

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
2009-pres	Secondary appointment with 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

PUBLICATIONS (publications in the last 5 years)

1. 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
2. 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
3. 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
4. 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
5. 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
6. 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 Res Treat* 175(3):675-689. PMID: 30852760
7. 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
8. 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
9. 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
10. 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

11. 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
12. 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
13. 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
14. 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
15. Charlton ME, Shahnazi AF, Gribovskaja-Rupp I, Hunter L, Mengeling MA, Chrischilles EA, Lynch CF, Ward MM (2018). 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*. [Epub ahead of print]. PMID: 30203231
16. 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
17. 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
18. 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
19. 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
20. 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

21. 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
22. 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
23. 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
24. 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
25. Ammann EM, Leira EC, Winiiecki 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
26. 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.
27. Ammann EM, Jones MP, Link BK, Carnahan RM, Winiiecki 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
28. 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
29. 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.
30. 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
31. 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
32. Ammann EM, Haskins CB, Fillman KM, Ritter RL, Gu X, Winiiecki 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

33. 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
34. Carter BL, Coffey CS, Ardery G, Uribe L, Ecklund D, James P, Egan B, Vander Weg M, Chrischilles E, Vaughn T (2015). Cluster-randomized trial of a physician/pharmacist collaborative model to improve blood pressure control. *Circ Cardiovasc Qual Outcomes*, 8(3):235-243. PMID: 25805647
35. Albertson J, McDanel JS, Carnahan R, Chrischilles E, Perencevich EN, Goto M, Jiang L, Alexander B, Schweizer ML (2015). Determination of risk factors for recurrent methicillin-resistant staphylococcus aureus bacteremia in a Veterans Affairs healthcare system population. *Infect Control Hosp Epidemiol*, 36(5):543-549. PMID: 25682861
36. Brooks JM, Cook E, Chapman CG, Schroeder MC, Chrischilles EA, Schneider KM, Kulchaitanaroaj P, Robinson J (2015). Statin use after acute myocardial infarction by patient complexity: Are the rates right? *Medical Care*, 53(4):324-331. PMID: 25719431
37. Tien YY, Link BK, Brooks JM, Wright K, Chrischilles E (2015). Treatment of diffuse large B-cell lymphoma (DLBCL) in the elderly: Regimens without anthracyclines are common and not futile. *Leuk Lymphoma* 56(1):65-71. PMID: 24625326
38. McDanel JS, Perencevich EN, Diekema DJ, Winokur PL, Johnson JK, Herwaldt LA, Smith TC, Chrischilles EA, Dawson JD, Schweizer ML (2015). Association between microbial characteristics and poor outcomes among patients with methicillin-resistant Staphylococcus aureus pneumonia: a retrospective cohort study. *Antimicrob Resist Infect Control*, 4:51. PMC: 4677450, PMID: 26668737
39. Schroeder MC, Lynch CF, Abu-Hejleh T, Chrischilles EA, Thomas A (2015). Chemotherapy use and surgical treatment by receptor subtype in node-negative T1a and T1b female breast cancers, Iowa SEER Registry, 2010 to 2012. *Clinical Breast Cancer*, 15(1):e27-34. PMC: PMC4289459, PMID: 25245424
40. Kulchaitanaroaj P, Carter BL, Goedken AM, Chrischilles EA, Brooks JM (2015). Instrumental variable methods to assess quality of care the marginal effects of process-of-care on blood pressure change and treatment costs *Res Social Adm Pharm* 11(2):e69-83. PMID: 25155998
41. McDowell BD, Chapman CG, Smith BJ, Button AM, Chrischilles EA, Mezhir JJ (2015). Pancreatectomy predicts improved survival for pancreatic adenocarcinoma: Results of an instrumental variable analysis. *Ann Surg* 261(4):740-745. PMC: 4277740, PMID: 24979599
42. Doucette WR, Pendergast JF, Zhang Y, Brown G, Chrischilles EA, Farris KB, Frank J (2015). Stimulating comprehensive medication reviews among Medicare Part D beneficiaries. *Am J Manag Care*, 21(6):e372-8. PMID: 26247578
43. Chrischilles EA, McDowell BD, Rubenstein L, Charlton M, Pendergast J, Juarez GY, Arora NK (2015). Survivorship care planning and its influence on long-term patient-reported outcomes among colorectal and lung cancer survivors: The CanCORS disease-free survivor follow-up study. *J Cancer Surviv*, 9(2):269-278. PMID: 25354481

44. Carter BL, Coffey CS, Chrischilles EA, Ardery G, Ecklund D, Gryzlak B, Vander Weg MW, James PA, Christensen AJ, Parker CP, Gums T, Finkelstein RJ, Uribe L, Polgreen LA, MEDication focused outpatient care for underutilization of secondary prevention (MEDFOCUS) trial investigators (2015). A cluster-randomized trial of a centralized clinical pharmacy cardiovascular risk service to improve guideline adherence. *Pharmacotherapy*, 35(7):653-62. PMID: 26111939
45. Carter BL, Levy BT, Gryzlak B, Chrischilles EA, Vander Weg MW, Christensen AJ, James PA, Moss CA, Parker CP, Gums T, Finkelstein RJ, Xu Y, Dawson JD, Polgreen LA (2015). A centralized cardiovascular risk service to improve guideline adherence in private primary care offices. *Contemporary Clinical Trials*, 43:25-32. PMC: PMC4522340, PMID: 25952471
46. Charlton ME, Stitzenberg KB, Lin C, Schlichting JA, Halfdanarson TR, Juarez GY, Pendergast JF, Chrischilles EA, Wallace RB (2015). Predictors of Long-Term Quality of Life for Survivors of Stage II/III Rectal Cancer in the Cancer Care Outcomes Research and Surveillance Consortium. *Journal of Oncology Practice / American Society of Clinical Oncology*, 11(4):e476-86. PMC: PMC4507395, PMID: 26080831
47. McDanel JS, Perencevich EN, Diekema DJ, Herwaldt LA, Smith TC, Chrischilles EA, Dawson JD, Jiang L, Goto M, Schweizer ML (2015). Comparative Effectiveness of Beta-lactams versus Vancomycin for Treatment of Methicillin-Susceptible *Staphylococcus aureus* Bloodstream Infections among 122 Hospitals. *Clin Infect Dis*, 61 (3):361-367. PMID: 25900170
48. Lund BC, Carrel M, Gellad W, Chrischilles EE, Kaboli PJ (2015). Incidence- versus prevalence-based measures of inappropriate prescribing in the Veterans Health Administration. *J Am Geriatr Soc*, 63(8):1601-7. PMID: 26200069
49. Polgreen LA, Han J, Carter BL, Ardery GP, Coffey CS, Chrischilles EA, James PA, (2015). Cost-effectiveness of a physician-pharmacist collaboration intervention to improve blood pressure control. *Hypertension*, 66(6):1145-51. PMC: 4644092, PMID: 26527048