

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
2007-19	Associate Director for Population Sciences, Holden Comprehensive Center
2007-10	Co-Director, BERD Key Function, Institute for Clinical and Translational Science
2011-15	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
2019 -	Associate Director for Population Sciences and Community Engagement, Holden Comprehensive Center

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 2017 through 6/30/2021)

1. Lizarraga I, Schroeder M, Jatoi I, Sugg S, Trentham-Dietz A, Hoeth L, Chrischilles E. Surgical decision-making surrounding contralateral prophylactic mastectomy: Comparison of treatment goals, preferences, and psychosocial outcomes from a multi-center survey of breast cancer patients. *Annals of Surgical Oncology*, in press.
2. Haskins CB, McDowell BD, Carnahan RM, Fiedorowicz JG, Wallace RB, Smith BJ, Chrischilles EA (2021). Breast cancer endocrine therapy adherence in health professional shortage areas: Unique effects on patients with mental illness. *Journal of psychosomatic research*, 140:110294. PMID: 33232903
3. Mohr NM, Harland KK, Okoro UE, Fuller BM, Campbell K, Swanson MB, Simpson SQ, Parker EA, Mack LJ, Bell A, DeJong K, Faine B, Zepeski A, Mueller K, Chrischilles E, Carpenter CR, Jones MP, Ward MM (2021). TELEmedicine as an intervention for sepsis in emergency departments: a multicenter, comparative effectiveness study (TELEvISED Study). *Journal of comparative effectiveness research*, 10(2):77-91. PMC: PMC8008221, PMID: 33470848
4. Chang NN, Reisinger HS, Schweizer ML, Jones I, Chrischilles E, Chorazy M, Huskins C, Herwaldt L (2021). Hand Hygiene Compliance at Critical Points of Care. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*, 72(5):814-820. PMID: 32034404
5. Chang NC, Jones M, Reisinger HS, Schweizer ML, Chrischilles E, Chorazy M, Huskins WC, Herwaldt L (2021). Hand hygiene and the sequence of patient care. *Infection control and hospital epidemiology*:1-6. PMID: 33820574
6. Anand ST, Chrischilles EA, Baer RJ, Charlton ME, Breheny PJ, Terry WW, McLemore MR, Karasek DA, Jelliffe-Pawlowski LL, Ryckman KK (2021). The risk of preterm birth among women with a history of leukemia or lymphoma. *The journal of maternal-fetal & neonatal medicine : the official journal of the European Association of Perinatal Medicine, the Federation of Asia and Oceania Perinatal Societies, the International Society of Perinatal Obstetricians*:1-9. PMID: 33832388
7. Del Vecchio NJ, Askelson NM, Carter KD, Chrischilles E, Lynch CF, Charlton ME (2021). Patterns and characteristics of patients' selection of cancer surgeons. *American journal of surgery*, 221(5):1033-1041. PMC: PMC8110945, PMID: 33969822
8. Suls J, Bayliss EA, Berry J, Bierman AS, Chrischilles EA, Farhat T, Fortin M, Koroukian SM, Quinones A, Silber JH, Ward BW, Wei M, Young-Hyman D, Klabunde CN (2021). Measuring Multimorbidity: Selecting the Right Instrument for the Purpose and the Data Source. *Medical care*. PMID: 33974576
9. Anand ST, Ryckman KK, Baer RJ, Charlton ME, Breheny PJ, Terry WW, Kober K, Oltman S, Rogers EE, Jelliffe-Pawlowski LL, Chrischilles EA (2021). Metabolic differences among newborns born to mothers with a history of leukemia or lymphoma. *The journal of maternal-fetal & neonatal medicine : the official journal of the European Association of Perinatal Medicine, the Federation of Asia and Oceania Perinatal Societies, the International Society of Perinatal Obstetricians*:1-8. PMID: 33980115
10. Chang NN, Schweizer ML, Reisinger HS, Jones M, Chrischilles E, Chorazy M, Huskins WC, Herwaldt L (2021). The impact of workload on hand hygiene compliance: Is 100% compliance achievable? *Infection control and hospital epidemiology*:1-3. PMID: 33985603

11. 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. PMC: PMC7889405; PMID: 31605641
12. Rasmussen-Torvik LJ, Furmanchuk A, Stoddard AJ, Osinski KI, Meurer JR, Smith N, Chrischilles E, Black BS, Kho A (2020). The effect of number of healthcare visits on study sample selection in electronic health record data. *International journal of population data science*, 5(1). PMC: PMC7448749, PMID: 32864475
13. 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
14. 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
15. Haskins CB, Neuner JM, McDowell BD, Carnahan RM, Fiedorowicz JG, Wallace RB, Smith BJ, Chrischilles EA (2020). Effects of Previous Medication Regimen Factors and Bipolar and Psychotic Disorders on Breast Cancer Endocrine Therapy Adherence. *Clinical breast cancer*, 20(3):e261-e280. PMC: PMC7103521, PMID: 32139273
16. Carnahan RM, Waitman LR, Charlton ME, Schroeder MC, Bossler AD, Campbell WS, Campbell JR, McDowell BD, Smith NC, Gryzlak BM, Chrischilles EA (2020). Exploration of PCORnet Data Resources for Assessing Use of Molecular-Guided Cancer Treatment. *JCO clinical cancer informatics*, 4:724-735. PMC: PMC7469597, PMID: 32795185
17. 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. PMC: PMC6309246, PMID: 29965807
18. 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. PMC: PMC6687292, PMID: 30232683
19. 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.
20. 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
21. 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

22. 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. PMC: PMC6609879, PMID: 29351659
23. 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. PMC: PMC6534523, PMID: 30852760
24. 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. PMC: PMC6873914, PMID: 31335166
25. 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
26. 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*. PMC: PMC7176526, PMID: 31714306
27. 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
28. 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
29. 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
30. 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
31. 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. PMC: PMC6410350, PMID: 29446185

32. 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). PMC: PMC6015383, PMID: 29848495
33. 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
34. 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
35. 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
36. 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
37. 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). PMC: PMC5412710, PMID: 28408716
38. 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
39. 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
40. 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
41. 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. PMC: PMC5769450, PMID: 28802891

42. 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
43. 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
44. 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. PMC: PMC6554646, PMID: 28682851
45. 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. PMC: PMC6392785, PMID: 29384925