologies That Provide More Accurate Drug Adherence Information to Providers for Their Patients with Schizophrenia." *Journal of managed care & specialty pharmacy* 22, no. 11 (2016): 1285-1291.
 23. **Shafrin, Jason**, Amanda Bruno, Joanna P. MacEwan, Avrita Campinha-Bacote, Jeffrey Trocio, Manan Shah, Wilson Tan, and John A. Romley. "Physician and patient preferences for nonvalvular atrial fibrillation therapies." *Value in Health* 19, no. 4 (2016): 451-459.
 24. **Shafrin, Jason**, Ningqi Hou, Ron Brookmeyer, Desi Peneva, Seanna Vine, Jinhee Park, Jie Zhang, Robert A. Figlin, and Darius N. Lakdawalla. "Predicting real-world effectiveness using overall survival and progression-free survival-based clinical trial efficacy measures." (2016): 6564-6564.
 25. Chandra, Amitabh, **Jason Shafrin**, and Ravinder Dhawan. "Utility of cancer value frameworks for patients, payers, and physicians." *JAMA* 315, no. 19 (2016): 2069-2070.
 26. **Shafrin, Jason**, Ron Brookmeyer, Desi Peneva, Jinhee Park, Jie Zhang, Robert A. Figlin, and Darius N. Lakdawalla. "The value of surrogate endpoints for predicting real-world survival across five cancer types." *Current medical research and opinion* 32, no. 4 (2016): 731-739.
 27. **Shafrin, Jason**, Jin Joo Shim, Caroline Huber, Jenny Griffith, Arijit Ganguli, and Wade Aubry. "Regional Variation in Measured Detection of Ankylosing Spondylitis." *Arthritis & Rheumatology* 67 (2015): 1565-1566.
 28. Chicklis, Camille, Thomas MaCurdy, Jay Bhattacharya, **Jason Shafrin**, Sajid Zaidi, and Daniel Rogers. "Regional growth in Medicare spending, 1992–2010." *Health services research* 50, no. 5 (2015): 1574-1588.
 29. Turakhia, Mintu P., **Jason Shafrin**, Katalin Bogнар, Dana P. Goldman, Philip M. Mendys, Younos Abdulsattar, Daniel Wiederkehr, and Jeffrey Trocio. "Economic burden of undiagnosed nonvalvular atrial fibrillation in the United States." *The American journal of cardiology* 116, no. 5 (2015): 733-739.
 30. Lakdawalla, Darius, **Jason Shafrin**, Claudio Lucarelli, Sean Nicholson, Zeba M. Khan, and Tomas J. Philipson. "Quality-adjusted cost of care: a meaningful way to measure

JASON SHAFRIN

growth in innovation cost versus the value of health gains." *Health Affairs* 34, no. 4 (2015): 555-561.

31. **Shafrin, Jason**. "Operating on commission: analyzing how physician financial incentives affect surgery rates." *Health economics* 19, no. 5 (2010): 562-580.
32. **Shafrin, Jason T.**, and John M. Fontanesi. "Focus on Vaccines Delivering Vaccines: A Case Study of the Distribution During implementation of the Vaccine Management Business Improvement Project, providers experienced longer delivery delays and a higher probability of a Vaccines for Children stockout." *American Journal of Managed Care* 15, no. 10 (2009): 751.
33. Bowers, Debra A., and **Jason Shafrin**. "Comparison of pharmacists and primary care providers as immunizers." *American Journal of Pharmacy* 1, no. 3 (2009): 150-157.

Technical Reports

Prepared for the Centers for Medicare and Medicaid Services and the Institute of Medicine

1. *Geographic Variation in Spending, Utilization and Quality: Medicare and Medicaid Beneficiaries*, (with Thomas MaCurdy, Jay Bhattacharya, Daniella Perlroth, Anita Au-Yeung, Hani Bashour, Camille Chicklis, Kennan Cronen, Brandy Lipton, Shahin Saneinejad, Elen Shrestha, and Sajid Zaidi) Report prepared for the Institute of Medicine. Burlingame, CA, 2013.
2. *IOM Study of Geographic Variation: Growth Analysis*, (with Thomas MaCurdy, Jay Bhattacharya, Camille Chicklis, Kennan Cronen, Jesselyn Friley, Brandy Lipton, Daniel Rogers, Sajid Zaidi.) Report prepared for the Institute of Medicine. Burlingame, CA, 2012.
3. *Geographic Adjustment of Medicare Payments to Physicians: Evaluation of IOM Recommendations*, (with T. MaCurdy, T. DeLeire, J. DeVaro, M. Bounds, D. Pham, and A. Chia), Acumen, LLC Report prepared for the Centers for Medicare & Medicaid Services. Burlingame, CA: Acumen, LLC, 2012.
4. Wage Index Reform Report to Congress: Technical Appendix. "Revising the Medicare Wage Index to Account for Commuting Patterns" (with T. MaCurdy, K. López de Nava, A. Shah, T. DeLeire). Acumen, LLC Report prepared for the Center for Medicare & Medicaid Services. Burlingame, CA: Acumen, LLC, 2012.
5. *Home Health Value-Based Purchasing Optional Design Approaches*, (with T. MaCurdy, K. Cook, K. Piccinini, M. O'Brien-Strain, A. Shah, G. DeForest, L. Hyungi Noh, C. Sharma, and D. Deitz), Acumen, LLC Report prepared for the Centers for Medicare & Medicaid Services. Burlingame, CA: Acumen, LLC, 2011.
6. *Report to Congress: Plan to Implement a Medicare Home Health Value-Based Purchasing Program*, (with T. MaCurdy, K. Cook, K. Piccinini, G. Marrufo, A. Dixit, and A. Shah), Acumen, LLC Report prepared for the Centers for Medicare & Medicaid Services. Burlingame, CA: Acumen, LLC, 2011.
7. *Long-Term Forecasts Using Time Series Models*, (with T. MaCurdy, and P. Hansen), Acumen, LLC Report prepared for the Centers for Medicare & Medicaid Services. Burlingame, CA: Acumen, 2011.

JASON SHAFRIN

8. *Revising the Medicare Wage Index to Account for Commuting Patterns*, (with T. MaCurdy, K. López de Nava, A. Shah, and T. DeLeire), Acumen, LLC Report prepared for the Centers for Medicare & Medicaid Services. Burlingame, CA: Acumen, LLC, 2011.
9. *Proposed Revisions to the Sixth Update of the Geographic Practice Cost Index*, (with T. MaCurdy, and M. Bounds), Acumen, LLC Report prepared for the Centers for Medicare & Medicaid Services. Burlingame, CA: Acumen, LLC, 2011.
10. *Revisions to the Sixth Update of the Geographic Practice Cost Index: Final Report*, (with T. MaCurdy, M. Bounds, and D. Pham), Acumen, LLC Report prepared for the Centers for Medicare & Medicaid Services. Burlingame, CA: Acumen, LLC, 2011.
11. *Optimal Pay-for-Performance Scores: How to Incentivize Physicians to Behave Efficiently Using Episode-Based Measures*, (with T. MaCurdy, E. Hartmann, M. Ho, L. Talbot, K. Ueda, and Z. Zhang), Acumen, LLC Report prepared for the Centers for Medicare & Medicaid Services. Burlingame, CA: Acumen, LLC, 2011.
12. *Issues in the Construction of Medicare Episodes*, (with T. MaCurdy, E. Hartmann, M. Ho, L. Talbot, J. Wong, S. Zaidi, and Z. Zhang), Acumen, LLC Report prepared for the Centers for Medicare & Medicaid Services. Burlingame, CA: Acumen, LLC, 2011.
13. *Evaluations of Four Episode Groupers*, (with T. MaCurdy, S. Zaidi, C. Sharma, M. Wernecke, C. Chicklis, J. Choi, and M. Chou), Acumen, LLC Report prepared for the Centers for Medicare & Medicaid Services. Burlingame, CA: Acumen, LLC, 2011.
14. *Medicare Grouper Evaluation: Risk Adjustment*, (with T. MaCurdy, S. Zaidi, C. Sharma, M. Wernecke, C. Chicklis, J. Choi, and M. Chou), Acumen, LLC Report prepared for the Centers for Medicare and Medicaid Services. Burlingame, CA: Acumen, LLC, 2011.
15. *Analysis of Current-Law Health Expenditure Projections*, (with T. MaCurdy, and D. Zheng), Acumen, LLC Report prepared for the Centers for Medicare & Medicaid Services. Burlingame, CA: Acumen, LLC, 2011.
16. *Expenditure Patterns for Part D Prescription Drugs, 2006-2008*, (with T. MaCurdy, M. Bounds, E. Hartmann, J. Son, and K. Ueda), Acumen, LLC Report prepared for the Medicare Payment Advisory Commission. Burlingame, CA: Acumen, LLC, 2010.
17. *Price Indices for Part D Prescription Drugs: 2006-2008*, (with T. MaCurdy, M. Bounds, K. Ueda, J. Son, S. Jhatakia, and E. Hartmann), Acumen, LLC Report prepared for the Medicare Payment Advisory Commission. Burlingame, CA: Acumen, LLC, 2010.
18. *Revision of Medicare Wage Index: Final Report, Part II*, (with T. MaCurdy, T. DeLeire, K. Lopez de Nava, P. Kamenecka, and Y. Tan), Acumen, LLC Report prepared for the Centers for Medicare & Medicaid Services. Burlingame, CA: Acumen, LLC, 2010.
19. *Overview of Acumen's Alternative Formulation of the Hospital Wage Index*, (with T. MaCurdy, T. DeLeire, K. López de Nava, and A. Shah), Acumen, LLC Report prepared for the Centers for Medicare & Medicaid Services. Burlingame, CA: Acumen, LLC, 2010.
20. *Consumption Patterns of Prescription Drugs in the Part D Program, 2006-2008*, (with T. MaCurdy, E. Hartmann, M. Bounds, K. Piccinini, J. Son, and K. Ueda), Acumen, LLC Report prepared for the Medicare Payment Advisory Commission. Burlingame, CA: Acumen, LLC, 2010.

JASON SHAFRIN

21. *Challenges in the Risk Adjustment of Episode Costs*, (with T. MaCurdy, E. Hartmann, M. Ho, L. Talbot, K. Ueda, and Z. Zhang), Acumen, LLC Report prepared for the Centers for Medicare & Medicaid Services. Burlingame, CA: Acumen, LLC, 2010.
22. *Evaluating the Stability of Physician Efficiency Scores*, (with T. MaCurdy, E. Hartmann, M. Ho, L. Talbot, K. Ueda, and Z. Zhang), Acumen, LLC Report prepared for the Centers for Medicare & Medicaid Services. Burlingame, CA: Acumen, LLC, 2010.
23. *National Health Expenditure Forecasting: A Handbook for Comparing OACT and CBO Methods*, (with T. MaCurdy, and T. Caldis), forthcoming as Centers for Medicare & Medicaid Services: Research Reports, Draft 2010.

Trade Press

1. **Shafrin, Jason**. “The gold standard of scientific evidence: Will randomized controlled trials become a thing of the past?” *Pharmaceutical Market Europe*. January, 2018. Pp. 18-19
2. **Shafrin, Jason**. “Advancing the Discussion of Real-World Evidence” *Drug Discovery and Development*. November 8, 2017. <https://www.dddmag.com/article/2017/11/advancing-discussion-real-world-evidence>
3. **Shafrin, Jason**. “Value frameworks are here: What to do about them?” *Pharmaceutical Commerce*. <http://pharmaceuticalcommerce.com/clinical-operations/value-frameworks-are-here-what-to-do-about-them/>
4. **Shafrin, Jason**. “Irrational model Healthcare economist reveals connection between behavior, care” *Modern Healthcare*. June 15, 2013. <http://www.modernhealthcare.com/article/20130615/MAGAZINE/306159971>

Interviews and press citations

1. *Radar on Specialty Pharmacy*, November 2018
2. *Eye for Pharma*, April 20-21, 2017, <http://social.eyeforpharma.com/market-access/price-everything-and-value-nothing>
3. *Journal of Healthcare Contracting*, December 2016
4. *NPR*, Here and Now, Radio interview, October 31, 2016, <http://www.wbur.org/hereandnow/2016/10/31/premium-price-surges-obamacare>
5. *Al Jazeera English*, TV interview, August 20, 2008