

# Mark Bounthavong

PHARMACIST · HEALTH ECONOMIST · DATA PROGRAM MANAGER

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*"A society can be Pareto optimal and still perfectly disgusting." — Amartya Sen*

## Education

### University of Washington

PH.D. IN THE COMPARATIVE HEALTH OUTCOMES, POLICY, & ECONOMICS (CHOICE) INSTITUTE

Seattle, WA

Sept. 2013 - July 2018

- Dissertation: Program evaluation of academic detailing in the U.S. Department of Veterans Affairs
- Chair: Emily Beth Devine, Pharm.D., MBA, Ph.D.

### Emory University

MPH IN ROLLINS SCHOOL OF PUBLIC HEALTH (APPLIED EPIDEMIOLOGY)

Atlanta, GA

Aug. 2011 - Dec. 2013

- Thesis: Multiple Imputation with Multivariate Models: An Evaluation of Two Case Studies
- Chair: Kevin M Sullivan, Ph.D., MPH, MHA

### Western University of Health Sciences

OUTCOMES RESEARCH FELLOWSHIP IN COLLEGE OF PHARMACY

Pomona, CA

July 2005 - June 2007

- Advisors: Anandi V. Law, PhD, RPh and Mark P. Okamoto, PharmD

### Jerry L. Pettis Veterans Affairs Healthcare System

POST-GRADUATE YEAR-1 PHARMACY PRACTICE RESIDENCY

Loma Linda, CA

July 2004 - June 2005

### Western University of Health Sciences

PHARM.D. IN COLLEGE OF PHARMACY

Pomona, CA

Sept. 2000 - May 2004

- Board Certified Pharmacist in California and Washington States

### University of California, Irvine

B.S. IN BIOLOGIC SCIENCES

Irvine, CA

Sept. 1994 - June 1999

## Skills

**Programming** Excel VBA, LaTeX, R, SAS, SPSS, STATA, T-SQL, WinBUGS

**Web** R-SHINY

## Employment History

### VA Health Economics Resource Center (HERC)

HEALTH ECONOMIST | DIRECTOR: TODD WAGNER, PhD | TWAGNER@STANFORD.EDU | (650) 493-5000 X22048

Menlo Park, CA

Jan. 2019 - Present

- Oversee and lead research projects at the VA
- Provide consultation on PBM-related projects
- Develop educational tools on pharmacoeconomics
- Apply econometric methods to policy research

### PBM VA Academic Detailing Services

DATA PHARMACIST PROGRAM MANAGER | SUPERVISOR: MELISSA LD CHRISTOPHER, PHARM.D. | MELISSA.CHRISTOPHER@VA.GOV |

San Diego, CA

(858) 337-8473

Mar. 2016 - Present

- Quantify the impact of academic detailing on outcomes
- Prepare research reports on program evaluation
- Oversee and spearheaded submission of letter of intent for a request for proposal
- Design and implemented statistical models utilizing diverse datasets

## University of Washington

Seattle, WA

TEACHING ASSISTANT | SUPERVISOR: SEAN D. SULLIVAN, PH.D. | SDSULL@UW.EDU | (206) 685-8153

Jan. 2016 - Mar. 2016

- Wrote exam questions, graded exams, and assisted in course logistics

## University of Washington

Seattle, WA

RESEARCH ASSISTANT | SUPERVISOR: RYAN HANSEN, PHARM.D., PH.D. | RHANSET@UW.EDU | (206) 543-2402

Aug. 2015 - Aug. 2016

- Performed cost-minimization analysis, developed protocol, constructed model, performed sensitivity analysis
- Prepared poster and manuscript

## University of Washington

Seattle, WA

RESEARCH ASSISTANT | SUPERVISOR: JOSH J. CARLSON, PH.D. MPH | CARLSOJJ@UW.EDU | (206) 543-9649

Jan. 2014 - Aug. 2014

- Performed systematic review on Accountable Care Organizations (ACOs)
- Summarized findings in a report submitted to PCORI

## University of Washington

Seattle, WA

RESEARCH ASSISTANT | SUPERVISOR: DAVID VEENSTRA, PHARM.D., PH.D. | VEENSTRA@UW.EDU | (206) 221-6936

July 2013 - Dec. 2013

- Performed systematic review of drug-drug interactions between warfarin and amiodarone

## Veterans Affairs San Diego Healthcare System

San Diego, CA

PHARMCOECONOMICS CLINICAL SPECIALIST (INTERMITTENT) | SUPERVISOR: VICTORIA ALDRIDGE, PHARM.D. |

VICTORIA.ALDRIDGE@VA.GOV | (858) 552-8585

Aug. 2013 - Aug. 2015

- Performed statistical analysis on renal pharmacist intervention
- Finalized report for the medical executive committee

## Veterans Affairs San Diego Healthcare System

San Diego, CA

PHARMCOECONOMICS CLINICAL SPECIALIST (40 HR/WEEK) | SUPERVISOR: VICTORIA ALDRIDGE, PHARM.D. |

VICTORIA.ALDRIDGE@VA.GOV | (858) 552-8585

July 2007 - July 2013

- Maintained and enforced the VA National Formulary, participated in Pharmacy and Therapeutics Committee
- Identified and implemented cost-savings initiatives
- Performed health technology assessment to identify cost-effective strategies while maintaining high quality health care
- Developed, implemented, and staffed the pharmacist-run immunization clinic
- Developed and directed the PGY-1 Managed Care Pharmacy Residency

## Grants & Funding

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- **Principal Investigator.** Study: Enhancing Access to Academic Detailing in Rural Areas: A Partnered-Evaluation of E-detailing; Sponsor: VA ORD QUERI Partnered Evaluation Initiative (In review); Total amount: \$447,514
- **Principal Investigator.** Study: VHA Rapid Naloxone Initiative Partnered Evaluation: Improving Implementation to Save Lives and Transform Post-Overdose Care; Sponsor: VA ORD QUERI Partnered Evaluation Initiative (In review); Total amount: \$496,271
- **Principal Investigator.** Study: Evaluating the Impact of Academic Detailing on Naloxone Distribution; Sponsor: Elmer M. Plein Endowed Research Fund (January 1, 2017 to December 31, 2017); Total amount: \$2,503
- **Principal Investigator.** Study: Evaluating the Impact of Academic Detailing on Naloxone Distribution; Sponsor: Rubenstein Endowment Fund (January 1, 2017 to December 31, 2017); Total amount: \$5,000
- **Principal Investigator.** Study: Cost-effectiveness analysis of tumor necrosis factor in Rheumatoid Arthritis and Crohn's disease in a Veteran population; Sponsor: Extramural Grant from UCB, Inc. (September 2009 to March 2015); IIS: 002296; VMRF Project: 08131; Protocol: H120150; Total amount: \$29,000
- **Principal Investigator.** Title: Clinical and economic outcomes of exenatide in a Veteran population; Sponsor: Extramural Grant from Amylin Pharmaceuticals (a subsidiary of Bristol-Myers Squibb) (January 2011 to December 2014); VMRF Project: 8367; Protocol: H12011; Total Amount: \$75,000

## Peer-Reviewed Publications

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- Ragan A, **Bounthavong M**, Brittain K, Mirk A, Aikens GB. Academic detailing to reduce sedative-hypnotic prescribing to older veterans. *Journal of Pharmacy Practice*. 2019 (in review).
- **Bounthavong M**, Devine EB, Christopher MLD, Harvey MA, Veenstra DL, Basu A. Implementation evaluation of academic detailing on naloxone prescribing trends at the United States Veterans Health Administration. *Health Services Research*. 2019 (in review).
- **Bounthavong M**, Christopher MLD, Veenstra DL, Basu A, Devine EB. Providers' perception of academic detailing on opioid overdose education and naloxone prescribing at the Veterans Health Administration: A cross-sectional study. *Journal of Behavioral Health Services and Research*. 2019 (in review).
- **Bounthavong M**, Suh K, Christopher MLD, Veenstra DL, Basu A, Devine EB. Providers' perceptions on opioid overdose education and naloxone prescribing behavior after implementation of a national academic detailing program: A qualitative assessment. *Research in Administrative and Social Pharmacy*. 2019 (in review).
- Lau MK, **Bounthavong M**, Kay CL, Harvey MA, Christopher MLD. Clinical Dashboard development and use for academic detailing in the U.S. Department of Veterans Affairs. *J Am Pharm Assoc* (in press).
- **Bounthavong M**, Lau MK, Popish SJ, Kay CL, Wells DL, Himstreet JE, Harvey MA, Christopher MLD. Impact of academic detailing on benzodiazepine use among veterans with posttraumatic stress disorder. *Substance Abuse*. 2018 (in press).
- Gale RC, Wu J, Erhardt T, **Bounthavong M**, Reardon CM, Damschroder LJ, Midboe AM. Comparison of Rapid vs In-Depth Qualitative Analytic Methods from a Process Evaluation of Academic Detailing in the Veterans Health Administration. *Implement Sci*. 2019 Feb 1;14(1):11. doi: 10.1186/s13012-019-0853-y.
- **Bounthavong M**, Butler J, Dolan CM, Dunn JD, Fisher KA, Oestreicher N, Pitt B, Hauptman PJ, Veenstra DL. A cost-effectiveness analysis of patiromer and spironolactone therapy in heart failure patients. *Pharmacoeconomics*. 2018 Dec;36(12):1463-1473. doi: 10.1007/s40273-018-0709-3.
- Mendes MAS, Smith JP, Marin J, Gray D, **Bounthavong M**, Lau MK, Miranda JL, Hauser P. A Direct-to-Consumer (DTC) educational quality improvement initiative to reduce benzodiazepine prescribing in older veterans. *Federal Practitioner*. 2018;35(9):36-43.
- Midboe AM, Wu J, Erhardt T, Carmichael J, **Bounthavong M**, Christopher MLD, Gale R. Academic Detailing to Improve Opioid Safety: Implementation Lessons from a Qualitative Evaluation. *Pain Medicine*. 2018;19(suppl 1):S46-S53. doi: 10.1093/pm/pny085.
- Patel S, Carmichael JM, Taylor JM, **Bounthavong M**, Higgins DT. Evaluating the Impact of a Clinical Decision Support Tool to Reduce Chronic Opioid Dose and Decrease Risk Classification in a Veteran Population. *Ann Pharmacother*. 2018 Apr;52(4):325-331. doi: 10.1177/1060028017739388
- Oliva EM, Christopher ML, Wells D, **Bounthavong M**, Harvey M, Himstreet J, Emmendorfer T, Valentino M, Franchi M, Goodman F, Trafton JA, Veterans Health Administration Opioid Overdose Education and Naloxone Distribution National Support and Development Workgroup. Opioid overdose education and naloxone distribution: Development of the Veterans Health Administration's national program. *J Am Pharm Assoc* (2003). 2017 Mar - Apr;57(2S):S168-S179.e4. doi: 10.1016/j.japh.2017.01.022.
- **Bounthavong M**, Harvey M, Wells D, Popish S, Himstreet J, Oliva E, Kay C, Lau MK, Randeria P, Phillips A, Christopher MLD. Trends in naloxone prescriptions prescribed after implementation of a National Academic Detailing Service in the Veterans Health Administration: A preliminary analysis. *J Am Pharm Assoc* (2003). 2017 Mar-Apr;57(2S):S68-S72. doi: 10.1016/j.japh.2016.11.003.
- Hirsch JD, **Bounthavong M**, Arjmand A, Ha DR, Cadiz CL, Zimmerman A, Ourth H, Morreale AP, Edleman SV, Morello CM. Estimated Cost Effectiveness and Risk Reduction Associated with a Pharmacist-Led Diabetes Intense Medical Management "Tune Up" Clinic. *J Manag Care Spec Pharm*. 2017 Mar;23(3):318-326. doi: 10.18553/jmcp.2017.23.3.318.
- Jelacic S, Craddick K, Nair BG, **Bounthavong M**, Yeung K, Kusulos D, Knutson JA, Somani S, Bowdle A. Relative Costs of Anesthesiologist-Prepared, Hospital Pharmacy-Prepared and Outsourced Anesthesia Drugs. *J Clin Anesth*. 2017 Feb;36:178-183. doi: 10.1016/j.jclinane.2016.10.015. Epub 2016 Dec 4.
- **Bounthavong M**, Pruitt L, Smolenski D, Gahm G, Bansal A, Hansen R. Economic evaluation of Home-Based TeleBehavioral Health compared to In-Person treatment delivery for depression. *Journal of Telemedicine and Telecare*. J Telemed Telecare. 2016 Nov 12. pii: 1357633X16678147.
- **Bounthavong M**, Li M, Watanabe JH. An evaluation of health care expenditures in Crohn's disease using the United States Medical Expenditure Panel Survey from 2003 to 2013. *Res Social Adm Pharm*. 2016 May 20. pii: S1551-7411(16)30093-6. doi: 10.1016/j.sapharm.2016.05.042.
- Wong SF, **Bounthavong M**, Nguyen C, Bechtoldt K, Lee E, Chen TC. Outcome Assessments and Cost Avoidance of a Comprehensive Oral Chemotherapy Management Clinic. *Journal of the National Comprehensive Cancer Network*. 2016;14(3):279-85.

- **Bounthavong M**, Watanabe JH, Sullivan K. Approach to addressing missing data for electronic medical records and pharmacy claims research. *Pharmacotherapy*. 2015 Apr;35(4):380-7. doi: 10.1002/phar.1569.
- Watanabe JH, Chen T, **Bounthavong M**, Hsu JC. Consideration of New Guidelines for Cholesterol Reduction: Comparison of Lipid Reduction Threshold Achievement by ACC/AHA Benefit Groups. *International Library of Diabetes and Metabolism*. 2015;1(1):13-16.
- Kazerooni R, Nguyen JB, **Bounthavong M**, Tran MH, Madkour N. New start versus continuing users on aripiprazole: Implications for policy. *Am J Manag Care*. 2015;21(1):e43-e50.
- Sakharkar P, **Bounthavong M**, Hirsch JD, Morello CM, Chen TC, Law AV. Development and validation of PSPSQ 2.0 measuring patient satisfaction with pharmacist services. *Res Social Adm Pharm*. 2015 Jul-Aug;11(4):487-98. doi: 10.1016/j.sapharm.2014.10.006. PMID: 25481330.
- **Bounthavong M**, Tran JN, Golshan S, Piland NF, Morello CM, Blickensderfer A, Best JH. Retrospective cohort study evaluating exenatide twice daily and long-acting insulin analogs in a Veterans Health Administration population with type 2 diabetes. *Diabetes Metab*. 2014 Sep;40(4):284-91. doi: 10.1016/j.diabet.2014.06.002. PMID: 25059703.
- **Bounthavong M**, Madkour N, Kazerooni R. Retrospective cohort study of anti-tumor necrosis factor agent use in a Veteran population. *PeerJ*. 2014 May 22;2:e385. doi: 10.7717/peerj.385. PMID: 24883246.
- Chen TC, Christofferson DE, Hamlett-Berry M, Kazerooni R, **Bounthavong M**, Bodie L, Myers M. A tobacco cessation treatment model using telehealth: a pilot evaluation in Veterans. *J Telemed Telecare*. 2014 Apr;20(3):161-3. doi: 10.1177/1357633X14527707. PMID: 24643952.
- Wong SF, **Bounthavong M**, Nguyen C, Bectoldt K, Hernandez E. Implementing a comprehensive oral chemotherapy management clinic: a pilot outcome report. *Am J Health Syst Pharm*. 2014 Jun 1;71(11):960-5. doi: 10.2146/ajhp130278. PMID: 24831001.
- Watanabe JH, Kazerooni R, **Bounthavong M**. Association of copayment with likelihood and level of adherence in new users of statins: a retrospective cohort study. *J Manag Care Pharm*. 2014;20(1):43-50. PMID: 24372459.
- Chen TC, Kazerooni K, Vannort EM, Nguyen K, Nguyen S, Harris J, **Bounthavong M**. Comparison of an intensive pharmacist-managed telephone clinic with standard of care for tobacco cessation in a veteran population. *Health Promot Pract*. 2013 Nov 14;15(4):512-520. PMID: 24231631.
- Kazerooni R, **Bounthavong M**, Watanabe JH. Association of copayment and statin adherence stratified by socioeconomic status. *Ann Pharmacother*. 2013;47(11):1463-70. doi: 10.1177/1060028013505743. PMID: 24259605.
- Hong MC, Hsu DI, **Bounthavong M**. Ceftolozane/tazobactam: a novel antipseudomonal cephalosporin and  $\beta$ -lactamase inhibitor combination. *Infect Drug Resist*. 2013;6:215-223. doi: 10.2147/IDR.S36140. PMID: 24348053.
- Kazerooni R, Watanabe JH, **Bounthavong M**. Measuring the association of statin adherence on cholesterol reduction in a veteran population. *Pharmacotherapy*. 2013;33(10):1044-52. doi: 10.1002/phar.1305. PMID: 23744794.
- Watanabe JH, Chen TC, Ney JP, **Bounthavong M**. Association of polypharmacy and statin new-user adherence in a Veterans Health Administration population: a retrospective cohort study. *Ann Pharmacother*. 2013;47(10):1253-59. doi: 10.1177/1060028013502000. PMID: 24259688.
- Watanabe JH, Chen TC, **Bounthavong M**. Revisiting the medication possession ratio threshold for adherence in lipid management. *Curr Med Res Opin*. 2013 Mar;29(3):175-80. doi: 10.1185/03007995.2013.766164. PMID: 23320610.
- **Bounthavong M**, Hsu DI. Pharmacoeconomic review of linezolid in Methicillin-resistant skin and soft tissue infection ns. *Expert Rev Pharmacoecon Outcomes Res*. 2012;12(6):683-98. doi: 10.1586/erp.12.72. PMID: 23252352.
- Nguyen CM, **Bounthavong M**, Mendes MAS, Christopher MLD, Tran JN, Kazerooni R, Morreale AP. Cost-utility analysis of tumor necrosis factor-alpha inhibitors for rheumatoid arthritis: An application of Bayesian methods for evidence synthesis in a Markov model. *Pharmacoeconomics*. 2012 Jul 1;30(7):575-93. doi: 10.2165/11594990-000000000-00000. Review. Erratum in: *Pharmacoeconomics*. 2012 Nov 1;30(11):1096. PMID: 22640174.
- Kazerooni R, **Bounthavong M**, Tran JN, Boggie DT, Meyer RS. Retrospective evaluation of inpatient celecoxib use after total hip and knee arthroplasty at a Veterans Affairs medical center. *J Arthroplasty* 2012;27(6):1033-40. doi: 10.1016/j.arth.2012.01.020. PMID: 22386610.
- Patel JJ, Mendes MAS, **Bounthavong M**, Christopher MLD, Boggie DT, Morreale AP. Cost-utility analysis of bevacizumab versus ranibizumab in neovascular age-related macular degeneration using a Markov model. *J Eval Clin Pract* 2012;18(2):247-255. doi: 10.1111/j.1365-2753.2010.01546.x. PMID: 20846318.
- **Bounthavong M**, Zargarzadeh A, Hsu DI, Vanness DJ. Cost-effectiveness analysis of linezolid, daptomycin, and vancomycin in methicillin-resistant *Staphylococcus aureus* complicated skin and skin structure infection using Bayesian methods for evidence synthesis. *Value Health* 2011;14(5):631-9. doi: 10.1016/j.jval.2010.12.006. PMID: 21839399.

- Bach TH, Hsu DI, **Bounthavong M**. Present and emerging therapies for skin and soft tissue infections: focus on iclaprim. *Clinical Medicine Reviews in Therapeutics* 2011;3:191-201.
- **Bounthavong M**, Kazerooni R, Tran JN, Nguyen CM, Christopher MLD, Mendes MAS. Biologics: What solutions do we have for their high costs? *California Pharmacist* 2011;58(2):38-45.
- Law AV, Jackevicius C, **Bounthavong M**. Monographs as an integrative application of Evidence Based-Medicine and Pharmacoeconomics in the PharmD Curriculum. *Am J Pharm Educ* 2011;10;75(1):1. PMID: 21451753.
- Pak S, **Bounthavong M**, Christopher MLD, Mendes MAS, Foster EB, Boggie DT, Lacro J, Morreale AP. Evaluation of therapeutic interchange from donepezil to galantamine extended-release. *Am J Pharm Benefits*. 2011;3(1):38-44.
- **Bounthavong M**, Christopher MLD, Mendes MAS, Foster EB, Johns ST, Lim L, Rubin LM, Patel J, Stewart A. Measuring patient satisfaction in the Pharmacy Specialty Immunization Clinic (PSIC): a pharmacist-run immunization clinic at the Veterans Affairs San Diego Healthcare System (VASDHS). *Int J Pharm Pract* 2010;18:100-7. PMID: 20441119.
- Kazerooni R, **Bounthavong M**. Cost-effectiveness analysis of intravenous levetiracetam versus intravenous phenytoin for early onset seizure prophylaxis after neurosurgery. *Clinicoecon Outcomes Res* 2010;2:15-23. PMID: 21935311.
- **Bounthavong M**, Hsu DI. Efficacy and safety of linezolid in methicillin-resistant *Staphylococcus aureus* (MRSA) complicated skin and soft tissue infections (cSSTI): a meta-analysis. *Curr Med Res Opin* 2010;26:407-21. doi: 10.1185/03007990903454912. PMID: 20001574.
- Aldridge V, Park H, **Bounthavong M**, Morreale AP. Implementing a Comprehensive Emergency Department Pharmacist Program. *Am J Health Syst Pharm* 2009;66:1943-7. doi: 10.2146/ajhp080660. PMID: 19850790.
- **Bounthavong M**, Hsu DI, Okamoto MP. Cost-effectiveness analysis of linezolid versus vancomycin in methicillin-resistant *Staphylococcus aureus* (MRSA) complicated skin and soft tissue infection (cSSTI) using a decision analytic model. *Int J Clin Pract* 2009;63:376-86. doi: 10.1111/j.1742-1241.2008.01958.x. PMID: 19222624.
- **Bounthavong M**, Law AV. Identifying health-related quality of life (HRQL) domains for multiple chronic conditions (diabetes, hypertension, and dyslipidemia): patient and provider perspectives. *J Eval Clin Pract* 2008;14:1002-12. doi: 10.1111/j.1365-2753.2007.00933.x. PMID: 18759755.
- **Bounthavong M**, Okamoto MP. Decision analysis model evaluating the cost-effectiveness of risperidone, olanzapine, and haloperidol in the treatment of schizophrenia. *J Eval Clin Pract* 2007;13:453-60. PMID: 17518814.

## Articles, Editorials, & Commentaries

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- Oliva E, **Bounthavong M**. Naloxone reports to U.S. poison centers highlight overdose prevention opportunities. *Addiction*. 2018 Oct 21. doi: 10.1111/add.14443. [Epub ahead of print]
- Oliva E, **Bounthavong M**. Emergency Medical Services Naloxone Administration: Many Unknowns and Opportunities. *Ann Intern Med*. 2017 Dec 19;167(12):89.
- **Bounthavong M**, Adamson B, Basu A. Instrumental Variables: A Tool to Reduce Bias in Non-Randomized Studies. *Value and Outcomes Spotlight*. 2016;2(1):24-25.
- Madkour N, **Bounthavong M**. Cost-effectiveness of cytochrome P450 2C19 genotype screening for selection of antiplatelet therapy with clopidogrel or prasugrel: a commentary. *Pharmacotherapy*. 2012 Jun;32(6):e170; discussion e170-1.

## Reports

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- Josh J Carlson, PhD; Laurie Gold, PhD; Greg Guzauskas, MSPH; **Mark Bounthavong**, PharmD, MPH. Pacific Northwest Evidence-based Practice Center. PCORI Research Prioritization Briefs. PCORI Topic Brief: Improving Health Systems. August 8, 2014. [\[link\]](#)

- Muennig P and **Bounthavong M**. Cost-Effectiveness Analysis in Health: A Practical Approach. Third Edition. Jossey-Bass/John Wiley & Sons, Inc. [\[link\]](#)
- Law AV and **Bounthavong M**. Patient-Reported Outcomes (PROs) & Other Self-Reported Data (Chapter 6). In: The ISPOR BOOK: Reliability and Validity of Data Sources for Health and Disease Management. ISPOR Publication. 2013. [\[link\]](#)
- **Bounthavong M**, Nguyen CMN, Mendes MAS. Understanding the Use of Pharmacoeconomic Analysis to Assess the Economic Impact of Pharmacogenomic Testing. In: Pharmacogenomics: An Introduction and Clinical Perspective. McGraw Hill, Inc. 2012. [\[link\]](#)

## Poster Presentations

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- **Bounthavong M**. Suh K, Christopher MLD, Veenstra DL, Basu A, Devine EB. Providers' perception after implementation of academic detailing on opioid overdose education and naloxone prescribing at the Veterans Health Administration. Podium Presentation at the National Resource Center for Academic Detailing, Boston, MA (November 11-12, 2018).
- **Bounthavong M**, Adamson R, Dolan C, Dunn J, Fisher K, Fogli J, Conrad A, Veenstra DL. Cost-Effectiveness Analysis of Patiromer and Renin-Angiotensin-Aldosterone System Inhibitors Therapy in Chronic Kidney Disease Patients With Hyperkalemia. Presented at the Academy of Managed Care Pharmacy Nexus Meeting, Washington, DC (October 22-26, 2018).
- **Bounthavong M**, Christopher MLD, Basu A, Veenstra DL, Devine EB. Is Naloxone Prescribing Behavior Associated with Providers' Perception with Academic Detailing and Opioid Overdose Education? Presented at the AcademyHealth 2018 Annual Research Meeting, Seattle WA (June 24-26, 2018).
- **Bounthavong M**, Harvey MA, Christopher MLD, Basu A, Veenstra DL, Devine EB. Impact of academic detailing on opioid overdose risk in the U.S. Veterans Health Administration. Presented at the American Society of Health Economics, Atlanta, GA (June 10-13, 2018).
- **Bounthavong M**, Devine EB, Christopher MLD, Harvey MA, Veenstra DL, Basu A. Implementation strength of academic detailing on the number of naloxone prescriptions at the Veterans Health Administration. Discussant paper at the Vancouver Health Economics Methodology Meeting (VanHEM) at Vancouver, BC, Canada (May 11, 2018 - **Best Student Paper Award**).
- Mirk AK, Brittain KG, **Bounthavong M**, Aikens GB, Raga AP. Academic Detailing to Reduce Sedative-Hypnotic Prescribing in Older Veterans. Presented at the American Geriatrics Society 2018 Annual Scientific Meeting, Orlando, FL (May 3-5, 2018).
- Wei R, **Bounthavong M**, Juneman E, Reed K. Sonographically measured inferior vena cava diameter in response to different maternal positions in pregnancy. Presented at the Society of Maternal Fetal Medicine 2018 Annual Meeting, Dallas, TX (January 29-February 03, 2018).
- Wu J, Erhardt TE, **Bounthavong M**, Midboe AM, Gale RC. Unlocking keys to successful implementation: A CFIR-guided evaluation of academic detailing for opioid safety. Presented at the 10th Annual Conference on the Science of Dissemination and Implementation. Arlington, VA (December 4-6, 2017)
- Wells DL, **Bounthavong M**, Lau MK, Popish SJ, Harvey MA, Himstreet JE, Kay CL, Christopher MLD. Theoretical Domains Framework Survey Identifies Domains Influencing Prescribers' Behaviors with Benzodiazepines. Presented at the American Academy of Addiction Psychiatry. San Diego, CA (December 7-10, 2017)
- **Bounthavong M**, Harvey MA, Himstreet JE, Popish SJ, Wells DL, Lau MK, Kay CL, Torrise V, Valentino M, Christopher MLD. Impact of a National Academic Detailing Service on Opioid Overdose Education and Naloxone Distribution, Opioid Safety, and Psychotropic Drug Safety Initiative. Presented at the VA HSR&D/QUERI National Meeting. Washington, DC (July 18-20, 2017)
- Mendes MA, Smith JP, Kryskalla-Marin J, Brown M, **Bounthavong M**, Lau MK, Miranda JL, Dray D, Hauser P. A Direct-to-Consumer Education Intervention to Reduce Benzodiazepine Prescribing in Elderly Veterans. Presented at the American Psychiatric Association. San Diego, CA (May 20-24, 2017)
- Popish SJ, Wells DL, Lau MK, **Bounthavong M**, Christopher MLD. Assisting providers in the reduction of benzodiazepine utilization in Veterans with posttraumatic stress disorder, a preliminary analysis. Presented at the College of Psychiatric and Neurologic Pharmacists. Phoenix, AZ (April 23-26, 2017).
- **Bounthavong M**, Harvey MA, Himstreet JE, Popish SJ, Wells DL, Lau MK, Kay C, Christopher MLD. Assisting providers to address Veterans prescribed long-term, high-dose opioids for non-cancer pain. Presented at the 48th American Society of Addiction Medicine. New Orleans, LA (April 6-9, 2017).

- **Bounthavong M**, Butler J, Dolan CM, Dunn JD, Fisher KA, Oestreicher N, Pitt B, Hauptman PJ, Veenstra DL. A cost-effectiveness analysis of patiromer and spironolactone therapy in heart failure patients with hyperkalemia. Presented at the Academic of Managed Care Pharmacy Annual Meeting. Denver, CO (March 27-30, 2017 - **Gold Medal Winner**).
- **Bounthavong M**, Pruitt L, Smolenski DJ, Gahm GA, Bansal A, Hansen RN. Economic evaluation of In-Home Telehealth compared to In-Person treatment delivery for managing depression. Presented at the 21st Annual International Society for Pharmacoeconomics and Outcomes Research Meeting. Washington, DC (May 23-25, 2016).
- Jin Y, **Bounthavong M**, Watanabe JH. Impact of FDA approval of self-injectable biologics on biologic utilization in patients with Crohn's Disease: Analysis of MEPS data from 2003 to 2012. Presented at the 2016 AMCP Managed Care & Specialty Pharmacy Annual Meeting. San Francisco, CA (April 19-22, 2016).
- Bae Y, Pham DQ, **Bounthavong M**, Law A. Validation of the DHDS: A Hybrid Instrument to Measure Health-Related Quality-Of-Life in Patients with Diabetes, Hypertension, and Dyslipidemia. Presented at the 2015 American Society of Nephrology meeting. San Diego, CA (November 3-8, 2015).
- Yon CK, Low CL, **Bounthavong M**, Aldridge V. Evaluation of Clinical Pharmacy Services in the Management of Kidney Disease. Presented at the 2015 American Society of Nephrology meeting. San Diego, CA (November 3-8, 2015).
- Dhanda D, Guzauskas G, **Bounthavong M**, Veenstra D. Pharmacogenomics implementation: Quantitative comparison of evidence levels for pharmacogenomic- vs. clinical-based personalized medicine. Presented at the 37th Annual Meeting of the Society for Medical Decision Making. St. Louis, MO (October 18-21, 2015).
- Zhou J, **Bounthavong M**, Watanabe JH. Association between perception on health and total medical expenditure in patients with type II diabetes. Presented at the 2015 California Society of Health-System Pharmacists Seminar, San Diego, CA (October 8-11, 2015).
- **Bounthavong M**, Li M, Watanabe JH. An evaluation of health care expenditures in Crohn's disease from 2003 to 2012 using the US Medical Expenditure Panel Survey. Presented at the 21st Annual National Research Services Award (NRSA) Conference, Minneapolis, MN (June 13, 2015).
- Watanabe JH, Singh R, Morello C, **Bounthavong M**, Hirsch JD. Are Medicare and Medicare-Medicaid insulin users different? Comparisons in a nationally representative claims database. Presented at the 75th Scientific Session for the American Diabetes Association. Boston, MA (June 5-9, 2015).
- **Bounthavong M**, Bae Y, Vanness DJ, Kazerooni R, Devine EB. An evaluation of clinical remission and safety among biologics for moderate-to-severe Crohn's disease: A Bayesian network meta-analysis. Presented at the 20th Annual International Society for Pharmacoeconomics and Outcomes Research Meeting. Philadelphia, PA (May 16-20, 2015).
- **Bounthavong M**, Bae Y, Devine EB, Veenstra D. A cost-utility analysis of biologics for moderate-to-severe Crohn's disease: Evidence synthesis using a Bayesian network meta-analysis. Presented at the 20th Annual International Society for Pharmacoeconomics and Outcomes Research Meeting. Philadelphia, PA (May 16-20, 2015).
- Adamson B, **Bounthavong M**, Kublin JG, Garrison L. Cost-effectiveness analysis of a partially effective HIV vaccine in San Francisco. Presented at the 20th Annual International Society for Pharmacoeconomics and Outcomes Research Meeting. Philadelphia, PA (May 16-20, 2015).
- **Bounthavong M**, Watanabe JH, Sullivan KM. Usefulness of multiple imputation for handling missing data in an observational study evaluating the association between statin adherence and lipid panel changes in the Veterans Health Administration. Presented at the 2014 AcademyHealth Annual Research Meeting. San Diego, CA (June 8-10, 2014).
- Chen TC, Watanabe J, **Bounthavong M**. Evaluation of an Intensive Pharmacist Managed Telephone Tobacco Cessation Clinic. Presented at 20th Annual Meeting for the Society for Research on Nicotine and Tobacco. Seattle, WA (February 5-8, 2014).
- **Bounthavong M**, Tran N, Golshan S, Pilant NF, Morello CM, Blickensderfer A, Best JH. Retrospective analysis of exenatide twice daily compared to long-acting insulin analogs in a veteran population. Presented at the 35th Annual Meeting for the Society for Medical Decision Making. Baltimore, MD (October 20-23, 2013).
- Hong MC, Trillanes M, **Bounthavong M**, Hsu DI. Incidence of Nephrotoxicity and Associated Risk Factors in Correlation with Vancomycin Use Across Different Acuity Levels of Care. Presented at IDWeek. San Francisco, CA (October 2-5, 2013).]
- Watanabe JN, Chen TC, **Bounthavong M**. Association of Medication Adherence Levels and Achievement of Lipid Goals. Presented at the American Diabetes Association 73rd Scientific Sessions. Chicago, IL (June 21-25, 2013).
- **Bounthavong M**, Tran NQ, Watanabe JN, Chen TC. Retrospective cohort study evaluating liraglutide and exenatide in a veteran population. Presented at the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) 18th Annual Meeting. Baltimore, MD (May 18-22, 2013).
- Watanabe JH, Kazerooni K, **Bounthavong M**. Investigating the association between copayment status and adherence for statin medications in a Veterans Administration population. Presented at the Academy of Managed Care Pharmacy (AMCP). San Diego, CA (April 3-5, 2013).

- Wong SF, Nguyen C, **Bounthavong M**, Hernandez E. Outcome assessment of an oral chemotherapy management clinic: A 3-month report. Presented at the Multinational Association of Supportive Care in Cancer (MASCC) and International Society of Oral Oncology (ISOO) 2012 International Symposium on Supportive Care in Cancer. New York, NY (June 28-30, 2012).
- Morello CM, **Bounthavong M**, Nayyar D, Bechtold A, Kocher K, Chong S, Hirsch JD. Preliminary Clinical, Patient Satisfaction and Quality of Life Outcomes of a Pharmacist-CDE Led Diabetes Intense Medical Management and Education Clinic within a Veteran Population. Presented at the American Diabetes Association 72nd Scientific Session. Philadelphia, PA (June 8-12, 2012).
- Madkour N, **Bounthavong M**, Hsu DI. A comparison of the cost-effectiveness of fidaxomicin, metronidazole, and vancomycin in the treatment of Clostridium difficile-associated disease. Presented at the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) 17th Annual International Meeting. Washington DC, USA (June 2-6, 2012).
- Sakharkar P, **Bounthavong M**, Law AV, Hirsch J, Morello CM, Chen TC. Development and validation of PPSQ measuring patient satisfaction with pharmacist clinical services. Presented at the American Pharmacists Association (APhA) Annual Meeting 2012. New Orleans, LA (March 9-12, 2012).
- Cho S, Detwiler J, Tran J, **Bounthavong M**, Chen T. Evaluation of a Pharmacist Managed Telephone Tobacco Cessation Clinic. Presented at the American Society of Health System Pharmacy (ASHP) Midyear 2012. New Orleans, LA (March 9-12, 2012).
- Tran JN, Christopher MDL, **Bounthavong M**. Outcome analysis following glucose test strip quantity standardization in type-2 diabetes. Presented at the Academy of Managed Care Pharmacy 2011 Educational Conference. Atlanta, GA (October 19-21, 2011).
- Sakharkar PR, Law AV, **Bounthavong M**. Validity and reliability of instruments used for measuring patient satisfaction with pharmaceutical care services. Presented at the ISPOR 3rd Latin America Conference. Mexico City, Mexico (September 8-10, 2011).
- Sau C, **Bounthavong M**, Tran JN, Wilson R. Cost-utility analysis of collagenase Clostridium histolyticum, limited fasciectomy, and percutaneous needle fasciotomy in Dupuytren's contracture. Presented at the ISPOR 16th Annual International Meeting. Baltimore, MD (May 20-25, 2011).
- Yi T, Tran JN, **Bounthavong M**. Evaluation of a safety initiative and outcomes for patients on statin-fibrate combination therapies in the Veterans Affairs population. Presented at the ISPOR 16th Annual International Meeting. Baltimore, MD (May 20-25, 2011).
- DeVille J, Bergman JJ, Equils O, Welch VL, Schrum K, **Bounthavong M**, Grogg S. Resource utilization in pediatric patients treated with linezolid or vancomycin for hospital-acquired pneumonia caused by resistant gram-positive bacteria. Presented at the 48th Annual Meeting of the Infectious Diseases Society of America (IDSA). Vancouver, British Columbia, Canada (October 21-24, 2010).
- Green V, **Bounthavong M**, Wong SF. Retrospective evaluation to examine efficacy and safety of half-dose pegfilgrastim in breast cancer patients receiving cytotoxic chemotherapy. Presented at the 2010 Breast Cancer Symposium, Washington, D.C. (October 1-3, 2010).
- Law AV, Jackevicius C, **Bounthavong M**. Monographs as an integrative application of Evidence Based-Medicine and Pharmacoeconomics in the PharmD Curriculum. Presented at the 2010 American Association of Colleges of Pharmacy (AACP) Annual Meeting and Seminars in Seattle, WA (July 10-14, 2010).
- Hsu DI, Chung EP, **Bounthavong M**, Prabhu S, Murray W. Comparison of Selected Admission Criteria with First-year Pharmacy Academic and Objective Structured Clinical Exam Performance. Presented at the 2010 AACP Annual Meeting and Seminar, Seattle, WA (July 10-14, 2010).
- Christopher MLD, **Bounthavong M**, Mendes MAS, Kazerooni R, Herbst K, Mavaian AA. Developing criteria for use for continuous glucose monitoring (CGM) sensors in a veteran population. Presented at the ISPOR 15th Annual International Meeting. Atlanta, GA (May 15-19, 2010).
- Nguyen CM, **Bounthavong M**, Mendes MAS, Christopher MLD, Morreale AP. Cost-utility analysis of tumor necrosis factor-alpha inhibitors for the treatment of rheumatoid arthritis using a Markov model. Presented at the ISPOR 15th Annual International Meeting. Atlanta, GA (May 15-19, 2010 - **Best poster finalist**).
- Morreale AP, Chen T, Mikusky E, Nguyen K, Nguyen S, Harris J, **Bounthavong M**. A Retrospective Look at the Effects of a Pharmacist-run Tobacco Cessation Clinic (Encore). Presented at the Veteran Centered Medical Home Summit Poster Session; Las Vegas, NV (April 2010).
- Morreale AP, Lai J, Chen T, **Bounthavong M**. Medication Management Programs at a VA Medical Facility: Effects on Blood Pressure, A Retrospective Analysis. (Encore). Presented at the Veteran Centered Medical Home Summit Poster Session; Las Vegas, NV (April 2010).
- Lai JH, Chen TC, **Bounthavong M**. Medication Management Programs at a VA medical facility: effects on blood pressure, a retrospective analysis. Presented at the 30th ACCP Annual Meeting, Anaheim, CA (October 2009).
- Truong J, Chen TC, **Bounthavong M**. Effectiveness of a Pharmacist-Run Disease State Management Clinic on Hypertension for the Veteran Population. Presented at the 30th ACCP Annual Meeting, Anaheim, CA (October 2009).

- **Bounthavong M**, Christopher M, Mendes M, Foster E, Johns S, Lim L, Rubin LM, Patel J, Stewart A. Measuring patient satisfaction in the Pharmacist Specialty Immunization Clinic (PSIC): a pharmacist-run immunization clinic at the Veterans Affairs San Diego Healthcare System. Presented at the APhA Annual Meeting & Exposition, in San Antonio, Texas (April 2009).
- Chen TC, Mikusky E, Nguyen KL, Nguyen S, Harris J, **Bounthavong M**. A retrospective look at the effects of a pharmacist-run tobacco cessation clinic. Presented at the 2008 Annual Meeting of the American College of Clinical Pharmacy (ACCP), Louisville, KY (October 2008).
- Christopher MLD, **Bounthavong M**, Johns ST, Lim L, Patel J, Rubin L, Stull M, Foster E. Improving access to immunizations through pharmacy immunization services. California Society of Health-System Pharmacists (CSHP) Seminar 2008 Annual Meeting at the Disneyland Hotel in Anaheim, California (October 2008).
- **Bounthavong M**, Hsu D, Okamoto MP. Decision analytic model evaluating the cost-effectiveness of linezolid versus vancomycin in methicillin-resistant *Staphylococcus aureus* (MRSA) complicated skin and soft tissue infection (cSSTI). Presented at the ISPOR 13th Annual Meeting, Toronto, Ontario, Canada (May 2008).
- Rubin LM, **Bounthavong M**, Christopher ML, Boggie DT, Plowman BK, Morreale AP. Appropriate utilization and cost-analysis of add-on ezetimibe lipid-lowering therapy at the Veterans Affairs San Diego Healthcare System (VASDHS). Presented at the ISPOR 13th Annual Meeting, Toronto, Ontario, Canada (May 2008).
- Patel JJ, Stull M, **Bounthavong M**, Christopher ML, Boggie DT, Plowman BK, Morreale AP. Cost-effective analysis of bevacizumab and ranibizumab in age-related macular degeneration. Presented at the ISPOR 13th Annual Meeting, Toronto, Ontario, Canada (May 2008).
- **Bounthavong M**, Rubin LM, Hsu D, Quist R, Law AV. Efficacy and safety of linezolid in methicillin-resistant *Staphylococcus aureus* (MRSA) complicated skin and soft tissue infections (cSSTI): a meta-analysis. Presented at the ACCP Spring Practice and Research Forum. Phoenix, AZ (April 2008).
- Rubin LM, **Bounthavong M**, Christopher MD, Plowman B, Morreale A, Boggie D. Appropriate utilization of add-on ezetimibe lipid-lowering therapy at the Veterans Affairs San Diego Healthcare System. Presented at the ACCP Spring Practice and Research Forum. Phoenix, AZ (April 2008).
- Law AV, **Bounthavong M**. Development and validation of the Patient Satisfaction with Pharmacist Services Questionnaire (PSPSQ). Presented at the APhA Annual Meeting & Exposition, San Diego, CA (March 2008).
- **Bounthavong M**, Okamoto MP, Quist R, Murray W, Prabhu S. Identifying predictors of academic success in a doctor of pharmacy degree program. Presented at the AACP Annual Meeting, Orlando, FL (2007).
- **Bounthavong M**, Law AV. Development and validation of the health-related quality-of-life (HRQL) component of the hybrid instrument - IMPACT (Impact of Pharmacist Activities and Care on Treatment Outcomes). Presented at the 12th Annual International Meeting of the ISPOR at Arlington, VA (2007).
- **Bounthavong M**, Okamoto MP, Hsu D. Evaluation of the cost-effectiveness of vancomycin and linezolid in methicillin-resistant *Staphylococcus aureus* (MRSA) skin and soft tissue infection using a decision-analysis (DA) model. Presented at the ACCP, Memphis, TN (2007).
- **Bounthavong M**, Law AV. What's more important to patients with diabetes, hypertension, and/or hyperlipidemia: identifying quality-of-life domains for a hybrid instrument. Presented at the APhA Annual Meeting and Exposition in Atlanta, GA (2007).
- **Bounthavong M**, Law AV. Development of an instrument to measure the impact of pharmacist activities and care on treatment outcomes (IMPACT) questionnaire: Phase I: Presented at AACP Annual Meeting in San Diego, CA (2006).
- **Bounthavong M**, Okamoto MP. Decision analysis model evaluating cost-effectiveness of risperidone, olanzapine, and haloperidol in schizophrenia: Presented at the ACCP Spring Research Forum in Monterey, CA (2006).
- **Bounthavong M**, Wong K, Kawahara B. Evaluating adherence and effects on outcomes for patients hospitalized with community acquired pneumonia according to the Infectious Disease Society Association (IDSA) guideline: Presented at Asilomar in the Western States Conference for Pharmacy Residents (2005).
- Walt JG, **Bounthavong M**, Ravelo A. Comparing treatment costs associated with the use of bromocriptine-purite 0.15% brimonidine benzalkonium chloride 0.2% in glaucoma: Presented at the 16th Annual AMCP Poster Presentation in San Francisco (2004).

## Membership, Leadership, and Service

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### LEADERSHIP

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| <b>President</b> , ISPOR Student Chapter, University of Washington      | 2015 to 2016 |
| <b>Vice-President</b> , ISPOR Student Chapter, University of Washington | 2014 to 2015 |

### MEMBERSHIP

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| <b>Member</b> , American Society of Health-System Pharmacists [Member ID: 07347816]                          | 2017 to Present |
| <b>Member</b> , American Society of Health Economists  | 2017 to Present |
| <b>Student Member</b> , Academy of Managed Care Pharmacy [Member ID: 66368]                                  | 2016 to Present |
| <b>Member</b> , International Society for Pharmacoeconomics and Outcomes Research (ISPOR) [Member ID: 10695] | 2007 to Present |
| <b>Member</b> , AcademyHealth  | 2013 to Present |
| <b>Student member</b> , Society for Medical Decision Making  | 2013 to Present |
| <b>Member</b> , Society for Medical Decision Making  | 2010 to 2013    |
| <b>Associate Member</b> , American College of Clinical Pharmacists (ACCP)                                    | 2006 to 2012    |

### SERVICE

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| <b>Student Member</b> , PORPP PhD Curriculum Committee   | 2016-2017        |
| <b>Student Member</b> , PORPP PhD Applicant Search Committee   | 2015-2016        |
| <b>Organizer</b> , PORPP Department Retreat Planning Committee   | 2014-2015        |
| <b>Reviewer</b> , Establishing and Reporting Evidence of the Content Validity of Newly Developed Patient-Reported Outcomes (PRO) Instruments for Medical Product Evaluation: Good Research Practices | 2013             |
| <b>Reviewer</b> , Research Review Committee for the ISPOR 18th Annual International Meeting at New Orleans, LA, USA  | May 18-22, 2012  |
| <b>Reviewer</b> , Research Review Committee for the 33rd Annual Meeting of the Society for Medical Decision Making at Chicago, IL, USA   | Oct. 22-26, 2011 |
| <b>Reviewer</b> , Research Review Committee for the ISPOR 17th Annual International Meeting at Washington D.C., USA  | June 2-6, 2012   |
| <b>Reviewer</b> , Research Review Committee for the ISPOR 16th Annual International Meeting at Baltimore, MD, USA  | May 20-25, 2011  |
| <b>Reviewer</b> , Research Review Committee for the ISPOR 15th Annual International Meeting at Atlanta, GA, USA  | May 16-20, 2010  |
| <b>Reviewer</b> , Research Review Committee for the ISPOR 14th Annual International Meeting at the Renaissance Orlando Resort at SeaWorld in Orlando, FL, USA  | May 16-20, 2009  |

## Honors & Awards

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| <b>Nominated</b> , Husky 100, University of Washington   | 2018 |
| <b>Finalist</b> , Graduate School "Scholar Citizen" Medal Award, University of Washington  | 2018 |
| <b>Best Student Paper Award</b> , ("National implementation of academic detailing service on naloxone prescribing trends at the United States Department of Veterans Affairs: A retrospective cohort study"), Vancouver Health Economics Methodology Meeting | 2018 |
| <b>Awardee</b> , Veterans Health Administration Under Secretary of Health Pharmacy Benefits Management Innovation Award, Department of Veterans Affairs  | 2018 |
| <b>Best Practice Award</b> , ("Impact of a Non-profit National Academic Detailing Service on the Opioid Safety Initiative and the Opioid Overdose Education and Naloxone Distribution Program"), American Society of Health-Systems Pharmacy (ASHP)          | 2017 |
| <b>Awardee</b> , Graduate Student Leadership Award, University of Washington   | 2017 |
| <b>Awardee</b> , Graduate School Fund for Excellence and Innovation (GSFEI), University of Washington  | 2017 |
| <b>Nominated</b> , Husky 100, University of Washington   | 2017 |
| <b>Finalist</b> , Lindau Nobel Laureate Meetings/Foundation Lindau Nobel Laureate Meetings   | 2017 |
| <b>Alumni Achievement Award</b> , 20th Anniversary Gala Celebration. College of Pharmacy, Western University of Health Sciences  | 2016 |

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| <b>Awardee</b> , Graduate School Fund for Excellence and Innovation Graduate (GSFEI) Student Travel Award.<br>University of Washington, School of Pharmacy   | 2015      |
| <b>Best Podium (tied)</b> , "A cost-utility analysis of biologics for moderate-to-severe Crohn's disease: Evidence synthesis using a Bayesian network analysis." Western Pharmacoeconomics and Outcomes Research Conference, Denver, CO (March 5-6, 2016)                        | 2015      |
| <b>Best Paper (tied)</b> , PORPP Prize for best paper (tied), "A cost-utility analysis of biologics for moderate-to-severe Crohn's disease: Evidence synthesis using a Bayesian network analysis." University of Washington, Pharmaceutical Outcomes Research and Policy Program | 2015      |
| <b>Awardee</b> , Reducing Barriers for the Ambitious Fund, established by Dr. Dana Hurley. University of Washington, School of Pharmacy  | 2015      |
| <b>AHRQ T32 Fellowship</b> , Agency for Healthcare Research and Quality T32 PhD Student training grant #T32HS013853  | 2013-2015 |
| <b>Outstanding Practicum Experience Award</b> , Rollins School of Public Health, Emory University: "Smoking Cessation in a Women's Health Clinic at the Department of Veterans Affairs"  | 2013      |
| <b>Top 10 Cited Paper 2010 Award</b> , Current Medical Research and Opinion (CMRO): "Efficacy and safety of linezolid in methicillin-resistant Staphylococcus aureus (MRSA) complicated skin and soft tissue infection (cSSTI): a meta-analysis."                                | 2011      |
| <b>Literature Award</b> , Innovation in Pharmacy Practice, ASHP: "Implementing a comprehensive, 24-hour emergency department pharmacy program."  | 2010      |
| <b>Pharmacy Innovations Award</b> , Pharmacy Benefits Management Innovations, United States Under Secretary for Health   | 2009      |
| <b>Distinguish Service Award</b> , Thomas J. Long School of Pharmacy and Health Sciences, University of the Pacific  | 2009      |
| <b>Best Practice Poster Award</b> , ("Implementing a comprehensive, 24-hour emergency department pharmacy program"), American Society of Health-System Pharmacy (ASHP)   | 2008      |

## License and Certification

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| <b>California State Licensed Pharmacist (since 2004)</b>                   | RPH 55969<br>Expires: 05/31/2020 |
| <b>Washington State Licensed Pharmacist (since 2015)</b>                   | PH60419006<br>Expires 05/31/2019 |
| <b>Pharmacist-Based Immunization Delivery: Certificate for Pharmacists</b> | CPN#202-0011                     |
| <b>National Provider Identifier</b>  | 1720272578                       |