

# BRENNAN BEAL

I am a pharmacist turned data scientist excited about bridging the gap between data and people. My favorite projects are cross-functional in nature and revolve around creating efficiencies in the way that data is understood and delivered.

## INDUSTRY EXPERIENCE

Current  
|  
2021

### Quantitative Scientist

Flatiron Health

 New York, NY

- Leading Syntech in the automation and deployment of a quality assessment pipeline to cut monthly engineering time by 75%
- Thought leader for target-trial emulation to reduce immortal time bias in survival modeling
- Collaborating with our clinicians to develop R packages for scaling the speed at which we can deliver data to clients
- Researching clinical and socioeconomic barriers to access for Chimeric antigen receptor (CAR) T-cell therapy patients
- Conducting research on the use of real-world data (RWD) for ex-US HTA use cases, including collaboration with NICE, UK and thought leadership surrounding the transportability of US-generated real-world evidence

2021  
|  
2019

### Post-Doctoral Healthcare Economics Research Fellow

AbbVie with the University of Washington

 Seattle, WA

- Designed and led a study employing stratified gamma generalized linear models to indicate that large US payers spend >\$315M on preventable glaucoma costs supporting legacy Allergan's second largest durable growth area prior to the acquisition
- Created and began marketing an RShiny app, the Real-World Evidence Assessments and Nee-ds Guidance (REAdi) Tool, to assist payers in streamlining the process of RWE synthesis and decision-making, which went on to receive \$50,000 in funding
- Managed vendors to support an economic value story for AbbVie's \$2.3B eye care portfolio

2019  
|  
2018

### Independent Consultant/Entrepreneur

Chiesi USA, Inc.

 Raleigh, NC

- Restructured FY 2020 marketing strategy by identifying a \$600k profit opportunity within their provider outreach program
- Optimized marketing efforts for an \$80M product by demonstrating the synergistic effect of two separate in-house marketing teams, yielding a 300% increase in uptake compared to no marketing



View this CV online with links at [brennanbeal.com/cv/](https://brennanbeal.com/cv/)

## CONTACT

 [brennanbeal@gmail.com](mailto:brennanbeal@gmail.com)

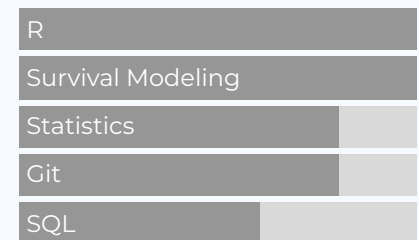
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## LANGUAGE SKILLS



Made with the R package [pagedown](https://github.com/jgm/pagedown).

The source code is available [on github.com/btbeal/cv](https://github.com/btbeal/cv).

Last updated on 2022-04-06.



## SELECTED PUBLICATIONS, POSTERS, AND TALKS

- 2022 • **Passport for Travel: Proposed Framework for Transportability of Oncology Real World Evidence<sup>1</sup>**  
ISPOR 2022 Poster  
• *Brennan Beal*, Ivy Altomare, Joshua Ray, Danielle Bargo, Blythe Adamson
- 2021 • **Comparing Healthcare Resource Utilization and Costs for Patients with Normal Tension Glaucoma Across Levels of Severity: A Retrospective Cohort Study<sup>2</sup>**  
Clinical Ophthalmology  
• *Brennan Beal*, Vanessa Shih, Joanna Campbell, David Veenstra, and Beth Devine
- 2021 • **Online tools to synthesize real-world evidence of comparative effectiveness research to enhance formulary decision making<sup>3</sup>**  
Journal of Managed Care and Specialty Pharmacy  
• Shuxian Chen, Jennifer Graff, Sophia Yun, *Brennan Beal*, Jamie T Ta, Aasthaa Bansa, Joshua J Carlson, David L Veenstra, Anirban Basu, and Beth Devine
- 2021 • **Intro to R<sup>4</sup>**  
University of Washington  
• Developed and led a course to teach incoming PhD and Fellows the basics of understanding data with R
- 2020 • **REAdi Tool for RWE Evaluation**  
R/Medicine 2020  
• Invited to present<sup>5</sup> the REAdi Tool as a novel use case for RShiny



## PACKAGE DEVELOPMENT

- 2020 • **adheRenceRX<sup>6</sup>**  
CRAN  
• Authored an opinionated set of R functions, which leverage C++ to improve the speed and efficiency at which researchers can conduct pharmaceutical adherence assessment



## SELECTED WRITING

- 2019 • **Indifference Curves Explained Through Visualization<sup>8</sup>**  
Personal Blog  
• Understanding the economic theory of utility is often accompanied by two-dimensional graphs of indifference curves; however, this can sometimes be confusing and misleading. This post is meant to demystify indifference curves through three-dimensional visualizations.

In my spare time, I really enjoy learning and teaching others - when I get curious about a subject, I'll usually write about it<sup>7</sup>

- 2019 ● **Expected Loss as a Way to Better Communicate Cost Effectiveness<sup>9</sup>**  
Personal Blog
- Discussing why the technology most likely to be cost-effective may not always be the best option for reducing risk



## EDUCATION

- 2021 ● **M.S., Healthcare Economics and Outcomes Research**  
University of Washington  Seattle, WA
- University Graduate Fellow
  - Thesis: Comparing Healthcare Resource Utilization and Costs for Patients with Normal Tension Glaucoma Across Levels of Severity: A Retrospective Cohort Study
  - First Fellow to receive the University of Washington School of Pharmacy Graduate Student Leadership Award
- 2019 ● **Doctor of Pharmacy**  
University of North Carolina  Chapel Hill, NC
- Focused on healthcare economics and value of pharmacists in primary care clinics
- 2015 ● **B.S., Structural and Molecular Biochemistry**  
North Carolina State University  Raleigh, NC



## LINKS

- 1: <https://www.ispor.org/heor-resources/presentations-database/presentation/intl2022-3459/115783>
- 2: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7881786/>
- 3: <https://pubmed.ncbi.nlm.nih.gov/33377442/>
- 4: <https://zealous-hawking-ce0a3d.netlify.app/>
- 5: <https://brennanbeal.com/talk/>
- 6: <https://btbeal.github.io/adherenceRX/>
- 7: <https://brennanbeal.com/projects/>
- 8: <https://btbeal.github.io/Indifference-Curves/>
- 9: [https://btbeal.github.io/Expected\\_Loss/](https://btbeal.github.io/Expected_Loss/)