

Elizabeth A. Chrischilles
Professor

EDUCATION

The University of Iowa, Iowa City, Iowa	BS	1979	Pharmacy
The University of Iowa, Iowa City, Iowa	MS	1981	Pharmacy
The University of Iowa, Iowa City, Iowa	PhD	1986	Pharmacy

EMPLOYMENT AND EXPERIENCE

1981-82	Clinical Pharmacy Fellowship, University of Iowa Family Practice/College of Pharmacy, Iowa City, Iowa
1982-84	Clinical Assistant Professor, Division of Clinical/Hospital Pharmacy, College of Pharmacy, University of Iowa
1982-84	Clinical Pharmacy Faculty, Cedar Rapids Medical Education Program, Cedar Rapids, Iowa
1986-87	Visiting Assistant Professor, Department of Preventive Medicine, University of Iowa
1987-94	Assistant Professor, Department of Preventive Medicine, University of Iowa
1994-99	Associate Professor, Department of Preventive Medicine, University of Iowa
1999-00	Associate Professor, Department of Epidemiology, College of Public Health, University of Iowa
2000-pres	Professor, Department of Epidemiology, College of Public Health, University of Iowa
2000-10	Associate Head for Admissions and Curriculum, Department of Epidemiology, College of Public Health, University of Iowa
2000-pres	Professor (Secondary Appointment), Dept. of Pharmacy Practice and Science, College of Pharmacy, University of Iowa
2007-pres	Associate Director for Population Sciences, Holden Comprehensive Center
2007-10	Co-Director, BERD Key Function, Institute for Clinical and Translational Science
2011-2015	Director, CER Thematic area, Institute for Clinical and Translational Science
2015-pres	Associate Director for Biomedical Informatics, Institute for Clinical and Translational Science
2017-	Department Head, Department of Epidemiology, College of Public Health, The University of Iowa

HONORS AND AWARDS

1987-92	Burroughs Welcome Scholar in Pharmacoepidemiology
1997	Iowa Pharmacists Association Appreciation Award
2000	The University of Iowa Collegiate Teaching Award
2004	College of Public Health Faculty Teaching Award
2005	Recipient of the Wiederholdt Prize by the American Pharmacists Association
2007	Marvin A. and Rose Lee Pomerantz Chair in Public Health
2007	CPH Distinguished Faculty Lecturer
2009	Iowa Pharmacy Association Appreciation Award
2014	College of Public Health Research Award
2015	Fellow of the Hedwig van Ameringen Executive Leadership in Academic Medicine (ELAM) program at the Drexel University College of Medicine
2018-	Fellow, American College of Epidemiology
2018	Distinguished Alumni Award, College of Pharmacy, The University of Iowa

PUBLICATIONS (publications in the last 5 years)

1. Mendy A, Metwali N, Perry SS, Chrischilles EA, Wang K, Thorne PS (2020). Household endotoxin reduction in the Louisa Environmental Intervention Project for rural childhood asthma. *Indoor air*, 30(1):88-97. PMID: 31605641
2. McDowell BD, Klemp J, Blaes A, Cohee AA, Trentham-Dietz A, Kamaraju S, Otte JL, Mott SL, Chrischilles EA (2020). The association between cancer care coordination and quality of life is stronger for breast cancer patients with lower health literacy: A Greater Plains Collaborative study. *Supportive care in cancer: official journal of the Multinational Association of Supportive Care in Cancer*, 28(2):887-895. PMC: PMC6893112, PMID: 31168710
3. Briasoulis A, Gao Y, Inampudi C, Alvarez P, Asleh R, Chrischilles E, Leira EC, Vaughan-Sarrazin M (2020). Characteristics and outcomes in patients with atrial fibrillation receiving direct oral anticoagulants in off-label doses. *BMC cardiovascular disorders*, 20(1):42. PMC: PMC6998084, PMID: 32013886
4. Chang NN, Reisinger HS, Schweizer ML, Jones M, Chrischilles E, Chorazy M, Huskins C, Herwaldt L (2020). Hand Hygiene Compliance at Critical Points of Care. *Clinical infectious diseases: an official publication of the Infectious Diseases Society of America*. PMID: 32034404
5. Leone JP, Haraldsson B, Mott SL, McDowell BD, Chrischilles EA (2019). Treatment Patterns and Survival of Elderly Patients With Breast Cancer Brain Metastases. *American journal of clinical oncology*, 42(1):60-66. PMID: 29965807
6. Neuner JM, Kong A, Blaes A, Riley D, Chrischilles E, Smallwood A, Lizarraga I, Schroeder M (2019). The association of socioeconomic status with receipt of neoadjuvant chemotherapy. *Breast cancer research and treatment*, 173(1):179-188. PMID: 30232683
7. Carnahan RM, Gagne JJ, Hampp C, Leonard CE, Toh S, Fuller C, Hennessy S, Hou L, Cocoros NM, Panucci G, Woodworth T, Cosgrove A, Iyer A, Chrischilles EA (2019). Evaluation of the US Food and Drug Administration Sentinel Analysis Tools Using a Comparator with a Different Indication: Comparing the Rates of Gastrointestinal Bleeding in Warfarin and Statin Users. *Pharmaceutical Medicine*, 33(1):29-43.
8. Haskins CB, McDowell BD, Carnahan RM, Fiedorowicz JG, Wallace RB, Smith BJ, Chrischilles EA (2019). Impact of preexisting mental illness on breast cancer endocrine therapy adherence. *Breast cancer research and treatment*, 174(1):197-208. PMC: PMC6426454, PMID: 30465157
9. Mora-Pinzon MC, Chrischilles EA, Greenlee RT, Hoeth L, Hampton JM, Smith MA, McDowell BD, Wilke LG, Trentham-Dietz A (2019). Variation in coordination of care reported by breast cancer patients according to health literacy. *Supportive care in cancer: official journal of the Multinational Association of Supportive Care in Cancer*, 27(3):857-865. PMC: PMC6355372, PMID: 30062586
10. Japuntich SJ, Kumar P, Pendergast JF, Juarez Caballero GY, Malin JL, Wallace RB, Chrischilles EA, Keating NL, Park ER (2019). Smoking Status and Survival Among a National Cohort of Lung and Colorectal Cancer Patients. *Nicotine & tobacco research: official journal of the Society for Research on Nicotine and Tobacco*, 21(4):497-504. PMID: 29351659

11. Chrischilles EA, Riley D, Letuchy E, Koehler L, Neuner J, Jernigan C, Gryzlak B, Segal N, McDowell B, Smith B, Sugg SL, Armer JM, Lizarraga IM (2019). Upper extremity disability and quality of life after breast cancer treatment in the Greater Plains Collaborative clinical research network. *Breast cancer research and treatment*, 175(3):675-689. PMID: 30852760
12. Stewart M, Norden AD, Dreyer N, Henk HJ, Abernethy AP, Chrischilles E, Kushi L, Mansfield AS, Khozin S, Sharon E, Arunajadai S, Carnahan R, Christian JB, Miksad RA, Sakoda LC, Torres AZ, Valice E, Allen J (2019). An Exploratory Analysis of Real-World End Points for Assessing Outcomes Among Immunotherapy-Treated Patients With Advanced Non-Small-Cell Lung Cancer. *JCO clinical cancer informatics*, 3:1-15. PMID: 31335166
13. Charlton ME, Shahnazi AF, Gribovskaja-Rupp I, Hunter L, Mengeling MA, Chrischilles EA, Lynch CF, Ward MM (2019). Determinants of Rectal Cancer Patients' Decisions on Where to Receive Surgery: a Qualitative Analysis. *Journal of gastrointestinal surgery: official journal of the Society for Surgery of the Alimentary Tract*, 23(7):1461-1473. PMC: PMC6409182, PMID: 30203231
14. Chioreso C, Gao X, Gribovskaja-Rupp I, Lin C, Ward MM, Schroeder MC, Lynch CF, Chrischilles EA, Charlton ME (2019). Hospital and Surgeon Selection for Medicare Beneficiaries With Stage II/III Rectal Cancer: The Role of Rurality, Distance to Care, and Colonoscopy Provider. *Annals of surgery*. PMID: 31714306
15. Blaes AH, Jewett PI, McKay K, Riley D, Jatoi I, Trentham-Dietz A, Chrischilles E, Klemp JR (2019). Factors associated with genetic testing in a cohort of breast cancer survivors. *The breast journal*, 25(6):1241-1244. PMID: 31270889
16. Ammann EM, Cuker A, Carnahan RM, Perepu US, Winiecki SK, Schweizer ML, Leonard CE, Fuller CC, Garcia C, Haskins C, Chrischilles EA (2018). Chart validation of inpatient International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) administrative diagnosis codes for venous thromboembolism (VTE) among intravenous immune globulin (IGIV) users in the Sentinel Distributed Database. *Medicine*, 97(8):e9960. PMC: PMC5841980, PMID: 29465588
17. Ammann EM, Shanafelt TD, Wright KB, McDowell BD, Link BK, Chrischilles EA (2018). Updating survival estimates in patients with chronic lymphocytic leukemia or small lymphocytic lymphoma (CLL/SLL) based on treatment-free interval length. *Leukemia & lymphoma*, 59(3):643-649. PMID: 28718694
18. Chrischilles EA, Gagne JJ, Fireman B, Nelson J, Toh S, Shoaibi A, Reichman ME, Wang S, Nguyen M, Zhang R, Izem R, Goulding MR, Southworth MR, Graham DJ, Fuller C, Katcoff H, Woodworth T, Rogers C, Saliga R, Lin ND, McMahill-Walraven CN, Nair VP, Haynes K, Carnahan RM (2018). Prospective surveillance pilot of rivaroxaban safety within the US Food and Drug Administration Sentinel System. *Pharmacoepidemiology and drug safety*, 27(3):263-271. PMID: 29318683
19. Ammann EM, Schweizer ML, Robinson JG, Eschol JO, Kafa R, Girotra S, Winiecki SK, Fuller CC, Carnahan RM, Leonard CE, Haskins C, Garcia C, Chrischilles EA (2018). Chart validation of inpatient ICD-9-CM administrative diagnosis codes for acute myocardial infarction (AMI) among intravenous immune globulin (IGIV) users in the Sentinel Distributed Database. *Pharmacoepidemiology and drug safety*, 27(4):398-404. PMID: 29446185
20. Brooks JM, Chapman CG, Suneja M, Schroeder MC, Fravel MA, Schneider KM, Wilwert J, Li YJ, Chrischilles EA, Brenton DW, Brenton M, Robinson J (2018). Use of Angiotensin-Converting Enzyme Inhibitors and Angiotensin Receptor Blockers for Geriatric Ischemic

Stroke Patients: Are the Rates Right? *Journal of the American Heart Association*, 7(11).
PMID: 29848495

21. Carter BL, Levy B, Gryzlak B, Xu Y, Chrischilles E, Dawson J, Vander Weg M, Christensen A, James P, Polgreen L (2018). Cluster-Randomized Trial to Evaluate a Centralized Clinical Pharmacy Service in Private Family Medicine Offices. *Circulation. Cardiovascular quality and outcomes*, 11(6):e004188. PMC: PMC5996776, PMID: 29884657
22. Carnahan RM, Kuntz JL, Wang SV, Fuller C, Gagne JJ, Leonard CE, Hennessy S, Meyer T, Archdeacon P, Chen CY, Panozzo CA, Toh S, Katcoff H, Woodworth T, Iyer A, Axtman S, Chrischilles EA (2018). Evaluation of the US Food and Drug Administration sentinel analysis tools in confirming previously observed drug-outcome associations: The case of clindamycin and *Clostridium difficile* infection. *Pharmacoepidemiology and drug safety*, 27(7):731-739. PMID: 29532543
23. Goedken AM, Brooks JM, Milavetz G, Rudzianski NJ, Chrischilles EA (2018). Geographic variation in inhaled corticosteroid use for children with persistent asthma in Medicaid. *The Journal of asthma: official journal of the Association for the Care of Asthma*, 55(8):851-858. PMID: 28800267
24. Vaughan Sarrazin MS, Jones M, Mazur A, Cram P, Ayyagari P, Chrischilles E (2017). Cost of hospital admissions in medicare patients with atrial fibrillation taking warfarin, dabigatran, or rivaroxaban *Journal of the American College of Cardiology* 69(3):360-362. PMID: 28104077
25. Palamaner Subash Shantha G, Bhave PD, Girotra S, Hodgson-Zingman D, Mazur A, Giudici M, Chrischilles E, Vaughan Sarrazin MS (2017). Sex-specific comparative effectiveness of oral anticoagulants in elderly patients with newly diagnosed atrial fibrillation. *Circ Cardiovasc Qual Outcomes*, 10(4). PMID: 28408716
26. Kulchaitanaroaj P, Brooks JM, Chaiyakunapruk N, Goedken AM, Chrischilles EA, Carter BL (2017). Cost-utility analysis of physician-pharmacist collaborative intervention for treating hypertension compared with usual care. *Journal of hypertension*, 35(1):178-187. PMID: 27684354
27. Mohr NM, Harland KK, Chrischilles EA, Bell A, Shane DM, Ward MM (2017). Emergency Department Telemedicine Is Used for More Severely Injured Rural Trauma Patients, but Does Not Decrease Transfer: A Cohort Study. *Academic emergency medicine: official journal of the Society for Academic Emergency Medicine*, 24(2):177-185. PMID: 28187248
28. Carnahan RM, Brown GD, Letuchy EM, Rubenstein LM, Gryzlak BM, Smith M, Reist JC, Kelly MW, Schultz SK, Weckmann MT, Chrischilles EA (2017). Impact of programs to reduce antipsychotic and anticholinergic use in nursing homes. *Alzheimer's & dementia (New York, N. Y.)*, 3(4):553-561. PMC: PMC5671632, PMID: 29124114
29. Ammann EM, Shanafelt TD, Larson MC, Wright KB, McDowell BD, Link BK, Chrischilles EA (2017). Time to Second-line Treatment and Subsequent Relative Survival in Older Patients With Relapsed Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma. *Clinical lymphoma, myeloma & leukemia*, 17(12):e11-e25. PMID: 28802891
30. Faine BA, Mohr N, Dietrich J, Meadow L, Harland KK, Chrischilles E (2017). Antimicrobial Therapy for Pneumonia in the Emergency Department: The Impact of Clinical Pharmacists on Appropriateness. *The western journal of emergency medicine*, 18(5):856-863. PMC: PMC5576621, PMID: 28874937

31. Chrischilles EA, Friedman S, Ritzwoller DP, Selby JV (2017). Patients, data, and progress in cancer care. *The Lancet. Oncology*, 18(11):e624-e625. PMID: 29208379
32. Zhou M, Wang SV, Leonard CE, Gagne JJ, Fuller C, Hampp C, Archdeacon P, Toh S, Iyer A, Woodworth TS, Cavagnaro E, Panozzo CA, Axtman S, Carnahan RM, Chrischilles EA, Hennessy S (2017). Sentinel Modular Program for Propensity Score-Matched Cohort Analyses: Application to Glyburide, Glipizide, and Serious Hypoglycemia. *Epidemiology (Cambridge, Mass.)*, 28(6):838-846. PMID: 28682851
33. Ammann EM, Leira EC, Winiecki SK, Nagaraja N, Dandapat S, Carnahan RM, Schweizer ML, Torner JC, Fuller CC, Leonard CE, Garcia C, Pimentel M, Chrischilles EA (2017). Chart validation of inpatient ICD-9-CM administrative diagnosis codes for ischemic stroke among IGIV users in the Sentinel Distributed Database. *Medicine*, 96(52):e9440. PMID: 29384925
34. Wright AA, Keating NL, Ayanian JZ, Chrischilles EA, Kahn KL, Ritchie CS, Weeks CJ, Earle CC, Landrum MB (2016). Family perspectives on aggressive cancer care near the end of life. *JAMA*, 315(3):1-10.
35. Ammann EM, Jones MP, Link BK, Carnahan RM, Winiecki SK, Torner JC, McDowell BD, Fireman BH, Chrischilles EA (2016). Intravenous immune globulin and thromboembolic adverse events in patients with hematologic malignancy. *Blood*, 127(2):200-207. PMC: 4713161, PMID: 26443622
36. Chrischilles EA, Schneider KM, Schroeder MC, Letuchy E, Wallace RB, Robinson JG, Brooks JM (2016). Association Between Preadmission Functional Status and Use and Effectiveness of Secondary Prevention Medications in Elderly Survivors of Acute Myocardial Infarction. *Journal of the American Geriatrics Society*, 64(3):526-35. PMID: 26928940
37. Farris KB, Salgado TM, Aneese N, Marshall VD, Pendergast JF, Frank J, Chrischilles EA, Doucette WR (2016). Effect of clinical and attitudinal characteristics on obtaining comprehensive medication reviews. *J Manag Care Spec Pharm*, 22(4):388-95.
38. Abu-Hejleh T, Chrischilles EA, Halfdanarson TR, Simon C, Pendergast JF, Jiang D, Smith CJ, Porter AT, Carter KD, Wallace RB, Cancer Care Outcomes Research and Surveillance Consortium (CanCORS) (2016). The effect of receiving treatment within a clinical trial setting on survival and quality of care perception in advanced stage non-small cell lung cancer. *Am J Clin Oncol* 39(2):126-31. PMID: 24632817
39. Thomas A, Khan SA, Chrischilles EA, Schroeder MC (2016). Initial surgery and survival in stage IV breast cancer in the United States, 1988-2011. *JAMA Surg*, 151(5):424-31. PMID: 26629881
40. Ammann EM, Haskins CB, Fillman KM, Ritter RL, Gu X, Winiecki SK, Carnahan RM, Torner JC, Fireman BH, Jones MP, Chrischilles EA (2016). Intravenous immune globulin and thromboembolic adverse events: A systematic review and meta-analysis of RCTs. *Am J Hematol*, 91(6):594-605. PMID: 26973084
41. Gagne JJ, Han X, Hennessy S, Leonard CE, Chrischilles EA, Carnahan RM, Wang SV, Fuller C, Iyer A, Katcoff H, Woodworth TS, Archdeacon P, Meyer TE, Schneeweiss S, Toh S (2016). Successful comparison of US Food and Drug Administration Sentinel analysis tools to traditional approaches in quantifying a known drug-adverse event association. *Clinical pharmacology and therapeutics*, 100(5):558-564. PMID: 27416001