

BIOGRAPHICAL SKETCH

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NAME: Elizabeth Andre Chrischilles

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POSITION TITLE: Professor and Head

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
The University of Iowa	BS	05/1979	Pharmacy
The University of Iowa	MS	05/1981	Clinical Pharmacy
The University of Iowa	PhD	08/1986	Pharmaceutical Socioeconomics

A. Personal Statement

Elizabeth Chrischilles, PhD is Professor and Department Head of Epidemiology specializing in comparative effectiveness research and patient-centered outcomes research. In her role as an Associate Director in the UI Institute for Clinical and Translational Science (ICTS), she oversees and contributes to the data science portfolio of ICTS including the ICTS Clinical Research Data Warehouse. She is the University of Iowa (UI) site PI for the PCORnet Greater Plains Collaborative Clinical Research Network. Within PCORnet, she is intimately involved with developing and validating electronic algorithms and phenotypes for exposures, covariates and outcomes using the PCORnet Common Data Model. In addition, she directs the UI Department of Epidemiology Health Effectiveness Research Center which consists of dozens of investigators who conduct prospective and retrospective comparative effectiveness research. These activities provide a rich environment and resources for pharmacoepidemiology and comparative effectiveness research, particularly using electronic healthcare data and prospective EHR-derived registries. Dr. Chrischilles is also Associate Director for Population Science and Community Engagement in the Holden Comprehensive Cancer Center. She has mentored many pre-doctoral and post-doctoral students in epidemiology and health services research over the past 30 years.

B. Positions and Honors**Positions and Employment**

1982-84 Clinical Assistant Professor, Division of Clinical/Hospital Pharmacy, College of Pharmacy, The 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, The University of Iowa

1987-94 Assistant Professor, Department of Preventive Medicine, The University of Iowa, Iowa City, Iowa

1994-99 Associate Professor, Department of Preventive Medicine, The University of Iowa, Iowa City, Iowa

1999-00 Associate Professor, Dept of Epidemiology, College of Public Health, The University of Iowa

2000-10 Associate Head for Admissions and Curriculum, Department of Epidemiology, College of Public Health, University of Iowa

2000- Professor, Department of Epidemiology, College of Public Health, The University of Iowa

2007- Associate Director Data Science & Research Methods, Institute for Clinical & Translational Science

2007- Associate Director for Population Sciences, Holden Comprehensive Cancer Center

2017- Department Head, Department of Epidemiology, College of Public Health, The University of Iowa

Current Professional Memberships

Society for Epidemiologic Research; American College of Epidemiology; American Society of Clinical Oncology; Biostatistics, Epidemiology and Research Design SIG, Association for Clinical and Translational Science

Honors and Awards

1987-92 Burroughs Wellcome Scholar in Pharmacoepidemiology
2000 The University of Iowa Collegiate Teaching Award
2007 Marvin A. and Rose Lee Pomerantz Chair in Public Health
2007 College of Public Health Distinguished Faculty Lecturer
2014 College of Public Health Research Award

C. Contribution to Science

The major focus of my research involves evaluating the pharmacoepidemiology and comparative effectiveness of cancer and cardiovascular disease interventions, particularly among the elderly and those with disabilities and multiple morbidities.

1. Against a background of wide variation patterns of care with limited evidence about comparative effectiveness, I am the founding director of the Health Effectiveness Research Center (founded in 2000) in the Department of Epidemiology that collaborates with the Institute for Clinical and Translational Science and the PCORnet Greater Plains Collaborative to support investigators to use large electronic healthcare databases including supporting proposal development, sharing proven SAS code and algorithms, and a secure server for hosting the data as well as support for the PCORnet common data model and prospective PCORnet studies.
 - a. Chrischilles E, Schneider K, Wilwert J, Lessman G, O'Donnell B, Gryzlak B, Wright K, Wallace R. Beyond comorbidity: Expanding the definition and measurement of complexity among older adults using administrative claims data. *Medical Care* 52 Suppl 3:S75-84, 2014. PMID: 24561763 PMID N/A
 - b. Brooks JM, Cook E, Chapman CG, Schroeder MC, Chrischilles E, Schneider KM, Kulchaitanaroaj P, Robinson J. Statin use after acute myocardial infarction by patient complexity: Are the rates right? *Medical Care* 53(4):324-31, 2015. PMID: 25719431 PMID N/A
 - c. Ammann EM, Jones MP, Link BK, Carnahan RM, Winiecki SK, Torner JC, McDowell BD, Fireman BH, Chrischilles EA. Intravenous immune globulin and thromboembolic adverse events in patients with hematologic malignancy. *Blood* 127(2):200-7, 2016. PMID: 26443622 PMID PMC4713161
 - d. Carnahan RM, Waitman LR, Charlton ME, Schroeder MC, Bossler AD, Campbell WS, Campbell JR, McDowell BD, Smith NC, Gryzlak BM, Chrischilles EA. Exploration of PCORnet data resources for assessing use of molecular-guided cancer treatment. *Journal of Clinical Oncology: Clinical Cancer Informatics* 4:724-735, 2020. PMID: 32795185
2. Additionally, in my former role as Applied Surveillance Core Co-Lead for the Food and Drug Administration's Sentinel Initiative, I am familiar with very large distributed data systems and common data models. I led the first sequential surveillance activity in Sentinel which prospectively monitored ischemic stroke, intracranial hemorrhage, and gastrointestinal bleeding outcomes in propensity score matched cohorts of new users of rivaroxaban or warfarin. I co-authored a report on using the Sentinel distributed data network for randomized comparative effectiveness trials.
 - a. Baker M, Nguyen M, Mullersman J, Lauer J, Zinderman C, Riedlinger K, Nakasato C, Chrischilles E, Garcia C, Balsbaugh C, Vajani M. PS3-6: Blood safety continuous active-surveillance network feasibility evaluation (Blood-SCAN). *Clin Med Res* 11(3):169, 2013. PMID: 24086005; PMID PMC3788538
 - b. Chrischilles EA, Winiecki SK, Fireman B, Carnahan RM, Schweizer ML, Leonard CE, Baker MA, Toh D, Cuker A. Thromboembolic events after immunoglobulin administration. *Mini-Sentinel Assessment Protocol*. May 20, 2014 (www.mini-sentinel.org). PMID N/A
 - c. Carnahan R, Gagne J, Nelson J, Fireman B, Shoabi A, Reichman M, Zhang R, Levenson M, Graham D, Tiwari R, Southworth MR, Archdeacon P, Chakravarty A, Goulding M, Brown J, Fuller C, Toh D, Chrischilles E. Mini-Sentinel prospective routine observational monitoring program tools (PROMPT): rivaroxaban surveillance plan. March 28, 2014 (www.mini-sentinel.org). PMID N/A

- d. Archdeacon P, Buse J, Califf R, Choudhry N, Chrischilles E, Connor S, Curtis J, Ellenberg S, Evans B, Fortmann S, Hernandez A, Hornbuckle K, Lavezzari G, Levy E, Madre L, Mahon E, Mannello E, McGraw D, Mikita JS, Mushlin A, Nair V, Perlmutter J, Platt R, Psaty B, Raebel M, Rosati K, Rosenfeld S, Spettell C, Tenaerts P, McMahill-Walraven C. Developing approaches to conducting randomized trials using the Mini-Sentinel distributed database. Final Report posted February 28, 2014. (www.mini-sentinel.org) PMID N/A
3. I have conducted patient-centered prospective observational studies. My earlier work was on lung cancer outcomes in the NCI-funded Cancer Care Outcomes Research and Surveillance Consortium. As a result of the Patient-Centered Outcomes Research Institute national network of patient-centered clinical data research networks (PCORnet), I led a team of researchers and patients from 9 medical centers to conduct the Share Thoughts on Breast Cancer study. Most recently, with early stage principal investigator Michael O'Rorke, I am assisting with a PCORI-funded multi-center cohort study of patients with neuroendocrine tumors, to learn about the comparative effectiveness of various treatment options.
 - a. Chrischilles EA, McDowell BD, Rubenstein L, Charlton M, Pendergast J, Juarez GY, Arora NK. 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*. 2015 Jun;9(2):269-78. doi: 10.1007/s11764-014-0406-y. Epub 2014 Oct 30. PMID: 25354481; PMID: PMC4416063.
 - b. Chrischilles EA, Friedman S, Ritzwoller DP, Selby JV. Patients, data, and progress in cancer care. *Lancet Oncol*. 2017 Nov;18(11):e624-e625.
 - c. 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. 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, 2019. PMID: 30852760; PMID: PMC6534523
4. Finally, when personal health records (PHRs) were in their infancy, with an AHRQ ambulatory patient safety grant I confirmed that existing PHRs were unusable for older adults and subsequently developed an online PHR in partnership with older adults. The PHR is being used as a patient-engagement tool for two multicenter pragmatic randomized controlled trials in cardiovascular risk management. An AHRQ mHealth grant that developed and tested (R21) 'on-the-go' versions of the tool and care model.
 - a. Chrischilles EA, Hourcade JP, Doucette W, Eichmann D, Gryzlak B, Lorentzen R, Wright K, Letuchy E, Mueller M, Farris K, Levy B. Personal health records: a randomized trial of effects on elder medication safety. *JAMIA*;21(4):679-686, 2014. PMID: 24326536; PMID: PMC4078278
 - b. Carter BL, Chrischilles EA, Rosenthal G, Gryzlak BM, Eisenstein EL, Vander Weg MW. Efficacy and safety of nighttime dosing of antihypertensives: Review of the literature and design of a pragmatic clinical trial. *J Clin Hypertens (Greenwich)* 16(2):115-21, 2014. PMID: 24373519; PMID: PMC4091949
 - c. 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. A centralized cardiovascular risk service to improve guideline adherence in private primary offices. *Contemp Clin Trials* 43:25-32, 2015. PMID: 25952471; PMID: PMC4522340
 - d. 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. A cluster-randomized trial of a centralized clinical pharmacy cardiovascular risk service to improve guideline adherence. *Pharmacotherapy* 35(7):653-62, 2015. PMID: 26111939 PMID: PMC4686257

Complete List of Published Work in MyBibliography:

<https://www.ncbi.nlm.nih.gov/myncbi/elizabeth.chrischilles.1/bibliography/public/>