

# ANDREW R. ZULLO, Pharm.D., Ph.D.

Department of Epidemiology  
Brown University School of Public Health  
121 South Main Street, Box G-S121-2  
Providence, RI, 02912  
Tel: 401-863-6309 (office)  
Email: [andrew\\_zullo@brown.edu](mailto:andrew_zullo@brown.edu)

## 1. DATE OF PREPARATION

---

March 15, 2024

## 2. EDUCATION

---

**Ph.D. (Pharmacoepidemiology)** 2012-2017  
Department of Health Services, Policy, and Practice Providence, Rhode Island  
Brown University

- Thesis: Use, safety, and effectiveness of diabetes medications in older nursing home residents.
- Chair: David Dore
- Committee Members: Robert J. Smith, Roee Gutman, & Vincent Mor

**Sc.M. (Epidemiology)** 2012-2015  
Department of Epidemiology Providence, Rhode Island  
Brown University

- Thesis: Estimating the effect of health insurance on personal prescription drug importation.
- Advisor: Chanelle Howe
- Reader: Omar Galárraga

**Pharm.D. (Clinical Pharmacy)** 2006-2012  
School of Pharmacy Piscataway, New Jersey  
Rutgers University

## 3. POSTDOCTORAL TRAINING

---

**Postdoctoral Research Fellow (Health Services Research)** Oct 2017 – May 2020  
Center of Innovation in Long-Term Services and Supports Providence, Rhode Island  
Providence Veterans Affairs Medical Center

- Primary Mentor: Amal Trivedi
- Secondary Mentors: James Rudolph & Kerry LaPlante

**Postdoctoral Research Fellow (Patient-Centered Outcomes Research)** Sep 2015 – Jul 2018

Center for Evidence Synthesis in Health  
Brown University

Providence, Rhode Island

*Note: Postdoctoral training was concurrent with PhD training due to prior PharmD degree.*

- Primary Mentor: Issa Dahabreh
- Secondary Mentors: Thomas Trikalinos & Ethan Balk

#### 4. EMPLOYMENT RECORD

---

|  |                          |
|--|--------------------------|
| <b>Associate Professor</b>                         | Jan 2023 – Present       |
| <b>Assistant Professor (Secondary Appointment)</b> | Oct 2017 – Jun 2022      |
| Department of Epidemiology                         | Providence, Rhode Island |
| Brown University School of Public Health           |                          |

|   |                          |
|---|--------------------------|
| <b>Associate Professor (Secondary Appointment)</b>  | Jan 2023 – Present       |
| <b>Associate Professor</b>                          | Jul 2022 – Dec 2022      |
| <b>Assistant Professor</b>                          | Oct 2017 – Jun 2022      |
| <b>Investigator</b>                                 | Sep 2015 – Sep 2017      |
| <b>Research Assistant</b>                           | Aug 2013 – Aug 2015      |
| Department of Health Services, Policy, and Practice | Providence, Rhode Island |
| Brown University School of Public Health            |                          |

|  |                          |
|--|--------------------------|
| <b>Research Health Science Specialist</b>  | May 2020 – Present       |
| <b>Research Fellow</b>                     | Oct 2017 – May 2020      |
| Health Services, Research, and Development | Providence, Rhode Island |
| Providence VA Medical Center               |                          |

|   |                          |
|---|--------------------------|
| <b>Clinical Pharmacist Specialist</b>                     | Sep 2015 – Present       |
| <b>Staff Pharmacist</b>                                   | Aug 2012 – Aug 2015      |
| Department of Pharmacy                                    | Providence, Rhode Island |
| Lifespan—Rhode Island Hospital/Hasbro Children’s Hospital |                          |

|                                    |                        |
|------------------------------------|------------------------|
| <b>Adjunct Assistant Professor</b> | Sep 2016 – Sep 2020    |
| College of Pharmacy                | Kingston, Rhode Island |
| University of Rhode Island         |                        |

|                                    |                     |
|------------------------------------|---------------------|
| <b>Adjunct Assistant Professor</b> | Sep 2016 – Sep 2018 |
| School of Pharmacy                 | Storrs, Connecticut |
| University of Connecticut          |                     |

#### 5. MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS & SOCIETIES

---

|                                       |                |
|---------------------------------------|----------------|
| 1) American Public Health Association | 2019 – present |
| 2) American Geriatrics Society        | 2015 – present |

|    |  |                |
|----|--|----------------|
| 3) | International Society for Pharmacoepidemiology | 2013 – present |
| 4) | Society for Epidemiologic Research             | 2013 – present |
| 5) | American Society of Health-System Pharmacists  | 2010 – present |

## 6. PUBLICATIONS

---

### A. BOOK CHAPTERS

---

- 1) None.

### B. REFEREED JOURNAL ARTICLES

---

\* denotes mentee serving as first or second author

- 1) **Zullo AR**, Khan MA, Pfieffer MR, Margolis SS, Ott BR, Curry AE, Bayer TA, Riester MR, Joyce NR. Non-benzodiazepine Hypnotics and Motor Vehicle Crash Risk among Older Adults: A Sequential Target Trial Emulation. *American Journal of Epidemiology*. Accepted for Publication.
- 2) Silva JBB, Riester MR, **Zullo AR**. Antibiotic Prescribing Patterns for Urinary Tract Infections and Pneumonia by Prescriber Type and Specialty in Nursing Home Care, 2016-2018. *J Am Med Dir Assoc*. 2024 Feb 27:S1525-8610(24)00075-6. doi: 10.1016/j.jamda.2024.01.019. Epub ahead of print. PMID: 38428833.
- 3) Harris DA, Chachlani P, Hayes KN, McCarthy EP, Wen KJ, Deng Y, **Zullo AR**, Djibo DA, McMahon-Walraven CN, Smith-Ray RL, Gravenstein S, Mor V. COVID-19 and influenza vaccine co-administration among older U.S. adults. *Am J Prev Med*. 2024 Feb 22:S0749-3797(24)00067-9. doi: 10.1016/j.amepre.2024.02.013. Epub ahead of print. PMID: 38401746.
- 4) Tat DP, **Zullo AR**, Mor V, Hayes KN. Sliding Scale Insulin Use in Nursing Homes Before and After Onset of the COVID-19 Pandemic. *J Am Med Dir Assoc*. 2024 Mar;25(3):459-464. doi: 10.1016/j.jamda.2024.01.004. Epub 2024 Jan 30. PMID: 38307122; PMCID: PMC10923121.
- 5) McConeghy KW, Hur K, Dahabreh IJ, Jiang R, Pandey L, Gellad WF, Glassman P, Good CB, Miller DR, **Zullo AR**, Gravenstein S, Cunningham F. Early Mortality After the First Dose of Coronavirus Disease 2019 Vaccination: A Target Trial Emulation. *Clin Infect Dis*. 2024 Feb 6:ciad604. doi: 10.1093/cid/ciad604. Epub ahead of print. PMID: 38319989.
- 6) Riester MR, Douglas CM, Silva JBB, Datta R, **Zullo AR**. Clinicians who primarily practice in nursing homes and outcomes among residents with urinary tract infection or pneumonia. *Antimicrob Steward Healthc Epidemiol*. 2023 Dec 6;3(1):e253. doi: 10.1017/ash.2023.527. PMID: 38178878; PMCID: PMC10762639.

- 7) Berry SD, Hayes K, Lee Y, Zhang Y, Kim DH, Ko D, Kiel DP, Daiello L, Zhang T, **Zullo AR**. Fall risk and cardiovascular outcomes of first-line antihypertensive medications in nursing home residents. *J Am Geriatr Soc*. 2023 Dec 5. doi: 10.1111/jgs.18702. Epub ahead of print. PMID: 38051600.
- 8) Hayes KN, Zhang T, Kim DH, Daiello LA, Lee Y, Kiel DP, Berry SD, **Zullo AR**. Benefits and Harms of Standard Versus Reduced-Dose Direct Oral Anticoagulant Therapy for Older Adults With Multiple Morbidities and Atrial Fibrillation. *J Am Heart Assoc*. 2023 Nov 7;12(21):e029865. doi: 10.1161/JAHA.122.029865. Epub 2023 Nov 6. PMID: 37929769.
- 9) Hayes KN, Harris DA, **Zullo AR**, Djibo DA, Smith-Ray RL, Taitel MS, Singh TG, McMahonill-Walraven C, Chachlani P, Wen KJ, McCarthy EP, Gravenstein S, McCurdy S, Baird KE, Moran D, Fenson D, Deng Y, Mor V. Data resource profile: COVid VAXines effects on the aged (COVVAXAGE). *Int J Popul Data Sci*. 2023 Oct 16;8(6):2170. doi: 10.23889/ijpds.v8i6.2170. PMID: 38425722; PMCID: PMC10900297.
- 10) Riester MR, D'Amico AM, Khan MA, Joyce NR, Pfeiffer MR, Margolis SA, Ott BR, Curry AE, Bayer TA, **Zullo AR**. Changes in the burden of medications that may impair driving among older adults before and after a motor vehicle crash. *J Am Geriatr Soc*. 2023 Oct 31. doi: 10.1111/jgs.18643. Epub ahead of print. PMID: 37905738.
- 11) Gadbois EA, Meehan A, Uth R, Baier RR, Gravenstein S, **Zullo AR**, Kabler H, Loiacono MM, Bardenheier BH. Identifying strategies that promote staff and resident influenza and COVID-19 vaccination in nursing homes: Perspectives from nursing home staff. *Geriatr Nurs*. 2023 Oct 14;54:205-210. doi: 10.1016/j.gerinurse.2023.09.006. Epub ahead of print. PMID: 37844537.
- 12) Shireman TI, Fashaw-Walters S, Zhang T, **Zullo AR**, Gerlach LB, Coe AB, Daiello L, Lo D, Strominger J, Bynum JPW. Federal Nursing Home Policies on Antipsychotics had Similar Impacts by Race and Ethnicity for Residents With Dementia. *J Am Med Dir Assoc*. 2023 Sep;24(9):1283-1289.e4. doi: 10.1016/j.jamda.2023.03.027. Epub 2023 Apr 28. PMID: 37127131.
- 13) \*Silva JBB, Howe CJ, Jackson JW, Bardenheier BH, Riester MR, van Aalst R, Loiacono MM, **Zullo AR**. Geospatial Distribution of Racial Disparities in Influenza Vaccination in Nursing Homes. *J Am Med Dir Assoc*. 2023 Sep 19:S1525-8610(23)00742-9. doi: 10.1016/j.jamda.2023.08.018. Epub ahead of print. PMID: 37739348.
- 14) Chambers LC, Hallowell BD, **Zullo AR**, Paiva TJ, Berk J, Gaither R, Hampson AJ, Beaudoin FL, Wightman RS. Buprenorphine Dose and Time to Discontinuation Among Patients With Opioid Use Disorder in the Era of Fentanyl. *JAMA Netw Open*. 2023 Sep 5;6(9):e2334540. doi: 10.1001/jamanetworkopen.2023.34540. PMID: 37721749; PMCID: PMC10507490.
- 15) Li AB, Yang B, Li Y, Huynh R, Shim S, Lo K, Li J, **Zullo AR**, Wu WC, Liu S. A network meta-analysis of association between cardiometabolic risk factors and COVID-19 outcome severity. *J Diabetes*. 2023 Aug 30. doi: 10.1111/1753-0407.13445. Epub ahead of print. PMID: 37649300.

- 16) Berry SD, Hecker EJ, McConnell ES, Xue TM, Tsai T, **Zullo AR**, Colón-Emeric C. Nursing Home PRevention of Injury in DEmentia (NH PRIDE): A pilot study of a remote injury prevention service for NH residents. *J Am Geriatr Soc*. 2023 Aug 19. doi: 10.1111/jgs.18564. Epub ahead of print. PMID: 37596877.
- 17) Harris DA, Hayes KN, **Zullo AR**, Mor V, Chachlani P, Deng Y, McCarthy EP, Djibo DA, McMahonill-Walraven CN, Gravenstein S. Comparative Risks of Potential Adverse Events Following COVID-19 mRNA Vaccination Among Older US Adults. *JAMA Netw Open*. 2023 Aug 1;6(8):e2326852. doi: 10.1001/jamanetworkopen.2023.26852. PMID: 37531110; PMCID: PMC10398407.
- 18) Robison RD, Singh M, Jiang L, Riester M, Duprey M, McGeary JE, Goyal P, Wu WC, Erqou S, **Zullo AR**, Rudolph JL, Rogus-Pulia N. Acute Antipsychotic Use and Presence of Dysphagia Among Older Veterans with Heart Failure. *J Am Med Dir Assoc*. 2023 Sep;24(9):1303-1310. doi: 10.1016/j.jamda.2023.06.009. Epub 2023 Jul 18. PMID: 37478895.
- 19) Liu E, Nahid M, Musse M, Chen L, Hilmer SN, **Zullo A**, Kwak MJ, Lachs M, Levitan EB, Safford MM, Goyal P. Prescribing patterns of fall risk-increasing drugs in older adults hospitalized for heart failure. *BMC Cardiovasc Disord*. 2023 Jul 26;23(1):372. doi: 10.1186/s12872-023-03401-w. PMID: 37495948; PMCID: PMC10373421.
- 20) \*Kunicki ZJ, Bayer T, Jiang L, Bozzay ML, Quinn MJ, De Vito AN, Emrani S, Erqou S, McGeary JE, **Zullo AR**, Duprey MS, Singh M, Primack JM, Kelso CM, Wu WC, Rudolph JL. Comparing Lookback Periods to Ascertain Alzheimer's Disease and Related Dementias. *Am J Alzheimers Dis Other Demen*. 2023 Jan-Dec;38:15333175231199566. doi: 10.1177/15333175231199566. PMID: 37650437.
- 21) Zhang T, **Zullo AR**, Hayes KKN, Kim DH, Lee Y, Daiello LA, Kiel DP, Berry SD. Use of Diabetes Medications before and after a Heart Failure-Related Hospitalization among Nursing Home Residents. *J Am Med Dir Assoc*. 2023 Aug 5:S1525-8610(23)00624-2. doi: 10.1016/j.jamda.2023.06.033. Epub ahead of print. PMID: 37553080.
- 22) Hayes KN, Harris DA, **Zullo AR**, Chachlani P, Wen KJ, Smith-Ray RL, Djibo DA, McCarthy EP, Pralea A, Singh TG, McMahonill-Walraven C, Taitel MS, Deng Y, Gravenstein S, Mor V. Racial and ethnic disparities in COVID-19 booster vaccination among U.S. older adults differ by geographic region and Medicare enrollment. *Front Public Health*. 2023 Aug 10;11:1243958. doi: 10.3389/fpubh.2023.1243958. PMID: 37637796; PMCID: PMC10456997.
- 23) \*Bayer TA, Jiang L, Erqou S, Kunicki ZJ, Singh M, Duprey M, Bozzay M, McGeary JE, **Zullo AR**, Wu WC, Gravenstein S, Rudolph JL. Incidence of New Dementia Diagnosis in Veterans Admitted to Nursing Homes After Heart Failure Hospitalization. *J Alzheimers Dis*. 2023;94(4):1397-1404. doi: 10.3233/JAD-221300. PMID: 37424463.
- 24) \*Riester MR, Beaudoin FL, Joshi R, Hayes KN, Cupp MA, Berry SD, **Zullo AR**. Evaluation of post-acute care and one-year outcomes among Medicare beneficiaries with hip fractures: a

retrospective cohort study. *BMC Med.* 2023 Jul 3;21(1):232. doi: 10.1186/s12916-023-02958-9. PMID: 37400841; PMCID: PMC10318833.

- 25) Sarri G, Liu W, Zabolka L, Freitag A, Claire R, Wangge G, Elvidge J, Dawoud D, Bennett D, Wen X, Li X, Rentsch CT, Uddin MJ, Ali MS, Gokhale M, Déruaz-Luyet A, Moga DC, Guo JJ, **Zullo AR**, Patorno E, Lin KJ. Prognostic Factors of COVID-19: An Umbrella Review Endorsed by the International Society for Pharmacoepidemiology. *Clin Pharmacol Ther.* 2023 Sep;114(3):604-613. doi: 10.1002/cpt.2977. Epub 2023 Jul 20. PMID: 37342987.
- 26) \*Silva JBB, Howe CJ, Jackson JW, Riester MR, Bardenheier BH, Xu L, Puckrein G, van Aalst R, Loiacono MM, **Zullo AR**. Geographic Variation in Racial Disparities in Receipt of High-Dose Influenza Vaccine Among US Older Adults. *J Racial Ethn Health Disparities.* 2023 May 15. doi: 10.1007/s40615-023-01628-z. Epub ahead of print. PMID: 37184814.
- 27) Zhang Y, Hayes KN, Riester MR, Silva JBB, Cupp MA, Lee Y, **Zullo AR**. Trends in COVID-19-Related Medication Use in US Nursing Homes, 2018-2022. *J Am Med Dir Assoc.* 2023 Aug;24(8):1120-1126.e1. doi: 10.1016/j.jamda.2023.05.013. Epub 2023 May 25. PMID: 37336494; PMCID: PMC10209440.
- 28) Datta R, Pirruccio G, Fried TR, O'Leary JR, **Zullo AR**, Cohen A. Antimicrobial resistance in *Escherichia coli* and *Klebsiella pneumoniae* urine isolates from a national sample of home-based primary care patients with dementia. *Infect Control Hosp Epidemiol.* 2023 May 22:1-4. doi: 10.1017/ice.2023.98. Epub ahead of print. PMID: 37211919.
- 29) Cupp MA\*, Beaudoin F, Hayes KN, Riester M, Berry S, Joshi R, **Zullo AR**. Post-Acute Care Setting after Hip Fracture Hospitalization and Subsequent Opioid Use in Older Adults. *J Am Med Dir Assoc.* 2023 Jul;24(7):971-977.e4. doi: 10.1016/j.jamda.2023.03.012. Epub 2023 Apr 17. PMID: 37080246; PMCID: PMC10293035.
- 30) Zhang T, **Zullo AR**, James HO, Lee Y, Taylor DCA, Daiello LA. The Burden and Treatment of Chronic Constipation Among US Nursing Home Residents. *J Am Med Dir Assoc.* 2023 Aug;24(8):1247-1252.e5. doi: 10.1016/j.jamda.2023.05.006. Epub 2023 Jun 9. PMID: 37308090.
- 31) \*Riester MR, Deng Y, **Zullo AR**. Antibiotic Prescribing in United States Nursing Homes, 2013-2017. *J Infect Dis.* 2023 Aug 16;228(4):464-468. doi: 10.1093/infdis/jiad087. PMID: 37017192; PMCID: PMC10428191.
- 32) Hayes KN, Berry SD, Munshi MN, **Zullo AR**. Adoption of sodium-glucose cotransporter-2 inhibitors among prescribers caring for nursing home residents. *J Am Geriatr Soc.* 2023 Aug;71(8):2585-2592. doi: 10.1111/jgs.18360. Epub 2023 Apr 20. PMID: 37078149; PMCID: PMC10528819.
- 33) **Zullo AR**, \*Riester MR, Hayes KN, Munshi MN, Berry SD. Comparative safety of sulfonylureas among U.S. nursing home residents. *J Am Geriatr Soc.* 2023 Apr;71(4):1047-1057. doi: 10.1111/jgs.18160. Epub 2022 Dec 10. PMID: 36495141; PMCID: PMC10089954.

- 34) Goyal P, **Zullo AR**, Gladders B, Onyebeke C, Kwak MJ, Allen L, Levitan EB, Safford MM, Gilstrap L. Real-World Safety of Neurohormonal Antagonist Initiation among Older Adults Following a Heart Failure Hospitalization. *European Society of Cardiology Heart Failure*. 2023. 2023 Feb 20. doi: 10.1002/ehf2.14317. Epub ahead of print. PMID: 36807850.
- 35) \*Duprey MS, **Zullo AR**, Gouskova NA, Lee Y, Capuano A, Kiel DP, Daiello LA, Kim DH, Berry SD. Development and validation of the fall-related injury risk in nursing homes (INJURE-NH) prediction tool. *J Am Geriatr Soc*. 2023 Jun;71(6):1851-1860. Epub 2023 Mar 8. PMID: 36883262; PMCID: PMC10258142.
- 36) Zhang T, Thomas K, **Zullo AR**, Coe AB, Gerlach LB, Daiello L, Varma H, MS; Lo D, Joshi R, Bynum JPW, Shireman TI. State Variation in Antipsychotic Use among Assisted Living Residents with Dementia. *J Am Med Dir Assoc*. 2023 Apr;24(4):555-558.e1. doi: 10.1016/j.jamda.2023.01.014. Epub 2023 Feb 23. PMID: 36841263
- 37) \*Gantenberg JR, \*McConeghy KW, Howe CJ, Steingrimsson J, van Aalst R, Chit A, **Zullo AR**. Predicting Seasonal Influenza Hospitalizations Using an Ensemble Super Learner: A Simulation Study. *Am J Epidemiol*. 2023 May 6:kwad113. doi: 10.1093/aje/kwad113. Epub ahead of print. PMID: 37147861.
- 38) **Zullo AR**, \*Riester MR, Goldberg EM, Cupp MA, Berry SD, Beaudoin FL. Long-Term Care Pharmacy Market Shares and Differences in Skilled Nursing Facilities Served. *Journal of Aging and Social Policy*. 2023 Feb 25:1-14. doi: 10.1080/08959420.2023.2182997. Epub ahead of print. PMID: 36841755.
- 39) \*Riester MR, \*Roberts AI, Silva JBB, Howe CJ, Bardenheier BH, van Aalst R, Loiacono MM, **Zullo AR**. Geographic Variation in Influenza Vaccination Disparities Between Hispanic and Non-Hispanic White US Nursing Home Residents. *Open Forum Infect Dis*. 2022 Nov 24;9(12):ofac634. doi: 10.1093/ofid/ofac634. PMID: 36540392; PMCID: PMC9757686.
- 40) \*McConeghy KW, Bardenheier B, Huang AW, White EM, Feifer RA, Blackman C, Santostefano CM, Lee Y, DeVone F, Halladay CW, Rudolph JL, **Zullo AR**, Mor V, Gravenstein S. Infections, Hospitalizations, and Deaths Among US Nursing Home Residents With vs Without a SARS-CoV-2 Vaccine Booster. *JAMA Netw Open*. 2022 Dec 1;5(12):e2245417. doi: 10.1001/jamanetworkopen.2022.45417. PMID: 36477482; PMCID: PMC9856563.
- 41) \*O'Neill ET, \*Bosco E, Persico E, Silva JB, Riester MR, Moyo P, van Aalst R, Loiacono MM, Chit A, Gravenstein S, **Zullo AR**. Correlation of long-term care facility vaccination practices between seasons and resident types. *BMC Geriatr*. 2022 Nov 4;22(1):835. doi: 10.1186/s12877-022-03540-3. PMID: 36333667; PMCID: PMC9635204.
- 42) \*Abdelmeseh V, Brown BR, Huynh JP, **Zullo AR**. Comparative cost savings of biosimilar and dose rounding utilization in oncology care. *J Oncol Pharm Pract*. 2022 Oct

19:10781552221134257. doi: 10.1177/10781552221134257. Epub ahead of print. PMID: 36259235.

- 43) Meehan A, Gadbois E, Uth R, Baier R, Gravenstein S, **Zullo AR**, Kabler H, Loiacono M, Bardenheier B. Strategies to Promote Staff and Resident Flu and COVID-19 Vaccination in Skilled Nursing Facilities. *J Am Med Dir Assoc*. 2022 Jun;23(6):e12. doi: 10.1016/j.jamda.2022.04.040. Epub 2022 Jun 2. PMID: PMC9159938.
- 44) Meehan A, Uth R, Gadbois EA, Baier RR, Gravenstein S, **Zullo AR**, Kabler H, Loiacono MM, Bardenheier BH. Impact of COVID-19 on influenza and infection control practices in nursing homes. *J Am Geriatr Soc*. 2023 Feb;71(2):661-665. doi: 10.1111/jgs.18061. Epub 2022 Sep 22. PMID: 36146903; PMID: PMC9538598.
- 45) \*Datta R, Fried T, O'Leary JR, **Zullo AR**, Allore H, Han L, Juthani-Mehta M, Cohen A. National Cohort Study of Homebound Persons Living With Dementia: Antibiotic Prescribing Trends and Opportunities for Antibiotic Stewardship. *Open Forum Infect Dis*. 2022 Sep 3;9(9):ofac453. doi: 10.1093/ofid/ofac453. PMID: 36147594; PMID: PMC9487603.
- 46) \*McConeghy KW, White EM, Blackman C, Santostefano CM, Lee Y, Rudolph JL, Canaday D, **Zullo AR**, Jernigan JA, Pilishvili T, Mor V, Gravenstein S. Effectiveness of a Second COVID-19 Vaccine Booster Dose Against Infection, Hospitalization, or Death Among Nursing Home Residents - 19 States, March 29-July 25, 2022. *MMWR Morb Mortal Wkly Rep*. 2022 Sep 30;71(39):1235-1238. doi: 10.15585/mmwr.mm7139a2. PMID: 36173757; PMID: PMC9533729.
- 47) Joyce NR, Khan MA, **Zullo AR**, Pfeiffer MR, Metzger KB, Margolis SA, Ott BR, Curry AE. Distance from home to motor vehicle crash location: Implications for license restrictions among medically-at-risk older drivers. *Journal of Aging and Social Policy*. 2022 Dec 4:1-15. doi: 10.1080/08959420.2022.2145791. Epub ahead of print. PMID: 36463560.
- 48) \*Riester MR, **Zullo AR**. Prediction tool Development and Implementation in pharmacy praCTice: The PreDICT guidelines. *American Journal of Health-System Pharmacy*. 2023 Jan 24;80(3):111-123. doi: 10.1093/ajhp/zxac298. PMID: 36242567; PMID: PMC10060697.
- 49) \*Margraf A, Davoodi N, Chen K, Shield R, McAuliffe L, Collins C, **Zullo AR**. Provider Beliefs about the Ideal Design of an Opioid Deprescribing and Substitution Intervention for Older Adults. *American Journal of Health-System Pharmacy*. 2023 Jan 5;80(2):53-60. doi: 10.1093/ajhp/zxac282. PMID: 36205419.
- 50) Moyo P, Eliot M, Shah A, Goodyear K, Jutkowitz E, Thomas K, **Zullo AR**. Discharge Locations after Hospitalizations Involving Opioid Use Disorder among Medicare Beneficiaries. *Addict Sci Clin Pract*. 2022 Oct 8;17(1):57. doi: 10.1186/s13722-022-00338-x. PMID: 36209151; PMID: PMC9548174.
- 51) \*Riester MR, Goyal P, Steinman MA, Zhang Y, Rodriguez MF, Rome Paul D, **Zullo AR**. Prevalence of Potentially Inappropriate Medication Prescribing in United States Nursing



Homes, 2013-2017. *J Gen Intern Med*. 2023 May;38(6):1563-1566. doi: 10.1007/s11606-022-07825-6. Epub 2022 Sep 29. PMID: 36175759; PMCID: PMC10160255.

- 52) \*Gantenberg JR, van Aalst R, Zimmerman N, Limone B, Chaves SS, La Via WV, Nelson CB, Rizzo C, Savitz DA, **Zullo AR**. Medically Attended Illness due to Respiratory Syncytial Virus Infection Among Infants Born in the United States Between 2016 and 2020. *J Infect Dis*. 2022 Aug 15;226(Suppl 2):S164-S174. doi: 10.1093/infdis/jiac185. PMID: 35968869; PMCID: PMC9377038.
- 53) Coe AB, Zhang T, **Zullo AR**, Gerlach LB, Thomas KS, Daiello LA, Varma H, Lo D, Joshi R, Shireman TI, Bynum JPW. Psychotropic medication prescribing in assisted living and nursing home residents with dementia after the National Partnership. *J Am Geriatr Soc*. 2022 Dec;70(12):3513-3525. doi: 10.1111/jgs.18004. Epub 2022 Aug 19. PMID: 35984088; PMCID: PMC9771901.
- 54) Kunicki ZJ, Madrigal C, Quach LT, Riester MR, Jiang L, Duprey MS, Bozzay M, **Zullo AR**, Singh M, McGeary J, Wu WC, Rudolph JL. Comparing Resident, Proxy, and Staff Respondents for Nursing Home Residents' Preferences for Everyday Living. *J Appl Gerontol*. 2023 Jan;42(1):28-36. doi: 10.1177/07334648221123059. Epub 2022 Aug 26. PMID: 36029016.
- 55) Saldanha IJ, Cao W, Bhuma MR, Konnyu KJ, Adam GP, **Zullo AR**, Chen KK, Roth JL, Balk EM. Systematic reviews can guide clinical practice and new research on primary headaches in pregnancy: An editorial on the 2022 American Headache Society Members' Choice Award paper. *Headache*. 2022 Jul;62(7):774-776. doi: 10.1111/head.14332. Epub 2022 May 31. PMID: 35638183.
- 56) Hayes KN, Mor V, **Zullo AR**. Electronic Health Records to Rapidly Assess Biosimilar Uptake: An Example Using Insulin Glargine in a Large U.S. Nursing Home Cohort. *Front Pharmacol*. 2022;13:855598. doi: 10.3389/fphar.2022.855598. eCollection 2022. PMID: 35600866; PMCID: PMC9114471.
- 57) Wyss R, Yanover C, El-Hay T, Bennett D, Platt RW, **Zullo AR**, Sari G, Wen X, Ye Y, Yuan H, Gokhale M, Patorno E, Lin KJ. Machine learning for improving high-dimensional proxy confounder adjustment in healthcare database studies: an overview of the current literature. *Pharmacoepidemiol Drug Saf*. 2022 Sep;31(9):932-943. doi: 10.1002/pds.5500. Epub 2022 Jul 5. Review. PMID: 35729705; PMCID: PMC9541861.
- 58) Bozzay ML, Jiang L, **Zullo AR**, Riester MR, Lafo JA, Kunicki ZJ, Rudolph JL, Madrigal C, Clements R, Erqou S, Wu W, Correia S, Primack JM. Mortality in patients with heart failure and suicidal ideation discharged to skilled nursing facilities. *J Geriatr Cardiol*. 2022 Mar 28;19(3):198-208. doi: 10.11909/j.issn.1671-5411.2022.03.009. PMID: 35464651; PMCID: PMC9002080.
- 59) Growdon ME, Espejo E, Jing B, Boscardin WJ, **Zullo AR**, Yaffe K, Boockvar KS, Steinman MA. Attitudes toward deprescribing among older adults with dementia in the United States. *J Am*

*Geriatr Soc.* 2022 Jun;70(6):1764-1773. doi: 10.1111/jgs.17730. Epub 2022 Mar 10. PMID: 35266141; PMCID: PMC9177826.

- 60) Zhang T, Shireman TI, Meyers DJ, **Zullo AR**, Lee Y, Wilson IB. Use of antiretroviral therapy in nursing home residents with HIV. *J Am Geriatr Soc.* 2022 Jun;70(6):1800-1806. doi: 10.1111/jgs.17763. Epub 2022 Mar 25. PMID: 35332518; PMCID: PMC10103632.
- 61) Erqou S, Papaila A, Halladay C, Ge A, Liu MA, Jiang L, Lally M, Menon A, Shah NR, Miech E, Virani SS, **Zullo AR**, Shireman TI, Longenecker CT, Ross D, Sullivan JL, Wu WC, Rudolph JL. Variation in statin prescription among veterans with HIV and known atherosclerotic cardiovascular disease. *Am Heart J.* 2022 Jul;249:12-22. doi: 10.1016/j.ahj.2022.03.006. Epub 2022 Mar 19. PMID: 35318028; PMCID: PMC9976623.
- 62) \*Riester MR, Bosco E, Manthana R, Eliot M, Bardenheier BH, Silva JBB, van Aalst R, Chit A, Loiacono MM, Gravenstein S, **Zullo AR**. Relationships Between Community Virus Activity and Cardiorespiratory Rehospitalizations From Post-Acute Care. *J Am Med Dir Assoc.* 2022 Aug;23(8):1418-1423.e7. doi: 10.1016/j.jamda.2021.12.036. Epub 2022 Jan 24. PMID: 35085507; PMCID: PMC9308831.
- 63) \*Riester MR, Bosco E, Silva JBB, Bardenheier BH, Goyal P, O'Neil ET, van Aalst R, Chit A, Gravenstein S, **Zullo AR**. Causes and timing of 30-day rehospitalization from skilled nursing facilities after a hospital admission for pneumonia or sepsis. *PLoS One.* 2022;17(1):e0260664. doi: 10.1371/journal.pone.0260664. eCollection 2022. PMID: 35051181; PMCID: PMC8775208.
- 64) Moyo P, Bosco E, Bardenheier BH, Rivera-Hernandez M, van Aalst R, Chit A, Gravenstein S, **Zullo AR**. Variation in influenza vaccine assessment, receipt, and refusal by the concentration of Medicare Advantage enrollees in U.S. nursing homes. *Vaccine.* 2022 Feb 11;40(7):1031-1037. doi: 10.1016/j.vaccine.2021.12.069. Epub 2022 Jan 13. PMID: 35033387; PMCID: PMC8917469.
- 65) Sarri G, Bennett D, Debray T, Deruaz-Luyet A, Soriano Gabarró M, Largent JA, Li X, Liu W, Lund JL, Moga DC, Gokhale M, Rentsch CT, Wen X, Yanover C, Ye Y, Yun H, **Zullo AR**, Lin KJ. ISPE-Endorsed Guidance in Using Electronic Health Records for Comparative Effectiveness Research in COVID-19: Opportunities and Trade-Offs. *Clin Pharmacol Ther.* 2022 Nov;112(5):990-999. doi: 10.1002/cpt.2560. Epub 2022 Mar 11. PMID: 35170021; PMCID: PMC9087010.
- 66) \*Riester MR, Goyal P, Jiang L, Erqou S, Rudolph JL, McGeary JE, Rogus-Pulia NM, Madrigal C, Quach L, Wu WC, **Zullo AR**. New Antipsychotic Prescribing Continued into Skilled Nursing Facilities Following a Heart Failure Hospitalization: a Retrospective Cohort Study. *J Gen Intern Med.* 2022 Oct;37(13):3368-3379. doi: 10.1007/s11606-021-07233-2. Epub 2022 Jan 3. PMID: 34981366; PMCID: PMC9550891.
- 67) **Zullo AR**, \*Duprey MS, Smith RJ, Gutman R, Berry SD, Munshi MN, Dore DD. Effects of Dipeptidyl Peptidase-4 Inhibitors and Sulfonylureas on Cognitive and Physical Function in

Nursing Home Residents. *Diabetes, Obesity, and Metabolism*. 2022 Feb;24(2):247-256. doi: 10.1111/dom.14573. Epub 2021 Oct 27. PMID: 34647409; PMCID: PMC8741644.

- 68) Mahmoud L, Zullo AR, Blake C, Dai X, Thompson BB, Wendell LC, Furie KL, Reznik ME, Mahta A. Safety of Modified Nimodipine Dosing in Aneurysmal Subarachnoid Hemorrhage. *World Neurosurg*. 2022 Feb;158:e501-e508. doi: 10.1016/j.wneu.2021.11.016. Epub 2021 Nov 11. PMID: 34775086; PMCID: PMC9091053.
- 69) \*McConeghy K, Cinque M, White EM, Feifer R, Blackman C, Mor V, Gravenstein S, Zullo AR. Lessons for deprescribing from a non-essential medication hold policy in U.S. nursing homes. *Journal of the American Geriatrics Society*. 2022 Feb;70(2):429-438. doi: 10.1111/jgs.17512. Epub 2021 Oct 25. PMID: 34695233; PMCID: PMC8821115.
- 70) \*Lee D, Zullo AR, Lee Y, Daiello L, Kim D, Kiel D, Berry S. Discontinuation of Beta Blockers among Nursing Home Residents at End of Life. *Journal of the American Geriatrics Society*. 2022 Jan;70(1):200-207. doi: 10.1111/jgs.17493. Epub 2021 Oct 20. PMID: 34669190; PMCID: PMC8742763.
- 71) \*Thorsness R, Raines NH, White EM, Santostefano CM, Parikh SM, Riester MR, Feifer RA, Mor V, Zullo AR. Association of CKD with 30-Day SARS-CoV-2 Mortality in Nursing Home Residents: A Retrospective Cohort Study. *American Journal of Kidney Diseases*. 2022 Feb;79(2):305-307. doi: 10.1053/j.ajkd.2021.09.009. Epub 2021 Oct 14. PMID: 34656641; PMCID: PMC8516437.
- 72) Zhang T, Wilson IB, Zullo AR, Meyers DJ, Lee Y, Daiello LA, Kim DH, Kiel DP, Shireman TI, Berry SD. Hip Fracture Rates in Nursing Home Residents With and Without HIV. *Journal of the American Medical Directors Association*. 2022 Mar;23(3):517-518. doi: 10.1016/j.jamda.2021.08.040. Epub 2021 Sep 25. PMID: 34582781; PMCID: PMC8938961.
- 73) \*Mintz J, \*Duprey MS, Zullo AR, Lee Y, Kiel DP, Daiello LA, Rodriguez KE, Venkatesh AK, Berry SD. Identification of Fall-related Injuries in Nursing Home Residents using Administrative Claims Data. *The Journals of Gerontology Series A, Biological Sciences and Medical Sciences*. 2022 Jul 5;77(7):1421-1429. doi: 10.1093/gerona/glab274. PMID: 34558615; PMCID: PMC9255678.
- 74) Zullo AR, Smith RJ, Gutman R, Kohler B, Duprey MS, Berry SD, Munshi MN, Dore DD. Comparative safety of dipeptidyl peptidase-4 inhibitors and sulfonyleureas among frail older adults. *Journal of the American Geriatrics Society*. 2021 Oct;69(10):2923-2930. doi: 10.1111/jgs.17371. Epub 2021 Jul 21. PMID: 34291453; PMCID: PMC8497422.
- 75) \*Riester MR, \*McAuliffe L, Collins C, Zullo AR. Development and validation of a Tool for Pharmacists to Predict 30-day hospital readmissions in patients with Heart Failure (ToPP-HF). *American Journal of Health-System Pharmacy*. 2021 Sep 7;78(18):1691-1700. doi: 10.1093/ajhp/zxab223. PMID: 34048528; PMCID: PMC8522353.

- 76) \*Silva J, \*Bosco E, Riester MR, McConeghy KW, Moyo P, van Aalst R, Bardenheier BH, Gravenstein S, Baier R, Loiacono MM, Chit A, **Zullo AR**. Geographic Variation in Influenza Vaccination among US Nursing Home Residents: A National Study. *Journal of the American Geriatrics Society*. 2021 Sep;69(9):2536-2547. doi: 10.1111/jgs.17270. Epub 2021 May 20. PMID: 34013979; PMCID: PMC8242857.
- 77) \*Bosco E, van Aalst R, McConeghy KW, Silva J, Moyo P, Eliot MN, Chit A, Gravenstein S, **Zullo AR**. Estimated Influenza and Respiratory Syncytial Virus-Attributable Cardiorespiratory Hospitalizations Among U.S. Long-Term Care Facility Residents. *JAMA Network Open*. 2021 Jun 1;4(6):e2111806. doi: 10.1001/jamanetworkopen.2021.11806. PMID: 34106266; PMCID: PMC8190624.
- 78) \*Riester MR, \*Bosco E, Bardenheier BH, Moyo P, Baier RR, Eliot M, Silva JB, Gravenstein S, van Aalst R, Chit A, Loiacono MM, **Zullo AR**. Decomposing Racial and Ethnic Disparities in Nursing Home Influenza Vaccination. *Journal of the American Medical Directors Association*. 2021 Jun;22(6):1271-1278.e3. doi: 10.1016/j.jamda.2021.03.003. Epub 2021 Apr 7. PMID: 33838115.
- 79) Gerlach LB, Fashaw S, Strominger J, Ogarek J, **Zullo AR**, Daiello LA, Teno J, Shireman TI, Bynum JPW. Trends in antipsychotic prescribing among long-term care residents receiving hospice care. *Journal of the American Geriatrics Society*. 2021 Aug;69(8):2152-2162. doi: 10.1111/jgs.17172. Epub 2021 Apr 9. PMID: 33837537; PMCID: PMC8373635.
- 80) Murad MH, Chang SM, Fiordalisi C, Lin JS, Wilt TJ, Tsou A, Leas B, Siddique S, **Zullo AR**, Balk E, Rutter CM, Robinson K, Coleman C, Costa O, Stoeger E, Helfand M, Viswanathan M. Improving the Utility of Evidence Synthesis for Decision Makers in the Face of Insufficient Evidence [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2021 Apr. Report No.: 21-EHC007. PMID: 33905185.
- 81) D'Andrea E, Vinals L, Patorno E, Franklin JM, Bennett D, Largent JA, Moga DC, Yuan H, Wen X, **Zullo AR**, Debray TPA, Sarri G. How well can we assess the validity of non-randomised studies of medications? A systematic review of assessment tools. *BMJ Open*. 2021 Mar 24;11(3):e043961. doi: 10.1136/bmjopen-2020-043961. PMID: 33762237; PMCID: PMC7993210.
- 82) Murad MH, Chang SM, Fiordalisi CV, Lin JS, Wilt TJ, Tsou AY, Leas B, Siddique S, **Zullo AR**, Balk EM, Rutter CM, Robinson K, Coleman C, Costa O, Helfand M, Stoeger E, Viswanathan M. Improving the utility of evidence synthesis for decision makers in the face of insufficient evidence. *Journal of Clinical Epidemiology*. 2021 Jul;135:170-175. doi: 10.1016/j.jclinepi.2021.02.028. Epub 2021 Mar 19. PMID: 33753229.
- 83) Bardenheier BH, Wu WC, **Zullo AR**, Gravenstein S, Gregg EW. Progression to diabetes by baseline glycemic status among middle-aged and older adults in the United States, 2006-2014. *Diabetes Research and Clinical Practice*. 2021 Apr;174:108726. doi: 10.1016/j.diabres.2021.108726. Epub 2021 Mar 1. PMID: 33662490.

- 84) \*Ganley KY, Wilson-Barthes M, **Zullo AR**, Sosa-Rubi SG, Conde-Glez CJ, Garcia-Cisneros S, Lurie MN, Marshall BDL, Operario D, Maher KH, Galarraga O. Incidence and time-varying predictors of HIV and sexually transmitted infections among male sex workers in Mexico City. *Infectious Diseases of Poverty*. 2021 Jan 19;10(1):7. doi: 10.1186/s40249-020-00792-2. PubMed PMID: 33461615; PMCID: PMC7814587.
- 85) Saldanha IJ, Cao W, Bhuma MR, Konnyu KJ, Adam GP, Mehta S, **Zullo AR**, Chen KK, Roth JL, Balk EM. Management of primary headaches during pregnancy, postpartum, and breastfeeding: A systematic review. *Headache*. 2021 Jan;61(1):11-43. doi: 10.1111/head.14041. Epub 2021 Jan 12. PMID: 33433020.
- 86) \*Sorral MN, Huynh JP, Azzoli CG, Liauw JC, Brunault RD, Collins CM, **Zullo AR**. Survival outcomes associated with corticosteroid use before chemoimmunotherapy in patients with advanced lung cancer. *European Journal of Cancer*. 2021 Mar;145:234-244. doi: 10.1016/j.ejca.2020.12.011. Epub 2021 Jan 8. PMID: 33431285; PMCID: PMC7935747.
- 87) Saldanha IJ, Roth JL, Chen KK, **Zullo AR**, Adam GP, Konnyu KJ, Cao W, Bhuma MR, Kimmel HJ, Mehta S, Riester MR, Sorral MN, Balk EM. Management of Primary Headaches in Pregnancy [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2020 Nov. Report No.: 20(21)-EHC026. PMID: 33263968.
- 88) Sarri G, Patorno E, Yuan H, Guo JJ, Bennett D, Wen X, **Zullo AR**, Largent J, Panaccio M, Gokhale M, Moga DC, Ali MS, Debray TPA. Framework for the synthesis of non-randomised studies and randomised controlled trials: a guidance on conducting a systematic review and meta-analysis for healthcare decision making. *BMJ Evidence-Based Medicine*. 2022 Apr;27(2):109-119. doi: 10.1136/bmjebm-2020-111493. Epub 2020 Dec 9. PMID: 33298465; PMCID: PMC8961747.
- 89) **Zullo AR**, Lee Y, Lary CW, Daiello LA, Kiel DP, Berry SD. Comparative Effectiveness of Denosumab, Teriparatide, and Zoledronic Acid among Frail Older Adults: A Retrospective Cohort Study. *Osteoporosis International*. 2021 Mar;32(3):565-573. doi: 10.1007/s00198-020-05732-2. Epub 2021 Jan 7. PMID: 33411003; PMCID: PMC7933063.
- 90) **Zullo AR**, Danko KJ, Moyo P, Adam GP, Riester M, Kimmel HJ, Panagiotou OA, Beaudoin FL, Carr D, Balk EM. Prevention, Diagnosis, and Management of Opioids, Opioid Misuse, and Opioid Use Disorder in Older Adults [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2020 Nov. Report No.: 21-EHC005. PMID: 33211447.
- 91) Bardenheier BH, **Zullo AR**, Jutkowitz E, Gravenstein S. Characteristics of Repeated Influenza Vaccination Among Older U.S. Adults. *American Journal of Preventive Medicine*. 2020 Nov;59(5):e179-e188. doi: 10.1016/j.amepre.2020.05.009. Epub 2020 Oct 2. PMID: 33012624.
- 92) Lary CW, Hinton AC, Nevola KT, Shireman TI, Motyl K, Houseknecht KL, Lucas L, Hallen S, **Zullo AR**, Berry SD, Kiel DP. Association of Beta Blocker Use with Bone Mineral Density in the Framingham Osteoporosis Study: A Cross-Sectional Study. *Journal of Bone and Mineral*

*Research Plus*. 2020 Sep;4(9):e10388. doi: 10.1002/jbm4.10388. eCollection 2020 Sep. PMID: 32995691; PMCID: PMC7507481.

- 93) Alvarez CA, Halm EA, Pugh MV, McGuire DK, Hennessy S, Miller RT, Lingvay I, Vouri SM, **Zullo AR**, Yang H, Chansard M, Mortensen EM. Lactic acidosis incidence with metformin in patients with type 2 diabetes and chronic kidney disease: A retrospective nested case-control study. *Endocrinology, Diabetes & Metabolism*. 2021 Jan;4(1):e00170. doi: 10.1002/edm2.170. eCollection 2021 Jan. PMID: 33532612; PMCID: PMC7831229.
- 94) Nevola K, Kiel D, **Zullo AR**, Foessel I, Obermayer-Pietsch B, Motyl K, Lary C. miRNA Mechanisms Underlying the Association of Beta Blocker Use and Bone Mineral Density. *Journal of Bone and Mineral Research*. 2021 Jan;36(1):110-122. doi: 10.1002/jbmr.4160. Epub 2020 Sep 22. PMID: 32786095; PMCID: PMC8140522.
- 95) Joyce NR, Pfeiffer MR, **Zullo AR**, Ahluwalia JS, Curry AE. Individual and geographic variation in Driver's license suspensions: Evidence of disparities by race, ethnicity and income. *Journal of Transport and Health*. 2020 Dec;19:100933. doi: 10.1016/j.jth.2020.100933. Epub 2020 Sep 14. PMID: 32953453; PMCID: PMC7500576.
- 96) Bardenheier BH, Baier RR, Silva JB, Gravenstein S, Moyo P, Bosco E, Ogarek J, van Aalst R, Chit A, **Zullo AR**. Persistence of Racial Inequities in Receipt of Influenza Vaccination among Nursing Home Residents in the United States. *Clin Infect Dis*. 2021 Dec 6;73(11):e4361-e4368. doi: 10.1093/cid/ciaa1484. PMID: 32990309; PMCID: PMC8662763.
- 97) **Zullo AR**, \*Riester M, Erquo S, Wu W, Rudolph JL, Steinman MA. Comparative Effectiveness of Angiotensin II Receptor Blockers and Angiotensin-Converting Enzyme Inhibitors in Older Nursing Home Residents After Myocardial Infarction: A Retrospective Cohort Study. *Drugs & Aging*. 2020 Oct;37(10):755-766. doi: 10.1007/s40266-020-00791-w. PMID: 32808250; PMCID: PMC7530043.
- 98) \*Silva J, \*Bosco E, Quilliam D, Gravenstein S, **Zullo AR**. Antiviral Chemoprophylaxis Use during Influenza Outbreaks in Long-term Care Facilities. *Journal of the American Medical Directors Association*. 2020 Sep;21(9):1354-1356. doi: 10.1016/j.jamda.2020.05.020. Epub 2020 Jul 11. PMID: 32660853; PMCID: PMC9015038.
- 99) \*Scotina AD, **Zullo AR**, Smith RJ, Gutman R. Approximate Bayesian Bootstrap procedures to estimate multilevel treatment effects in observational studies with application to type 2 diabetes treatment regimens. *Statistical Methods in Medical Research*. 2020 Nov;29(11):3362-3380. doi: 10.1177/0962280220928109. Epub 2020 Jun 26. PMID: 32588747.
- 100) **Zullo AR**. Trends in Medication Importation by U.S. Adults over Time. *Journal of the American Pharmacists Association*. 2021 Jan-Feb;61(1):e115-e118. doi: 10.1016/j.japh.2020.04.021. Epub 2020 May 29. PMID: 32482499; PMCID: PMC7704530.

- 101) \*Francis AG, Beaudoin FL, Naidjate S, Berard-Collins C, **Zullo AR**. Comparing Treatment Response Between Older and Younger Hepatitis C Virus Patients on Direct-acting Antiviral Agents. *Rhode Island Medical Journal*. 2020 Jun 1;103(5):35-40. PMID: 32481778; PMCID: PMC8994554.
- 102) Berry SD, Daiello LA, Lee Y, **Zullo AR**, Wright NC, Curtis JR, Kiel DP. Secular Trends in the Incidence of Hip Fracture Among Nursing Home Residents. *Journal of Bone and Mineral Research*. 2020 Sep;35(9):1668-1675. doi: 10.1002/jbmr.4032. Epub 2020 May 8. PMID: 32302028; PMCID: PMC7486242.
- 103) Ofori-Asenso R, Chin KL, Sahle B, Mazidi M, **Zullo AR**, Liew D. Frailty confers high mortality risk across different populations: Evidence from an overview of systematic reviews and meta-analyses. *Geriatrics*. 2020 Mar 12;5(1). doi: 10.3390/geriatrics5010017. PMID: 32178338; PMCID: PMC7151473.
- 104) \*Bosco E, **Zullo AR**, McConeghy KW, Moyo P, Van Aalst R, Chit A, Mwenda KW, Panozzo CA, Mor V, Gravenstein S. Geographic Variation in Pneumonia and Influenza in Long-Term Care Facilities: A National Study. *Clinical Infectious Diseases*. 2020 Nov 5;71(8):e202-e205. doi: 10.1093/cid/ciaa081. PMID: 31995171; PMCID: PMC7643743.
- 105) \*Mogul A, Teixeira E, McAuliffe L, Promrat K, **Zullo AR**. Effectiveness of crushed sofosbuvir-velpatasvir in a patient with dysphagia. *American Journal of Health-System Pharmacy*. 2020 Mar 5;77(6):417-418. doi: 10.1093/ajhp/zxz326. PMID: 31930300.
- 106) **Zullo AR**, Ofori-Asenso R, Wood M, Zuern A, Lee Y, Wu W, Rudolph JL, Liew D, Steinman MA. Effects of Statins for Secondary Prevention on Functioning and Other Outcomes among Frail Older Adults. *Journal of the American Medical Directors Association*. 2020 Apr;21(4):500-507.e8. doi: 10.1016/j.jamda.2020.01.102. Epub 2020 Mar 3. PMID: 32144051; PMCID: PMC7127965.
- 107) **Zullo AR**, Moyo P, Zhang W, Jutkowitz E, Thomas KS. Older Adults with Opioid Use Disorder Often Discharged to Skilled Nursing Facilities. *J Am Med Dir Assoc*. 2020 Apr;21(4):557-559. doi: 10.1016/j.jamda.2020.01.011. Epub 2020 Feb 18. PMID: 32081682; PMCID: PMC7127932.
- 108) Moyo P, **Zullo AR**, McConeghy KW, Bosco E, van Aalst R, Chit A, Gravenstein S. Risk factors for pneumonia and influenza hospitalizations in long-term care facility residents: a retrospective cohort study. *BMC Geriatrics*. 2020 Feb 10;20(1):47. doi: 10.1186/s12877-020-1457-8. PMID: 32041538; PMCID: PMC7011520.
- 109) Erqou S, Jiang L, Choudhary G, Lally M, Bloomfield G, **Zullo AR**, Shireman T, Freiberg MS, Justice A, Rudolph JL, Lin N, Wu W. Heart Failure Outcomes and Associated Factors among Veterans with Human Immunodeficiency Virus Infection. *JACC Heart Fail*. 2020 Jun;8(6):501-511. doi: 10.1016/j.jchf.2019.12.007. Epub 2020 Apr 8. PMID: 32278680; PMCID: PMC9019736.
- 110) \*McConeghy KW, **Zullo AR**, Lary CW, Zhang T, Lee Y, Daiello L, Kiel DP, Berry SD. Association between bisphosphonates and hospitalized *Clostridium difficile* infection among

frail older adults. *J Am Med Dir Assoc*. 2020 May;21(5):688-691. doi: 10.1016/j.jamda.2019.11.016. Epub 2020 Jan 10. PMID: 31932139; PMCID: PMC8922243.

- 111) Greene RA, **Zullo AR**, Mailloux CM, Berard-Collins C, Levy MM, Amass T. Effect of Best Practice Advisories on Sedation Protocol Compliance and Drug-Related Hazardous Condition Mitigation Among Critical Care Patients. *Crit Care Med*. 2020 Feb;48(2):185-191. doi: 10.1097/CCM.0000000000004116. PMID: 31939786; PMCID: PMC8840326.
- 112) \*Sorial M, Greene RA, **Zullo AR**, Berard-Collins C, Willis S. Exogenous supplementation of antithrombin III in adult and pediatric patients receiving extracorporeal membrane oxygenation. *Int J Artif Organs*. 2020 May;43(5):315-322. doi: 10.1177/0391398819888932. Epub 2019 Nov 21. PMID: 31750755.
- 113) **Zullo AR**, \*Adams J, Gantenberg J, Marshall BD, Howe C. Examining Neighborhood Poverty-based Disparities in HIV/STI Prevalence: An Analysis of Add Health Data. *Ann Epidemiol*. 2019 Nov;39:8-14.e4. doi: 10.1016/j.annepidem.2019.09.010. Epub 2019 Oct 9. PMID: 31679893; PMCID: PMC6902432.
- 114) \*Yankulina O, **Zullo AR**, Cabral SE, Huynh JP, Hutchinson JA, Lopresti ML, Fenton MA, Berard-Collins CM. Pertuzumab-associated diarrhea in HER2/neu-positive breast cancer patients: A comparison of trials to actual practice. *J Oncol Pharm Pract*. 2020 Jun;26(4):912-917. doi: 10.1177/1078155219879211. Epub 2019 Oct 20. PMID: 31631811; PMCID: PMC8915200.
- 115) Gutman R, Scotina A, Smith RJ, Dore DD, **Zullo AR**. Creating and Testing Methods to Estimate Treatment Effect in Observational Studies with Three or More Treatments [Internet]. Washington (DC): Patient-Centered Outcomes Research Institute (PCORI); 2020 May. PMID: 37556582.
- 116) **Zullo AR**, \*Sorial M, Lee Y, Lary C, Kiel D, Berry SD. Predictors of Hip Fracture among Frail Older Adults Treated with Bisphosphonates. *J Am Geriatr Soc*. 2020 Feb;68(2):256-260. doi: 10.1111/jgs.16176. Epub 2019 Oct 3. PMID: 31580488; PMCID: PMC7002229.
- 117) Goyal P, Anderson T, Marcum Z, Orkaby A, Kim DH, **Zullo AR**, Krishnaswami A, Weissman A, Steinman MA, Rich M. Physician Perspectives on Deprescribing Cardiovascular Medications for Older Adults. *J Am Geriatr Soc*. 2020 Jan;68(1):78-86. doi: 10.1111/jgs.16157. Epub 2019 Sep 11. PMID: 31509233; PMCID: PMC7061460.
- 118) Ofori-Asenso R, Chin KL, Mazidi M, Zomer E, Ilomaki J, **Zullo AR**, Gasevic D, Ademi Z, Korhonen MJ, LoGiudice D, Bell JS, Liew D. Global Incidence of Frailty and Prefrailty Among Community-Dwelling Older Adults: A Systematic Review and Meta-analysis. *JAMA Netw Open*. 2019 Aug 2;2(8):e198398. doi: 10.1001/jamanetworkopen.2019.8398. PMID: 31373653; PMCID: PMC6681553.
- 119) Berry SD, **Zullo AR**, Zhang T, Lee Y, McConeghy KW, Kiel DP. Validation of the FRAiL model to Predict Non-Vertebral and Hip Fractures in Nursing Home Residents. *Bone*. 2019



Nov;128:115050. doi: 10.1016/j.bone.2019.115050. Epub 2019 Aug 28. PMID: 31472301; PMCID: PMC6823926.

- 120) \*Bosco E, **Zullo AR**, McConeghy KW, Moyo P, van Aalst R, Chit A, Mor V, Gravenstein S. Long-Term Care Facility Variation in the Incidence of Pneumonia and Influenza. *Open Forum Infect Dis*. 2019 Jun;6(6):ofz230. doi: 10.1093/ofid/ofz230. eCollection 2019 Jun. PMID: 31214626; PMCID: PMC6565378.
- 121) **Zullo AR**, \*Mogul A, Corsi K, Shah NR, Lee SJ, Rudolph JL, Wu WC, Dapaah-Afriyie R, Berard-Collins C, Steinman MA. Association between Secondary Prevention Medication Use and Outcomes in Frail Older Adults after Acute Myocardial Infarction. *Circulation: Cardiovascular Quality and Outcomes*. 2019 (ePub ahead of print). doi: 10.1161/CIRCOUTCOMES.118.004942. PMID: 31002274; PMCID: PMC6481629.
- 122) **Zullo AR**, \*Olean M, Berry SD, Lee Y, Tjia J, Steinman MA. Patient-Important Adverse Events of  $\beta$ -blockers in Frail Older Adults after Acute Myocardial Infarction. *J Gerontol A Biol Sci Med Sci*. 2019 Jul 12;74(8):1277-1281. doi: 10.1093/gerona/gly191. PMID: 30137259; PMCID: PMC6625583.
- 123) Joyce NR, **Zullo AR**, Ahluwalia JS, Pfeiffer MR, Curry AE. Driver's License Suspension Policies as a Barrier to Health Care. *Am J Public Health*. 2019 Dec;109(12):1692-1693. doi: 10.2105/AJPH.2019.305383. PMID: 31693414; PMCID: PMC6836782.
- 124) \*Childs A, **Zullo AR**, Joyce N, McConeghy KW, van Aalst R, Moyo P, Bosco E, Mor V, Gravenstein S. The Burden of Respiratory Infections among Older Adults in Long-Term Care: A Systematic Review. *BMC Geriatr*. 2019 Aug 5;19(1):210. doi: 10.1186/s12877-019-1236-6. PMID: 31382895; PMCID: PMC6683564.
- 125) Zhang T, Lary CW, **Zullo AR**, Lee Y, Daiello LA, Kiel DP, Berry SD. Post-hip fracture mortality in nursing home residents by obesity status. *J Am Geriatr Soc*. 2019 Sep;67(9):1983-1985. doi: 10.1111/jgs.16028. Epub 2019 Jun 12. PMID: 31188465; PMCID: PMC6732026.
- 126) Krishnaswami A, Steinman MA, Goyal P, **Zullo AR**, Anderson TS, Birtcher K, Goodlin SJ, Maurer MS, Alexander KP, Rich MW, Tjia J (from the Geriatric Cardiology Section Leadership Council, American College of Cardiology). Deprescribing in Older Adults with Cardiovascular Disease: Rationale, Evidence and Strategies. *J Am Coll Cardiol*. 2019 May 28;73(20):2584-2595. doi: 10.1016/j.jacc.2019.03.467. Review. PMID: 31118153; PMCID: PMC6724706.
- 127) Nolan K, **Zullo AR**, Bosco E, Marchese C, Berard-Collins C. Controlled substance diversion in health systems: a failure modes and effects analysis for prevention. *Am J Health Syst Pharm*. 2019 Jul 18;76(15):1158-1164. doi: 10.1093/ajhp/zxz116. PMID: 31408513; PMCID: PMC7170724.

- 128) Amir O, Berry SD, **Zullo AR**, Kiel DP, Zhang T. Incidence of Hip Fracture in Native American Residents of U.S. Nursing Homes. *Bone*. 2019 Jun;123:204-210. doi: 10.1016/j.bone.2019.04.001. Epub 2019 Apr 3. PMID: 30951886; PMCID: PMC6527125.
- 129) \*Sine K, Lee Y, **Zullo AR**, Daiello LA, Zhang T, Berry SD. Incidence of Lower Extremity Fractures in U.S. Nursing Homes. *J Am Geriatr Soc*. 2019 Jun;67(6):1253-1257. doi: 10.1111/jgs.15825. Epub 2019 Feb 27. PMID: 30811581; PMCID: PMC6561809.
- 130) \*Naidjate S, **Zullo AR**, Dapaah-Afriyie R, Hersey M, Marshall BDL, Manalang RB, Berard-Collins C. Comparative Effectiveness of Pharmacist Care Delivery Models for Hepatitis C Virus Clinics. *Am J Health Syst Pharm*. 2019 May 2;76(10):646-653. doi: 10.1093/ajhp/zxz034. PMID: 30873537.
- 131) **Zullo AR**, \*Lou U, Cabral S, Huynh J, Berard-Collins CM. Overuse and underuse of pegfilgrastim for primary prophylaxis of febrile neutropenia. *J Oncol Pharm Pract*. 2019 Sep;25(6):1357-1365. doi: 10.1177/1078155218792698. Epub 2018 Aug 19. PMID: 30124123; PMCID: PMC8915199.
- 132) Ofori-Asenso R, Ilomaki J, Tacey M, Zomer E, Curtis AJ, Si S, **Zullo AR**, Korhonen MJ, Bell JS, Zoungas S, Liew D. Therapy Changes, Adherence, Discontinuation and Reinitiation of Statin Among Older Adults: A Nationwide Cohort Study. *J Am Coll Cardiol*. 2018 Nov 27;72(21):2675-2677. doi: 10.1016/j.jacc.2018.08.2191. PMID: 30466527; PMCID: PMC8915196.
- 133) **Zullo AR**, Zhang T, Lee Y, McConeghy KW, Daiello LA, Kiel DP, Mor V, Berry SD. Effect of Bisphosphonates on Fracture Outcomes Among Frail Older Adults. *J Am Geriatr Soc*. 2019 Apr;67(4):768-776. doi: 10.1111/jgs.15725. Epub 2018 Dec 21. PMID: 30575958; PMCID: PMC6705123.
- 134) **Zullo AR**, \*Hersey M, Lee Y, Sharmin S, Bosco E, Daiello LA, Shah NR, Mor V, Boscard WJ, Berard-Collins CM, Dore DD, Steinman MA. Outcomes of “diabetes-friendly” versus “diabetes-unfriendly” beta-blockers in older nursing home residents with diabetes after acute myocardial infarction. *Diabetes, Obesity, and Metabolism*. 2018 Dec;20(12):2724-2732. doi: 10.1111/dom.13451. Epub 2018 Jul 22. PMID: 29952104; PMCID: PMC6231977.
- 135) Mahmoud LN, **Zullo AR**, Thompson BB, Wendell LC. Outcomes of protocolized analgesia and sedation in neurocritical care. *Brain Inj*. 2018;32(7):941-947. doi: 10.1080/02699052.2018.1469167. Epub 2018 Apr 30. PMID: 29708438; PMCID: PMC9587753.
- 136) Zhang T, **Zullo AR**, Shireman TI, Lee Y, Mor V, Liu Q, McConeghy KW, Daiello LA, Kiel DP, Berry SD. Epidemiology of hip fracture in nursing home residents with multiple sclerosis. *Disabil Health J*. 2018 Oct;11(4):591-597. doi: 10.1016/j.dhjo.2018.03.002. Epub 2018 Mar 21. PMID: 29598927; PMCID: PMC6150858.

- 137) Olszewski AJ, **Zullo AR**, Nering CR, Huynh JP. Use of charity financial assistance for novel oral anti-cancer agents. *J Oncol Pract*. 2018 Apr;14(4):e221-e228. doi: 10.1200/JOP.2017.027896. Epub 2018 Feb 13. PMID: 29443649; PMCID: PMC5951296.
- 138) Lefebvre A, **Zullo AR**, Dapaah-Afriyie R, Berard-Collins C, Elsaid K. Outcomes of a pharmacist-managed clinic for underserved patients with uncontrolled type 2 diabetes mellitus. *J Pharm Pract Res*. 2018 Feb;48(1):65-71. doi: 10.1002/jppr.1349. Epub 2018 Feb 15. PMID: 36815097; PMCID: PMC9943050.
- 139) \*McAuliffe L, **Zullo AR**, Dapaah-Afriyie R, Collins C. Development and validation of the MEDCOINS transitions of care pharmacist tool to predict potentially avoidable 30-day readmissions. *American Journal of Health-System Pharmacy*. 2018 Feb 1;75(3):111-119. doi: 10.2146/ajhp170184. PMID: 29371191; PMCID: PMC9015819.
- 140) **Zullo AR**, Zhang T, Banerjee G, Lee Y, McConeghy KW, Kiel DP, Daiello LA, Mor V, Berry SD. Facility and State Variation in Hip Fracture among US Nursing Home Residents. *Journal of the American Geriatrics Society*. 2018 Mar;66(3):539-545. doi: 10.1111/jgs.15264. Epub 2018 Jan 16. PMID: 29336024; PMCID: PMC5849498.
- 141) Thomas KS, KS, Parikh RB, **Zullo AR**, Dosa D. Home-delivered meals and risk of self-reported falls: results from a randomized trial. *Journal of Applied Gerontology*. 2018 Jan;37(1):41-57. doi: 10.1177/0733464816675421. Epub 2016 Oct 25. PMID: 27798291; PMCID: PMC6620777.
- 142) **Zullo AR**, Zhang T, Beaudoin FL, Lee Y, McConeghy KW, Kiel DP, Daiello LA, Mor V, Berry SD. Pain Treatments after Hip Fracture among Older Nursing Home Residents. *Journal of the American Medical Directors Association*. 2018 Feb;19(2):174-176. doi: 10.1016/j.jamda.2017.11.008. Epub 2017 Dec 26. PMID: 29287695; PMCID: PMC5803325.
- 143) \*McConeghy KW, Berry SD, Lee Y, **Zullo AR**, Banerjee G, Daiello LA, Dosa D, Kiel DP, Mor V. Influenza illness and hip fracture hospitalizations in nursing home residents: are they related? *The Journals of Gerontology Series A, Biological Sciences and Medical Sciences*. 2018 Nov 10;73(12):1638-1642. doi: 10.1093/gerona/glx200. PMID: 29095964; PMCID: PMC6230207.
- 144) **Zullo AR**, Gray SL, Holmes HM, Marcum ZA. Screening for medication appropriateness in older adults. *Clinics in Geriatric Medicine*. 2018 Feb;34(1):39-54. doi: 10.1016/j.cger.2017.09.003. Epub 2017 Oct 14. Review. PMID: 29129216; PMCID: PMC9588173.
- 145) Berry SD, **Zullo AR**, Lee Y, Mor V, McConeghy KW, Banerjee G, D'Agostino RB, Daiello L, Dosa D, Kiel DP. Fracture Risk Assessment in Long term care (FRAiL): development and validation of a prediction model. *The Journals of Gerontology Series A, Biological Sciences and Medical Sciences*. 2018 May 9;73(6):763-769. doi: 10.1093/gerona/glx147. PMID: 28958013; PMCID: PMC5946931.
- 146) Dore DD, **Zullo AR**, Lee Y, Mor V, Berry SD. Age, sex, and dose effects of non-benzodiazepine hypnotics on hip fracture in nursing home residents. *Journal of the American Medical Directors*

*Association*. 2018 Apr;19(4):328-332.e2. doi: 10.1016/j.jamda.2017.09.015. Epub 2017 Nov 7. PMID: 29126858; PMCID: PMC5871542.

- 147) **Zullo AR**, \*Sharmin S, Lee Y, Daiello LA, Shah NR, Boscardin WJ, Dore DD, Lee SJ, Steinman MA. Secondary prevention medication use after myocardial infarction among U.S. nursing home residents. *J Am Geriatr Soc*. 2017 Nov;65(11):2397-2404. doi: 10.1111/jgs.15144. Epub 2017 Oct 17. PMID: 29044457; PMCID: PMC5683399.
- 148) **Zullo AR**, Dore DD, Gutman R, Mor V, Alvarez CA, Smith RJ. Metformin safety warnings and diabetes drug prescribing patterns for older nursing home residents. *J Am Med Dir Assoc*. 2017 Oct 1;18(10):879-884.e7. doi: 10.1016/j.jamda.2017.05.020. Epub 2017 Jul 1. PMID: 28676291; PMCID: PMC5612829.
- 149) Berry SD, **Zullo AR**, McConeghy K, Lee Y, Daiello L, Kiel DP. Defining hip fracture with claims data: outpatient and provider claims matter. *Osteoporosis International*. 2017 Jul;28(7):2233-2237. doi: 10.1007/s00198-017-4008-1. Epub 2017 Apr 26. PMID: 28447106; PMCID: PMC5649370.
- 150) Steinman MA, **Zullo AR**, Lee Y, Boscardin WJ, Dore DD, Gan S, Fung K, Miao Y, Lee SJ, Covinsky KE, Komaiko KDR, Mor V. Association of  $\beta$ -blockers with functional outcomes, death, and rehospitalization in older nursing home residents after acute myocardial infarction. *JAMA Intern Med*. 2017 Feb 1;177(2):254-262. doi: 10.1001/jamainternmed.2016.7701. PMID: 27942713; PMCID: PMC5318299.
- 151) Fain KM, Alexander GC, Dore DD, Segal JB, **Zullo AR**, Castillo-Salgado C. Frequency and predictors of analgesic prescribing in U.S. nursing home residents with persistent pain. *J Am Geriatr Soc*. 2017 Feb;65(2):286-293. doi: 10.1111/jgs.14512. Epub 2016 Nov 7. PMID: 28198563; PMCID: PMC9588418.
- 152) Bunnell KL, **Zullo AR**, Collins C, Adams CA. Methicillin-resistant *Staphylococcus aureus* pneumonia in critically ill trauma and burn patients: a retrospective cohort study. *Surg Infect (Larchmt)*. 2017 Feb/Mar;18(2):196-201. doi: 10.1089/sur.2016.115. Epub 2016 Dec 22. PMID: 28004983.
- 153) **Zullo AR**, Lee Y, Daiello L, Mor V, Boscardin WJ, Miao Y, Komaiko K, Steinman MA. Beta-blocker use among United States nursing home residents after myocardial infarction: a national study. *J Am Geriatr Soc*. 2017 Apr;65(4):754-762. doi: 10.1111/jgs.14671. Epub 2016 Nov 15. PMID: 27861719; PMCID: PMC5397324.
- 154) Fain KM, Castillo-Salgado C, Dore DD, Segal JB, **Zullo AR**, Alexander GC. Inappropriate fentanyl prescribing among nursing home residents in the United States. *J Am Med Dir Assoc*. 2017 Feb 1;18(2):138-144. doi: 10.1016/j.jamda.2016.08.015. Epub 2016 Oct 6. PMID: 27720662; PMCID: PMC9012076.

- 155) \*Gao TY, Howe CJ, **Zullo AR**, Marshall BDL. Risk factors for self-report of not receiving an HIV test among adolescents in NYC with a history of sexual intercourse, 2013 YRBS. *Vulnerable Children and Youth Studies*. 2017;12(4):277-291. doi: 10.1080/17450128.2016.1268741. Epub 2016 Dec 12. PubMed PMID: 29057006; PMCID: PMC5647150.
- 156) **Zullo AR**, Dore DD, Gutman R, Mor V, Smith RJ. National glucose-lowering treatment complexity is greater among nursing home residents than community-dwelling adults. *Journal of the American Geriatrics Society*. 2016 Nov;64(11):e233-e235. doi: 10.1111/jgs.14485. Epub 2016 Sep 27. PMID: 27677102; PMCID: PMC8931637.
- 157) \*Banerjee G, **Zullo AR**, Berry SD, Lee Y, McConeghy K, Kiel DP, Mor V. Geographic variation in hip fracture among U.S. long-stay nursing home residents. *Journal of the American Medical Directors Association*. 2016 Sep 1;17(9):865.e1-3. doi: 10.1016/j.jamda.2016.06.012. Epub 2016 Jul 25. PMID: 27461867; PMCID: PMC5003725.
- 158) **Zullo AR**, Dore DD, Daiello L, Baier RR, Gutman R, Gifford DR, Smith RJ. National trends in treatment initiation for nursing home residents with diabetes mellitus, 2008-2010. *Journal of the American Medical Directors Association*. 2016 Jul 1;17(7):602-8. doi: 10.1016/j.jamda.2016.02.023. Epub 2016 Mar 24. PMID: 27052559; PMCID: PMC4925288.
- 159) Berry SD, Lee Y, **Zullo AR**, Kiel DP, Dosa D, Mor V. Incidence of hip fracture in U.S. nursing homes. *The Journals of Gerontology Series A, Biological Sciences and Medical Sciences*. 2016 Sep;71(9):1230-4. doi: 10.1093/gerona/glw034. Epub 2016 Mar 14. PMID: 26980299; PMCID: PMC4978364.
- 160) Mahmoud L, **Zullo AR**, McKaig D, Berard-Collins CM. Concordance between activated partial thromboplastin time and antifactor Xa assay for monitoring unfractionated heparin in hospitalized hyperbilirubinemic patients. *Rhode Island Medical Journal*. 2016 Mar 1;99(3):33-7. PMID: 26929970; PMCID: PMC7071828.
- 161) **Zullo AR**, Howe CJ, Galárraga O. Estimating the effect of health insurance on personal prescription drug importation. *Medical Care Research and Review*. 2017 Apr;74(2):178-207. doi: 10.1177/1077558716629039. Epub 2016 Aug 3. PMID: 26837427; PMCID: PMC4970983.
- 162) Kenna J, Mahmoud L, **Zullo AR**, Potter NS, Fehnel CR, Thompson BB, Wendell LC. Effect of probiotics on the incidence of healthcare-associated infections in mechanically ventilated neurocritical care patients. *Nutrition in Clinical Practice*. 2016 Feb;31(1):116-20. doi: 10.1177/0884533615620349. Epub 2015 Dec 16. PMID: 26673200; PMCID: PMC9594993.
- 163) Migliozi D, **Zullo AR**, Berard-Collins CM, Elsaid K. Achieving blood pressure control among renal transplant recipients by integrating electronic health technology and clinical pharmacy services. *American Journal of Health-System Pharmacy*. 2015 Nov 15;72(22):1987-92. doi: 10.2146/ajhp140810. PMID: 26541954.

- 164) **Zullo AR**, \*Caine K, Galárraga O. The dollars and sense of economic incentives to modify HIV-related behaviours. *Journal of the International AIDS Society*. 2015;18:20724. doi: 10.7448/IAS.18.1.20724. eCollection 2015. PMID: 26480927; PMCID: PMC4610955.
- 165) **Zullo AR**, Dore DD, Galarraga O. Development and validation of an index to predict personal prescription drug importation by adults in the United States. *Journal of Pharmaceutical Health Services Research*. 2015 Mar;6(1):33-41. doi: 10.1111/jphs.12088. Epub 2015 Feb 17. PMID: 27375777; PMCID: PMC4930104.

### C. COMMENTARIES & EDITORIALS

---

- 166) Goldberg EM, **Zullo AR**, Beaudoin FL. When one size doesn't fit all: Agitation in older adults requires a tailored approach. *Academic Emergency Medicine*. 2021 Oct;28(10):1200-1201. doi: 10.1111/acem.14267. Epub 2021 May 8. PMID: 33899982; PMCID: PMC8597583.
- 167) Berry SD, **Zullo AR**, McConeghy K, Lee Y, Daiello L, Kiel DP. Administrative health data: guilty until proven innocent – Response to comments by Levy and Sobolev. *Osteoporosis International*. 2018;29(1):255-256.
- 168) **Zullo AR**. Capsule Commentary on McCoy Et al. Hospital Readmissions Among Commercially-Insured and Medicare Advantage Beneficiaries with Diabetes and the Impact of Severe Hypoglycemic and Hyperglycemic Events. *J Gen Intern Med*. 2017;32(10):1132.

### D. WORK UNDER REVIEW (SELECTED)

---

- 169) **Zullo AR**, Riester MR, Varma H, Daiello L, Gerlach LB, Coe AB, Thomas KS, Joshi R, Zhang T, Shireman TI, Bynum JPW. Emulating Trials to Estimate the Effects of Nursing Home Changes in Antipsychotic Use on Outcomes Among Residents with Alzheimer's Disease and Related Dementias. (Submitted to *Annals of Internal Medicine*).
- 170) Stettenbauer EG, Berry SD, Lee Y, **Zullo AR**, Daiello LA. Evaluating Lecanemab Eligibility for Patients in Skilled Nursing Facilities with Alzheimer's Disease or Mild Cognitive Impairment. (Submitted to *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*).
- 171) Riester MR, **Zullo AR**, Richa J, Daiello LA, Hayes KN, Ko D, Kim DH, Munshi M, Berry SD. Comparative Safety and Cardiovascular Effectiveness of Sodium-Glucose Cotransporter-2 Inhibitors and Glucagon-Like Peptide-1 Agonists in Nursing Homes. (Submitted to *Diabetes, Obesity, and Metabolism*).
- 172) Shakya I, **Zullo AR**, Hayes KN, Joshi R, Berry SD. Risk Factors for Urinary Tract Infections among Nursing Home Residents Initiating Sodium-glucose Cotransporter-2 Inhibitors. (Submitted to *Journal of Diabetes*).

- 173) Sisti A, Zullo AR, Gutman R. A Bayesian Method for Adverse Effects Estimation in Observational Studies with Truncation by Death. (Submitted to *Statistical Methods in Medical Research*).
- 174) Shireman T, Coulibaly N, Zhang T, Zullo AR, Gerlach LB, Coe AB, Daiello LA, Lo D, Bynum, JPW. Federal Policies' Impact on Exclusionary Diagnoses for Dementia Residents in Nursing Homes. (Submitted to *Journal of the American Geriatrics Society*).
- 175) \*Gantenberg JR, van Aalst R, Reddy Bhuma M, Limone B, Diakun D, Smith DM, Nelson CB, Bengtson AM, Chaves SS, La Via WV, Rizzo C, Savitz DA, Zullo AR. Risk Analysis of Respiratory Syncytial Virus Among Infants in the United States by Birth Month. (Submitted to *Journal of the Pediatric Infectious Disease Society*).
- 176) Zullo AR, Riester MR, Hayes KN, Zhang Y, Berry SD, Belanger E, Cupp-Buxton M, Beaudoin FL. "Analgesic Regimens among Older Adults Receiving Skilled Nursing Facility Care Following Hip Fracture" (Submitted to *Journal of the American Medical Directors Association*).
- 177) Cupp MA, Hayes KN, Beaudoin FL, Riester MR, Berry SD, Joshi R, Zullo AR. Association between opioid use after hip fracture and one-year risk of subsequent hip fracture: a self-controlled case series analysis. (Submitted to *American Journal of Epidemiology*).
- 178) Joyce N, Lombardi LR, Pfeiffer MR, Curry AE, Margolis S, Ott BR, Zullo AR. Implications of using administrative healthcare data to identify risk of motor vehicle crash-related injury: the importance of distinguishing crash from crash-related injury. (Submitted to *Annals of Epidemiology*).
- 179) Riester MR, Bosco E, Beaudoin FL, Gravenstein S, Mor V, Zullo AR. Initial and Long-term Use of Opioids and Non-steroidal Anti-inflammatory Drugs Following Total Hip and Knee Arthroplasty. (Submitted to *Geriatric Orthopaedic Surgery & Rehabilitation*)
- 180) Huang A, Mor V, Gravenstein S, Lee Y, Santostefano C, White E, McConeghy K, Zullo AR. Emulating target trials using the Long-Term Care Data Cooperative to estimate the effectiveness of mRNA COVID-19 primary series vaccination among nursing home residents in the United States. (Submitted to *American Journal of Epidemiology*).
- 181) \*Gantenberg JR, van Aalst R, Diakun D, Limone BL, Nelson CB, Savitz DA, Bengtson AM, Zullo AR. Healthcare Utilization During Acute Medically Attended RSV LRTI Episodes Among Infants in the United States. (Submitted to *PLOS One*)
- 182) Sawan MJ, Clough AJ, Hillen J, Zullo AR, Moga DC, Soulsby N, Gnjjidic D. Variation in the potentially inappropriate use of antipsychotic and benzodiazepine medications in Australian long term care facilities. (Submitted to *Research in Social and Administrative Pharmacy*).

- 183) Bosco E, Riester MR, Beaudoin FL, Schoenfeld AJ, Gravensten S, Mor V, **Zullo AR**. Comparative Safety of Tramadol and Other Opioids Following Total Hip and Knee Arthroplasty. (Submitted to *BMC Geriatrics*).
- 184) Zabolka LE, Ravinder C, Wangge G, Freitag A, Liu W, Dawoud D, Elvidge J, Bennett D, Wen X, Deruaz-Iuyet A, Ali S, Moga DC, Patorno E, Uddin MJ, Lin KJ, Rentsch CT, Li X, **Zullo AR**, Sarri G. Totality of Evidence in COVID-19 Treatment Landscape: an Umbrella Review from the International Society for Pharmacoepidemiology Comparative Effectiveness Research Special Interest Group. (Submitted to *BMJ Global Health*).

## E. ABSTRACTS (SELECTED)

---

- 1) Hayes KN, Aggarwal S, Adegboye M, **Zullo AR**, Berry SD, Oganisian A, Cheung AM, Cadarette SM. Differences in long-term bisphosphonate treatment between older adults in the United States and Canada. *JBMR Plus*, In press. American Society for Bone and Mineral Research Annual Meeting, Oct 2023, Vancouver, Canada. Poster Presentation.
- 2) **Zullo AR**, Khan MA, Pfeiffer MR, Margolis SA, Ott BR, Curry AE, Joyce NR. Effect of non-benzodiazepine hypnotics on motor vehicle crashes among older adults: A Sequential Target Trial Emulation. International Society for Pharmacoepidemiology Conference, August 23-27, 2023, Halifax, Nova Scotia, Canada. Poster Presentation.
- 3) Cupp MA, Hayes KN, Berry S, Riester M, Beaudoin F, Joshi R, **Zullo AR**. 'Opioid use after hip fracture and one-year risk of subsequent fracture: a self-controlled case series analysis'. Society for Epidemiologic Research Conference, June 13 – 16, 2023, Portland, OR. Oral Presentation.
- 4) Khan MA, Joyce NR, Pfeiffer MR, Margolis SA, Ott BR, Curry AE, Konieczny K, **Zullo AR**. Effect of non-benzodiazepine hypnotics on motor vehicle crashes among older adults. Society for Epidemiologic Research Conference, June 13 – 16, 2023, Portland, OR. Poster Presentation.
- 5) Shakya I, Joshi R, **Zullo AR**, Berry SD. Incidence of SGLT2I medication adverse events among older adults with multimorbidity. Society for Epidemiologic Research Conference, June 13 – 16, 2023, Portland, OR. Poster Presentation.
- 6) Harris D, Hayes KN, Chachlani P, **Zullo AR**, Mor V, Gravenstein S. Comparative risk of adverse events following BNT162b2 and mRNA-1273 mRNA vaccination in 6.4 million US older adults: A difference in safety or early effectiveness? Society for Epidemiologic Research Conference, June 13 – 16, 2023, Portland, OR. Poster Presentation.
- 7) Harris D, Hayes KN, Chachlani P, **Zullo AR**, Mor V, Gravenstein S. Comparative safety and early effectiveness of mRNA vaccines for SARS-CoV-2: Assessing potential effect modification by frailty. Society for Epidemiologic Research Conference, June 13 – 16, 2023, Portland, OR. Poster Presentation



- 8) Hayes KN, Harris D, Zullo AR, Mor V, COVID-19 booster vaccination by race, ethnicity, and frailty among 11.3 million older Adults. Society for Epidemiologic Research Conference, June 13 – 16, 2023, Portland, OR. Poster Presentation.
- 9) Harris DA, Hayes KN, Zullo AR, Mor V. Comparative safety of BNT162b2 and mRNA-1273 vaccines across frailty subgroups among 6.4 million older adults. [Abstract] Poster presentation, American Geriatrics Society Annual Meeting, May 2023, Long Beach, United States.
- 10) Silva JB, Howe C, Jackson JW, Riester MR, Bardenheier BH, Xu L, Puckrein G, Van Aalst R, Loiacono MM, Zullo AR. Racial Disparities in Receipt of High-Dose Influenza Vaccine Among Older Adults in the United States. AcademyHealth Annual Research Meeting, June 24 – 27, 2023, Seattle, WA. Poster Presentation.
- 11) Harris D, Hayes KN, Chachlani P, Zullo AR, Mor V, Gravenstein S. Comparative Safety and Early Effectiveness of mRNA Vaccines for Sars-Cov-2: Assessing Variation By Frailty in 6.4 Million Older Adults. Abstract: AcademyHealth Annual Research Meeting, June 24 – 27, 2023, Seattle, WA. Poster Presentation.
- 12) Tat D, Zullo AR, Mor V, Hayes KN. Sliding Scale Insulin Use in Nursing Homes Before and After Onset of the COVID-19 Pandemic. Annual Scientific Meeting of the American Geriatrics Society, May 4 – 6 (pre-conference day: Wednesday, May 3) in Long Beach, CA. Poster Presentation.
- 13) O'Neill ET, Bosco E, Persico E, Silva JB, Riester MR, Moyo P, van Aalst R, Loiacono MM, Chit A, Gravenstein S, Zullo AR. Correlation of long-term care facility vaccination practices between seasons and resident types. Population Association of America Annual Meeting, April 12-15, 2023. Abstract no. 1980.
- 14) Silva JBB, Riester MR, Van Aalst R, Loiacono MM, Zullo AR. Nursing Home Specialty: Assessing Provider Antibiotic Prescribing Practices for Urinary Tract Infections and Pneumonia. Abstract selected for poster presentation. International Society for Pharmacoepidemiology Conference, August 23-27, Halifax, Nova Scotia, Canada.
- 15) Silva JB, Howe C, Jackson JW, Riester MR, Bardenheier BH, Xu L, Puckrein G, Van Aalst R, Loiacono MM, Zullo AR. High-Dose Influenza Vaccine Receipt: Geographic Variation in Racial Health Disparities. Abstract Selected for oral presentation. International Conference on Pharmacoepidemiology and Therapeutic Risk Management (ICPE 2023), August 23-27, 2023, Nova Scotia, Canada.
- 16) Cupp MA, Beaudoin F, Hayes KN, Riester M, Berry S, Joshi R, Zullo AR. Post-Acute Care Setting after Hip Fracture Hospitalization and Subsequent Opioid Use in Older Adults. Abstract selected for oral presentation, ISPE Mid-Year Meeting 2023, April, Reykjavik, Iceland.

- 17) Moyo P, Goodyear K, Jutkowitz E, Thomas K, Zullo AR. Discharge Locations after Hospitalizations Involving Opioid Use Disorder among Medicare Enrollees. [Abstract] The Gerontological Society of America Annual Scientific Meeting, November 2022, Indianapolis, IN.
- 18) Gantenberg J, van Aalst R, Diakun DR, Limone BL, Nelson CB, Savitz DA, Zullo AR. Healthcare Utilization During Acute Medically Attended Respiratory Syncytial Virus (RSV) Episodes among Infants in the United States. IDWeek, October 19-23, 2022. Abstract no. 1262760.
- 19) Sawan MJ, Clough AJ, Hillen J, Zullo AR, Moga DC, Gnjjidic D. Variation in the potentially inappropriate use of antipsychotic medications in Australian long term care facilities. [Abstract] International Conference in Pharmacoepidemiology and Therapeutic Risk Management, Aug 2022, Copenhagen, Denmark.
- 20) Cupp MA, Beaudoin F, Joshi R, Riester M, Hayes KN, Zullo AR. One-year opioid use following discharge from post-acute care after hip fracture. [Abstract] International Conference in Pharmacoepidemiology and Therapeutic Risk Management, Aug 2022, Copenhagen, Denmark.
- 21) Hayes KN, Riester MR, Zhang Y, Beaudoin F, Zullo AR. Administrations of pro re nata (PRN) analgesics among skilled nursing facility residents following a hip fracture. [Abstract] International Conference in Pharmacoepidemiology and Therapeutic Risk Management, Aug 2022, Copenhagen, Denmark.
- 22) Zhang Y, Hayes KN, Lee Y, Zullo AR. Trends in COVID-19-related medication use in United States nursing homes. [Abstract] International Conference in Pharmacoepidemiology and Therapeutic Risk Management, Aug 2022, Copenhagen, Denmark.
- 23) Hayes KN, Cupp MA, Commey A, Joshi R, Beaudoin F, Zullo AR. Differences in opioid use after hip fracture by race and post-acute care use among U.S. older adults. [Abstract] International Conference in Pharmacoepidemiology and Therapeutic Risk Management, Aug 2022, Copenhagen, Denmark. Podium/Oral Presentation. Abstract #1223378.
- 24) Hayes KN, Daiello LA, Zullo AR, Berry SD. Use of large-scale electronic health record data to examine precise antihypertensive medication exposures immediately before a fall among US nursing home residents. [Abstract] International Conference in Pharmacoepidemiology and Therapeutic Risk Management, Aug 2022, Copenhagen, Denmark.
- 25) Silva JBB, Howe CJ, Jackson JW, Bardenheier BH, Riester MR, Van Aalst R, Loiacono MM, Zullo AR. Influenza Vaccine Uptake among United States Nursing Home Residents: Measuring Geographic variation in Racial Health Disparities . Abstract poster presentation at International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Copenhagen, Denmark. August 24-28, 2022.

- 26) Silva JBB, Howe CJ, Jackson JW, Bardenheier BH, Riester MR, Van Aalst R, Loiacono MM, **Zullo AR**. Estimation of Racial Disparities in Influenza Vaccine Use among Nursing Home Residents. Society for Epidemiologic Research Annual Meeting, Chicago, IL. June 15-17, 2022. Abstract no. 125942. Poster Session 3.
- 27) Silva JBB, Howe CJ, Jackson JW, Bardenheier BH, Riester MR, Van Aalst R, Loiacono MM, **Zullo AR**. Disparities in Influenza Vaccine Use in Nursing Homes by Marginalized Racial Group Status and Geography. AcademyHealth Annual Research Meeting, Washington, DC. June 4-7, 2022. *Accepted*.
- 28) Hayes KN, Zhang T, Berry SD\*, **Zullo AR**\*. Benefits and Harms of Standard versus Reduced-Dose Direct Oral Anticoagulants for Frail Older Adults. [Abstract] Poster presentation, US Deprescribing Research Network Annual Meeting, May 2022, Orlando, United States.  
\*Drs. Berry and Zullo contributed equally.
- 29) \*Riester MR, Bosco E, Bardenheier B, Moyo P, Baier RR, Eliot M, **Zullo AR**. Potential Sources of Racial and Ethnic Disparities in Nursing Home Influenza Vaccination. Gerontological Society of America Annual Meeting, Virtual, November 10-13, 2021. Abstract no. 1028093.
- 30) Bosco E, Beaudoin F, Gravenstein S, Mor V, **Zullo AR**. Postoperative Safety of Tramadol Among Older Adults Following Total Hip and Knee Arthroplasty. International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Virtual, August 23-25, 2021. Abstract no. SP12E. (Selected as *Geriatrics Spotlight Poster Winner*).
- 31) **Zullo AR**. Improving Cardiovascular Medication Deprescribing through Collaborative Practice. How Much is Too Much? Navigating Medication Overload by Medication Deprescribing. American College of Cardiology Annual Scientific Session and Expo, Virtual, May 15<sup>th</sup>, 2021.
- 32) Curry AE, Joyce N, Pfeiffer M, **Zullo AR**. Driver's License Suspension Policies: A Transportation-Related Source of Health Inequity. Society for Advancement of Violence and Injury Research 2020 Annual Conference, Philadelphia, PA, April 27-29, 2020. Abstract no. 208. Oral podium presentation.
- 33) D'Andrea E., Vinals L., Patorno E., Franklin J.M., Bennett, D., Largent, J.A., Moga D.C., Yuan H., Wen X., **Zullo AR**, Debray T.P.A., Sarri G. Tools for assessing the validity of non-randomized studies: a systematic review. Recommendations by the International Society for Pharmacoepidemiology Comparative Effectiveness Research Special Interest Group (CER SIG). International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Berlin, Germany, August 26-30, 2020.
- 34) McMahon AW, Gazarian M, Hak E, Kim D, **Zullo AR**. Description And Linkage Of Functional And Clinical Data Sets In Vulnerable Populations. International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Berlin, Germany, August 26-30, 2020. Abstract no. 2020-SW-4155-ISPE.

- 35) Bosco E, **Zullo AR**. Influenza Vaccination Among Frail Older Adults Receiving Post-Acute and Long-Term Care. International Society for Pharmacoepidemiology Mid-Year Meeting, Orlando, FL. April 18, 2020. Abstract no. 73. Oral podium presentation. Awarded 2020 ICPE Student Scholarship.
- 36) **Zullo AR**, Lee Y, Daiello L, Zhang T, Kiel DP, Berry SD. Comparative Effectiveness of Non-Oral Drug Treatments for Hip Fracture Prevention in Nursing Home Residents. American Geriatrics Society Annual Meeting, Long Beach, CA. May 7-9, 2020. Abstract no. 3303612 (P3). Oral podium presentation.
- 37) **Zullo AR**, Danko K, Adam G, Beaudoin F, Moyo P, Carr DB, Balk EM Prevention, Diagnosis, and Management of Opioids, Opioid Misuse, and Opioid Use Disorder in Older Adults. American Geriatrics Society Annual Meeting, Long Beach, CA. May 7-9, 2020. Abstract no. 3309205 (B262). Presidential Poster Session B.
- 38) Silva J, **Zullo AR**, Bosco E, Quilliam D, Gravenstein S. Adherence to CDC Chemoprophylaxis Guidelines and Self-Established Policies for Long-Term Care Facility Influenza Outbreak Control. American Geriatrics Society Annual Meeting, Long Beach, CA. May 7-9, 2020. Abstract no. 3344421 (D233). Presidential Poster Session.
- 39) Zhang T, **Zullo AR**, Daiello L, Shireman T, Wilson I, Berry S. Incidence rates of hip fracture in nursing home residents with and without HIV. American Geriatrics Society Annual Meeting, Long Beach, CA. May 7-9, 2020.
- 40) Lee DS, **Zullo AR**, Lee Y, Berry S. Discontinuation of Beta Blockers Among Nursing Home Residents at End of Life. American Geriatrics Society Annual Meeting, Long Beach, CA. May 7-9, 2021. Presidential Poster Session.
- 41) Krishnaswami A, Goyal P, **Zullo AR**, Orr N, Rich MW. Deprescribing Cardiovascular Medications in Older Adults: A Practical Approach. American Geriatrics Society Annual Meeting, Long Beach, CA. May 6, 2021. Abstract no. 3244539. Oral podium presentation.
- 42) Mintz J, Lee Y, **Zullo AR**, Berry S. Sample size trade-offs when identifying injurious falls using Medicare claims. American Geriatrics Society Annual Meeting, Long Beach, CA. May 7-9, 2020. Abstract no. 3352725 (B172). Presidential Poster Session.
- 43) Greene R, **Zullo AR**, Collins C. Incidence and Risk Factors for Propofol-Associated Hypertriglyceridemia. Society of Critical Care Medicine 49<sup>th</sup> Critical Care Congress, Orlando, FL. February 16-19, 2020. Abstract no. 900.
- 44) Means H, **Zullo AR**, Collins C, Willis S. The impact of a penicillin delabeling pathway on care, clinical outcomes, and efficacy. Vizient Pharmacy Network Virtual Meeting. December 1-3, 2020.

- 45) Ware L, **Zullo AR**, Collins C, Nagy J. Economic assessment of sugammadex use in the operating room. Vizient Pharmacy Network Virtual Meeting. December 1-3, 2020.
- 46) Bendix KJ, Greene RA, **Zullo AR**, Collins C, Aliotta J. Safety and effectiveness of different anticoagulation strategies in critically ill patients with COVID-19. Vizient Pharmacy Network Virtual Meeting. December 1-3, 2020.
- 47) Kohler B, Duprey M, **Zullo AR**, Collins C. Comparative Effectiveness of Dipeptidyl Peptidase-4 Inhibitors and Sulfonylureas among Frail Older Adults. Vizient Pharmacy Network Virtual Meeting. December 1-3, 2020.
- 48) Lasorsa M, **Zullo AR**, Berry SD, Collins C. Comparative effects of antihypertensives on injurious falls in nursing home residents. Vizient Pharmacy Network Virtual Meeting. December 1-3, 2020.
- 49) Abdelmeseh V, **Zullo AR**, Rogala B, Huynh JP, Berard-Collins C. Comparative cost savings of biosimilar and dose rounding utilization. Vizient Pharmacy Network Virtual Meeting. December 1-3, 2020.
- 50) Capuano AE, **Zullo AR**, Berry SD, Berard-Collins C. Development of a model to predict injurious falls in nursing home residents. Vizient Pharmacy Network Virtual Meeting. December 1-3, 2020.
- 51) Dunton P, **Zullo AR**, Collins C, Whitehead S. Development of a risk-stratification tool for empiric anti-methicillin resistant staphylococcus aureus antibiotics from patient-specific risk factors in pneumonia. Vizient Pharmacy Network Virtual Meeting. December 1-3, 2020.
- 52) Joyce NR, **Zullo AR**, Wellenius G, Foss R, Metzger K, Curry A. The use of Quasi Induced Exposure to identify risk factors for motor vehicle crashes. 13<sup>th</sup> International Conference on Health Policy Statistics, San Diego, CA. January 6, 2020. Abstract no. 307893.
- 53) Joyce NR, Pfeiffer M, **Zullo AR**, Curry AE. Individual- and neighborhood-level variation in driver's license suspensions for non-driving-related offenses. American Public Health Association Annual Meeting, Philadelphia, PA. November 2-6, 2019. Abstract no. 433829. Oral podium presentation.
- 54) Zuern A, Wood M, **Zullo AR**, McAuliffe L. Standardization of transitions of care pharmacy education for COPD patients. American Society for Health System Pharmacists Annual Summer Meeting, Boston, MA. June 8-12, 2019. Abstract no. 22-T.
- 55) Lary C, Nevola K, Hinton A, Shireman T, Motyl K, Houseknecht K, Lucas L, Hallen S, **Zullo AR**, Berry S, Kiel D. Association of Beta Blocker Use and Bone Mineral Density using the Framingham Osteoporosis Study: Effects of Dose, Duration, and Drug. American Society for Bone and Mineral Research Annual Meeting, Orlando, FL. September 20-23, 2019. Abstract no. A19021050.

- 56) Panozzo CA, Jin R, Toh D, Zullo AR, Cocoros N. Patterns of Respiratory Syncytial Virus Disease Incidence in Commercial Claims Data Compared to National Respiratory and Enteric Virus Surveillance System Data, July 2012- June 2016. ID Week Annual Meeting, Washington, DC. October 2-6, 2019. Abstract no. 679221.
- 57) Lary CW, Nevola K, Hinton AC, Shireman TI, Motyl K, Houseknecht KL, Lucas FL, Hallen S, Zullo AR, Berry SD, Kiel DP. The Effect Of Beta Blocker Use On Bone Outcomes In The Framingham Osteoporosis Study. International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Philadelphia, PA. August 24-28, 2019. Abstract no. 2019-A-6855-ISPE. Oral podium presentation.
- 58) Bosco E, Zullo AR, McConeghy KW, Moyo P, van Aalst R, Chit A, Gravenstein S, Mor V. Variation In Vaccination For Respiratory Infections And Associated Outcomes Across Long-term Care Facilities. International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Philadelphia, PA. August 24-28, 2019. Abstract no. 2019-A-5723-ISPE. Awarded 2019 ICPE Student Scholarship.
- 59) Bosco E, Zullo AR, McConeghy KW, Moyo P, van Aalst R, Chit A, Mor V, Gravenstein S. Long-Term Care Facility Variation in the Incidence of Pneumonia and Influenza Hospitalizations. Gerontological Society of America Annual Scientific Meeting, Austin, TX. November 13-17, 2019. Abstract no. 643381. Oral podium presentation.
- 60) Zuern A, Wood M, Zullo AR, McAuliffe L, Collins C. Effect of a standardized pharmacist transitions of care intervention on chronic obstructive pulmonary disease outcomes. American College of Clinical Pharmacy Annual Meeting, New York, NY. October 28, 2019. Abstract no. 50439.
- 61) Zullo AR, McConeghy KW, Zhang T, Lee Y, Daiello LA, Mor V, Kiel DP, Berry SD. Predictors of Hip Fracture among Frail Older Adults Treated with Bisphosphonates. American Geriatrics Society Annual Meeting, Portland, OR. May 2, 2019. Abstract no. 3152121. Post ID B141.
- 62) Greene R, Zullo AR, Mailloux CM, Amass T. Impact of Best Practice Advisories on Sedation Protocol Compliance and Adverse Event Mitigation. Society of Critical Care Medicine 48<sup>th</sup> Critical Care Congress, San Diego, CA. February 18, 2019. Abstract no. 1294. (Selected for *Gold Snapshot Top Ten Scoring Abstract Award*)
- 63) Berry SD, Zullo AR, Zhang T, McConeghy KW, Daiello LA, Kiel DP. Studying Fractures in Nursing Home Residents Using Linked Datasets. Gerontological Society of America's 70th Annual Scientific Meeting, Boston, MA. November 14, 2018. Abstract no. 45907. Oral symposia presentation.
- 64) Sine K, Lee Y, Zullo AR, Daiello LA, Zhang T, Berry SD. Incidence of Lower Extremity Fractures in U.S. Nursing Homes. Gerontological Society of America's 70th Annual Scientific Meeting, Boston, MA. November 16, 2018. Abstract no. 530803.

- 65) **Zullo AR**, Lee Y, Zhang T, McConeghy KW, Daiello LA, Kiel DP, Mor V, Berry SD. Effect of Bisphosphonates on Nonvertebral Fracture Among Older Nursing Home Residents. International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Prague, Czech Republic. August 22, 2018. Abstract no. 2639. Oral Podium Presentation.
- 66) **Zullo AR**, Ofori-Asenso R, Steinman MA. Association of Statins With Functioning, Rehospitalization, and Mortality in Frail Older Adults. International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Prague, Czech Republic. August 22, 2018. Abstract no. 2390. Oral Podium Presentation.
- 67) Sharmin S, **Zullo AR**, Daiello LA, Zhang T, Shireman TI. Drug- and Dose-Specific Effects of Sulfonyleureas on Cognition and Physical Functioning in Older Nursing Home Residents. International Society for Pharmacoepidemiology Mid-Year Meeting, Toronto, Canada. April 23, 2018.
- 68) Childs A, **Zullo AR**. Frequency of Respiratory Infections among Nursing Home Residents: A Semi-automated Systematic Review. International Society for Pharmacoepidemiology Mid-Year Meeting, Toronto, Canada. April 23, 2018.
- 69) McConeghy KW, **Zullo AR**, Van Aalst R, Chit A, Gravenstein S, Mor V. The National Burden of Pneumonia and Influenza in U.S. Nursing Homes, 2013-2015. ID Week, San Francisco, CA. October 3-7, 2018. Abstract no. 71713.
- 70) **Zullo AR**, Steinman MA. Effect of Statins for Secondary Prevention on Functioning, Rehospitalization, and Mortality in Frail Older Adults. American Geriatrics Society Annual Meeting, Orlando, FL. May 4, 2018. Paper no. P24. Oral Podium Presentation.
- 71) Scotina A, Gutman R, **Zullo AR**. Using Generalized Propensity Score Matching to Evaluate the Cardiovascular Safety of Multiple Type 2 Diabetes Treatments. International Society for Pharmacoepidemiology Mid-Year Meeting, Toronto, Canada. April 23, 2018. Oral Podium Presentation.
- 72) **Zullo AR**, Steinman MA. Relative and Absolute Effects of Statins for Secondary Prevention on Functioning, Rehospitalization, and Mortality in Frail Older Adults. International Society for Pharmacoepidemiology Mid-Year Meeting, Toronto, Canada. April 23, 2018. Abstract no. 41. Oral Podium Presentation.
- 73) **Zullo AR**, Olean M, Berry SD, Lee Y, Steinman MA. Adverse Effects of Beta-Blockers in Older Nursing Home Residents after Myocardial Infarction. Asian Conference on Pharmacoepidemiology, Brisbane, Australia. October 30, 2017. Oral Podium Presentation.
- 74) Nolan K, **Zullo AR**, Bosco E, Marchese C, Berard-Collins C. Controlled Substance Diversion in Health Systems: Failure Mode and Effects Analysis for Prevention. American Society of

Health-System Pharmacy Midyear Clinical Meeting, Orlando, FL. December 4, 2017. Abstract no. 334998.

- 75) Olean MS, Zullo AR, Berry SD, Lee Y, Steinman MA. Adverse effects of beta-blockers in older nursing home residents after acute myocardial infarction. American Society of Health-System Pharmacy Midyear Clinical Meeting, Orlando, FL. December 5, 2017. Abstract no. 389708.
- 76) Previte M, Zullo AR, Beaulieu J, Collins C. Patterns of sugammadex use for the reversal of short-acting non-depolarizing neuromuscular blocking agents. American Society of Health-System Pharmacy Midyear Clinical Meeting, Orlando, FL. December 5, 2017. Abstract no. 396876.
- 77) Ortega A, Zullo AR, Huynh JP, Brunault R, Berard-Collins C. Discontinuation of medications after advanced cancer diagnosis in older nursing home residents. Vizient University Health System Consortium Meeting, Orlando, FL. December 2, 2017.
- 78) Corsi K, Zullo AR, Mogul A, Dapaah-Afriyie R, Collins C. Subgroup effects of secondary prevention medication use among older nursing home residents after acute myocardial infarction. Vizient University Health System Consortium Meeting, Orlando, FL. December 2, 2017.
- 79) Mogul A, Zullo AR, Corsi K, Dapaah-Afriyie R, Collins C. Effect of secondary prevention medication use on functional outcomes, death, and rehospitalization in older nursing home residents after acute myocardial infarction. Vizient University Health System Consortium Meeting, Orlando, FL. December 2, 2017.
- 80) Shangani S, Operario O, Zullo AR, Howe C. Prevalence and predictors of concurrent sexual partnerships among sexually active men in Kenya. American Public Health Association Annual Meeting, Atlanta, Georgia. November 6, 2017.
- 81) Zullo AR, Dahabreh IJ, Nelson J, Kent DM, Crown WH, Shah ND, Inker LA. "Comparative Effectiveness of Angiotensin Converting Enzyme Inhibitors and Angiotensin Receptor Blockers among Chronic Kidney Disease Patients". International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Montreal, Canada. August 2017. Oral Podium Presentation.
- 82) Dahabreh IJ, Nelson J, Zullo AR, Crown WH, Shah ND, Inker LA. "Emulating a Multi-Arm Randomized Controlled Trial of Antihypertensive Treatments for Chronic Kidney Disease Using Observational Data: How Do the Results Compare with Network Meta-Analysis?" International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Montreal, Canada. August 2017. Oral Podium Presentation.
- 83) Zullo AR, Sharmin S, Daiello LA, Zhang T, Shireman TI. "Dose- and Drug-Specific Effects of Sulfonyleureas on Hypoglycemia and Cardiovascular Events in Older Nursing Home Residents". International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Montreal, Canada. August 2017. Oral Podium Presentation.



- 84) **Zullo AR**, Hersey M, Sharmin S, Bosco E, Daiello LA, Lee Y, Boscardin WJ, Dore DD, Lee SJ, Steinman MA. "Type of Beta-Blocker Use by Diabetes Status and Associated Outcomes in Older Nursing Home Residents after Acute Myocardial Infarction". International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Montreal, Canada. August 2017. Oral Podium Presentation.
- 85) **Zullo AR**, Smith RJ, Gutman R, Mor V, Dore DD. "Comparative Safety of Dipeptidyl Peptidase-4 Inhibitors and Sulfonylureas in Older Nursing Home Residents". American Geriatrics Society Annual Meeting, San Antonio, TX. May 2017. Oral Podium Presentation.
- 86) **Zullo AR**, Smith RJ, Gutman R, Mor V, Dore DD. "The Effect of Dipeptidyl Peptidase-4 Inhibitors versus Sulfonylureas on Cognition and Physical Functioning in Frail Older Nursing Home Residents". International Society for Pharmacoepidemiology Mid-Year Meeting, London, UK. April 2017. Oral Podium Presentation.
- 87) **Zullo AR**, Lee Y, Daiello L, Mor V, Boscardin WJ, Steinman MA. "Effect of Beta Blocker Use on Daily Functioning, Rehospitalization, and Death after Myocardial Infarction Among Older Nursing Home Residents". AcademyHealth Annual Meeting, Boston, MA. June 2016. Oral Podium Presentation.
- 88) **Zullo AR**, Lee Y, Daiello L, Mor V, Boscardin WJ, Steinman MA. "Effect of Beta Blocker Use on Daily Functioning, Rehospitalization, and Death after Myocardial Infarction Among Older Nursing Home Residents". American Geriatrics Society Annual Meeting, Long Beach, CA. May 2016. Oral Podium Presentation.
- 89) **Zullo AR**, Lee Y, Mor V, Daiello L, Komaiko K, Boscardin WJ, Steinman MA. "Beta Blocker Use among United States Nursing Home Residents after Myocardial Infarction: A National Study". American Geriatrics Society Annual Meeting, National Harbor, MD. May 2015. Oral Podium Presentation.
- 90) **Zullo AR**, Kiel DP, Berry SD. Effect of Bisphosphonates on Nonvertebral Fracture among Older Nursing Home Residents. American Geriatrics Society Annual Meeting, Orlando, FL. May 4, 2017. Abstract no. 289280.
- 91) Amir O, Zhang T, **Zullo AR**, Kiel DP, Berry SD. Incidence of hip fracture in Native American residents of U.S. nursing homes. American Geriatrics Society Annual Meeting, Orlando, FL. May 4, 2017. Abstract no. 2923112.
- 92) Zhang T, **Zullo AR**, Shireman T. Temporal trends in age and function for newly admitted long-stay nursing home residents with multiple sclerosis. American Geriatrics Society Annual Meeting, Orlando, FL. May 4, 2017.

- 93) Zhang T, Liu Q, Daiello L, **Zullo AR**, Lee Y, Mor V, McConeghy KW, Kiel DP, Berry SD. Prescription drug burden and hip fracture risk in nursing home residents. American Geriatrics Society Annual Meeting, Orlando, FL. May 4, 2017.
- 94) Berry SD, **Zullo AR**, Zhang T, Lee Y, Banerjee G, Daiello L, McConeghy K, Dosa D, Mor V, Kiel DP. Bisphosphonate Prescriptions May Reduce Fracture Risk in Older Nursing Home (NH) Residents. American Society for Bone and Mineral Research, Denver, CO. September 2017.
- 95) Sharmin S, **Zullo AR**, Daiello LA, Zhang T, Shireman TI. Dose- and Drug-Specific Effects of Sulfonylureas on Hypoglycemia and Cardiovascular Events in Older Nursing Home Residents. Brown University Public Health Research Day, Providence, RI. April 2017.
- 96) Brunault R, **Zullo AR**, Huynh JP, Liauw JC, Berard-Collins C. Managing diabetes mellitus in nursing home residents with advanced cancer: a national study. Brown University Public Health Research Day, Providence, RI. April 2017.
- 97) **Zullo AR**, Beaulieu J, Berard-Collins C. Effect of drug shortage mitigation strategies on time to ampicillin/sulbactam administration. American Society for Health-system Pharmacists Midyear Clinical Meeting, Las Vegas, NV. December 2016.
- 98) Mahmoud L, **Zullo AR**, Fehnel CR, Thompson BB, Wendell L. Age-specific effects of an analgesia and sedation protocol in neurocritical care patients. American Society for Health-system Pharmacists Midyear Clinical Meeting, Las Vegas, NV. December 2016.
- 99) Greene R, **Zullo AR**, Berard-Collins C. Effect of pharmacist interventions on drug cost savings in a collaborative, unit-based practice model. American Society for Health-system Pharmacists Midyear Clinical Meeting, Las Vegas, NV. December 2016.
- 100) Adams J, Howe C, **Zullo AR**, Marshall BDL, Akilah K. Estimating the Impact of Intervening on Adolescent Binge Drinking on Neighborhood-based Disparities in HIV/STI Prevalence: A Causal Mediation Analysis, Society for Adolescent Medicine, New Orleans, LA. March 2017.
- 101) **Zullo AR**, Dore DD, Daiello L, Baier RR, Gutman R, Gifford DR, Smith RJ. National Trends in Treatment Initiation for Nursing Home Residents with Diabetes Mellitus, 2008-2010, Lifespan Research Celebration Day, Providence, RI. October 2016.
- 102) **Zullo AR**, Dore DD, Gutman R, Mor V, Smith RJ. Food and Drug Administration Warnings and Diabetes Medication Prescribing Patterns for Older Nursing Home Residents, Lifespan Research Celebration Day, Providence, RI. October 2016.
- 103) **Zullo AR**, Lee Y, Daiello L, Mor V, Boscardin WJ, Steinman M. Effect of Beta Blocker Use on Daily Functioning, Rehospitalization, and Death after Myocardial Infarction Among Older Nursing Home Residents, Lifespan Research Celebration Day, Providence, RI. October 2016.

- 104) Hersey ML, **Zullo AR**, Lee Y, Sharmin S, Bosco E, Mor V, Steinman MA. Type of Beta-Blocker Use by Diabetes Status in Nursing Home Residents after Myocardial Infarction. Lifespan Research Celebration Day, Providence, RI. October 2016.
- 105) Berry SD, Lee Y, **Zullo AR**, Mor V, Banerjee G, McConeghy K, D'Agostino RA, Hiris J, Kiel DP. Fracture Risk Assessment In Long-term care: FRAIL. American Society for Bone and Mineral Research Annual Meeting, Atlanta, GA. September 2016.
- 106) **Zullo AR**, Dore DD, Gutman R, Mor V, Smith RJ. Selection of Sulfonylureas over Metformin in Elderly Nursing Home Residents with Diabetes Mellitus. International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Dublin, Ireland. August 2016.
- 107) Ganley KY, **Zullo AR**, Sosa-Rubi SG, Conde-Glez CJ, Lurie MN, Marshall BDL, Operario D, Mayer KH, Galarraga O. Incidence and Time-Varying Predictors of HIV and Sexually Transmitted Infections (STIs) Among Male Sex Workers in Mexico City. International AIDS Conference (AIDS 2016), Durban, South Africa. July 2016.
- 108) **Zullo AR**, Dore DD, Daiello L, Baier RR, Gutman R, Gifford DR, Smith RJ. National Trends in Treatment Initiation for Nursing Home Residents with Diabetes Mellitus, 2008-2010. AcademyHealth Annual Research Meeting, Boston, MA. June 2016.
- 109) **Zullo AR**, Dore DD, Daiello L, Baier RR, Gutman R, Gifford DR, Smith RJ. Patterns of Treatment Initiation for Nursing Home Residents with Diabetes Mellitus, 2008-2010. American Diabetes Association Scientific Sessions, New Orleans, LA. June 2016. Selected for moderated poster discussion *Epidemiology of Diabetes – What's New?*.
- 110) McAuliffe L, **Zullo AR**, Petrillo S, Dapaah-Afriyie R, Berard-Collins C. Development of a transitions of care pharmacist tool to predict 30-day rehospitalization. American Society of Health-system Pharmacy Summer Meeting, Baltimore, MD. June 2016
- 111) Ganley KY, **Zullo AR**, Sosa-Rubi SG, Conde-Glez CJ, Lurie MN, Marshall BDL, Operario D, Mayer KH, Galarraga O. Incidence and Time-Varying Predictors of HIV and Sexually Transmitted Infections (STIs) Among Male Sex Workers in Mexico City. HIV and Hepatitis in the Americas, Mexico City, Mexico. April 2016. (Selected for *Brown University International Affairs Undergraduate Student Fund Award*).
- 112) Mahmoud LN, **Zullo AR**, Potter NS, Fehnel CR, Thompson BB, Wendell LC. Effect of an Analgesia and Sedation Protocol in Neurocritical Care Patients. American Academy of Neurology Annual Meeting, Vancouver, BC, Canada. April 2016.
- 113) Bunnell K, **Zullo AR**, Adams C, Berard-Collins C. Methicillin-Resistant Staphylococcus Aureus Pneumonia in Critically Ill Trauma Patients. Society of Critical Care Medicine Annual Congress, Orlando, FL. February 2016.

- 114) Yankulina O, **Zullo AR**, Huynh JP, Berard-Collins CM. Retrospective Analysis of the Association Between Pertuzumab and Diarrhea in HER2-Positive Breast Cancer Patients. University Health System Consortium Conference, Orlando, FL. December 2015.
- 115) Hunt L, **Zullo AR**, Berard-Collins CM, Petrillo S, Dapaah-Afriyie R. Identification of Pharmacy Transitions of Care Patients at Highest Risk of 30-day Hospital Readmission. University Health System Consortium Conference, Orlando, FL. December 2015.
- 116) Berry SD, **Zullo AR**, Lee Y, Mor V, D'Agostino R, Dosa D, Hiris J, Banerjee G, Kiel DP. A Useful Clinical Model to Predict Hip Fracture in U.S. Nursing Home (NH) Residents: the first step in developing a screening tool in the nursing home. American Society for Bone and Mineral Research Annual Meeting, Seattle, WA. October 2015.
- 117) Mahmoud L, **Zullo AR**, McKaig D, Berard-Collins CM. Concordance between aPTT and anti-Xa monitoring methods for Unfractionated Heparin in a hospitalized population: an exploratory cohort study. 23<sup>rd</sup> Lifespan Research Symposium, Providence, RI. September 2015.
- 118) Lou U, **Zullo AR**, Cabral SE, Collins C. Adherence to pegfilgrastim primary prophylaxis guidelines in current practice. Eastern States Conference for Pharmacy Residents and Preceptors, Hershey, PA. May 2015. (Selected for *Best Research Poster Award*).
- 119) Ganley K, **Zullo AR**, Li E, Sosa-Rubí SG, Galárraga O. Socioeconomic Status and Return to Clinic Among Male Sex Workers in Mexico City. Brown University Public Health Research Day, Providence, RI. April 2015.
- 120) Caine K, **Zullo AR**, Li E, Sosa-Rubí SG, Galárraga O. The Effect of Economic Interventions on HIV Treatments and Prevention: A Systematic Review. Brown University Public Health Research Day, Providence, RI. April 2015. (Selected as runner-up for *Best Undergraduate Research Poster Award*).
- 121) Lou U, **Zullo AR**, Cabral SE, Elsaid K, Collins C. Adherence to pegfilgrastim primary prophylaxis guidelines in current practice. Brown University Public Health Research Day, Providence, RI. April 2015.
- 122) Fudin H, **Zullo AR**, Migliozi DR, Elsaid K, Collins C, Dapaah-Afriyie RB. Engaging renal transplant patients in home electronic blood pressure monitoring: an exploratory qualitative study. Brown University Public Health Research Day, Providence, RI. April 2015.
- 123) Weeden N, **Zullo AR**, Li Q, Sosa-Rubí SG, Galárraga O. Socioeconomic status and CD4 count among male sex workers at high risk of contracting HIV. Brown University Public Health Research Day, Providence, RI. April 2015.
- 124) **Zullo AR**, Howe C. Estimating the effect of health insurance on personal prescription drug importation in various subpopulations using complex survey data and marginal structural models. Society for Epidemiologic Research Annual Meeting, Denver, CO. June 2015.

- 125) Berry SD, Zullo AR, Lee Y, Kiel D, Dosa D, Mor V. Incidence of hip fracture in U.S. nursing homes. American Geriatrics Society (AGS) Annual Meeting, National Harbor, MD. May 2015.
- 126) Zullo AR, Howe C. Estimating the effect of health insurance on personal prescription drug importation in various subpopulations using complex survey data and marginal structural models. Brown University Public Health Research Day, Providence, RI. April 2015.
- 127) Postman C, Li E, Zullo AR, Sosa-Rubí SG, Galárraga O. Socioeconomic status and access to health care among men-who-have-sex-with-men at high risk of HIV acquisition. Brown University Public Health Research Day, Providence, RI. April 2015.
- 128) Lou U, Zullo AR, Elsaid K, Cabral SE, Collins C. Adherence to pegfilgrastim primary prophylaxis guidelines in current practice: a multi-center cohort study. University Health System Consortium Conference, Anaheim, CA. December 2014.
- 129) Fudin H, Migliozi D, Zullo AR, Elsaid K, Collins C, Dapaah-Afriyie RB. Engaging renal transplant patients in home electronic blood pressure monitoring: an exploratory qualitative study. University Health System Consortium Conference, Anaheim, CA. December 2014.
- 130) Migliozi D, Zullo AR, Elsaid K, Collins C. Evaluation of Integrated Clinical Pharmacy Services and Home Electronic Blood Pressure Monitoring in Renal Transplantation: Preliminary Results of a Single-Center Cohort Study. 22<sup>nd</sup> Lifespan Research Symposium, Providence RI. October 2014.
- 131) Migliozi D, Zullo AR, Elsaid K, Collins C. The Effect of Integrated Clinical Pharmacy Services and Home Electronic Blood Pressure Monitoring on Blood Pressure Among Renal Transplant Recipients. 22<sup>nd</sup> Lifespan Research Symposium, Providence, RI. October 2014.
- 132) Zullo AR, Dore DD, Galarraga O. Development and Validation of a Prescription Drug Importation Index. 22<sup>nd</sup> Lifespan Research Symposium, Providence, RI. October 2014.
- 133) Rocafort PT, Zullo AR, Haines ST, Lebovitz L. Characteristics of Performance Assessment and Feedback: Variation in Faculty Perception by Duration of Academic Employment. American Association of Colleges of Pharmacy, Grapevine, TX. July 2014.
- 134) Zullo AR, Dore D, Rocafort PT, Galarraga O, Mor V. Predictors of Prescription Drug Importation and Development of an Importation Risk Score. Brown University Public Health Research Day, Providence, RI. April 2014.
- 135) Zullo AR, Krishnaswamy N, Dore D. A Systematic Review of the Adverse Effects of Atypical Antipsychotics in the Elderly Population. 29<sup>th</sup> International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Montreal, Canada. August 2013.

- 136) **Zullo AR**, Krishnaswamy N, Dore D. A Systematic Review of the Adverse Effects of Atypical Antipsychotics in the Elderly Population. Brown University Public Health Research Day, Providence, RI. April 2013.
- 137) **Zullo AR**, Amin P. Political advocacy training in Doctor of Pharmacy curricula: a quantitative assessment and analysis of educational need. American Society of Health-System Pharmacists Annual Meeting, New Orleans, LA. December 2011.
- 138) **Zullo AR**, Amin P, Cintron N. Assessment of the impact of the historical Rutgers University Big Brother Big Sister Pharmacy Mentoring Program on student pharmacy professionals. American Society of Health-System Pharmacists Annual Meeting, Anaheim, CA. December 2010.

#### F. ACCEPTED & SUBMITTED ABSTRACTS

---

- 139) Stettenbauer EG, Berry SD, Lee Y, **Zullo AR**, Daiello LA. Evaluating Lecanemab Eligibility for Residents in Skilled Nursing Facilities with Alzheimer's Disease or Mild Cognitive Impairment, Abstract submitted to International Society for Pharmacoepidemiology (IPSE) Annual Meeting, August 24-28, 20204, Berlin, Germany.
- 140) Harris D, Chachlani P, Hayes KN, Mor V, **Zullo AR**. COVID-19 and influenza vaccine co-administration among older U.S. adults. Abstract submitted to International Society for Pharmacoepidemiology (IPSE) Annual Meeting, August 24-28, 20204, Berlin, Germany.
- 141) Khan MA, Joyce NR, Pfeiffer MR, Margolis SA, Ott BR, Curry AE, Riester MR, **Zullo AR**. Comparative safety of antidepressants on motor-vehicle crash risk among older adults with depression: a sequential target trial emulation. Abstract Submission, Society of Epidemiologic Research (SER) 2024, Austin, Texas.
- 142) Cupp MA., Berry SD., Hayes KN., Daiello L, Ko D, Riester, MR, and **Zullo AR**. "Concurrent use of Cholinesterase Inhibitors and Beta-Blockers and Risk of Fall-Related Injury: a self-controlled case series analysis. Abstract accepted for oral presentation at ISPE Mid-Year Meeting 2024, Orland, FL, April 2024.
- 143) Chambers LC, Hallowell BD, **Zullo AR**, Rodriguez M, Khan MA, Berk J, Gaither R, Beaudoin BL, Wightman RS. Risk of Overdose While Engaged in Buprenorphine Treatment for Opioid Use Disorder in the Fentanyl Era. Poster Submission, Rx and Illicit Drug Summit, April 1-4, 2024, Atlanta, Georgia.

#### G. INVITED ACADEMIC PRESENTATIONS

---

##### International

- 1) **Zullo AR**. Measuring Medication Burden. USDeN/AGING Networks, Virtual, July 14, 2021.

- 2) **Zullo AR**. At the intersection of frailty and pharmacoepidemiology: Foundations, applications, and future directions. International Society for Pharmacoepidemiology All-Access (replacement for prior in-person Mid-Year Meeting in Orlando, FL, April 18-21, 2020), Virtual, December 8, 2020.
- 3) **Zullo AR**. Biostatistics and Research Design for Clinical Pharmacists. Kwame Nkrumah University of Science and Technology, School of Pharmacy, Kumasi, Ghana. March 27-28, 2019.
- 4) **Zullo AR**. Biostatistics and Research Design for Clinical Pharmacists. Kwame Nkrumah University of Science and Technology, School of Pharmacy, Accra, Ghana. March 25-26, 2019.
- 5) **Zullo AR**. Biostatistics and Research Design for Clinical Pharmacists. Kwame Nkrumah University of Science and Technology, School of Pharmacy, Accra, Ghana. March 27, 2018.
- 6) **Zullo AR**. Biostatistics and Research Design for Clinical Pharmacists. Kwame Nkrumah University of Science and Technology, School of Pharmacy, Kumasi, Ghana. March 29, 2018.
- 7) **Zullo AR**, Moga DC, Gnjdjic D, Wei J, Lapane K. Methodological Challenges and Opportunities of Conducting Pharmacoepidemiologic Research in Medically Complex Populations: The Case of Nursing Homes. International Conference on Pharmacoepidemiology and Therapeutic Risk Management Symposium, Montreal, Canada. August 28, 2017.

## National

- 8) **Zullo AR**. Clinically Significant Drug Interactions among Nursing Home Residents with ADRD. NIA Workshop: Optimizing Older Adult Care through the Use of Electronic Health Records, Virtual, February 23, 2024.
- 9) **Zullo AR**. Medications and Motor Vehicle Crashes in Older Adults. Finger Lakes Geriatric Education Center of Upstate New York and the Geriatric/Aging Division of the University of Rochester, Community-Wide Geriatric Medicine Grand Rounds, Virtual, September 14, 2022.
- 10) **Zullo AR**. Medications and Motor Vehicle Crashes in Older Adults. Hebrew SeniorLife Hinda and Arthur Marcus Institute for Aging Research, Musculoskeletal Research Center, Virtual, June 29, 2022.
- 11) **Zullo AR**. Medications and Motor Vehicle Crashes in Older Adults. University of North Carolina at Chapel Hill Division of Geriatric Medicine and Center for Aging and Health, Virtual, June 6, 2022.
- 12) **Zullo AR**. Deprescribing Cardiovascular Medications: Embedding Interventions in Routine Clinical Practice. American Society of Consultant Pharmacists, San Diego, CA, November 4-7, 2021.

- 13) **Zullo AR**. Pharmacist Tools for Managing Medication Adherence and Addressing Polypharmacy. National Heart, Lung, and Blood Institute Workshop on Improving Heart Failure Care for Older Adults: Gaps and Strategies to Optimize Care Transitions, Virtual, September 27-28, 2021.
- 14) **Zullo AR**. Data linkage to study medication use during post-acute care in skilled nursing facilities among Medicare beneficiaries. Veterans Affairs Geriatrics and Extended Care Data Analysis Center Seminar, Virtual, September 15, 2020.
- 15) **Zullo AR**. Drawing Causal Inference from Observational Data: Application to Bisphosphonates and Fracture. Maine Medical Center, Center for Outcomes Research and Evaluation (CORE) Research Forum, Portland, ME, October 10, 2018.
- 16) **Zullo AR**. Diabetes Research Using CMS Data Sources. National Institutes of Health, Diabetes Mellitus Interagency Coordinating Committee Meeting on Fostering Research on Older Adults with Diabetes Receiving Long-term Care, Bethesda, MD. May 29, 2018.
- 17) **Zullo AR**. Drawing Causal Inference from Observational Data on Frail, Older Adults, Institute for Aging Research in Progress Seminar, Hebrew SeniorLife (affiliate of Harvard Medical School), Boston, MA. May 16, 2018.
- 18) **Zullo AR**. “Using Rapid-cycle Research to Inform Pharmacy Decision-making”. Parkland Hospital/Texas Tech University Health Sciences Center School of Pharmacy. Pharmacy Grand Rounds, Dallas, TX. October 2016.

#### **Local/Regional**

- 19) **Zullo AR**. Data linkage to study medication use during post-acute care in skilled nursing facilities among Medicare beneficiaries. COBRE Center on Opioids and Overdose (P20GM125507) Seminar, Providence, RI. June 2021.
- 20) **Zullo AR**. Variation in Propensity Score-Adjusted Estimates of Treatment Effects: Sulfonylureas versus Dipeptidyl Peptidase-4 Inhibitors for Diabetes as a Case Study, Brown University Women’s Reproductive Health Research Career Development Program K Award Seminar, Providence, RI. October 2016.
- 21) **Zullo AR**. Estimating Predicted Probabilities from Logistic Regression: Different Methods Correspond to Different Target Populations, Brown University K12 Center for Evidence Synthesis in Health Seminar, Providence, RI. September 2016.
- 22) **Zullo AR**. Selection of Sulfonylureas over Metformin in Older Nursing Home Residents. Brown University Pharmacoepidemiology Core, Providence, RI. August 2016.



- 23) **Zullo AR**. Estimating and Modeling Cost Data Using Generalized Gamma Regression: A Primer. Brown University K12 Center for Evidence Synthesis in Health Seminar, Providence, RI. June 2016.
- 24) **Zullo AR**. Effect of Beta Blocker Use on Daily Functioning, Rehospitalization, and Death after Myocardial Infarction among Older Nursing Home Residents. Brown University Pharmacoepidemiology Core, Providence, RI. May 2016.
- 25) **Zullo AR**, Daiello L. Effect of Beta Blocker Use on Daily Functioning, Rehospitalization, and Death after Myocardial Infarction Among Older Nursing Home Residents. Brown University Pharmacoepidemiology Core, Providence, RI. February 2016.
- 26) **Zullo AR**. National Trends in Treatment Initiation for Nursing Home Residents with Type 2 Diabetes Mellitus, 2008-2010. Brown University Pharmacoepidemiology Core, Providence, RI. November 2015.
- 27) **Zullo AR**. National Trends in Initiation of Diabetes Medications in the Nursing Home and Current Best Practices for Prescribing. Rhode Island Hospital Department of Pharmacy Seminar, Providence, RI. November 2015.
- 28) **Zullo AR**. What's the Risk? A Simple Approach for Estimating Adjusted Risk Measures from Nonlinear Models Including Logistic Regression. Brown University Center for Evidence-based Medicine Seminar, Providence, RI. September 2015.
- 29) **Zullo AR**. Beta Blockers Use among United States Nursing Home Residents after Myocardial Infarction: A National Study. Rhode Island Hospital Department of Pharmacy Seminar, Providence, RI. May 2015.
- 30) **Zullo AR**. Pharmaceutical Contamination of Drinking Water: Methodological Challenges to Human Health Risk Assessment. Brown University School of Public Health PhD Student Seminar, Providence, RI. December 2013.

#### **H. OTHER INVITED PRESENTATIONS**

---

- 31) **Zullo AR**. Ingenol Mebutate for Treatment of Actinic Keratosis. Horizon Blue Cross/Blue Shield of New Jersey, Newark, NJ. April 2012.
- 32) **Zullo AR**. Pharmacogenomics of Warfarin in the Egyptian Patient Population. Princeton University Medical Center, Princeton, NJ. February 2012.
- 33) **Zullo AR**, Wang S, Haddad S. Influenza and Pneumococcal Vaccinations for Primary Prevention. Princeton University Medical Center, Princeton, NJ. February 2012.

- 34) **Zullo AR.** Methicillin Susceptible *Staphylococcus aureus* Bacteremia and Endocarditis in IV Drug Users. Princeton University Medical Center, Princeton, NJ. February 2012.
- 35) **Zullo AR.** Apixaban versus Enoxaparin for Thromboprophylaxis in Medically Ill Patients. Princeton University Medical Center, Princeton, NJ. February 2012.
- 36) **Zullo AR.** Apnea of Prematurity: Comparative Effectiveness of Caffeine Citrate and Aminophylline. Jersey Shore University Medical Center, Neptune, NJ. December 2011.
- 37) **Zullo AR.** Treatment of Community Acquired Pneumonia in Pediatric Patients. Jersey Shore University Medical Center, Neptune, NJ. December 2011.
- 38) **Zullo AR.** Remifentanyl and Propofol for Weaning of Mechanically Ventilated Pediatric Intensive Care Unit Patients. Jersey Shore University Medical Center, Neptune, NJ. November 2011.
- 39) **Zullo AR,** Vo J. Sexually Transmitted Diseases: Key Guideline Updates Affecting Navajo Nation. Indian Health Services—Kayenta Health Center, Kayenta, AZ. November 2011.
- 40) **Zullo AR,** Chen J. Medical and Pharmaceutical Management of Angiotensin Converting Enzyme Inhibitor-Induced Angioedema. Robert Wood Johnson University Hospital, Hamilton, NJ. October 2011.
- 41) **Zullo AR,** Chen J. Falls Prevention Strategies in Elderly Patients. Robert Wood Johnson University Hospital. Hamilton, NJ. October 2011.
- 42) **Zullo AR,** Chen J. Proper Medication Disposal Practices and Environmental Implications. Robert Wood Johnson University Hospital, Hamilton, NJ. September 2011.
- 43) **Zullo AR.** Predictors of New-Onset Diabetes in Patients Treated with Atorvastatin. CVS Caremark Headquarters Clinical Operations Team, Woonsocket, RI. June 2011.
- 44) **Zullo AR.** Leukotriene Antagonists as First-Line or Add-On Asthma-Controller Therapy. CVS Caremark Headquarters Clinical Operations Team, Woonsocket, RI. June 2011.
- 45) **Zullo AR.** Olmesartan for the Delay or Prevention of Microalbuminuria in Type 2 Diabetes. CVS Caremark Headquarters Clinical Operations Team. Woonsocket, RI. May 2011.

## **I. PROFESSIONAL PUBLICATIONS**

---

- 1) Lown Institute with acknowledgement to **Zullo AR.** Medication Overload: America's Other Drug Problem. Available from: <https://lowninstitute.org/>.

- 2) World Health Organization (WHO) with acknowledgement to Systematic Review team members Balk EM, Adam GP, Di M, Kimmel HJ, Olean M, Roydhouse JK, Smith B, **Zullo AR** (listed alphabetically). WHO Guidelines for the pharmacological and radiotherapeutic management of cancer pain in adults and adolescents. Available from: <http://www.who.int/iris/handle/10665/279700> and <https://www.ncbi.nlm.nih.gov/books/NBK537486/>. License: CC BY-NC-SA 3.0 IGO. ISBN 9789241550390.
- 3) **Zullo AR**. OTC Spotlight: Niacin for Dyslipidemia. *CVS Clinical FOCVS Newsletter*. 2011; 13(8): 5-6.
- 4) **Zullo AR**. Attention Deficit Hyperactivity Disorder (ADHD) Treatment Review. *CVS Clinical FOCVS Newsletter*. 2011;13(8):1-4.
- 5) **Zullo AR**. Sun Protection: Basic Principles of Sunscreens. *CVS Clinical FOCVS Newsletter*. 2011;13(7):2-4.
- 6) **Zullo AR**. Aquatic Envenomations: Avoid the Sting. *Shore Memorial Hospital Pharmacy Newsletter*. 2010;6(1):1-2
- 7) **Zullo AR**. Spider Bites: Brown v. Black. *Shore Memorial Hospital Pharmacy Newsletter*. 2010;6(1):2-4.
- 8) **Zullo AR**. OTC Spotlight: Niacin for Dyslipidemia. *CVS Clinical FOCVS Newsletter*. 2011; 13(8): 5-6.
- 9) **Zullo AR**. Leading Littles at Lambda: Rutgers. *The Laurel*. 2010;6(4):1
- 10) **Zullo AR**. Behind-The-Counter Medications: A Healthcare Solution. *The Roosevelt Institution Public Policy Journal*. 2008:3-5

## 7. RESEARCH GRANTS

---

### A. GRANTS CURRENTLY HELD

---

#### **Risk for hospitalization and all-cause mortality in Veterans prescribed antipsychotic medications for PTSD, anxiety, and depression**

Role on Project: Co-Investigator (MPIs: M. McGeary, W. Wu, Q. Zeng)

Funder: Department of Defense CDMRP

Mechanism: I01

Project Period: Sept 1<sup>st</sup> 2023 – Aug 31<sup>st</sup> 2027

Project Identifier: PR221687

Total PVAMC Subaward Amount: \$1,020,708

Description: Long-Term Outcomes of Antipsychotic Medication Use in Veterans with PTSD

### **Models of Post-Acute Care in Complex Older Adults with Fracture**

Role on Project: Site Principal Investigator (MPI: S. Berry & C. C lon-Emeric)

Funder: Patient-Centered Outcomes Research Institute

Mechanism: Research Award (Comparative Effectiveness of Multimodal Interventions to Prevent Osteoporotic Fractures Funding Announcement)

Project Period: Jan 1<sup>st</sup> 2024 – Dec 31<sup>st</sup>, 2029

Total Brown Subaward Amount: \$1,517,062

Description: The overarching goal of this project is to compare the effectiveness of care models promoting early OP prescribing, deprescribing FRIDs, or both in reducing subsequent injurious falls and fractures, and to test the impact of these care models on patient-centered outcomes.

### **Addressing racial/ethnic geographic disparities in COVID-19 health services and outcomes among nursing home residents with ADRD**

Role on Project: Sponsor/Primary Mentor (PI: J. Silva)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: F31

Project Period: 07/23 – 06/25

Total Amount: \$95,388

Project Identifier: F31AG079607

Description: This research will provide some of the first empirical evidence for policymakers and other stakeholders that can be used to improve health equity for COVID-19 and other conditions among nursing home residents, as well as establish unique methods that can be used broadly to conduct accurate, timely, and relevant future studies of disparities in nursing home residents and other populations.

### **Treating pain in autoimmune disease: concurrent use of opioids and biologic medication**

Role on Project: Sponsor/Primary Mentor (PI: M. Cupp-Buxton)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: F31

Project Period: 06/23- 05/25

Total Amount: \$95,388

Project Identifier: F31AG081089

Description: Assessing the patterns and safety outcomes of concurrent opioids and biologics use in older adults with autoimmune disease. Findings will address a critical research gap around the safety of concurrent opioids and biologic use and inform clinical practices to optimize treatment strategies.

### **Clinically Significant Drug Interactions among Nursing Home Residents with ADRD**

Role on Project: Principal Investigator

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: R01

Project Period: Sep 15<sup>th</sup>, 2022 - May 31<sup>st</sup>, 2027

Total Amount: \$3,538,620

Project Identifier: R01AG077620

Description: This research will exhaustively identify important drug interactions and rigorously examine their effects on fall-related injuries in older nursing home residents with Alzheimer's Disease and Related Dementias.

### **Metadoxine as a novel pharmacotherapy for older adults with alcohol use disorder**

Role on Project: Mentor (PI: S. Portis)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: K99

Project Period: Sep 15<sup>th</sup>, 2022 – Aug 31<sup>st</sup> 2024

Total Amount: \$131,805

Project Identifier: 1K99AA030076-01A1

Description: The aim of this study is to verify the safety and tolerability of metadoxine as a putative pharmacotherapy for alcohol use disorder among adults aged 65 and older. The findings from this study will inform a pilot randomized controlled trial

### **Benefits and Harms of Long-term Osteoporosis Pharmacotherapy: Impact of Treatment Length, Type, Switching, and Holidays**

Role on Project: Co-Investigator (PI: K. Hayes)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: R01

Project Period: Sep 15<sup>th</sup>, 2022 – Jun 30<sup>th</sup>, 2026

Total Amount: \$2,537,664

Project Identifier: R01AG078759-01

Description: This research will examine the benefits and harms of long-term osteoporosis pharmacotherapy, sequencing, and drug holidays in community dwelling adults and nursing home residents using U.S. Medicare data and universal healthcare data from Ontario, Canada.

### **MWAS+ - A Novel Drug Repurposing Strategy for ADRD Prevention**

Role on Project: Site Principal Investigator (PI: Q. Zeng)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: R01

Project Period: Aug 15<sup>th</sup>, 2022 – May 31<sup>st</sup>, 2027

Total PVAMC Subaward Amount: \$329,765

Project Identifier: R01AG073474-01A1

Description: We propose a 3-Step Medication-Wide Association Study Plus (MWAS+) approach that will rigorously accelerate the identification of drugs that have a high potential to be repurposed to delay and prevent AD/ADRD

### **The risks and consequences of a motor vehicle crash in older adults with Alzheimer's Disease and Related Dementias**

Role on Project: Co-Investigator (PI: N. Joyce)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: R01

Project Period: Aug 15<sup>th</sup>, 2022 – Jun 30<sup>th</sup>, 2026

Total Amount: \$3,018,027

Project Identifier: R01AG079295-01

Description: Will use novel data source of Medicare insurance claims linked to licensing, citation, and crash data for more than 1.5 million older drivers over a 13-year period to evaluate longitudinal changes in the risk of a crash and changes in the trajectory of health, health care utilization, and long-term care assistance following a crash, among older drivers with Alzheimer's Disease.

### **Deprescribing of Diabetes Treatment Regimens in Long Term Care Residents with Alzheimer's Disease and Related Dementias (ADRD)**

Role on Project: Site Principal Investigator (PI: M. Munshi)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: U54 Pilot Grant Program

Project Period: Jul 1<sup>st</sup>, 2022 – Jun 30<sup>th</sup>, 2024 (NCE)

Total Amount: \$293,868

Project Identifier: U54AG063546

Description: The proposed project will be the first rigorous implementation of an educational intervention to improve diabetes care among individuals with Alzheimer's Disease and Related Dementias through deprescribing in long-term care facilities (LTCFs).

### **Skilled Nursing Facility Care and Outcomes After Hospitalizations Involving Opioid Use Disorder**

Role on Project: Co-Investigator (PI: P. Moyo)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: R21

Project Period: Apr 15<sup>th</sup>, 2022 – Mar 31<sup>st</sup>, 2024

Total Amount: \$434,860

Project Identifier: R21DA053518

Description: The objective of this application, the first step toward this long-term goal, is to examine the quality of SNF care and patient outcomes following an OUD-related hospitalization, and elicit provider perspectives on the transition to SNF and adequacy of OUD care in SNFs.

### **Magnesium Supplement and Vascular Health: Machine Learning from Longitudinal Medical Record**

Role on Project: Site Principal Investigator (MPI: Q. Zeng, A. Ahmed, W. Wen-Chih)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: R01

Project Period: Sep 2021 – Jul 2025

Total Amount: \$1,809,687

Project Identifier: R01HL156518

Description: This project will interrogate national electronic health record data from Veterans Health Administration using novel pharmacoepidemiology methodology and develop

explainable deep-learning models to help clinicians and patients make personalized decisions to maximize the health benefits of magnesium supplements.

**NIA AD/ADRD Health Care Systems Research Collaboratory, supplement “Monitoring Medicare Beneficiaries’ Response to COVID Vaccines”**

Role on Project: Co-Investigator (PI: V. Mor)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: U54

Project Period: Mar 1<sup>st</sup>, 2021 – Jun 30<sup>th</sup>, 2024

Total Amount: \$630,528

Project Identifier: 5U54AG063546-02

Description: This project will create a quasi “real time” data base that can be used to monitor the rates of adverse events of the SARS-CoV-2 vaccine older adults who are frail or who have AD/ADRD. The resulting database and proposed analyses will provide the basis for assessing mid to long term safety and efficacy of the different vaccines being distributed for use.

**Medications and the Risk of Motor Vehicle Crashes in Older Drivers**

Role on Project: Principal Investigator

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: R01

Project Period: Sep 15<sup>th</sup>, 2020 – May 31<sup>st</sup>, 2024

Total Amount: \$1,764,594

Project Identifier: R01AG065722

Description: The objective of this project is to evaluate the effects of medications, including dose and adherence, on motor vehicle crashes in older adults.

**Deploying High ValuE LOngitudinal Population-Based dAta in Dementia Research (DEVELOP AD Research)**

Role on Project: Site Principal Investigator (PI: R. Morrison)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: P01

Project Period: Apr 1<sup>st</sup>, 2020 – Mar 31<sup>st</sup>, 2025

Total Subcontract Amount: \$100,000

Project Identifier: P01AG066605

Description: This program project is grounded in the linkage of medical, social, and health system contexts of dementia with inter-related research projects/cores that together will lead to improved care for this vulnerable population.

**Behavioral Control and Alzheimer's Disease: Policies, Medication Use, and Health Effects Across Care Settings**

Role on Project: Co-Investigator (PI: T. Shireman)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: P01

Project Period: Sep 9<sup>th</sup>, 2019 – May 31<sup>st</sup> 2024

Total Amount: \$1,050,637

Project Identifier: 5P01AG027296-14 8594

Description: Using novel approaches developed by the P01 Data Management and Methods Core, we will assess important policies intended to reduce the adverse outcomes of antipsychotics in older adults with ADRD across care settings and among minorities with potential to guide further policy refinement as necessary.

### **Safe Cardiometabolic Drug Prescribing to Prevent Injury in the Nursing Home**

Role on Project: Site Principal Investigator (PI: S. Berry)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: R01

Project Period: Jul 1<sup>st</sup>, 2019 – Jun 30<sup>th</sup>, 2024 (NCE)

Total Amount: \$1,682,035

Project Identifier: 1RF1AG061221

Description: This project will identify cardiometabolic drugs with a poor net clinical benefit, defined as drugs that increase the risk of injurious falls and fail to achieve clinical benefit, to improve prescribing in the nursing home setting.

## **B. COMPLETED GRANTS**

---

### **Motor Vehicle Crashes as a Marker of Pre-Clinical and Prodromal Alzheimer's Disease**

Role on Project: Principal Investigator

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: Alzheimer's Disease Administrative Supplement (to R01AG065722)

Project Period: Jun 22<sup>nd</sup>, 2022 – May 31<sup>st</sup>, 2023

Total Amount: \$368,458

Project Identifier: R01AG065722- Supplement

Description: Early diagnosis of Alzheimer's Disease (AD) is associated with better clinical outcomes yet obtaining biomarkers for early diagnosis requires invasive and resource intensive procedures. In contrast, this research examines the feasibility of using a motor vehicle crash – a clinically significant and easily identifiable event – as an early indicator of AD. Study findings will have a positive impact by establishing the feasibility of using motor vehicle crashes as an effective pre-screening tool to diagnose patients earlier in the course of disease and help to inform both the judicious use of costly neurodiagnostic methods and thoughtful advance care planning.

### **Guidelines and Best Practices for Evaluating the Causal Effects of Medications on Motor Vehicle Crashes and Driving Outcomes using Observational Data**

Role on Project: Principal Investigator (awarded to Medications and Driving Working Group)

Project Period: Feb 1<sup>st</sup>, 2020 – Jul 31<sup>st</sup>, 2023

Funder: International Society for Pharmacoepidemiology

Total Amount: \$13,000

Project Identifier: N/A

Description: The Medications and Driving Working Group will formally synthesize the existing observational literature examining medication exposures and motor vehicle crash outcomes to



make principled recommendations that ultimately enable the construction of a formal evidence-based methodological framework for estimating the causal effects of medication use on motor vehicle crash.

### **The Burden of Infections in Long-Term Care Facilities: Identification, Treatment, and Health Outcomes**

Role on Project: Principal Investigator

Project Period: Sep 1<sup>st</sup>, 2017 – Jul 31<sup>st</sup>, 2023 (NCE)

Funder: Sanofi Pasteur

Total Amount: \$1,439,086

Project Identifier: 005705

Description: The overall aims of this project are to describe the epidemiology of various infections and vaccine use in long-term care using recent data, thereby providing insights into a number of high-priority areas where vaccine and medication utilization can be improved.

### **Estimating RSV-attributable outcomes in Newborns less than one year of age using world data**

Role on Project: Principal Investigator

Funder: Sanofi Pasteur

Mechanism: Large Independent Research Grant

Project Period: Aug 1<sup>st</sup>, 2020 – June 30<sup>th</sup>, 2023 (NCE)

Total Amount: \$440,000

Project Identifier: E002810374

Description: The objective of this project is to study the epidemiology of respiratory syncytial virus in infants.

### **Opioid Use in Post-Acute Hip Fracture Care: Prescribing Patterns, Effectiveness, and Safety**

Role on Project: Principal Investigator

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: R21

Project Period: Jul 1<sup>st</sup>, 2019 – Apr 30<sup>th</sup>, 2023 (NCE)

Total Amount: \$461,483

Project Identifier: 1R21AG061632

Description: Suboptimal pain treatment during post-acute care after hip fracture is a major cause of increased morbidity, mortality, and costs among older adults, yet there is no clear evidence base for choosing an analgesic medication regimen in post-acute care. This R21 project will provide a better understanding of the benefits and harms of different analgesic regimens for pain treatment, which will help guide treatment decisions for the post-acute care population residing in skilled nursing facilities (SNFs), and ultimately improve patient health outcomes.

### **U.S. Deprescribing Research Network**

Role on Project: Site Principal Investigator (MPI: M. Steinman and C. Boyd)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: R24

Project Period: Aug 1<sup>st</sup>, 2021 – Jul 31<sup>st</sup>, 2022

Total Amount: \$6,915

Project Identifier: R24AG064025

Description: Older adults often use unnecessary, potentially inappropriate, and goal-discordant medications, and efforts to improve deprescribing can improve health outcomes by reducing use of these medications. This proposal will establish the U.S. Deprescribing Research Network. This collaborative network will catalyze a range of research on deprescribing and search for solutions to improve the quality of pharmaceutical care and health outcomes for older adults.

### **Practices and Policies Contributing to Influenza-Related Outcomes and Suboptimal Vaccination Rates in LTCFs: A Qualitative Assessment**

Role on Project: Co-Investigator (PI: B. Bardenheier)

Funder: Sanofi Pasteur

Mechanism: Large Independent Research Grant

Project Period: Mar 1<sup>st</sup>, 2021 – Jan 31<sup>st</sup>, 2022

Total Amount: \$160,643

Project Identifier: N/A

Description: The objective of this qualitative study is to investigate root causes of differential influenza and pneumonia burden, influenza vaccine coverage, and disparities in long term care facilities (LTCFs).

### **The effect of a driver's license suspension on access to health care**

Role on Project: Co-Investigator (PI: N. Joyce)

Funder: Brown Office of the Vice President for Research (OVPR)

Mechanism: Seed Award

Project Period: Mar 1<sup>st</sup>, 2020 – Feb 28<sup>th</sup>, 2022

Total Amount: \$49,500

Project Identifier: N/A

Description: The objective of this study is to understand the population of suspended drivers and the unintended consequences of a license suspension for accessing health care.

### **Patient Profiles and Settings of Care Following Opioid Use Disorder Related Hospitalizations in Medicare**

Role on Project: Co-Investigator (PI: P. Moyo)

Funder: Brown Office of the Vice President for Research (OVPR)

Mechanism: Salomon Award

Project Period: Mar 1<sup>st</sup>, 2020 – Feb 28<sup>th</sup>, 2022

Total Amount: \$13,454

Project Identifier: N/A

Description: The objective of this study is to understand the context of opioid use disorder hospitalizations with respect to the attributes of the patients, hospital admission, and the settings of care following opioid-related acute care use.

### **Development of a novel pharmacist-led opioid deprescribing protocol in older adults**

Role on Project: Co-Investigator (PI: A. Margraf)

Funder: ASHP Foundation

Mechanism: Pharmacy Resident Practice-Based Research Grant

Project Period: Jan 1<sup>st</sup>, 2020 – Dec 31<sup>st</sup>, 2021

Total: \$5,000

Project Identifier: N/A

Description: This project will develop a novel opioid deprescribing protocol for older adults that addresses the fundamental issue of unclear division of responsibilities between members of a care team.

### **Development and validation of a pharmacist transitions of care tool using machine learning algorithms to predict rehospitalization in chronic heart failure**

Role on Project: Co-Investigator / “Senior Investigator” (PI: M. Riester)

Funder: ASHP Foundation

Mechanism: Pharmacy Resident Practice-Based Research Grant

Project Period: Jan 1<sup>st</sup>, 2020 – Dec 31<sup>st</sup>, 2020

Total Amount: \$4,931

Project Identifier: N/A

Description: This project will develop a novel screening tool to assist transitions of care pharmacists with efficiently intervening on their chronic heart failure patients.

### **Task Order 16-Methods and Dissemination: Collaboration to improve validity, consistency, and utility of systematic reviews**

Role on Project: Co-Investigator (PI: T. Trikalinos)

Project Period: Sep 11<sup>th</sup>, 2019 – Aug 31<sup>st</sup>, 2020

Funder: Agency for Healthcare Research and Quality

Total Amount: \$50,000

Project Identifier: HHSA290201500002I 75Q80119F32016

Description: The purpose of the task order is to provide methods and dissemination to improve validity and utility of systematic reviews of the Evidence-based Practice Centers (EPC) Program.

### **Identifying Analgesic Users after Hip Fracture in Post-Acute Care**

Role on Project: Principal Investigator

Funder: Rhode Island Advance-CTR

Mechanism: Pilot Projects Program Category I (Cycle 4)

Project Period: Jun 18<sup>th</sup>, 2019 – Jun 17<sup>th</sup>, 2020

Total Amount: \$60,921

Project Identifier: U54GM115677

Description: Little is known about the use of analgesic medications among older adults receiving post-acute care in skilled nursing facilities (SNFs) after hip fracture. The lack of knowledge is primarily due to the outright absence of medication data during the post-acute care period since drug dispensing information in the hospital and post-acute SNF settings is not captured by Medicare Part D drug claims. This pilot project will initiate the assembly and

linkage of several databases to establish a unique data resource that can be re-used to conduct timely, relevant, and previously impossible medication-related studies of older adults in post-acute SNF care.

### **Prevention, Diagnosis, and Management of Inappropriate Opioid Use, Misuse, and Abuse in Older Adults**

Role on Project: Co-Principal Investigator (MPI: E. Balk)

Funder: Agency for Healthcare Research and Quality

Mechanism: EPC RFTO

Project Period: Jun 10<sup>th</sup>, 2019 – Jan 5<sup>th</sup>, 2020

Total Requested: \$200,000

Project Identifier: HHSA290201500002I 75Q80119F32015T

Description: The objective of this project is to conduct a technical brief on the issues and gaps that are driving the current rise in opioid-related morbidity and mortality in older adults.

### **Management of Primary Headaches in Pregnancy**

Role on Project: Co-Investigator (PI: I. Saldanha)

Project Period: Apr 26<sup>th</sup>, 2019 – Aug 6<sup>th</sup>, 2020

Funder: Agency for Healthcare Research and Quality

Total Amount: \$295,385

Project Identifier: HHSA290201500002I HHSA29032014T

Description: The purpose of the task order is to conduct a topic refinement and systematic review on the management of primary headaches in pregnancy.

### **Development and Implementation of “Nursing Home Prevention of Injury in Dementia” (NH PRIDE)**

Role on Project: Site Principal Investigator (PI: S. Berry)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: R01

Project Period: Apr 1<sup>st</sup>, 2019 – Jan 31<sup>st</sup>, 2023

Subcontract Amount: \$68,172

Project Identifier: 5R01AG062492

Description: This pragmatic clinical trial embedded in a nursing home chain will test the efficacy of the Injury Liaison Service model to reduce injurious falls. If successful, this model can be readily deployed by nursing home chains and evaluated more widely for its impact on injurious falls.

### **Medications and Risk of Motor Vehicle Crashes in Older Drivers: Data Linkage and Evaluation**

Role on Project: Principal Investigator

Project Period: Feb 1<sup>st</sup>, 2019 – Jan 31<sup>st</sup>, 2020

Funder: Brown University Office of the Vice President for Research Seed Award Program

Total Amount: \$49,999

Project Identifier: N/A

Description: To develop a unique database that combines data on drivers' crash, licensing, and citation histories, and Medicare fee-for-service prescription drug and inpatient insurance claims. Additionally, we establish the frequency and patterns of driving by medication use.

#### **Long-Term Care Chronic Constipation and Laxative Use Exploration (CLUE) Study**

Role on Project: Co-Investigator (PI: R. Baier)

Project Period: Oct 1<sup>st</sup>, 2018 – Feb 6<sup>th</sup>, 2019

Funder: Ironwood Pharmaceuticals / Allergan

Total Amount: N/A

Project Identifier: N/A

Description: Brown University's Center for Long-Term Care Quality & Innovation (Q&I Center) will conduct a three-part, cross-sectional study to describe the current treatment of chronic constipation among long-term care residents, assess its impact on resident quality of life, and estimate its costs.

#### **Impact of pharmacist intervention on chronic obstructive pulmonary disease outcomes**

Role on Project: Co-Investigator / "Senior Investigator" (PI: A. Zuern)

Project Period: Oct 1<sup>st</sup>, 2018 – Sep 30<sup>th</sup>, 2019

Funder: American College of Clinical Pharmacy Ambulatory Care Practice and Research Networks

Total Amount: \$1,000

Project Identifier: N/A

Description: To evaluate the effect of a pharmacist transitions-of-care intervention on COPD patient health outcomes both overall and across levels of predicted risk of potentially preventable rehospitalization (estimated using the MEDCOINS tool).

#### **Beta blockers and their impact on fracture risk in nursing home residents taking atypical antipsychotics**

Role on Project: Co-Investigator (PI: C. Duarte)

Project Period: Sep 1<sup>st</sup>, 2017 – Aug 31<sup>st</sup>, 2022

Funder: National Institutes of Health (National Institute on General Medical Sciences)

Total Amount: \$2,159,876

Project Identifier: P20-GM121031

Description: As part of a cohesive series of projects, the overall aim of this project is to assess whether beta blockers ameliorate the risk of fractures associated with atypical antipsychotics in a population of older nursing home residents.

#### **Outcomes of a Pharmacist-Managed Hepatitis C Virus Clinic Care Delivery Model**

Role on Project: Co-Investigator / "Senior Investigator" (PI: S. Naidjate)

Project Period: Jan 1<sup>st</sup>, 2017 – Dec 31<sup>st</sup>, 2017

Funder: American Society of Health-System Pharmacists Research and Education Foundation

Total Amount: \$4,903

Project Identifier: N/A

Description: The objectives of this project are: 1) to describe the demographic, clinical, and social characteristics of adult patients infected with HCV at a pharmacist-managed outpatient HCV

clinic, 2) to characterize the determinants of enrollment in a pharmacist-managed outpatient HCV clinic versus a limited-pharmacist- involvement clinic for HCV patients, and 3) to estimate the effect of a pharmacist-managed HCV clinic versus a limited-pharmacist- involvement clinic on treatment completion and achieving HCV cure.

### **Conducting Systematic Reviews to Inform World Health Organization Guidelines on the Clinical Management of Cancer Pain**

Role on Project: Co-Investigator (PI: E. Balk)

Project Period: Jan 1<sup>st</sup>, 2017 – Oct 30<sup>th</sup>, 2017

Funder: World Health Organization

Total Amount: \$120,763

Description: This goal of this project is to conduct a systematic review to inform the development of new cancer pain treatment guidelines.

### **High Dose Influenza Vaccine Morbidity and Mortality in U.S. Nursing Homes: Assessing Cost-Effectiveness and Relative Benefit Compared to Standard Dose**

Role on Project: Co-Investigator (PI: T. Shireman)

Project Period: Dec 31<sup>st</sup>, 2016 – Apr 30<sup>th</sup>, 2018

Funder: Insight Therapeutics

Total Amount: \$420,000

Project Identifier: N/A

Description: The aim of this project is to estimate the effectiveness of high dose influenza vaccine in long-term care facilities using linked trial and administrative data.

### **Identification of Pharmacy Transitions of Care Patients at Highest Risk of 30-Day Hospital Readmission**

Role on Project: Co-Investigator (PI: L. McAuliffe)

Project Period: Jan 1<sup>st</sup>, 2016 – Dec 31<sup>st</sup>, 2016

Funder: American Society of Health-System Pharmacists Research and Education Foundation

Total Amount: \$5,000

Project Identifier: N/A

Description: The objectives of this project were: 1) to identify factors associated with an increased risk of unplanned hospital readmission, paying particular attention to factors that a) frequently available to the transitions of care pharmacist, and b) unavailable in previous models of rehospitalization developed by other researchers using administrative claims data, and 2) develop and validate a practical prediction tool for use by transitions of care pharmacists.

### **Patient Centered Outcomes Research Institutional Mentored Career Development Program**

Role on Project: Scholar (PI: T. Trikalinos)

Funder: National Institutes of Health (Agency for Healthcare Research and Quality)

Total Amount: \$3,392,382

Project Period: Sep 1<sup>st</sup>, 2015 – Jun 30<sup>th</sup>, 2018

Project Identifier: K12-HS022998

Description: The objective of this program is to prepare scholars to apply comparative effectiveness research methods to patient-centered outcomes research.

### **Doubly Robust Estimation of the Effect of Health Insurance on Personal Prescription Drug Importation**

Role on Project: Principal Investigator

Project Period: May 1<sup>st</sup>, 2015 – Aug 31<sup>st</sup>, 2015

Funder: Brown University (Population and Studies Training Center)

Total Amount: \$2,165

Description: The objective of this project was to extend and apply doubly robust estimation of causal effects for complex survey data to estimate the effect of health insurance on personal prescription drug importation behavior.

### **Estimating the Effect of Health Insurance on Personal Prescription Drug Importation Using Marginal Structural Models and Complex Survey Data**

Role on Project: Principal Investigator

Project Period: Jan 1<sup>st</sup>, 2015 – Jan 1<sup>st</sup>, 2016

Funder: Brown University (Nora Kahn Piore Award)

Total Amount: \$3,000

Description: The objective of this project was to use state-of-the-art quantitative methods for causal inference, specifically inverse probability weighted (IPW) marginal structural models (MSMs), in complex survey data to estimate the unconditional effect of health insurance on the risk of personal prescription drug importation across subpopulations of the United States defined by important characteristics.

### **The Effects of Socioeconomic Status on Access to Care, Medication Adherence, and HIV Viral Suppression: Establishing a Framework for Conditional Economic Incentivization of Healthy Behaviors**

Role on Project: Principal Investigator

Project Period: Sep 1<sup>st</sup>, 2014 – May 30<sup>th</sup>, 2015

Funder: Brown University (Sheridan Center for Teaching and Learning)

Total Amount: \$2,000

Description: The objective of this project was to preliminarily test the feasibility and acceptability of a highly innovative conditional economic incentives program to incentivize healthy behaviors among HIV-positive men in Mexico City.

### **A Clinical Prediction Tool to Guide Treatment of Osteoporosis in the Nursing Home**

Role on Project: Co-Investigator, then Site Principal Investigator (PI: S. Berry)

Project Period: Aug 1<sup>st</sup>, 2014 – Apr 30<sup>th</sup>, 2019

Funder: National Institutes of Health (National Institute on Aging)

Total Amount: \$1,691,799

Project Identifier: R01-AG045441

Description: The objective of this project is to develop a screening tool for osteoporosis and use the screening tool to determine a threshold at which osteoporosis medications may prevent fractures.

## **Estimating the Effect of Health Insurance on Personal Prescription Drug Importation in Underserved Populations**

Role on Project: Principal Investigator

Project Period: May 1<sup>st</sup>, 2014 – Aug 31<sup>st</sup>, 2014

Funder: Brown University (Population Studies and Training Center)

Total Amount: \$790

Description: The objective of this project was to extend novel causal inference methods for complex survey data to estimate the effect of policy interventions on personal prescription drug importation behavior.

## **Outcomes of Beta Blockers after Myocardial Infarction in Nursing Home Residents**

Role on Project: Research Assistant, then Co-Investigator (PI: M. Steinman)

Project Period: Aug 1<sup>st</sup>, 2013 – Jun 30, 2016

Funder: National Institutes of Health (National Heart, Lung, and Blood Institute)

Total Amount: \$1,678,874

Project Identifier: R01-HL111032

Description: The objective of this project was to better understand the benefits and harms of beta blockers in frail nursing home residents after myocardial infarction to substantially improve the evidence base and help guide treatment decisions for this important population.

## **C. PROPOSALS SUBMITTED**

---

### **Pain Assessment and Management among Nursing Home residents with Alzheimer's Disease and Related Dementias**

Role on Project: Co-Investigator (MPIs K. Hayes & E. Belanger)

Funder: NIH

Mechanism: R01

Project Period: Jul 1<sup>st</sup>, 2024– Jun 30<sup>th</sup>, 2029

Total Brown Amount Requested: \$3,893,219

Description: The overall objectives are to characterize change in pain assessment and treatment as associated with the removal of pain as a NH quality indicator, and to determine the comparative effectiveness and safety of major analgesic regimens among NH residents with AD/DRD.

### **Optimizing Methadone Treatment Strategies for Opioid Use Disorder in the Era Of Fentanyl**

Role on Project: Multi Principal Investigator (MPI with F. Beaudion, R. Wightman)

Funder: National Institute on Drug Abuse (NIDA)

Mechanism: R01

Project Period: Dec 1<sup>st</sup>, 2024 – Nov 30<sup>th</sup>, 2029

Total Brown Subaward Amount Requested: \$1,075,772

Description: This study will create a unique linked database combining electronic health record and state administrative databases to enable an unprecedented evaluation into methadone



treatment strategies and outcomes during a time of expanded and changing methadone flexibilities in a fentanyl-endemic area.

**National Study of Antiepileptic Prescribing Among Patients with Dementia in Long-Term Care**

Role on Project: Sub Principal Investigator (PI: L. Gerlach)

Funder: National Institutes of Health

Mechanism: R01

Project Period: Jul 1<sup>st</sup>, 2024– Jun 30<sup>th</sup>, 2029

Total Brown Subaward Amount Requested: \$234,270

Description: To identify factors that influence antiepileptic prescribing in nursing home settings and the net health effects of such prescribing among patients with dementia.

**GAPcareAD: A Brief Emergency Department Intervention to Address Post-Fall Care Needs of Persons with Cognitive Impairment and Care Partners**

Role on Project: Site Primary Investigator (PI: E. Goldberg)

Funder: National Institutes of Health

Mechanism: R01

Project Period: Jan 1<sup>st</sup>, 2025 – Dec 31<sup>st</sup>, 2029

Total Brown Subaward Amount Requested: \$242,468

Description: To prevent falls in older adults and their sequelae, downstream healthcare visits, which reduce healthy days at home and overall quality of life.

**Prescribing Cascades among Nursing Home Residents with ADRD**

Role on Project: Multiple Principal Investigator (MPI with: K. Hayes)

Funder: National Institutes of Health

Mechanism: R01

Project Period: July 1<sup>st</sup>, 2024 – June 30<sup>th</sup>, 2029

Total Brown Amount Requested: \$3,886,933

Description: To understand how prescribing cascades arise in nursing home residents and to quantify their effects on outcomes.

**The NH Explanatory Trials Network: Supporting Transformation by Enhancing Partnerships (The NEXT STEPS).**

Role on Project: Sub Principal Investigator (PI: K. Unroe)

Funder: National Institutes of Health

Mechanism: U24

Project Period: July 1<sup>st</sup>, 2024 – June 30<sup>th</sup>, 2029

Total Brown Subaward Amount Requested: \$1,926,041

Description: Developing infrastructure to enable explanatory randomized clinical trials in nursing homes, including recruitment, patient assessment, treatment delivery, and obtaining investigational samples and/or imaging.

**Post-Acute Care Medication Use and Functional Recovery in Heart Failure**

Role on Project: Multiple Principal Investigator (MPI with: P. Goyal)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: R01

Project Period: July 1<sup>st</sup>, 2024 – June 30<sup>th</sup>, 2029

Total Requested: \$ 3,890,428

Description: This project will rigorously examine the effects of using individual medications for heart failure and other common conditions (e.g., pain) as well as using multiple medications together on physical function and successful discharge from SNFs to home.

### **Benefits and Harms of Antihypertensive Management Strategies for Nursing Home Residents with ADRD**

Role on Project: Co-Investigator (PI: K. Hayes)

Funder: National Institutes of Health

Mechanism: R01

Project Period: April 1<sup>st</sup>, 2024 – March 31<sup>st</sup>, 2028

Total Requested: \$2,466,861.00

Description: Developing infrastructure to enable explanatory randomized clinical trials in nursing homes, including recruitment, patient assessment, treatment delivery, and obtaining investigational samples and/or imaging.

### **High Hypoglycemia Risk Medications In Nursing Home Residents with ADRD**

Role on Project: Co-Investigator (PI: K. Hayes)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: R21

Project Period: Jan 4<sup>th</sup>, 2024 – Dec 31<sup>st</sup>, 2025

Total Requested: \$455,239

Description: This project will provide rigorous evidence on the comparative hypoglycemia risks of different diabetes medication regimens for NH residents through comprehensive observational studies employing novel electronic health record data linked to Medicare claims

### **Promoting Antibiotic Stewardship in Home-Based Primary Care**

Role on Project: Mentor (PI: R. Datta)

Funder: The Paul B. Beeson Emerging Leaders Career Development Award in Aging

Mechanism: K76

Project Period: Jul 1<sup>st</sup>, 2023 – Jun 30<sup>th</sup>, 2028

Total Requested: \$1,214,999.00

Description: The overall objective of this proposal is to develop quality indicators and risk-adjusted measures of antibiotic use in home-based primary care and to adapt an existing antibiotic stewardship dashboard for use among home-based primary care programs.

### **Effects of Polypharmacy and Deprescribing in Alzheimer's Disease and Related Dementias**

Role on Project: Co-Investigator (PI A. Andrade)

Funder: National Institutes of Health (National Institute on Aging)

Mechanism: R01

Project Period: Apr 1<sup>st</sup> 2023 – Mar 31<sup>st</sup>, 2028

Total Requested: \$3,885,473.00

Description: This project will employ rigorous experimental methods and mouse models of Alzheimer's Disease to assess the effects of anticholinergic drug polypharmacy and deprescribing on cognitive function, physical function, and safety outcomes. Study findings will provide important insights into how to safely discontinue anticholinergic medications to improve health outcomes among older adults with Alzheimer's Disease and Related Dementias.

## 8. SERVICE

---

### A. INTERNATIONAL AND NATIONAL (EXTRAMURAL)

---

- Member, Research Review Committee, Long-Term Care Data Cooperative 2024 – Present
- Member, Podcasts Subcommittee, Scientific Dissemination Committee, Society for Epidemiologic Research (SER) 2023 – Present
- Member, Research Methods Sub-Committee, American Geriatrics Society 2019 – Present
- Proposal Reviewer, and Writer, International Society for Pharmacoepidemiology Geriatric Pharmacoepidemiology Special Interest Group 2018 – Present
- Proposal Reviewer, International Society for Pharmacoepidemiology Comparative Effectiveness Research Special Interest Group 2018 – Present
- Abstract and Proposal Reviewer, American Geriatrics Society Annual Meeting 2015 – Present
- Abstract Reviewer, International Conference on Pharmacoepidemiology and Therapeutic Risk Management 2016 – Present
- Abstract Reviewer, International Society for Pharmacoepidemiology and Therapeutic Risk Management Midyear Meeting 2016 – Present
- Abstract Reviewer, Society for Epidemiologic Research Annual Meeting 2014, 2023– Present
- Investigator Development Core, U.S. Deprescribing Research Network (USDeN) 2021 – 2023
- Chair, International Society for Pharmacoepidemiology Geriatric Pharmacoepidemiology Special Interest Group 2019 – 2021
- Proposal Reviewer, American Society of Consultant Pharmacists 2016
- Abstract Reviewer and Poster Judge, Vizient University Health System Consortium 2016
- Abstract and Proposal Reviewer, International Association of Gerontology and Geriatrics World Congress 2016
- Coordinator, Lifespan Pharmacy Board Certification Review Group 2015

### B. UNIVERSITY AND DEPARTMENTAL

---

- Member, OVPR Seed Award Reviewer Committee 2023
- Member, Search Committee for Assistant or Associate Professor of Epidemiology, Tenure-Track - PH-318 2023 – Present
- Member, Brown University Human Resources Advisory Board 2021 – Present
- Member, Doctoral Program Admissions Committee 2021 – Present  
Department of Epidemiology, School of Public Health, Brown University
- Member, AHRQ Postdoctoral Fellowship (T32) Selection Committee 2021 – Present  
Center for Gerontology and Healthcare Research, Department of Health Services, Policy, and Practice, School of Public Health, Brown University
- Faculty Advisor, Brown University Student Chapter of the International Society for Pharmacoepidemiology 2019 – Present  
School of Public Health, Brown University

- Member, Doctoral Program Admissions Committee 2019 – 2023  
Department of Health Services, Policy, and Practice, School of Public Health, Brown University
- Member, Curriculum Committee 2018 – 2023  
Department of Health Services, Policy, and Practice, Brown University
- Member, Search Committee for Assistant, Associate, or Full Professor of Health Services, Policy and Practice, Research Scholar Track (Evidence Synthesis) - PH 308 2022 – 2023
- Advisor, Infectious Diseases Health Services Research PhD Track 2022 – 2023  
Department of Health Services, Policy, and Practice, School of Public Health, Brown University
- Qualifying Exam Writer, Infectious Diseases Health Services Research PhD Track 2022  
Department of Health Services, Policy, and Practice, School of Public Health, Brown University
- Advisor, The Leadership Alliance Summer Research Early Identification Program (SR-EIP) 2021 – 2023
- Chair, Transportation and Health Initiative Project Coordinator Search Committee 2020 – 2021  
Center for Gerontology and Healthcare Research, Department of Health Services, Policy, and Practice, School of Public Health, Brown University
- Member, Curriculum Committee 2019 – 2020  
School of Public Health, Brown University
- Chair, Transportation and Health Initiative Data Analyst Search Committee 2020 – 2020  
Center for Gerontology and Healthcare Research, Department of Health Services, Policy, and Practice, School of Public Health, Brown University
- Co-Coordinator (with Dr. Nina Joyce), Pharmacoepidemiology Research Core 2018 – 2019  
School of Public Health, Brown University
- Member, Pharmacoepidemiology Research Core 2016 – 2019  
Department of Health Services, Policy, and Practice, Brown University
- Ad hoc Interviewer, Tenure Track Faculty Candidates 2015  
Department of Health Services, Policy, and Practice, Brown University
- Ad hoc Interviewer, Research Track Faculty Candidates 2014 - 2015  
Department of Health Services, Policy, and Practice, Brown University
- Representative, Graduate Program Steering Committee 2013 - 2014  
School of Public Health, Brown University
- Coordinator, Journal Club 2013 - 2014  
School of Public Health, Brown University
- Ad hoc Interviewer, PhD Applicants 2013  
Department of Epidemiology, Brown University

### C. EDITORIAL

---

- None

## D. JOURNAL REVIEW

---

- Aging Clinical and Experimental Research
- American Journal of Epidemiology
- Annals of Internal Medicine
- Annals of Pharmacotherapy
- BMC Health Services Research
- Circulation: Cardiovascular Quality and Outcomes
- International Journal of Health Care Finance and Economics
- JAMA Internal Medicine
- Journal of the American Geriatrics Society
- Journal of the American Pharmacists Association
- Journal of General Internal Medicine
- Journals of Gerontology
- Journal of Pharmacy Technology
- Methods of Information in Medicine
- Pharmacoepidemiology and Drug Safety
- PLOS One
- Research in Social and Administrative Pharmacy
- The American Journal of Pharmacy Benefits
- The BMJ

## E. GRANT REVIEW

---

- Ad Hoc Reviewer, Topics in Health Services Research, Health Information Technology, and Aging, 2024/01 ZRG1 HSS-P (91), National Institutes of Health Center for Scientific Review (CSR) panel 2023
- Ad Hoc Reviewer, Study Section, Pilot and Grant Planning Award applications, United States Deprescribing Research Network (USDeN)(R24AG064025) 2020, 2021, 2022
- Ad Hoc Reviewer, Pilot and Exploratory Grants Program, University of Michigan Claude D. Pepper Older Americans Independence Center 2022
- Ad Hoc Reviewer, Pilot and Exploratory Grants Program, Yale Claude D. Pepper Older Americans Independence Center 2021
- Ad Hoc Reviewer, Pragmatic Trials of Managing Multimorbidity in Alzheimer's Disease ZAG1 ZIJ-7 (A1), R61/R33 Exploratory/Developmental Phased Award, National Institutes of Health/National Institute on Aging (RFA AG 20-029) 2020
- Ad Hoc Reviewer, Infectious Disease Control Programme grant applications, The Netherlands Organisation for Health, Research, and Development (ZonMw) 2020

## F. SERVICE TO THE COMMUNITY

---

### The Lown Institute, Polypharmacy in Homes Working Group

2018 – 2019

- Member

## 9. AWARDS

---

### American Headache Society Members' Choice Award Best Paper Published in 2021 Award 2022

- For the paper entitled "Management of primary headaches during pregnancy, postpartum, and breastfeeding: A systematic review". Members of the American Headache Society are provided with a shortlist of five of the best papers published in the previous calendar year, with that shortlist approved by the Editor-in-Chief of *Headache* and the full editorial board. A popular vote is then staged with the winning paper simply attracting the most votes.

### Brown Early Career Research Achievement Award 2022

- This award from the Brown University of the Office of the Vice President for Research recognizes outstanding research achievements of Brown faculty. The overall merit of the research achievements are evaluated based on two criteria: 1) Scholarly achievements and recognition (publications, professional awards, funded research etc.; and 2) Significance of contributions to the discipline. The award includes a \$5,000 research stipend.

### American Society of Consultant Pharmacists Plein Memorial Lecture Award 2021

- The Plein Memorial Lecture is an annual keynote presentation during ASCP's Annual Meeting & Exhibition, hosted by Shelly Gray, Director, Shirley & Herb Bridge Endowed Professor at the University of Washington. The Plein Memorial Lecture honors Joy and Elmer Plein, two pioneers in the field of Geriatric Pharmacy. The Lecture is supported by the Plein Center for Geriatric Pharmacy, Research, Education, and Outreach.

### American Geriatrics Society Health in Aging Foundation New Investigator Award 2020

### American Geriatrics Society/National Institute of Aging U13 Osteoporosis and Soft Tissue Disorders "Rising Star" and Travel Award 2019

### American Geriatrics Society Epidemiology Best Paper Award 2018

### International Society for Pharmacoepidemiology Midyear Conference Travel Award 2017

- Awarded \$1,000

### International Society of Pharmacoeconomics and Outcomes Research Meeting Annual Meeting Research Presentation Award Finalist 2017

- Poster ranked in the top 10% based on reviewer scores

### American Geriatrics Society National Conference Travel Award 2017

- \$250 award for being a top 25 abstract scored by the AGS Abstract Selection Committee

|   |             |
|---|-------------|
| <b>American Society of Health-Systems Pharmacy Best Practices Award</b>   | 2017        |
| <ul style="list-style-type: none"> <li>• MEDCOINS transitions of care project selected as one of the five best practices from the entire U.S.</li> </ul>  |             |
| <i>Pharmacoepidemiology and Drug Safety</i> “Top Peer Reviewer”   | 2016        |
| <b>International Society for Pharmacoepidemiology Midyear Conference Travel Award</b>   | 2016        |
| <ul style="list-style-type: none"> <li>• Awarded \$1,000</li> </ul>   |             |
| <b>American College of Cardiology/American Geriatrics Society/National Institute of Aging Pharmacotherapy in Older Adults with Cardiovascular Disease Early Career Travel Award</b>   | 2016        |
| <b>American Geriatrics Society Scientist-in-Training Research Award</b>   | 2016        |
| <ul style="list-style-type: none"> <li>• One \$500 award presented to a pre-doctoral candidate who submitted the highest-scoring abstract for the 2016 AGS Annual Meeting and demonstrates evidence of an early but promising career path in geriatrics research</li> </ul> |             |
| <b>American Geriatrics Society National Conference Travel Award</b>   | 2016        |
| <ul style="list-style-type: none"> <li>• \$250 award for being a top 25 abstract scored by the AGS Abstract Selection Committee</li> </ul>  |             |
| <b>American Geriatrics Society National Conference Travel Award</b>   | 2015        |
| <ul style="list-style-type: none"> <li>• \$250 award for being a top 25 abstract scored by the AGS Abstract Selection Committee</li> </ul>  |             |
| <b>Rhode Island Hospital Department of Pharmacy Preceptor-in-Training of the Year Award</b>   | 2016        |
| <ul style="list-style-type: none"> <li>• “The recipient of this award has demonstrated strong commitment to the professional training of students and residents while also displaying leadership skills and professionalism.”</li> </ul>                                    |             |
| <b>Finalist for Outstanding Academic Accomplishment by a Brown University Master’s Student Award</b>  | 2015        |
| <b>Phi Lambda Sigma/American Foundation for Pharmaceutical Education/GlaxoSmithKline First Year Graduate Scholarship (declined)</b>   | 2012        |
| <ul style="list-style-type: none"> <li>• One \$7,500 award granted annually to fund graduate study in a college of pharmacy graduate program of the award recipient’s choice</li> </ul>   |             |
| <b>New Jersey Pharmacists Association Outstanding Leadership Award</b>  | 2012        |
| <b>United States Public Health Service Excellence in Public Health Pharmacy Practice Award</b>  | 2012        |
| <b>Ernest Mario Endowed Scholar, Rutgers University School of Pharmacy</b>  | 2011 – 2012 |
| <b>John and Josephine Calasibetta Scholar, Rutgers University School of Pharmacy</b>  | 2011 – 2012 |
| <b>Rutgers Alumni Association Scholar, Rutgers University School of Pharmacy</b>  | 2010 – 2011 |



|   |             |
|---|-------------|
| Rutgers University Academic Merit Scholar                                 | 2006 – 2010 |
| Phi Lambda Sigma Pharmacy Leadership Honor Society                        | 2009        |
| Phi Delta Chi Pharmacy Fraternity Leadership Award                        | 2007 – 2008 |
| Phi Delta Chi Pharmacy Fraternity Prescription for Success Academic Award | 2007        |
| Miriam Hospital Stanley Gross Academic Scholarship                        | 2006 – 2007 |

## 10. TEACHING & MENTORING

### A. COURSES TAUGHT

| Session     | Course  | Class Size | Scheduled Hours |              |
|-------------|---|------------|-----------------|--------------|
|             |   |            | Lecture         | Lab/Tutorial |
| Spring 2024 | PHP 2440 – Introduction to Pharmacoepidemiology | 16         | 37.5            | 0            |
| Fall 2023   | PHP 2490 – Methods in Pharmacoepidemiology      | 21         | 32.5            | 11           |
| Spring 2023 | PHP 2440 – Introduction to Pharmacoepidemiology | 17         | 35              | 0            |
| Spring 2022 | PHP 2455B – Health Services Research Methods II | 6          | 32.5            | 11           |
| Fall 2021   | PHP 2455A – Health Services Research Methods I  | 6          | 32.5            | 10           |
| Spring 2021 | PHP 2455B – Health Services Research Methods II | 10         | 35              | 6            |

### B. GUEST LECTURES

- 1) **Zullo AR.** “Competing Risks in Pharmacoepidemiology”. Brown University PHP2440 (Introduction to Pharmacoepidemiology). April 12, 2022.
- 2) **Zullo AR.** “Competing Risks in Pharmacoepidemiology”. Brown University PHP2440 (Introduction to Pharmacoepidemiology). April 7, 2021.
- 3) **Zullo AR.** “Survey Methodology: Weighting, Accounting for Sampling and Clustering”. Brown University PHP 2260 (Applied Epidemiologic Analysis Using SAS). March 10, 2016.
- 4) **Zullo AR.** “Pharmacovigilance: Spontaneous Reporting and Detecting Signals”. Brown University PHP 2440 (Introduction to Pharmacoepidemiology). Feb 18, 2016.

- 5) **Zullo AR.** “Hospitals”. Brown University PHP 0310 (Health Care in the United States). Mar 12, 2014.

## C. MENTORING

### Current Mentees and Trainees

| Trainee Name             | Type/Training Period  | Thesis/<br>Project Title                                       | Funding  | Role                  |
|--------------------------|---|--|--|-----------------------|
| Kamila Radjabova         | MPH<br>(2024-Present)   | TBD  | N/A  | Thesis Advisor        |
| Esteban Fernández        | PhD Biostatistics,<br>Brown University<br>(2024-Present)  | TBD  | N/A  | Thesis Committee      |
| Selvam Sendhil           | PhD Epidemiology,<br>Brown University<br>(2023-Present)   | TBD  | R01AG077620,<br>PI A.Zullo   | RAship Advisor        |
| Tiffany (Han-Chih) Hsieh | PhD Epidemiology,<br>Brown University<br>(2023-Present)   | TBD  | N/A  | Academic Advisor      |
| Jinying Chen             | Real World Data Scholar LTCDC program, Assistant Professor, Boston University School of Medicine (2023 – Present) | Validation of drug indications using NLP                       | IMPACT Collaboratory Real-World Data Scholars Program  | Faculty Mentor        |
| Rachel Baker             | Assistant Professor (2023 – Present), Brown Epidemiology Junior Faculty Mentoring Program,                        | N/A  | N/A  | Faculty Mentor        |
| Rupak Datta              | Assistant Professor, Yale School of Medicine, (2021– Present)   | Promoting Antimicrobial Stewardship in Home-Based Primary Care | NIA IMPACT Collaboratory Career Development Award (U54AG063546) , SHEA Epidemiology Competition Award, Yale CTSA (UL1 TR001863), Yale Program on Aging (P30AG021342) | Co-Mentor             |
| Fiona Bhondoeckhan       | PhD Epidemiology, Brown University (2021 – Present)   | N/A  | R01AG078759, PI K. Hayes;  | Research Assistantshi |

|                                      |  |  |   |   |
|--------------------------------------|--|--|---|---|
|                                      |  |  | R01AG079295,<br>PI N. Joyce   | p Co-<br>Advisor  |
| Katelle Donkor                       | MPH<br>Interdisciplinary,<br>Brown University<br>(2023 – Present)  | Evaluation of Long-Term<br>Bisphosphonate Medication<br>Use in Older Adults Prior to<br>Long-term Nursing Facility<br>Admissions.                            | N/A   | Thesis<br>Reader  |
| Dagam Jeong                          | PGY1 Hematology<br>Oncology Pharmacy<br>Resident, Lifespan<br>(2023 – Present)   | TBD.   | Lifespan<br>Department of<br>Pharmacy   | Research<br>Preceptor   |
| Molly<br>(Elizabeth)<br>Stettenbauer | PhD Health Services<br>Research, Brown<br>University (2022 –<br>Present)   | TBD.   | 1RF1AG061221<br>Site PI: A.<br>Zullo, PI S.<br>Berry                                      | RAship<br>Advisor;<br>Academic<br>Advisor   |
| Thomas Bayer                         | Veterans Health<br>Administration Office<br>of Academic<br>Affiliations Fellow,<br>Providence VA<br>Medical Center (2021 –<br>Present) | TBD.   | VA Office of<br>Academic<br>Affiliations  | Mentor  |
| Yalin Deng                           | PhD, Health Services<br>Research, Brown<br>(2022– Present)   | TBD.   | N/A   | Academic<br>Advisor   |
| Mir Moafi<br>Madani                  | PhD, Epidemiology,<br>Brown (2022– Present)  | Intergenerational social<br>mobility, income volatility, and<br>cardiovascular health  | N/A   | Academic<br>Advisor   |
| Anthony<br>Roberts                   | PhD Health Services<br>Research, Brown (2021<br>– Present)   | TBD.   | N/A   | Academic<br>Advisor   |
| Iju Shakya                           | PhD Epidemiology,<br>Brown (2022-Present)  | TBD  | RAship<br>1RF1AG061221<br>Site PI: A.<br>Zullo, PI S.<br>Berry                            | RAship<br>advisor   |
| Meghan Cupp                          | PhD Epidemiology,<br>Brown (2020 –<br>Present)   | Treating pain in autoimmune<br>disease: concurrent use of<br>opioids and biologic<br>medication  | NIH<br>R21AG061632P<br>I A. Zullo.;<br>F31AG081089<br>PI M. Cupp<br>(Sponsor A.<br>Zullo) | Research<br>Assistantship<br>Advisor;<br>Dissertation<br>Chair, F31<br>Mentor/Spo<br>nsor |
| Joe Silva                            | PhD Health Services<br>Research, Brown<br>University (2020 –<br>Present)   | Dissertation: Addressing<br>racial/ethnic geographic<br>disparities in COVID-19 health<br>services and outcomes among<br>nursing home residents with<br>ADRD | Sanofi Burdens<br>of Infections; PI<br>A. Zullo.;<br>F31AG079607<br>PI J. Silva           | Academic<br>Advisor;<br>Research<br>Assistantship<br>Advisor;<br>Dissertation             |

|                 |   |  |  |  |
|-----------------|---|--|--|--|
|                 |   | RAship: Understanding Variation in Vaccine Use using Geospatial and Health Services Research Methods (The “GEO-HSR” Study) | (Sponsor A. Zullo)   | Chair, F31 Mentor/Sponsor                            |
| Samantha Portis | Postdoctoral Research Fellow, Center for Alcohol and Addiction Studies, Brown University (2021 – Present) | Metadoxine for Alcohol Use Disorder in Older Adults  | K99/R00 Metadoxine as a novel pharmacotherapy for older adults with alcohol use disorder | K Award Mentor on Medication Studies in Older Adults |
| Emily O’Neil    | PhD Health Services Research, Brown University (2020 – Present)   | N/A  | N/A  | Academic Advisor                                     |

### Completed Mentees and Trainees

| Trainee Name        | Type/Training Period   | Thesis/ Project Title  | Funding           | Role                          | Last Known Position   |
|---------------------|--|--|-------------------|-------------------------------|---|
| Kate Sine           | MD, Warren Alpert Medical School, Brown University (2020 – 2023)                               | Patterns of prescription drug use before and after fall-related injury in under-resourced US Nursing Homes   | RF1AG061221       | Mentor and RAship Advisor     | Medical Student at The Warren Alpert Medical School of Brown University     |
| Christina Escobar   | PGY1/PGY2 Health-System Pharmacy Administration and Leadership Pharmacy Resident (2022 – 2023) | N/A  | Lifespan Pharmacy | Research Preceptor            | Clinical Pharmacist   |
| Joe Camacho         | PGY1 Clinical Pharmacy Resident (2022 – 2023)  | N/A  | Lifespan Pharmacy | Research Preceptor            | PGY-2 Critical Care Resident at Hennepin County Medical Center              |
| Kevin McConeghy     | PhD Health Services Research, Brown (2021 – 2023)  | Emulation of Target Trials to Evaluate COVID-19 Vaccine Safety and Effectiveness: Evidence Generated from U.S. Community Nursing Homes and the Veterans’ Health Administration | N/A               | Dissertation Committee Member | Clinical Pharmacy Specialist and Investigator, Providence VA Medical Center |
| Cody Douglas        | MPH, Brown (2021 – 2023)   | N/A  | RAship CGHCR      | RAship advisor                | Public Health Educator, Clinton County Health Department                    |
| Elisabeth Salisbury | PGY-2 Ambulatory Care Pharmacy Resident Lifespan Pharmacy, LLC. (2022-2023)                    | Impact of pharmacist-mediated refill authorization program on proton pump inhibitor (PPI) deprescribing success rates.   | Lifespan Pharmacy | Research Preceptor            | Clinical Pharmacist   |

|                   |  |  |                   |                    |   |
|-------------------|--|--|-------------------|--------------------|---|
| Amanda Hutchinson | PGY2 Hematology/Oncology Pharmacy Resident (2022-Present)                        | Effectiveness of tixagevimab and cilgavimab as pre-exposure prophylaxis for COVID-19 infection in cancer patients  | Lifespan Pharmacy | Research Preceptor | Clinical Pharmacist   |
| James Ning        | PGY1/PGY2 Resident, Lifespan Pharmacy (2021 – 2023)                              | Development of buprenorphine/naloxone management protocol for trauma patients                                      | Lifespan Pharmacy | Research Preceptor | Clinical Pharmacist   |
| Darlene Tat       | MPH 2023   | Evaluation of Sliding Scale Insulin Therapy in Nursing Homes using Electronic Health Record Data                   | N/A               | Thesis Reader      | Clinical Pharmacist - Population Health, Providence Community Health Centers. Clinical Pharmacist Per Diem, Rhode Island Hospital |
| Arianna Allman    | MPH 2023   | Concomitant use of tramadol and selective serotonin reuptake inhibitors in those who have experienced hip fracture | N/A               | Thesis Advisor     | Clinical Safety Scientist, Vertex Pharmaceuticals   |
| Nancy Liu         | Sc.M Biostatistics 2023  | Bayesian Competing Risks from a Causal Perspective   | N/A               | Thesis Reader      | Biostatistician, Rutgers University   |
| Abednego Commey   | MPH, Brown (Aug 2020-May 2022)   | Racial and ethnic differences in pain medication prescriptions among older adults with hip fracture                | N/A               | Thesis Reader      | Business Analyst, PharmaACE   |
| Hope MacLeod      | PGY1/PGY2 Health System Administration Resident, Lifespan Pharmacy (2020 – 2022) | Clinical laboratory stewardship to improve the efficiency of care.   | Lifespan Pharmacy | Research Preceptor | PGY2 Health-System Pharmacy Administration and Leadership Resident  |

|                       |  |   |                   |                    |  |
|-----------------------|--|---|-------------------|--------------------|--|
| Hannah Means          | PGY1/PGY2 Oncology Resident, Lifespan Pharmacy (2020 – 2022)   | The impact of a penicillin delabeling pathway on care, clinical outcomes, and efficacy. / COVID-19 Vaccine Effectiveness in Oncology Populations  | Lifespan Pharmacy | Research Preceptor | PGY2 Hematology/Oncology Pharmacy Resident   |
| Erin Connolly         | PGY2 Ambulatory Care Resident, Lifespan Pharmacy (2021 – 2022) | Impact of Clinical Pharmacist Involvement in Infliximab Biosimilar Switching at a Large Academic Medical Center   | Lifespan Pharmacy | Research Preceptor | Clinical Pharmacist Specialist/ Rhode Island Hospital PGY-1 Pharmacy Residency Preceptor |
| Noelle Cordova        | PGY2 Ambulatory Care Resident, Lifespan Pharmacy (2021 – 2022) | Impact of a pharmacist-driven anticoagulation protocol in the ambulatory setting  | Lifespan Pharmacy | Research Preceptor | Clinical Pharmacy Specialist – Gastroenterology, UT Southwestern Medical Center          |
| Katherine Harte       | PGY2 Ambulatory Care Resident, Lifespan Pharmacy (2021 – 2022) | Impact of pharmacist-driven collaborative practice diabetes management on SGLT2 inhibitor and GLP-1 receptor agonist utilization in patients with type 2 diabetes mellitus                                  | Lifespan Pharmacy | Research Preceptor | Clinical Pharmacist Specialist in Neurology, Rhode Island Hospital                       |
| Ama Cobbinah          | PGY1 Resident, Lifespan Pharmacy (2021 – 2022)                 | Penicillin Allergy De-Labeling in Primary Care  | Lifespan Pharmacy | Research Preceptor | Clinical Pharmacist Case Manager, CenterLight Health System                              |
| Vanamrung Isaragumpot | PGY1 Resident, Lifespan Pharmacy (2021 – 2022)                 | Impact of early administration of four-factor prothrombin complex concentrate on hemostasis and bleed expansion in patients with traumatic intracranial hemorrhage on warfarin or oral factor-Xa inhibitors | Lifespan Pharmacy | Research Preceptor | Clinical Pharmacist Specialist in Critical Care, Rhode Island Hospital                   |

|                  |   |   |   |                                |  |
|------------------|---|---|---|--------------------------------|--|
| Nicole Kalver    | PGY1 Resident, Lifespan Pharmacy (2021 – 2022)  | Factors Related to COVID-19 Vaccine Use in Kidney Transplant Recipients   | Lifespan Pharmacy                               | Research Preceptor             | Clinical Pharmacist, Brigham and Women's Hospital                          |
| Katie Konieczny  | PGY1 Resident, Lifespan Pharmacy (2021 – 2022)  | Evaluating the optimal anticonvulsant agent to reduce the risk of motor vehicle crash in epileptic older adults | Lifespan Pharmacy                               | Research Preceptor             | Breast, Gynecology Clinical Oncology Pharmacist at Yale New Haven Hospital |
| Jason Gantenberg | Postdoctoral Fellow, Brown University (2021 – 2022)   | Estimating RSV-attributable outcomes in newborns less than one year of age using real-world data                | Sanofi RSV; PI. A. Zullo.                       | Primary Advisor                | Research Scientist, Brown University CGHCR & CESH                          |
| Julie Gokhale    | MPH, Brown University (2020 – 2022)   | TBD.  | NIH R01AG065722; PI A. Zullo.                   | Thesis Advisor                 | Policy Intern, Rhode Island Department of Health                           |
| Hosam Mohamed    | B.A., Tougaloo College (2018 – 2022); Leadership Alliance Summer Research Early Identification Program (SR-EIP) (2021 – 2022) | Outcomes of Drug Interactions at the Population Level: A Systematic Review                                      | SR-EIP Funding Provided by Dr. Theresa Shireman | Primary Advisor/ Mentor        | Doctor of Pharmacy Student, University of Mississippi School of Pharmacy   |
| Missy Riester    | Postdoctoral Fellow, Brown University (2020 – 2022)   | TBD.  | Sanofi Burdens of Infections; PI A. Zullo.      | Primary Advisor                | Research Scientist, Brown University CGHCR                                 |
| Katherine Wen    | Postdoctoral Fellow, Brown University (2021 – 2022)   | TBD.  | N/A   | Fellowship Advisor/ Mentor     | Assistant Professor, Vanderbilt University                                 |
| Ralph Welwean    | PhD Epidemiology, Brown (2021 – 2022)   | Antibiotic Use in U.S. Nursing Homes  | Sanofi Burdens of Infections; PI A. Zullo.      | Research Assistantship Advisor | Doctoral Student, Brown University School of Public Health                 |



|                  |  |   |   |                               |  |
|------------------|--|---|---|-------------------------------|--|
| Jason Gantenberg | PhD Epidemiology, Brown University (2017 – 2021)               | Several, including “Effect of Alcohol Use on the Association Between Neighborhood-Level Characteristics and HIV/STIs” | AHRQ: K12 HS022998; PI. A. Zullo; Sanofi Burdens of Infections; PI. A. Zullo; Sanofi RSV; PI. A. Zullo. | Co-Primary Supervisor         | Postdoctoral Fellow, Brown University School of Public Health                  |
| Matthew Duprey   | Postdoctoral Fellow, Brown University (2020 – 2021)            | Identification of Fall-related Injuries in Nursing Home Residents using Administrative Claims Data                    | NIH RF1AG061221; Site PI A. Zullo.  | Primary Advisor               | Assistant Professor, University of Kentucky College of Pharmacy                |
| Lydia Ware       | PGY1 Resident, Lifespan Pharmacy (2020 – 2021)                 | Economic assessment of sugammadex use in the operating room   | Lifespan Pharmacy   | Research Preceptor            | PGY-2 Critical Care Pharmacy Resident at Brigham and Women's Hospital          |
| Kali Bendix      | PGY1 Resident, Lifespan Pharmacy (2020 – 2021)                 | Safety and effectiveness of different anticoagulation strategies in critically ill patients with COVID-19             | Lifespan Pharmacy   | Research Preceptor            | Clinical Pharmacist  |
| Bianca Kohler    | PGY2 Resident Ambulatory Care, Lifespan Pharmacy (2020 – 2021) | Comparative Effectiveness of Dipeptidyl Peptidase-4 Inhibitors and Sulfonylureas among Frail Older Adults             | NIH RF1AG061221; Site PI A. Zullo; Lifespan Pharmacy  | Primary Advisor and Preceptor | Clinical Pharmacist  |
| Mark Lasorsa     | PGY2 Resident Ambulatory Care, Lifespan Pharmacy (2020 – 2021) | Comparative effects of antihypertensives on injurious falls in nursing home residents                                 | NIH RF1AG061221; Site PI A. Zullo; Lifespan Pharmacy  | Primary Advisor and Preceptor | Clinical Pharmacist Specialist, Tufts Medical Center                           |
| Verona Abdelmese | PGY2 Resident Oncology, Lifespan Pharmacy (2020 – 2021)        | Comparative cost savings of biosimilar and dose rounding utilization  | Lifespan Pharmacy   | Research Preceptor            | Clinical Pharmacist, Hematology/Oncology, Beth Israel Deaconess Medical Center |

|                  |  |  |  |                                      |   |
|------------------|--|--|--|--------------------------------------|---|
| Alyssa Capuano   | PGY2 Resident Ambulatory Care, Lifespan Pharmacy (2020 – 2021) | Development of a model to predict injurious falls in nursing home residents  | NIH RF1AG061221; Site PI A. Zullo; Lifespan Pharmacy | Primary Advisor and Preceptor        | Clinical Pharmacist Specialist, Endocrinology, Lifespan     |
| Paige Dunton     | PGY1 Resident, Lifespan Pharmacy (2020 – 2021)                 | Development of a risk-stratification tool for empiric anti-methicillin resistant staphylococcus aureus antibiotics from patient-specific risk factors in pneumonia | Lifespan Pharmacy                                    | Research Preceptor                   | Clinical Pharmacist   |
| Elliott Bosco    | PhD Health Services Research, Brown University (2018 – 2021)   | Use and Outcomes of Opioid and Nonopioid Analgesics Following Total Hip and Knee Arthroplasty in Older Adults  | Sanofi Burdens of Infections; PI. A. Zullo.          | Dissertation Chair; Academic Advisor | Investigator, Brown University School of Public Health      |
| Samuel Shim      | ScM Epidemiology, Brown University (2019 – 2021)               | Assessing the Effects of Micronutrients on Viral Infection in Humans: A Systematic Review and Meta-Analysis  | N/A  | Thesis Reader                        | Data Scientist at CRScube Inc.                              |
| Alissa Margraf   | PGY2 Resident Ambulatory Care, Lifespan Pharmacy (2019 – 2020) | Development of a novel interdisciplinary deprescribing protocol for older adults.  | ASHP Foundation Practice-Based Research Grant        | Primary Advisor and Preceptor        | Clinical Pharmacy Specialist – Specialty Pharmacy, Lifespan |
| Erin Dudolevitch | PGY1 Resident, Lifespan Pharmacy (2019 – 2020)                 | Optimization of Oral Liquid Medication Use in Pediatric Patients   | Lifespan Pharmacy                                    | Primary Advisor and Preceptor        | Unknown   |
| Mike Consaga     | PGY1 Resident, Lifespan Pharmacy (2019 – 2020)                 | Safety of total dose infusions of low molecular weight intravenous iron dextran without a test dose  | Lifespan Pharmacy                                    | Primary Advisor and Preceptor        | Critical Care Clinical Pharmacist, Rhode Island Hospital    |
| Joe Silva        | ScM Epidemiology, Brown University (2018 – 2020)               | Antiviral Chemoprophylaxis in Rhode Island Long-Term Care Facilities   | Rhode Island Department of Health                    | Thesis Advisor                       | PhD Student at Brown University School of Public Health     |
| Alexandra King   | MPH Generalist, Brown  | Statin adherence and associated cardiovascular   | N/A  | Thesis Advisor                       | Senior Manager, Clinical                                    |

|                    |  |   |   |   |   |
|--------------------|--|---|---|---|---|
|                    | University<br>(2019 – 2020)  | hospitalizations among<br>Medicare Advantage<br>beneficiaries   |   |   | Network<br>Analytics at<br>ChenMed  |
| Mark Sorial        | PGY1 / PGY2<br>Resident,<br>Lifespan<br>Pharmacy<br>(2018– 2020)           | Several, including<br>“Effects on heparin<br>infusion rates after<br>exogenous<br>supplementation of<br>antithrombin III in<br>patients receiving<br>ECMO”                                | Lifespan<br>Pharmacy                                      | Preceptor                                   | Senior Clinical<br>Pharmacist -<br>Hematology/O<br>ncology,<br>Brigham and<br>Women's<br>Hospital |
| Melissa<br>Riester | PGY1 / PGY2<br>Resident,<br>Lifespan<br>Pharmacy<br>(2018– 2020)           | Several, including “A<br>machine learning<br>transitions of care tool<br>for pharmacists to<br>predict chronic heart<br>failure<br>rehospitalization”                                     | ASHP<br>Foundation<br>Practice-Based<br>Research<br>Grant | Preceptor                                   | Postdoctoral<br>Fellow, Brown<br>University<br>School of<br>Public Health                         |
| Divya<br>Santhanam | AB Health and<br>Human<br>Biology, Brown<br>University<br>(2018 – 2019)    | Altering the Transition<br>from Acute to Chronic<br>Pain (ATTAC-Pain): A<br>randomized clinical<br>trial of duloxetine for<br>the treatment and<br>prevention of<br>musculoskeletal pain. | N/A   | Thesis<br>Reader                            | Medical<br>Student at<br>Western<br>University  |
| Arielle Childs     | ScM<br>Epidemiology,<br>Brown<br>University<br>(2017 – 2019)               | Systematic Review of<br>the Burden of<br>Respiratory Infections<br>in Long-Term Care  | Sanofi Pasteur;<br>PI. A. Zullo                           | Primary<br>Supervisor;<br>Thesis<br>Advisor | Senior Public<br>Health<br>Epidemiologist,<br>State of Rhode<br>Island                            |
| Alyssa Francis     | MPH<br>Generalist,<br>Brown<br>University<br>(2018 – 2019)                 | Comparing Treatment<br>Response in Younger<br>versus Older Adults on<br>Direct-Acting Antiviral<br>Agents for Chronic<br>Hepatitis C Virus  | N/A   | Thesis<br>Reader                            | Medical<br>Student at<br>Texas Tech<br>University<br>Health Sciences<br>Center                    |
| Allison Zuern      | PGY2 Resident<br>Ambulatory<br>Care, Lifespan<br>Pharmacy<br>(2018 – 2019) | Impact of pharmacist<br>intervention on chronic<br>obstructive pulmonary<br>disease outcomes  | ACCP<br>Ambulatory<br>Care PRN; PI.<br>A. Zuern           | Primary<br>Advisor<br>and<br>Preceptor      | Clinical<br>Pharmacy<br>Specialist,<br>Ambulatory<br>Care Services,<br>Rhode Island<br>Hospital   |
| Marci Wood         | PGY2 Resident<br>Ambulatory<br>Care, Lifespan<br>Pharmacy<br>(2018 – 2019) | Effects of statins for<br>secondary prevention<br>in older nursing home<br>residents  | Lifespan<br>Pharmacy                                      | Primary<br>Advisor<br>and<br>Preceptor      | Pharmacist<br>Clinician at The<br>University of<br>Vermont<br>Medical Center                      |

|                          |  |  |                                     |                               |   |
|--------------------------|--|--|-------------------------------------|-------------------------------|---|
| Jennifer Hutchinson      | PGY2 Resident Oncology, Lifespan Pharmacy (2018 – 2019)        | Effects of non-oral drugs for fracture prevention in frail older adults with cancer  | Lifespan Pharmacy                   | Primary Advisor and Preceptor | Clinical Pharmacist, Breast Oncology, Massachusetts General Hospital  |
| Amanda Mogul             | PGY2 Resident Ambulatory Care, Lifespan Pharmacy (2017 – 2018) | Main Effect of Secondary Prevention Medication Use on Functional Outcomes, Death, and Rehospitalization in Older Nursing Home Residents after Acute Myocardial Infarction      | Lifespan Pharmacy                   | Primary Advisor and Preceptor | Clinical Assistant Professor, Pharmacy Practice School of Pharmacy and Pharmaceutical Sciences, Binghamton University |
| Katherine Duprey (Corsi) | PGY2 Resident Ambulatory Care, Lifespan Pharmacy (2017 – 2018) | Subgroup Effects of Secondary Prevention Medication Use on Functional Outcomes, Death, and Rehospitalization in Older Nursing Home Residents after Acute Myocardial Infarction | Lifespan Pharmacy                   | Primary Advisor and Preceptor | Clinical Pharmacist Specialist with Lifespan Pharmacy   |
| Alicia Ortega            | PGY2 Resident Oncology, Lifespan Pharmacy (2017 – 2018)        | Discontinuation of medications after advanced cancer diagnosis in older nursing home residents   | Lifespan Pharmacy                   | Primary Advisor and Preceptor | Pharmacist, Tucson, Arizona   |
| Sadia Sharmin            | ScM Epidemiology, Brown University (2016 – 2018)               | Dose- and Drug-Specific Effects of Sulfonylureas on Cognitive and Physical Functioning in Older Nursing Home Residents   | AHRQ: K12 HS022998; PI. A. Zullo.   | Primary Supervisor            | Strategic Information Analyst at Interior Health, Canada  |
| Anthony Scotina          | PhD Biostatistics, Brown University (2017 – 2018)              | Estimation of Multi-Treatment Effects from Observational Data with Applications to Diabetes Mellitus   | PCORI: HSRP20153342 ; PI. R. Gutman | Thesis Reader                 | Assistant Professor and Program Director for Data Sciences, Simmons University  |
| Brian Gilbert            | BS Applied Mathematics, Brown                                  | Principal Stratification for Comparative Safety of Diabetes  | N/A                                 | Secondary Advisor             | PhD Student, Statistics, Johns Hopkins  |

|                                 |   |  |                                       |  |  |
|---------------------------------|---|--|---------------------------------------|--|--|
|                                 | University<br>(2017 – 2018)   | Medications in Nursing<br>Home Residents   |                                       |  | University<br>School of<br>Public Health   |
| Joella Adams                    | PhD<br>Epidemiology,<br>Brown<br>University<br>(2016 – 2017)          | Effect of Adolescent<br>Alcohol Use of the<br>Associations Between<br>Neighborhood-Level<br>Characteristics and<br>HIV/STIs    | N/A                                   | Summer<br>Thesis<br>Reader             | Research<br>Epidemiologist,<br>RTI<br>International                              |
| Geetanjoli<br>Banerjee          | PhD<br>Epidemiology,<br>Brown<br>University<br>(2014 – 2016)          | Geographic and<br>Facility Variation in<br>Hip Fracture Among<br>United States Long-<br>Stay Nursing Home<br>Residents         | NIH: R01<br>AG045441; PI.<br>S. Berry | Superviso<br>r                         | Senior<br>Manager,<br>HEOR, Medical<br>Health<br>Outcomes<br>Research,<br>Biogen |
| Melissa<br>Riester<br>(Previte) | PharmD<br>Student,<br>Lifespan<br>Pharmacy and<br>URI (2017)          | Patterns of<br>sugammadex use for<br>the reversal of short-<br>acting non-<br>depolarizing<br>neuromuscular<br>blocking agents | Lifespan<br>Pharmacy                  | Secondary<br>Advisor                   | Postdoctoral<br>Fellow, Brown<br>University<br>School of<br>Public Health        |
| Matthew<br>Olean                | APPE Research<br>PharmD<br>Student,<br>Lifespan<br>Pharmacy<br>(2017) | Adverse Effects of Beta-<br>Blockers in Older<br>Nursing Home<br>Residents after Acute<br>Myocardial Infarction                | Lifespan<br>Pharmacy                  | Primary<br>Advisor<br>and<br>Preceptor | Clinical<br>Pharmacist<br>Specialist at<br>Cambridge<br>Health Alliance          |
| Elliott Bosco                   | APPE Research<br>PharmD<br>Student,<br>Lifespan<br>Pharmacy<br>(2016) | Controlled substance<br>diversion in health<br>systems: failure mode<br>and effects analysis for<br>prevention                 | Lifespan<br>Pharmacy                  | Primary<br>Advisor<br>and<br>Preceptor | Investigator,<br>Brown<br>University<br>School of<br>Public Health               |
| Tina Gao                        | MPH, Brown<br>University<br>(2014 – 2016)                             | Risk factors for not<br>being tested for HIV<br>among young<br>adolescents in NYC  | N/A                                   | Thesis<br>Reader                       | Study<br>Coordinator at<br>Albert Einstein<br>College of<br>Medicine             |
| Katherine<br>Caine              | BA, Brown<br>University<br>(2014 – 2015)                              | The Effect of Economic<br>Interventions on HIV<br>Transmission in<br>Vulnerable<br>Populations: A<br>Systematic Review         | Brown<br>University; PI.<br>A. Zullo  | Project<br>Advisor                     | Senior<br>Manager,<br>Corporate<br>Innovation,<br>gener8tor                      |
| Karla Ganley                    | BA, Brown<br>University<br>(2014 – 2015)                              | Socioeconomic Status<br>and Return to Clinic   | Brown<br>University; PI.<br>A. Zullo  | Project<br>Advisor                     | MD-PhD<br>Student,<br>University of  |

|                        |  |  |                                   |                               |   |
|------------------------|--|--|-----------------------------------|-------------------------------|---|
|                        |  | Among Male Sex Workers in Mexico City  |                                   |                               | Florida College of Medicine   |
| Nicholas Weeden        | BA, Brown University (2014 – 2015)                             | Socioeconomic status and CD4 count among MSWs at high risk of contracting HIV  | Brown University; PI. A. Zullo    | Project Advisor               | Technical Solutions Engineer at Verily Life Sciences  |
| Claire Postman         | BA, Brown University (2014 – 2015)                             | Self-Identification: Insurance Status and Sex Work in Mexico City  | Brown University; PI. A. Zullo    | Project Advisor               | Law School Student, Columbia University   |
| Robert Brunault        | PGY2 Resident Oncology, Lifespan Pharmacy (2016 – 2017)        | Managing diabetes mellitus in nursing home residents with advanced cancer: a national study  | Lifespan Pharmacy                 | Primary Advisor and Preceptor | Clinical Pharmacy Specialist, Hematology/Oncology, Lifespan   |
| Safiya Naidjate        | PGY2 Resident Ambulatory Care, Lifespan Pharmacy (2016 – 2017) | Comparative Effectiveness of Pharmacist Hepatitis C Virus Clinic Care Delivery Models  | ASHP Foundation; PI. S. Naidjate  | Primary Advisor and Preceptor | Clinical Pharmacist Specialist at Lifespan  |
| Michelle Hersey        | PGY2 Resident Ambulatory Care, Lifespan Pharmacy (2016 – 2017) | Outcomes of “diabetes-friendly” versus “diabetes-unfriendly” beta-blockers in older nursing home residents with diabetes after acute myocardial infarction | Lifespan Pharmacy                 | Primary Advisor and Preceptor | Ambulatory Care Clinical Pharmacy Specialist at Rhode Island Hospital   |
| Laura McAuliffe (Hunt) | PGY2 Resident Ambulatory Care, Lifespan Pharmacy (2015 – 2016) | Development and validation of the MEDCOINS transitions of care pharmacist tool to predict potentially avoidable 30-day readmissions                        | ASHP Foundation; PI. L. McAuliffe | Primary Advisor and Preceptor | Clinical Pharmacy Specialist-Ambulatory Care/Transitions of Care; Director, PGY-2 Ambulatory Care Residency Program, Lifespan |
| Olga Yankulina         | PGY2 Resident Oncology, Lifespan Pharmacy (2015 – 2016)        | Pertuzumab-associated Diarrhea in HER2/neu Positive Breast Cancer Patients: A Comparison of Trials to Actual Practice                                      | Lifespan Pharmacy                 | Primary Advisor and Preceptor | Clinical Pharmacy Specialist (Oncology), Henry Ford Health System   |

|              |  |  |                                    |                               |   |
|--------------|--|--|------------------------------------|-------------------------------|---|
| Hao Deng     | MPH, Brown University (2014 – 2015)                            | Outcomes of Beta-blockers in Older Nursing Home Residents after Acute Myocardial Infarction                              | NIH: R01 HL111032; PI. M. Steinman | Primary Supervisor            | Assistant Professor, Harvard Medical School   |
| Hannah Fudin | PGY2 Resident Ambulatory Care, Lifespan Pharmacy (2014 – 2015) | Renal Transplant Patient Opinions of Home Electronic Blood Pressure Monitoring (HeBPM): An Exploratory Qualitative Study | Lifespan Pharmacy                  | Primary Advisor and Preceptor | Clinical Pharmacist-Women's Clinic, Transgender Clinic, Metabolic & Obesity Clinic at U.S. Department of Veterans Affairs |
| Uvette Lou   | PGY2 Resident Oncology, Lifespan Pharmacy (2014 – 2015)        | Overuse and Underuse of Pegfilgrastim for Primary Prophylaxis of Febrile Neutropenia                                     | Lifespan Pharmacy                  | Primary Advisor and Preceptor | Clinical Pharmacy Specialist - Medical Oncology at Massachusetts General Hospital   |

## 11. SELECTED BROADCAST MEDIA QUOTING ANDREW ZULLO OR ZULLO ET AL. PAPERS

- 1) Maxmen, A. (2023) A new COVID vaccine is here, but those at greatest risk may not get it as outreach drops off, PBS. Available at: <https://www.pbs.org/newshour/health/a-new-covid-vaccine-is-here-but-those-at-greatest-risk-may-not-get-it-as-outreach-drops-off>
- 2) Puckrein, Gary. "Increasing Vaccination Rates in Nursing Homes and Communities of Color". 2023 CMS Quality Conference. May 1st, 2023. Presenter: Joe BB. Silva. <https://www.youtube.com/watch?v=ONi9mDQndbo>
- 3) Matthews, Samantha. "Deprescribing Among Older Adults With Dementia". Annals of Long-Term Care Newsletter. March 10th, 2022.
- 4) Asimopoulos, Maria. "Influenza, Respiratory Syncytial Virus Linked to Rehospitalizations in Postacute Setting." *Annals of Long-Term Care Newsletter*. January 1<sup>st</sup>, 2022.
- 5) Bluth, Rachel. "Looking for Bargains, Many Americans Buy Medicines Abroad". *National Public Radio (NPR)*. December 17<sup>th</sup>, 2016.

## 12. SELECTED TEXT MEDIA QUOTING ANDREW ZULLO OR ZULLO ET AL. PAPERS

---

- 1) Clinic-Embedded Pharmacists Bridge The Biosimilars Gap. *Pharmacy Practice News*. September 6<sup>th</sup>, 2022. <https://www.pharmacypracticenews.com/Operations-and-Management/Article/09-22/Clinic-Embedded-Pharmacists-Bridge-The-Biosimilars-Gap/67996>
- 2) How pharmacists can be 'deprescribing champions'. *Lown Institute*. June 3<sup>rd</sup> 2019. <https://lowninstitute.org/news/blog/how-pharmacists-can-be-deprescribing-champions/>
- 3) Pros, Cons to Multiple Meds for Nursing Home Residents. *Drugs.com*. April 10<sup>th</sup> 2019. <https://www.drugs.com/news/pros-cons-multiple-meds-nursing-home-residents-81649.html>
- 4) Schwenk, Thomas. Post-Myocardial Infarction Beta-Blockers and Functional Decline in Nursing Home Residents. *NEJM Journal Watch*. December 20<sup>th</sup>, 2016.
- 5) Bluth, Rachel. Faced with Unaffordable Drug Prices, Tens of Millions Buy Medicine Outside U.S. *Kaiser Health News*. December 20<sup>th</sup>, 2016.
- 6) Predit, Robert. Beta Blockers May Not Be Best Heart Drugs for Dementia Patients. *U.S. News and World Report*. December 12<sup>th</sup>, 2016.

## 13. LICENSES & CERTIFICATIONS

---

- |  |                |
|--|----------------|
| • Registered Pharmacist (RPH05164)<br>Rhode Island Department of Health                                      | 2012 - Present |
| • Registered Pharmacist (28RI03517000)<br>New Jersey Department of Health                                    | 2012 - Present |
| • Mentoring Training Program<br>Advance-CTR (U54GM115677)  | 2019           |
| • Teaching Certificate in Research Mentorship<br>Sheridan Center for Teaching and Learning, Brown University | 2015           |
| • Teaching Certificate in Reflective Teaching<br>Sheridan Center for Teaching and Learning, Brown University | 2014           |

## 14. PROFESSIONAL LEAVES

---

- |               |                     |
|---------------|---------------------|
| • Bereavement | Jan 2015 - Mar 2015 |
|---------------|---------------------|



## 15. RESEARCH SUMMARY

---

My research focuses on the use, comparative safety, and comparative effectiveness of medications in older adults, especially those who receive post-acute care in institutional settings or who reside in long-term care facilities. Since there is little or no evidence to support treatment decisions for many important subgroups of older adults receiving medications in clinical practice, my work seeks to generate such evidence. To achieve this overarching aim, I employ a diverse set of quantitative methods to large routinely collected administrative and clinical data.