

## CURRICULUM VITAE

## EXPERIENCE

*Freelance health economic modeling consultant*

November 2017 - present

- Developed, deployed, and currently maintain a web-based employer-focused economic model in R/Shiny for a pharmaceutical client.
- Collaborated with client and seasoned health economics researchers to determine model's constructs and scope.
- Informed model assumptions via literature search of relevant peer-reviewed publications.

Rutgers University Center for Health Outcomes, Policy, and Economics (HOPE)

Piscataway, NJ

*Senior Research Analyst*

April 2017 - present

- Senior Research Analyst specializing in Health Economics and Outcomes Research (HEOR); promoted from Research Analyst position in February 2020.
- Migrated along with my research group from Thomas Jefferson University to Rutgers University in April 2017.
- Responsible for data analytic management of a growing academic HEOR program.
- Perform complex analysis and model programming for a wide variety of HEOR studies using technologies such as R/RStudio, SAS, SQL, SPSS, TreeAge, and VBA, among others.
- Primary analytic work includes statistical modeling and analysis of study, healthcare, and claims data; budget impact model programming; and decision analytic modeling.
- Develop analytic plans, maintain plan documentation, and manage source code version control via GitHub.
- Translate and validate health utility instrument scoring code, and use this code to score health utilities for patient-reported outcomes analyses.
- Communicate analytic findings to colleagues, collaborators, and clients through high-quality, polished deliverables, including written reports, graphical output, and verbal presentations.
- Contribute to all aspects of scientific abstract and manuscript development, presentation, and publication.
- Create and maintain web-based analytic dashboards to monitor study progress.
- Supervise and mentor fellows, students, and junior staff in all stages of research procedures including data collection, development and execution of analytic plans, and reporting findings.
- Train faculty, fellows, students, and staff in the use of analytical software and statistical methods both through formal coursework and informal sessions.
- Develop and co-teach a graduate-level course in health economic modeling methods covering topics such as budget impact analysis, decision analytic modeling, and univariate and probabilistic sensitivity analyses.
- Perform other teaching duties as needed, including serving as a formal graduate capstone project advisor and co-teaching a graduate-level independent study course.
- Create content for complete overhaul of HOPE website, coordinate with Office of Information Technology to create new site, and update site as needed.
- Manage IRB coverage for all active studies.

Thomas Jefferson University

Philadelphia, PA

*Research Analyst*

June 2015 - April 2017

- Research Analyst specializing in HEOR.
- Was responsible for data analysis and model programming for a wide variety of prospective and retrospective health economic studies.
- Primary tasks included study data analysis in SPSS, Excel-based budget impact model programming in VBA, and decision modeling in TreeAge.
- Contributed to scientific publication of results, including peer-reviewed journal articles and conference abstracts.
- Served as Teaching Assistant in two School of Pharmacy courses: PHRM 519 (Healthcare Delivery Systems) and PHRM 551 (Pharmacoeconomics and Health Outcomes), including delivery of a hands-on instructional lab in decision analytic modeling in TreeAge as well as development of course assignments and exam questions.
- Maintained IRB approval for all studies.

RJMetrics  
*Data Warehouse Analyst*

Philadelphia, PA  
December 2014 - May 2015

- Analyst specializing in business intelligence analyses, including ad-hoc analysis and implementation of standardized analytic packages.
- Used SQL daily to query local and remote databases (both MySQL and PostgreSQL).
- Performed data transformations in the data warehouse in Java and PHP.
- Identified sources of data discrepancies between clients' remote databases and the local data warehouse and worked with clients and/or the development team as needed to rectify these.

Temple University  
*Doctoral student / Future Faculty Fellow*

Philadelphia, PA  
August 2013 - December 2014

- Doctoral student in Physics with a Future Faculty fellowship.
- Primary research function was fabricating  $\text{MgB}_2/\text{MgO}/\text{MgB}_2$  trilayer Josephson junction circuits via hybrid physical chemical vapor thin film deposition, and testing these circuits.
- Analyzed and interpreted data from circuit testing using OriginLab and Excel and communicated findings to research group daily.
- Coursework included numerical analysis programming in C/C++ and reporting in  $\text{\LaTeX}$ .
- Taught three sections of introductory physics laboratory to undergraduate students.

Thomas Jefferson University  
*Research Assistant*

Philadelphia, PA  
March 2012 - August 2013

- Research Assistant specializing in pharmaco- and health economics.
- Used SPSS to analyze the data and present findings graphically and numerically.
- Used TreeAge Pro to create and modify decision- and cost-analytic models based on study data.
- Worked with several varieties of study data, including longitudinal prospective studies, retrospective records analysis, and survey-based data.
- Contributing author on several scientific publications, including posters and journal articles.
- Performed literature searches to support proposal, research plan, and manuscript development.

## TECHNICAL SKILLS

### *Analytic/Statistical Programming and Modeling Skills*

Analytic/Statistical Programming: R, SAS, SQL, SPSS, JMP

Modeling: Shiny, TreeAge, VBA

Machine Learning: scikit-learn (Python), several R packages for clustering

### *Programming Languages/Environments and Data Warehousing Skills*

Programming Languages: R, Python, C/C++; some Java and PHP

Markup Languages:  $\text{\LaTeX}$ , HTML, Markdown, some CSS

IDEs/Editors: RStudio, JupyterLab, Spyder, Atom, vim

Data Warehousing: PostgreSQL, MySQL

### *Miscellaneous*

Operating Systems: All versions of Windows, Mac, and Linux

Version Control: GitHub

Applications: Microsoft Office (and open-source alternatives), Visio, OriginLab Origin, Wolfram Mathematica

Other: owner/webmaster of prioli.net, which is hosted on a Linux VPS and runs on blogdown

## EDUCATION

*Master of Science*, Applied Statistics, Villanova University, Villanova, PA

June 2016 - December 2019

Coursework included an elective in machine learning. Final project in the machine learning course used supervised and unsupervised ML approaches in R and Python to understand demographic and behavioral characteristics associated with obesity using the 2015-2016 National Health and Nutrition Examination Survey (NHANES) dataset.

Doctoral-level research & coursework, Physics, Temple University, Philadelphia, PA August 2013 - December 2014  
Future Faculty Fellow and graduate student researcher in thin film material physics

Continuing education, Physics, Temple University, Philadelphia, PA August 2010 - December 2011

*Bachelor of Science*, Biophysics, Temple University, Philadelphia, PA August 2006 - May 2010  
Graduated Cum Laude; Member, Phi Beta Kappa Society; Minored in French

## PROFESSIONAL ASSOCIATIONS

Member, International Society for Pharmacoeconomics and Outcomes Research 2013 - present  
Volunteer research abstract reviewer annually since 2018

Member, American Statistical Association 2018 - 2019

Member, RStudio Community 2017 - present  
Volunteer Community Sustainer since 2018

## PUBLICATIONS

### PEER-REVIEWED JOURNAL ARTICLES

1. (*Manuscript in development*) Yuan J, **Prioli KM**, Abersone I, Hark LA, Waisbourd M, Katz LJ, Myers J, Pizzi LT. Costs and Outcomes of the Philadelphia Telemedicine Glaucoma Detection and Follow-up Study.
2. (*Manuscript in development*) Babcock Z, **Prioli KM**, Pizzi LT, Yuan J, McAbee-Sevick H, Wakefield D, Fortinsky RH. Societal costs from of the Care of Persons with Dementia in their Environments (COPE-CT) translational study.
3. (*Manuscript in development*) Pizzi LT, Yuan J, **Prioli KM**, Jutkowitz E, Piersol CV, Marx KA, Gitlin LN. Cost Savings from the Tailored Activity Program in Community-Dwelling Older Adults with Dementia: Results from the Dementia Behavior Study (DBS).
4. (*Manuscript in development*) Wagner M, McCarthy C, Bateman T, Simmons D, **Prioli KM**. Pharmacist improved diabetes outcomes in a Federally Qualified Health Center.
5. (*Manuscript in development*) Dally TM, Murchison AP, Leiby BE, **Prioli KM**, Michael B, Brahmhbhatt Y, Pizzi LT. Satisfaction with Eye Care and Pharmacy Services in Dialysis Patients with Diabetes: A Survey of Two Centers.
6. Smart M, Seligman NS, Gray L, **Prioli KM**, Berghella V, Pizzi LT. Serial Cervical Length Screening to Prevent Preterm Birth Among United States Women with a Singleton Gestation and a History of Preterm Birth: A Decision Analysis. *Manuscript submitted to Cost Effectiveness and Resource Allocation*.
7. LaFontaine P, Yuan J, **Prioli KM**, Herman JH, Shah P, Pizzi LT. Economic analyses of pathogen reduction and screening technologies in blood transfusion: a systematic literature review. *Invited article; manuscript submitted to Applied Health Economics*.
8. Gerlach JA, Snow B, **Prioli KM**, Vertsman R, Patterson J, Pizzi LT. An Analysis of Multi-Stakeholder Engagement in the Public Comments of ICER Draft Evidence Reports. *Manuscript submitted to American Health and Drug Benefits*.
9. **Prioli KM**, Karp JK, Lyons NM, Chrebtow V, Herman JH, Pizzi LT. Economic Implications of Pathogen Reduced and Bacterially Tested Platelet Components: A US Hospital Budget Impact Model. *Appl Health Econ Health Policy*. 2018. doi: 10.1007/s40258-018-0409-3.
10. Schafer JJ, McRae J, **Prioli KM**, Harris LF, McCoy M, Cannon-Dang E, Pizzi LT. Exploring beliefs about pneumococcal vaccination in a predominantly older African American population: the Pharmacists' Pneumonia Prevention Program (PPPP). *Ethn Health*. 2018; 1-15. doi: 10.1080/13557858.2018.1514450.
11. Pizzi LT, **Prioli KM**, Fields Harris L, Cannon-Dang E, Marthol-Clark M, Alcusky M, McCoy M, Schafer JJ. Knowledge, Activation, and Costs of the Pharmacists' Pneumonia Prevention Program (PPPP): A Novel Senior Center Model to Promote Vaccination. *Ann Pharmacother*. 2018; 52(5):446-453. doi: 10.1177/1060028017745566.
12. **Prioli KM**, Pizzi LT, Kash KM, Newberg AB, Morlino AM, Matthews MJ, Monti DA. Costs and Effectiveness of Mindfulness-Based Art Therapy versus Standard Breast Cancer Support Group for Women with Cancer. *Am Health Drug Benefits*. 2017; 10(6):288-295.

13. Nightingale G, Hajjar E, Pizzi LT, Wang M, Pigott E, Doherty S, **Prioli KM**, Swartz K, Chapman AE. Implementing a pharmacist-led, individualized medication assessment and planning (iMAP) intervention to reduce medication related problems among older adults with cancer. *J Geriatr Oncol.* 2017; 8(4):296-302. doi: 10.1016/j.jgo.2017.04.005.
14. **Prioli KM**, Pizzi LT, Karp JK, Galanis T, Herman JH, and the Plasma Cost Focus Group. Cost of Purchased Versus Produced Plasma from Donor Recruitment Through Transfusion. *Appl Health Econ Health Policy.* 2016; 14(5):609-17.
15. Pizzi LT, Snitzer M, Amos T, **Prioli KM**, Steele D, Levin AV. Cost and Effectiveness of an Eye Care Adherence Program for Philadelphia Children with Significant Visual Impairment. *Population Health Management.* 2015; 18(3):223-31.
16. Pizzi LT, Jutkowitz E, Frick KD, Suh DC, **Prioli KM**, Gitlin LN. Cost-Effectiveness of a Community-Integrated Home-Based Depression Intervention in Older African Americans. *J Am Geriatr Soc.* 2014; 62:2288-95.

#### POSTERS AND PRESENTATIONS

1. (*Abstract accepted; poster under development*) **Prioli KM**, Abersone I, Vertsman R, Neese M, Schafer JJ, Fields Harris L, Jackson F, Cunningham R, Pizzi LT. Knowledge, Beliefs, and Activation Regarding Vaccine-Preventable Diseases: Results from the Vaccine Education through Pharmacists and Senior Centers (VEPSC) Study. Poster presentation at the 25<sup>th</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, Orlando, Florida, May 2020.
2. (*Abstract accepted; poster under development*) **Prioli KM**, Babcock ZR, Jain S, Cusumano EM, Ko R, Pizzi LT. A Model for Teaching Economic Modeling: Delivery of a Novel Economic Modeling Course. Poster presentation at the 25<sup>th</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, Orlando, Florida, May 2020.
3. Pizzi LT, **Prioli KM**, Jutkowitz E, Yuan J, Gitlin LN. Tailored Activity Program (TAP) Costs: Opportunities to Streamline Delivery and Pursue Reimbursement. Symposium presentation at the 2019 Annual Scientific Meeting of the Gerontological Society of America, Austin, Texas, November 2019.
4. Ray M, **Prioli KM**, Jutkowitz E, Gitlin L, Rovner B, Casten R, Pizzi LT. Impact of Behavioral Interventions for Chronic Diseases on Health Utility: Assessment of Three Trials of Older Adults. Poster presentation at the 24<sup>th</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, New Orleans, Louisiana, May 2019.
5. **Prioli KM**, Vertsman R, Schafer JJ, Fields Harris L, Jackson F, Pizzi LT. Patient Knowledge About Vaccine-Preventable Diseases: Baseline Results of the Vaccine Education through Pharmacists and Senior Centers (VEPSC) Trial. Poster presentation at the 24<sup>th</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, New Orleans, Louisiana, May 2019.
6. Pizzi LT, Jutkowitz E, **Prioli KM**, Gitlin LN, Fortinsky RH. Intervention Delivery Costs and Caregivers' Willingness to Pay for COPE-CT: Interim Findings. Symposium presentation at the 2018 Annual Scientific Meeting of the Gerontological Society of America, Boston, Massachusetts, November 2018.
7. Smart M, Seligman NS, **Prioli KM**, Gray LM, Pizzi LT. Cost-Effectiveness of Serial Cervical Length Screening to Prevent Preterm Birth Among High-Risk Women: A Decision Analysis. Poster presentation at the 23<sup>rd</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, Baltimore, Maryland, May 2018.
8. **Prioli KM**, Lyons NL, Karp JK, Herman JH, Pizzi LT. Cost and Shelf-Life Implications of Pathogen-Reduced Platelets: A Hospital Budget Impact Model. Poster presentation at the 23<sup>rd</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, Baltimore, Maryland, May 2018.
9. **Prioli KM**, Formal RG, Schafer JJ, Fields Harris L, Jackson F, Vertsman R, Pizzi LT. Baseline Knowledge about Vaccines and Vaccine-Preventable Diseases Among Older Adults: Preliminary Analysis of the Vaccine Education through Pharmacists and Senior Centers (VEPSC) Study. Poster presentation at the 23<sup>rd</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, Baltimore, Maryland, May 2018.
10. Mehta R, **Prioli KM**, Hark LA, Katz LJ, Myers JS, Pizzi LT. Baseline Health Utility Scores in Subjects with Suspected Ocular Disease: An Interim Analysis of the Philadelphia Telemedicine Glaucoma Detection and Follow-Up Study. Poster presentation at the 23<sup>rd</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, Baltimore, Maryland, May 2018.
11. **Prioli KM**, Lyons NM, Karp JK, Herman JH, Pizzi LT, Chrebtow VC, Robbins C. Cost Implications of Pathogen-Reduced Platelets: A Hospital Budget Impact Model. Oral presentation at the 2018 joint meeting of

the California Blood Bank Society and the South Central Association of Blood Banks, Glendale, Arizona, April 2018.

12. **Prioli KM**, Lyons NM, Karp JK, Herman JH, Pizzi LT. Cost and Shelf Life Implications of Pathogen-Reduced Platelets: A Hospital Budget Impact Model. Poster presentation at the 2017 AABB conference, San Diego, California, October 2017.
13. Robbins C, Pizzi LT, **Prioli KM**. Cost Analysis for Implementation of Pathogen Reduced Platelets - An Interactive Model. Workshop presentation at the 2017 Annual Meeting of the Society for the Advancement of Blood Management, Portland, Oregon, September 2017.
14. Lyons NM, **Prioli KM**, Pizzi LT. Cost of Platelet Purchase and Production: A Survey of US Hospitals. Poster presentation at the 22<sup>nd</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, Boston, Massachusetts, May 2017.
15. Pizzi LT, Waisbourd M, Hark LA, **Prioli KM**, Katz LJ. Costs of a Community-Based Glaucoma Detection Program: Analysis of the Philadelphia Glaucoma Detection and Treatment Project. Podium presentation at the 2017 Annual Meeting of the Association for Research in Vision and Ophthalmology, Baltimore, Maryland, May 2017.
16. Pizzi LT, Jutkowitz E, **Prioli KM**, Gitlin L, Fortinski RH. Cost Analysis Plan and Caregivers' Willingness to Pay for COPE-CT: Interim Findings. Symposium presentation at the 2016 Annual Scientific Meeting of the Gerontological Society of America, New Orleans, Louisiana, November 2016.
17. **Prioli KM**, Lyons NL, Pizzi LT. Tasks Involved in Platelet Production and Transfusion from the U.S. Hospital Perspective: Two Process Frameworks. Poster presentation at the 19<sup>th</sup> annual European congress of the International Society for Pharmacoeconomics and Outcomes Research, Vienna, Austria, October 2016.
18. **Prioli KM**, Schafer JJ, Pizzi LT. Reducing Disparities In U.S. Vaccination through Senior Centers: A Comparison of Three Educational Models for Older African Americans. Poster presentation at the 19<sup>th</sup> annual European congress of the International Society for Pharmacoeconomics and Outcomes Research, Vienna, Austria, October 2016.
19. Pizzi LT, **Prioli KM**, Seidner M, Cunningham C, Ollendorf D. How Stakeholders are Responding to ICER Drug Therapy Reports: An Analysis of Public Comments. Poster presentation at the 21<sup>st</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, Washington, DC, May 2016.
20. McRae J, **Prioli KM**, Schafer JJ, Cannon-Dang E, Harris LF, Pizzi LT. Developing Beliefs that Support Vaccination: Results from the Pharmacists' Pneumonia Prevention Program. Poster presentation at the 21<sup>st</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, Washington, DC, May 2016.
21. Dally T, **Prioli KM**, Leiby BE, Murchison A, Michael B, Brahmabhatt Y, Pizzi LT. Satisfaction with Pharmacy Services in Diabetic Dialysis Patients Enrolled in an Eye Care Study at Two Centers. Poster presentation at the 21<sup>st</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, Washington, DC, May 2016.
22. Varga S, **Prioli KM**, Gitlin L, Jutkowitz E, Pizzi L. Developing Consistent Measures for Cost Analyses of Dementia Behavioral Trials: A Review of Four Study Protocols. Poster presentation at the 21<sup>st</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, Washington, DC, May 2016.
23. Nightingale G, Pizzi LT, Hajjar E, **Prioli KM**, Swartz K, Chapman A. Implementing a Pharmacist-Led, Individualized Medication Assessment and Planning (iMAP) Program to Improve Medication Use in Ambulatory Senior Adult Oncology (SAO) Patients. Poster presentation at the HOPA 2016 annual meeting, Atlanta, Georgia, March 2016.
24. Pizzi LT, Karp JK, Galanis T, **Prioli KM**, Herman JH. Cost of Purchased versus Produced Plasma from Production through Administration: A Decision Analysis. Poster presentation at the AABB 2014 annual meeting, Philadelphia, Pennsylvania, October 2014.
25. Pizzi LT, Karp JK, Galanis P, **Prioli KM**, Herman JH. Comprehensive Cost Analysis of Fresh Frozen Plasma in an Urban Hospital Setting: An Observational and Decision Analysis. Poster presentation at the AABB 2013 annual meeting, Denver, Colorado, October 2013.
26. **Prioli KM**, Schafer JJ, Fields Harris L, McCoy M, Barber E, Marthol-Clark M, Pizzi LT. Awareness and Beliefs about Pneumococcal and Influenza Vaccination among Older African Americans: Results from a Survey of Community-Dwelling Participants at an Urban Senior Center. Poster presentation at the 18<sup>th</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, New Orleans, Louisiana, May 2013.

27. Pizzi LT, Jutkowitz E, Frick KD, Suh DC, **Prioli KM**, Gitlin LN. Healthcare and Social Service Use and Cost in Depressed African American Elders: Results from the Beat the Blues Randomized Clinical Trial. Poster presentation at the 18<sup>th</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, New Orleans, Louisiana, May 2013.
28. Pizzi LT, Seligman NS, Baxter JK, Jutkowitz E, **Prioli KM**, Mearns E, Berghella V. Cost-Effectiveness of Vaginal Progesterone Gel in Reducing Preterm Birth: A Decision Analytic Model Based on the PREGNANT Randomized Clinical Trial. Poster presentation at the 18<sup>th</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, New Orleans, Louisiana, May 2013.
29. Levin A, Pizzi LT, Snitzer M, **Prioli KM**. Barriers to Follow Up Care in Children with Vision Diseases: Development of a Conceptual Framework and Parent/Caregiver Survey through the Children's Eye Care Adherence Project. Poster presentation at the 18<sup>th</sup> Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research, New Orleans, Louisiana, May 2013.
30. Pizzi LT, Jutkowitz E, Frick KD, Suh DC, **Prioli KM**, Gitlin LN. Novel Approaches to Evaluating the Cost-Effectiveness of a Nonpharmacological Depression Intervention for Older Adults: Results from the Beat the Blues Trial. Poster presentation at the 65<sup>th</sup> Annual Scientific Meeting of the Gerontological Society of America, San Diego, California, November 2012.