#### SECTION I

Updated November 8, 2023

### A. PERSONAL DATA

Catherine Janes Staes, PhD, MPH, RN, FAMIA, FACMI Name & Credentials

Rank and Title Emeritus (Clinical) Professor, College of Nursing

> Adjunct Professor, Dept of Biomedical Informatics, School of Medicine Adjunct Professor, Dept of Population Health Sciences, School of Medicine

**Contact Information** Home: 4335 South Pin Oak St, Millcreek UT 84124

Work: University of Utah, College of Nursing, 10 South 2000 East, Salt

Lake City, Utah 84112

801-673-8347 (cell) Phone

Catherine.staes@hsc.utah.edu E-mail

#### **B. EDUCATION**

1. <u>Year</u>	<u>Degree</u>	Institution (Area of Study/Specialization)
1977 - 1981	B.S.	Georgetown University (Nursing), Washington, D.C.
1986 - 1987	M.P.H.	Johns Hopkins University School of Public Health (Master of Public
		Health in Epidemiology), Baltimore, MD
1990 - 1992	EIS	Centers for Disease Control and Prevention (Epidemic Intelligence
		Service (EIS)), Atlanta, GA
2000 - 2006	Ph.D.	University of Utah School of Medicine (Medical Informatics), Salt Lake
		City, UT
		Dissertation: Development of an information system for the outpatient
		management of liver transplant patients (available from:

http://content.lib.utah.edu/cdm/ref/collection/etd1/id/202)

### 2. Licensure / Certification

1995 - 2025 Utah Division of Occupational and Professional Licensing: Registered

Nurse (UT) - Registered (Professional) Nurse

#### C. EMPLOYMENT / PROFESSIONAL EXPERIENCE

<u>Dates</u>	Position and Institution
Full-Time Positi	ions
1979 - 1980	Public Health Nursing Student, Commissioned Officers Student Training and Extern
	Program (COSTEP), US Public Health Service, Johns Island, SC and Starkville, MS
1981 - 1985	Pediatric ICU Nurse, Denver General Hospital and The Children's Hospital, Denver,
	CO
1985	Registered Nurse (3mo assignment), Indian Health Service, Public Health Service,
	Kotzebue, AK
1985 - 1986	Infectious disease/oncology nurse, AIDS Clinic, Denver City/County Health

	Department, Denver, CO
1988 - 1990	Epidemiologist/Head, Communicable Disease Branch and Surveillance Unit, North Carolina Department of Environment, Health and Natural Resources, Raleigh, NC
1990 - 1993	Epidemic Intelligence Service Officer and Staff Epidemiologist, Lead Poisoning Prevention Branch, Centers for Disease Control, Atlanta, GA
1990 - 1993	Officer (0-4), Active duty Commissioned Corps, United States Public Health Service
1995 - 2000	Epidemiologist for studies of hepatitis A & firearm-related injuries, Bureau of Epidemiology and Surveillance, Salt Lake Valley Health Department, Salt Lake City
2000 - 2005	Medical Informaticist/Systems Analyst/Programmer (PhD student), Solid Organ Transplant Program, LDS Hospital, Intermountain Health Care, Salt Lake City, UT
2005 - 2006	Knowledge Engineer/Informaticist, TheraDoc, Inc., Salt Lake City, UT
2006 - 2018	Assistant Professor, Department of Biomedical Informatics, University of Utah
	School of Medicine, Salt Lake City, UT
2018	Associate Professor, Department of Biomedical Informatics, University of Utah School of Medicine, Salt Lake City, UT
2018 – 2023	Professor, College of Nursing, University of Utah, Salt Lake City (thru 2/28/23)
2023	Professor (Clinical) Emeritus, University of Utah, Salt Lake City (starting 3/1/23)
Part-Time Positi	ions
1989 - 1991	Adjunct Faculty, School of Public Health, University of North Carolina, Chapel Hill
1993 - 2010	Officer (0-4), Inactive Reserve Corps, United States Public Health Service, Salt Lake City, UT
2000 - 2001	Intermountain Injury Control Research Center, University of Utah, Department of Pediatrics, Salt Lake City, UT
2014 - 2015	Associate Director, Knowledge Management and Mobilization, University of Utah Health Sciences Center, Salt Lake City, Utah
2015 - 2018	Informatics Consultant, Council of State and Territorial Epidemiologists, Atlanta, GA
2016 - 2018	Clinical Informaticist, Veterans Health Administration (VHA) Office of Informatics

Adjunct Professor, Dept of Biomedical Informatics, School of Medicine, University of

Adjunct Professor, Dept of Population Health Sciences, School of Medicine,

## D. HONORS, RECOGNITIONS & AWARDS

2018 - Present

2023 - Present

and Analytics, Washington, DC

University of Utah, Salt Lake City, Utah

Utah, Salt Lake City, Utah

<u>Year</u>	Recognition	Received From
1993	Alexander D. Langmuir Prize (Best paper)	Epidemic Intelligence Service Alumni Association and CDC
1993	Achievement Medal - Commissioned Corps	US Public Health Service
2000 - 2003	Pre-doctoral fellowship in Medical Informatics	National Library of Medicine
2010 - 2013	Invited Faculty, Medical Informatics MBL/NLM week-long Certificate Course - Woods Hole	National Library of Medicine
2013	Reed M. Gardner Award for Faculty Excellence in teaching and mentoring.	Department of Biomedical Informatics, University of Utah
2014 - 2015	AAMC Learning Health System Research Award: "Development of a standardized and accepted process for creating, implementing, and	Association of American Medical Colleges (AAMC), Washington DC.

<u>Year</u>	Recognition evaluating value-driven care process models within an Academic Health Enterprise"	Received From
2018	Alumni Award for 'Relationships'. Each year the alumni vote graduates who have made exceptional impact in the three areas valued by the Department (Relevance, Relationships or Leadership).	University of Utah's Department of Biomedical Informatics
2018 - present	FACMI. Elected to be a Fellow in the American College of Medical Informatics (FACMI). Awarded to those who have made significant and sustained contributions to the field of biomedical informatics.	American College of Medical Informatics (ACMI)
2018 - present	FAMIA. Awarded Fellowship for the American Medical Informatics Association (FAMIA). This award is to recognize members who apply informatics skills and knowledge within their professional setting, who have demonstrated professional achievement and leadership, and who have a sustained commitment to the betterment of AMIA.	American Medical Informatics Association (AMIA)
2021	Reed M. Gardner Award for Faculty Excellence in teaching and mentoring.	Department of Biomedical Informatics, University of Utah
2023	Most Influential Woman in Health IT	Utah Chapter, Healthcare Information Management Systems Society (Utah-HIMSS)

## E. RESEARCH AND SCHOLARLY WORK

### 1. Extramural Grants/Contracts

<u>Dates</u>	<u>Amount</u>	<u>Funding</u> <u>Status</u>	Title & Funding Agency	Role
01/01/22 – 6/30/22	\$50,000	Closed	Chronic Disease Reporting Student Project	Co-I
04/01/21 – 03/30/23	\$338,000	Active	Data analytics to Improve End-of-Life Care– Phase 4	P <u>I</u>
02/01/21 – 09/30/21	\$42,716	Closed	Opioid-related interoperability: Training and research question exploration	PI
02/01/20 – 07/01/21	\$22,000	Closed	Death Certification Smart of FHIR App Utah Department of Health	PI
02/16/20 - 03/31/21	\$158,307	Closed	Data analytics to Improve End-of-Life Care– Phase 3	PI
04/15/19 - 10/15/19	\$11,200	Closed	Improving Quality and Timeliness of Death Certification Utah Department of Health	PI
11/09/18- 3/31/19	\$49,953	Closed	Data Analytics to Improve End-of-Life Care (Phase 2) - Hitachi Ltd	PI

<u>Dates</u>	<u>Amount</u>	Funding Status	Title & Funding Agency	<u>Role</u>
10/01/18- 9/30/19	\$84,147	Closed	Clinician needs assessment and evaluation for the Utah Medicaid Prescription Drug Monitoring Project HIE implementation project - Utah Department of Health / HITECH	PI
02/22/18 - 06/15/18	\$41,580	Closed	Feasibility Assessment for Data Analytics to Improve End-of-Life Care (Phase 1) - Hitachi Ltd	PI
12/17/17– 09/30/18	\$88,723	Closed	Researcher, Knowledge Based Systems, Office of Informatics and Analytics (Interagency Personnel Agreement) - U.S. Veterans Administration	PI
11/15/17 - 08/31/19		Closed	Quantifying System and Data Readiness for Automated Clinical Decision Support - National Library of Medicine	Co-I
01/15/2016- 09/30/2016	\$55,921	Closed	Researcher, Knowledge Based Systems, Office of Informatics and Analytics (Interagency Personnel Agreement) - U.S. Veterans Administration	PI
2015 - 2016	\$27,500	Closed	Developing a Quality Framework for Evaluation of Birth Data Extracted from Electronic Health Records for Vital Statistics - Utah Department of Health	PI
2013 - 2015	\$14,000	Closed	AMIA 10x10 online course to provide training in vocabulary and standards relevant for informatics practice in the healthcare or public health setting AMIA	PI
2012 - 2014	\$49,442	Closed	Co-lead development of Reportable Condition Knowledge Management System to support jurisdiction-specific specifications for electronic case reporting throughout the US - National Center for Infectious Disease, CDC	PI
2012 - 2013	\$63,411	Closed	Development of Interface Business Requirements for Patient Entry of Occupational History Information for Electronic Health Records - Shepherd Grant subcontract funded by National Institute for Occupational Safety and Health, CDC	Co-PI
2011 - 2012	\$28,609	Closed	HIV-Data Security – Utah Department of Health	PI
2010 - 2011	\$214,881	Closed	University of Utah Biomedical Informatics Training: Online Curriculum Development - National Library of Medicine	Co-I
2009 - 2014	\$45,705	Closed	Public Health 10 X 10 (deliver online training in Public Health Informatics)  AMIA	PI
2009 - 2013	\$4,986,150	Closed	Just-in-time delivery of dynamically maintained public health knowledge (Project 2 of Center grant: Rocky Mountain Center for Translational	PI for Project 2

<u>Dates</u>	<u>Amount</u>	<u>Funding</u> <u>Status</u>	Title & Funding Agency	Role
2009 - 2010	\$20,000	Closed	Research in Public Health Informatics – CDC Optimizing Family Health History Tools for the National Children's Study	PI
2007 - 2009		Closed	Center of Excellence in Public Health Informatics	Co-I
2007 - 2008	\$4,989	Closed	Family Health History - Utah Department of Health	PI
2005 - 2009		Closed	University of Utah Medical Informatics Training - Public Health Supplement - NLM	Co-I

#### 2. Intramural Grants/Contracts

<u>Dates</u>	<u>Amount</u>	Funding Status	Title & Funding Agency	Role
2008 - 2009	\$5,000	Closed	Development of an on-line course in Public Health Informatics	PI

#### F. PUBLICATIONS & EDITORIAL EXPERIENCE

#### 1. Editorial Boards

<u>Years</u>	<u>Journal</u>
2011 - 2019	Editorial Board for Journal of the American Medical Informatics Association
	(JAMIA)
2017 - 2021	Associate Editor for JAMIA Open (newly-launched Gold Open Access journal
	that is a sibling to JAMIA
2021-present	Editorial Board for JAMIA Open

### 2. Books and Book Chapters

#### **Book**

IOM (Institute of Medicine) (2011). *Incorporating Occupational Information in Electronic Health Records: Letter Report*. Washington DC: The National Academies Press.

#### **Book Chapter**

- 1. **Staes CJ**, Corkins D (1999). Child Care Settings. In *American Academy of Pediatrics (AAP), Committee on Environmental Health. Handbook of Pediatric Environmental Health* (pp. 279-94). Elk Grove Village, IL: AAP.
- 2. **Staes C**, Wilson M, Lenert L (06/01/2013). Public Health Informatics (chapter 11). In Ramona Nelson and Nancy Staggers (Eds.), *Health Informatics: An Interprofessional Approach (selected 2013 Book of the Year by AJN)* (1e). Philadelphia: Elsevier.
- 3. **Staes C** (March 1, 2017). Public Health Informatics. In Ramona Nelson and Nancy Staggers (Eds.), *Health Informatics: An Interprofessional Approach*. (2nd Edition). Philadelphia: Elsevier. *NOTE: Selected by the American Journal of Nursing (AJN) as the 2017 Book of the Year in the division of Information Technology/Informatics*

- 4. LaVenture M, Ross D, **Staes C** Yasnoff WA, (2021). Public Health Informatics. In Shortliffe EH and Cimino JJ (Eds.), *Biomedical Informatics: Computer Applications in Health Care and Biomedicine* (5<sup>th</sup> Edition). Springer.
- 5. Umberfield EE, **Staes CJ**, Morgan TP, Mamlin BW, Grout RW, Dixon BE. (2022) Syntactic Interoperability and the Role of Syntactic Standards in Health Information Exchange. In: Dixon BE, editor. *Health Information Exchange: Navigating and Managing a Network of Health Information Systems.* (2nd ed). San Diego: Elsevier Science & Technology.

#### 3. Journal Publications – peer reviewed (\*trainees I directly mentored)

- 1. Staes C (1990). Hepatitis B: a preventable killer. N C Med J, 51(2), 93-5.
- 2. Levine JF, Apperson CS, Spiegel RA, Nicholson WL, **Staes CJ** (1991). Indigenous cases of Lyme disease diagnosed in North Carolina. *South Med J*, *84*(1), 27-31.
- Staes C, Matte T, Copley CG, Flanders D, Binder S (1994). Retrospective study of the impact of lead-based paint hazard remediation on children's blood lead levels in St. Louis, Missouri. Am J Epidemiol, 139(10), 1016-26.
- 4. **Staes C**, Orengo JC, Malilay J, Rullan J, Noji E (1994). Deaths due to flash floods in Puerto Rico, January 1992: implications for prevention. *Int J Epidemiol*, *23*(5), 968-75.
- 5. **Staes C**, Balk S, Ford K, Passantino RJ, Torrice A (1994). Environmental factors to consider when designing and maintaining a child's day-care environment. *Pediatrics*, *94*(6 Pt 2), 1048-50.
- 6. Schlenker TL, Sadler R, Risk I, **Staes C**, Harris H (1999). Incidence rates of hepatitis A by ZIP code area, Salt Lake County, Utah, 1992-1996. *J Public Health Manag Pract*, *5*(2), 17-8.
- 7. **Staes CJ**, Schlenker TL, Risk I, Cannon KG, Harris H, Pavia AT, Shapiro CN, Bell BP (2000). Sources of infection among persons with acute hepatitis A and no identified risk factors during a sustained community-wide outbreak. *Pediatrics*, *106*(4), E54.
- 8. Kaufmann RB, **Staes CJ**, Matte TD (2003). Deaths related to lead poisoning in the United States, 1979-1998. *Environ Res*, *91*(2), 78-84.
- 9. **Staes CJ**, Huff SM, Evans RS, Narus SP, Tilley C, Sorensen JB (2005). Development of an information model for storing organ donor data within an electronic medical record. *J Am Med Inform Assoc*, *12*(3), 357-63.
- 10. **Staes CJ**, Bennett ST, Evans RS, Narus SP, Huff SM, Sorensen JB (2006). A case for manual entry of structured, coded laboratory data from multiple sources into an ambulatory electronic health record. *J Am Med Inform Assoc*, *13*(1), 12-5.
- 11. **Staes CJ**, Evans RS, Narus SP, Huff SM, Sorensen JB (2007). System analysis and improvement in the process of transplant patient care. *Stud Health Technol Inform*, *129*(Pt 2), 915-9.
- 12. Holbrook R\*, **Staes C**, Longo N, Botkin J, Anderson R, Mitchell J (2007). Development of requirements and a pilot registry for long-term follow-up of children with heritable conditions. *AMIA Annu Symp Proc*, 977.
- 13. **Staes CJ**, Evans RS, Rocha BH, Sorensen JB, Huff SM, Arata J, Narus SP (2008). Computerized alerts improve outpatient laboratory monitoring of transplant patients. *J Am Med Inform Assoc*, *15*(3), 324-32.
- 14. Gesteland PH, Allison MA, **Staes CJ**, Samore MH, Rubin MA, Carter ME, Wuthrich A, Kinney AY, Mottice S, Byington CL (2008). Clinician use and acceptance of population-based data about respiratory pathogens: implications for enhancing population-based clinical practice. *AMIA Annu Symp Proc*, 232-6.
- 15. Botkin JR, Anderson R, **Staes C**, Longo N (2009). Developing a National Registry for conditions identifiable through newborn screening. *Genet Med*, *11*(3), 176-82.
- 16. **Staes CJ**, Xu W, LeFevre SD, Price RC, Narus SP, Gundlapalli A, Rolfs R, Nangle B, Samore M, Facelli JC (2009). A case for using grid architecture for state public health informatics: the

- Utah perspective. BMC Med Inform Decis Mak, 9, 32.
- 17. **Staes CJ**, Gesteland PH, Allison M, Mottice S, Rubin M, Shakib JH, Boulton R, Wuthrich A, Carter ME, Leecaster M, Samore MH, Byington CL (2009). Urgent care providers' knowledge and attitude about public health reporting and pertussis control measures: implications for informatics. *J Public Health Manag Pract*, *15*(6), 471-8.
- 18. Shakib JH, Wyman L, Gesteland PH, **Staes CJ**, Bennion DW, Byington CL (2009). Should the pertussis case definition for public health reporting be refined? *J Public Health Manag Pract*, 15(6), 479-84.
- 19. Jiang Y\*, **Staes CJ**, Adams TD, Hunt SC (2009). Evaluation of risk scores derived from the health family tree program. *AMIA Annu Symp Proc*, 2009, 286-90.
- 20. Rajeev D\*, **Staes CJ**, Evans RS, Mottice S, Rolfs R, Samore MH, Whitney J, Kurzban R, Huff SM (\*PhD student directed by Staes) (2010). Development of an Electronic Public Health Case Report using HL7 v2.5 to Meet Public Health Needs. *J Am Med Inform Assoc*, *17*(1), 34-41.
- 21. Walton NA, Poynton MR, Gesteland PH, Maloney C, **Staes C**, Facelli JC (2010). Predicting the start week of respiratory syncytial virus outbreaks using real time weather variables. *BMC Med Inform Decis Mak*, 10, 68.
- 22. Rajeev D\*, **Staes C**, Evans RS, Price A, Hill M, Mottice S, Risk I, Rolfs R (2011). Evaluation of HL7 v2.5.1 electronic case reports transmitted from a healthcare enterprise to public health. *AMIA Annu Symp Proc*, 2011, 1144-52.
- 23. **Staes CJ**, Altamore R, Han E, Mottice S, Rajeev D, Bradshaw R (2011). Evaluation of knowledge resources for public health reporting logic: Implications for knowledge authoring and management.LID 10.5210/ojphi.v3i3.3903 [doi]LID ojphi.v3i3.3903 [pii]. *Online J Public Health Inform*, *3*(3).
- 24. Garrett NY, Mishra N, Nichols B, **Staes CJ**, Akin C, Safran C (2011). Characterization of public health alerts and their suitability for alerting in electronic health record systems. *J Public Health Manag Pract*, *17*(1), 77-83.
- 25. Xu W, Pettey W, Livnat Y, Gesteland P, Rajeev D, Reid J, Samore M, Evans RS, Rolfs RT, Staes C (2011). Strengthening Partnerships along the Informatics Innovation Stages and Spaces: Research and Practice Collaboration in Utah.LID 10.5210/ojphi.v3i3.3904 [doi]LID ojphi.v3i3.3904 [pii]. Online J Public Health Inform, 3(3).
- 26. Staes CJ, Wuthrich A, Gesteland P, Allison MA, Leecaster M, Shakib JH, Carter ME, Mallin BM, Mottice S, Rolfs R, Pavia AT, Wallace B, Gundlapalli AV, Samore M, Byington CL (2011). Public health communication with frontline clinicians during the first wave of the 2009 influenza pandemic. J Public Health Manag Pract, 17(1), 36-44.
- 27. Tinoco A, Evans RS, **Staes CJ**, Lloyd JF, Rothschild JM, Haug PJ (2011). Comparison of computerized surveillance and manual chart review for adverse events. *J Am Med Inform Assoc*, *18*(4), 491-7.
- 28. Davis K, **Staes C**, Duncan J, Igo S, Facelli JC (2012). Identification of pneumonia and influenza deaths using the Death Certificate Pipeline. *BMC Med Inform Decis Mak*, 12, 37.
- 29. Gren LH, Porucznik CA, Joy EA, Lyon JL, **Staes CJ**, Alder SC (2013). Point-of-Care Testing as an Influenza Surveillance Tool: Methodology and Lessons Learned from Implementation. *Influenza Res Treat*, 2013, 242970.
- 30. **Staes C**, Jacobs J, Mayer J, Allen J (2013). Description of outbreaks of health-care-associated infections related to compounding pharmacies, 2000-12. *Am J Health Syst Pharm*, *70*(15), 1301-12.
- 31. Eilbeck KL, Lipstein J, McGarvey S, **Staes CJ** (2014). Evaluation of need for ontologies to manage domain content for the Reportable Conditions Knowledge Management System. *AMIA Annu Symp Proc*, 2014, 496-505.
- 32. Jacobs J\*, Weir C, Evans RS, **Staes C** (2014). Assessment of readiness for clinical decision support to aid laboratory monitoring of immunosuppressive care at U.S. liver transplant centers.

- Appl Clin Inform, 5(4), 988-1004.
- 33. Kukhareva PV\*, Kawamoto K, Shields DE, Barfuss DT, Halley AM, Tippetts TJ, Warner PB, Bray BE, **Staes CJ** (2014). Clinical Decision Support-based Quality Measurement (CDS-QM) Framework: Prototype Implementation, Evaluation, and Future Directions (Nominated for Best Paper Award). *AMIA Annu Symp Proc*, 2014(2014), 825-834.
- 34. Lin Y, **Staes CJ**, Shields DE, Kandula V, Welch BM, Kawamoto K (2015). Design, Development, and Initial Evaluation of a Terminology for Clinical Decision Support and Electronic Clinical Quality Measurement. *AMIA Annu Symp Proc*, 2015, 843-51.
- 35. Tippetts TJ, Warner PB, Kukhareva PV, Shields DE, Staes CJ, Kawamoto K (2015). Challenges and Solutions in Optimizing Execution Performance of a Clinical Decision Support-Based Quality Measurement (CDS-QM) Framework. AMIA Annu Symp Proc, 2015, 1194-203.
- Jacobs J\*, Narus SP, Evans RS, Staes CJ (2015). Longitudinal Analysis of Computerized Alerts for Laboratory Monitoring of Post-liver Transplant Immunosuppressive Care. AMIA Annu Symp Proc, 2015, 1918-26.
- 37. Kawamoto K, Martin CJ, Williams K, Tu MC, Park CG, Hunter C, **Staes CJ**, Bray BE, Deshmukh VG, Holbrook RA, Morris SJ, Fedderson MB, Sletta A, Turnbull J, Mulvihill SJ, Crabtree GL, Entwistle DE, McKenna QL, Strong MB, Pendleton RC, Lee VS (2015). Value Driven Outcomes (VDO): a pragmatic, modular, and extensible software framework for understanding and improving health care costs and outcomes. *J Am Med Inform Assoc*, 22(1), 223-35.
- 38. Duncan J, Narus SP, Clyde S, Eilbeck K, Thornton S, **Staes C** (2015). Birth of identity: understanding changes to birth certificates and their value for identity resolution. *J Am Med Inform Assoc*, 22(e1), e120-9.
- 39. Duncan J, Eilbeck K, Narus SP, Clyde S, Thornton S, **Staes C** (2015). Building an Ontology for Identity Resolution in Healthcare and Public Health. Online Journal of Public Health Informatics. 2015 Jul 1; 7(2):e219.
- 40. Wan YJ\*, **Staes CJ** (2016). Melinda A custom search engine that provides access to locally-developed content using the HL7 Infobutton standard. AMIA Annu Symp Proc, 2016, 2043-2052. (Nominated for student paper award)
- 41. Kukhareva P, Staes C, Noonan KW, Mueller H, Warner P, Shields D, Weeks H, Kawamoto K (Feb 2017). Single-reviewer electronic phenotyping validation in operational settings: Comparison of strategies and recommendations. J Biomed Inform, 66, 1-10.
- 42. Unni P, **Staes C**, Weeks H, Kramer H, Borbolla D, Slager S, Taft T, Chidambaram V, Weir C (02/10/2017). Why aren't they happy? An analysis of end-user satisfaction with electronic health records. AMIA Annu Symp Proc, 2016(2016), 2026-2035.
- 43. Taft T, **Staes C**, Slager S, Weir C (02/10/2017). Adapting Nielsen's Design Heuristics to Dual Processing for Clinical Decision Support. AMIA Annu Symp Proc. 2016(2016), 1179-1188.
- 44. Grafe CJ, Staes CJ, Kawamoto K, Samore MH, Evans RS (2018). State-level adoption of national guidelines for norovirus outbreaks in health care settings. Am J Infect Control. 2018 Oct;46(10):1084-1091.
- 45. Kukhareva P, Weir C, **Staes C,** Borbolla D, Slager S, Kawamoto K. Integration of Clinical Decision Support and Electronic Clinical Quality Measurement: Domain Expert Insights and Implications for Future Direction. *AMIA 2018 Annual Symposium*, Washington DC: AMIA
- 46. Weir CR, Staes C, Slager S, Taft T, Chidambaram V, Kramer H, Bray BE, Moore SP. What are they trying to do?: An analysis of Action Identities in using electronic documentation in an EHR. AMIA Annu Symp Proc. 2018 Apr 16;2017:1764-1772
- Tiase V, Hull W, McFarland M, Sward K., Del Fiol G, **Staes C**, Weir C & Cummins M. (2019). Patient-generated health data and electronic health record integration: Protocol for a scoping review. BMJ Open. 2019 Dec 17; 9(12).

- Tiase V, Wawrzynski S, Sward K, Del Fiol G, **Staes C**, Weir C & Cummins M. (2019). Patient-Generated Health Data In Pediatric Asthma: Exploratory Study of Providers' Information Needs. JMIR Pediatr Parent. 2021 Jan 26;4(1):e25413. doi: 10.2196/25413. PubMed PMID: 33496674.
- Richesson RL, **Staes CJ**, Douthit B, Thoureen T, Hatch D, Kawamoto K, Del Fiol G. (2020). Measuring Implementation Feasibility of Clinical Decision Support Alerts for Clinical Practice Recommendations (DOI:10.1093/jamia/ocz225). J Am Med Inform Assoc, 27(4), 514-521.
- Tiase VL, Hull W, McFarland MM, Sward KA, Del Fiol G, **Staes C**, Weir C, Cummins MR. Patient-generated health data and electronic health record integration: a scoping review. JAMIA Open. 2020 Dec;3(4):619-627. doi: 10.1093/jamiaopen/ooaa052. eCollection 2020 Dec. Review. PubMed PMID: 33758798; PubMed Central PMCID: PMC7969964.
- Taber P, **Staes CJ**, Phengphoo S, Rocha E, Lam A, Del Fiol G, Maviglia SM, Rocha RA (2021). Developing a sampling method and preliminary taxonomy for classifying COVID-19 public health guidance for healthcare organizations and the general public. *Journal of biomedical informatics*, 120, 103852.
- Taber P, Radloff C, Del Fiol G, **Staes C**, Kawamoto K. (2021). New Standards for Clinical Decision Support: A Survey of The State of Implementation. (**Honorable Mention for Best Paper Award, AMIA 2021 Year in Review**). *Yearbook of medical informatics*, *30*(1), 159-171.
- Douthit BJ, **Staes CJ**, Del Fiol G, Richesson RL (2021). A thematic analysis to examine the feasibility of EHR-based clinical decision support for implementing *Choosing Wisely* ® guidelines. *JAMIA open*, *4*(2), ooab031.
- Douthit BJ, Del Fiol G, **Staes CJ**, Docherty SL, Richesson RL (2021). A Conceptual Framework of Data Readiness: The Contextual Intersection of Quality, Availability, Interoperability, and Provenance. *Applied clinical informatics*, 12(3), 675-685.
- Tiase VL, Wawrzynski SE, Sward KA, Del Fiol G, **Staes C**, Weir C, Cummins MR (2021). Provider Preferences for Patient-Generated Health Data Displays in Pediatric Asthma: A Participatory Design Approach. *Applied clinical informatics*, *12*(3), 664-674.
- Kukhareva PV, Weir C, Del Fiol G, Aarons GA, Taft TY, Schlechter CR, Reese TJ, Curran RL, Nanjo C, Borbolla FD, Staes CJ, Morgan KL, Kramer HS, Stipelman CH, Shakib JH, Flynn MC, Kawamoto K (2022). Evaluation in Life Cycle of Information Technology (ELICIT) framework: Supporting the innovation life cycle from business case assessment to summative evaluation. *Journal of biomedical informatics*, 127(104014).
- Radloff CL, Bennett H. **Staes CJ** (2022). Utility of Poison Control Center Data for Automated Opioid Overdose Surveillance. *J Public Health Manag Pract*, 28(3), 272-281.
- Cummins M, Turcotte C, McFarland MM, **Staes C**. Research outcomes of linked prescription drug monitoring program data: a scoping review protocol. BMJ Open. 2022 Apr 15;12(4):e055290. doi: 10.1136/bmjopen-2021-055290. PMID: 35428630; PMCID: PMC9013995.
- Chalkidis G, McPherson J, Beck A, Newman M, Yui S, **Staes C**. (2022) Development of a Machine Learning Model Using Limited Features to Predict 6-Month Mortality at Treatment Decision Points for Patients With Advanced Solid Tumors. JCO Clin Cancer Inform. Mar;6:e2100163. doi: 10.1200/CCI.21.00163. PMID: 35467965; PMCID: PMC9067363.
- 60 **Staes C**, Yusuf S, Hambly M, Phengphoo S, Guo JW. Safety risks and workflow implications associated with nursing-related free-text communication orders. J Am Med Inform Assoc. (2023) Feb 2. Available from: https://doi.org/10.1093/jamia/ocad018.
- Dixon BE, **Staes C**, Acharya JC, Allen KS, Hartsell J, Cullen T, Lenert L, Rucker DW, Lehmann HP, (2023) Enhancing the nation's public health infrastructure: a report from the ACMI symposium. J Am Med Inform Assoc. ocad033, <a href="https://doi.org/10.1093/jamia/ocad033">https://doi.org/10.1093/jamia/ocad033</a>
- Acharya JC, **Staes C**, Allen KS, Hartsell J, Cullen T, Lenert L, Rucker DW, Lehmann HP, Dixon, BE. Strengths, weaknesses, opportunities, and threats for the nation's public health information

systems infrastructure: synthesis of discussions from the 2022 ACMI Symposium, *Journal of the American Medical Informatics Association*, Volume 30, Issue 6, June 2023, Pages 1011–1021, https://doi.org/10.1093/jamia/ocad059

- Chalkidis G, McPherson JP, Beck A, Newman MG, Guo JW, Sloss EA, **Staes CJ.** (2023) External Validation of a Machine Learning Model to Predict 6-Month Mortality for Patients With Advanced Solid Tumors. JAMA Netw Open. 2023;6(8):e2327193. doi:10.1001/jamanetworkopen.2023.27193 https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2807936
- Hartsell J, **Staes C**, Allen K, Dunn A, Wilson F, Samore M, Shoaf K. (2023) Navigating the Landscape: Barriers and Facilitators in Electronic Case Reporting Implementation Across Public Health Agencies. J Public Health Manag Pract. 2023 Oct 5. doi: 10.1097/PHH.0000000000001825. Epub ahead of print. PMID: 37797330.
- Staes C, Beck AC, Chalkidis G, Scheese CH, Taft T, Guo J-W, Newman MG, Kawamoto K, Sloss EA, McPherson JP, (2023) Design of an interface to communicate artificial intelligence-based prognosis for patients with advanced solid tumors: a user-centered approach, Journal of the American Medical Informatics Association, 2023;, ocad201, https://doi.org/10.1093/jamia/ocad201

### Pending publications

Cummins M, **Staes C**. Perspectives on Research Priorities for Linked Prescription Drug Monitoring Program Data: A Survey, [submitted to BMC Health Services Research on 16 March 2023]

#### 4. Letters to the editor

- 1. **Staes C**, Matte T, Staeling N, Rosenblum L, Binder S (1995). Lead poisoning deaths in the United States, 1979 through 1988 [Letter to the editor]. *JAMA*, *273*(11), 847-8.
- 2. Rajeev D\*, **Staes CJ**, Evans RS, Mottice S, Rolfs R, Samore MH, Whitney J, Kurzban R, Huff SM (\*PhD student directed by Staes) (09/01/2010). In response to letter to the editor: 'Concerning SNOMED-CT content for public health case reports' [Letter to the editor]. *J Am Med Inform Assoc*, *17*(5), 613-4.
- 3. Staes CJ, Jellison J, Kurilo MB, Keller R, Kharrazi H. Response to authors of "Barriers to hospital electronic public health reporting and implications for the COVID-19 pandemic". J Am Med Inform Assoc. 2020 Nov 1;27(11):1821-1822. doi: 10.1093/jamia/ocaa191. PMID: 33001156: PMCID: PMC7543506.
- 4. Epidemic Intelligence Service Officers Past and Present (2020). Open Letter by Epidemic Intelligence Service Officers Past and Present in Support of CDC. Epimonitor, 41(10), 12–18.

### 5. Non Peer-Reviewed Journal Articles

- 1. CDC (1990). Foodborne hepatitis A Alaska, Florida, North Carolina, Washington. *MMWR Morb Mortal Wkly Rep*, 39(14), 228-32.
- 2. CDC (1990). Psittacosis at a turkey processing plant North Carolina, 1989. MMWR Morb Mortal Wkly Rep, 39(27), 460-9.
- 3. CDC (1991). Fatal pediatric poisoning from leaded paint Wisconsin, 1990. MMWR Morb Mortal Wkly Rep, 40, 193-5.

#### 6. White Papers and Reports

- 1. **Staes CJ**, Rinehart R (1995). *Does residential lead-based paint hazard control work? A review of the scientific evidence*. The National Center for Lead-Safe Housing.
- 2. NFFIRS Workgroup (2001). *Uniform Data Elements National Fatal Firearm Injury Reporting System, Release 1.1.* http://www.hsph.harvard.edu/hicrc/nviss.
- 3. **Staes C**, Edwards H, Duncan J, Peelay J (09/25/2013). *Development of Interface Business Requirements for Patient Entry of Occupational History Information for Electronic Health Records (SHEPheRD Grant RFTOP Number: 2012-005).* Atlanta: National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention (CDC).
- 4. **Staes CJ**, Eilbeck K, and the RCKMS Knowledge Representation Workgroup (2014). *Recommendations for use of ontologies to manage information in the Reportable Condition Knowledge Management System (RCKMS)*. Atlanta: Centers for Disease Control and Prevention.
- 5. Duncan J\*, **Staes C**, Luna-Lopez S (03/02/2016). Developing a Quality Framework for Initial and Ongoing Evaluation of Birth Data Extracted from Electronic Health Records (EHRs) for Vital Statistics (Task order Proposal No: 2015-Q-17144). Atlanta: National Center for Health Statistics, Centers for Disease Control and Prevention.
- 6. **Staes C**, Campbell K (11/15/2017). Whitepaper: From retrospective mapping to prospective standardization: A comparison of integration strategies to achieve semantic data interoperability. Available from: http://solor.io/wp-content/uploads/2017/11/White-paper\_Achieving-semantic-data-interoperability.pdf. Washington, DC: Department of Veterans Affairs, Veterans Health Administration, Office of Informatics and Analytics, Knowledge Based Systems.

#### 7. HL7 Standard Implementation Guide

1. Dolin R, Alschuler L, Beebe C, Boone K, Giannone G, Abellera J, Altamore R, **Staes CJ**, Kreisler A, Ganesan S (2009). HL7 CDA® R2 Implementation Guide: Public Health Case Report, Release 1 - US Realm.

The purpose of this implementation guide (IG) is to specify a standard for electronic submission of electronic initial public health case reports using HL7 Version 3 Clinical Document Architecture (CDA), Release 2 format.

#### 8. Published Abstracts (Recent - last 3 years)

- 1. Phengphoo S, Taber P, Lam A, Rocha E, Del Fiol G, Maviglia SM, Rocha RA & **Staes CJ** (2020). Linking COVID-19 guidance for healthcare provider's to Ely's taxonomy of generic clinical questions. Learning Health Systems. (12/20/2020). 5(1). https://onlinelibrary.wiley.com/doi/10.1002/lrh2.10256
- 2. Taber P, Rocha E, Del Fiol G, **Staes CJ**, Lam A, Phengphoo S, Maviglia SM & Rocha RA (2020). An automated process to catalog and track COVID-19 public health guidance. Learning Health Systems. (12/20/2020). 5(1). https://onlinelibrary.wiley.com/doi/10.1002/lrh2.10256
- 3. Rocha E, Taber P, Lam A, Phengphoo S, Del Fiol G, **Staes CJ**, Maviglia SM & Rocha RA (2020). Linking COVID-19 public health guidance to MeSH terms. Learning Health Systems. (12/20/2020). 5(1). https://onlinelibrary.wiley.com/doi/10.1002/lrh2.10256.
- 4. Lam A, Taber P, Rocha E, Phengphoo S, Del Fiol G, **Staes CJ**, Maviglia SM & Rocha RA (2020). Public health guidance for the COVID-19 pandemic: a preliminary qualitative analysis. Learning Health Systems. (12/20/2020). 5(1). https://onlinelibrary.wiley.com/doi/10.1002/lrh2.10256
- 5. Sloss EA, Staes CJ, McPherson JP, Scheese CM, Taft T, Guo J. Information needs when deciding to start a new line of therapy for advanced cancer: Are patients, caregivers, and oncologists aligned? JCO Oncol Pract. 2023;19(11 suppl):315-315. doi:10.1200/OP.2023.19.11 suppl.315

#### 9. Conference Proceedings

- 1. **Staes CJ**, Xu W, LeFevre S, Narus S, Gundlapalli A, Samore M, Facelli JC (2008). A case for using grid architecture in state public health informatics: the Utah perspective (poster). *HealthGrid 2008*, Chicago.
- 2. Abellara J, Kesarinath G, **Staes CJ**, Altamore R, Giannone G, Dolin R (2009). Development of a Public Health Case Report Implementation Guide: Enabling the Exchange of Electronic Health Record data using HL7 Clinical Document Architecture format. *AMIA Fall 2009 Symposium*, Bethesda: American Medical Informatics Association, 753.
- 3. Dykman D, **Staes CJ**, Facelli J (2009). Web service architecture for management of reportable condition reporting and rules. *AMIA Fall 2009 Symposium*, Bethesda: Amercian Medical Informatics Association, 830.
- 4. Walton N, Gesteland P, Poynton M, Maloney C, **Staes CJ**, Facelli J (2009). A Novel Neural Network Approach for Real-Time RSV Outbreak Prediction. *AMIA 2009 Fall Symposium*, Bethesda: American Medical Informatics Association, 1068.
- Gundlapalli AV, Ried J, Jackson BR, Mottice S, Facelli J, Staes CJ (2010). Public Health Reporting by Clinical Laboratories: Survey of Current Practices and Needs Assessment for Informatics Solutions. AMIA Annual Symposium 2010, Washington, DC: American Medical Informatics Association.
- Rajeev D\*, Staes C, Young J, Staggers N. (\*PhD student directed by Staes) (2010). A Pilot Usability Study of Public Health Websites in Determining What Conditions Are Reportable Where. AMIA Annual Fall 2010 Meeting, Washington, DC: American Medical Informatics Association.
- 7. Jiang Y\*, Staggers N, Staes C (\*PhD student directed by Staes) (2010). Requirements for Documenting Family Health History for the National Children's Study. *AMIA Fall 2010 Symposium*, Bethesda: American Medical Informatics Association.
- 8. Han E, Duncan J, **Staes C** (2011). An Automated Rule-Based Decision Tool for Improving Public Health Reporting Logic. *AMIA 2011 Annual Symposium*, Washington DC: American Medical Informatics Association.
- 9. Davis K, **Staes C**, Price R, Duncan J, Igo S, Facelli JC (10/25/2011). Improved Automated Encoding of Deaths Certificates to Identify Pneumonia and Influenza Deaths. *AMIA 2011 Annual Symposium*, Washington, DC: American Medical Informatics Association.
- 10. Bradshaw RL, **Staes CJ**, Del Fiol G, Schultz ND, Mitchell JA (2012). Going FURTHER with Metadata. *AMIA 2012 fall annual meeting*.
- 11. Jacobs J, Shields D, **Staes C**, Kawamoto K (2012). Enabling Intuitive Knowledge Authoring Using Continuity of Care Documents: the OpenCDS CCD-vMR Project. *AMIA 2012 fall annual meeting*.
- 12. Kawamoto K, Shields D, Tu M, Reid JH, Mottice S, Sanders P, **Staes CJ**, Hunter CY, Bray BE (2012). OpenCDS ePHR: an Open-Source, Standards-Based Decision Support Platform for Electronic Public Health Reporting. *AMIA* 2012 fall annual meeting.
- 13. Duncan JD, Grey T, Lenert L, Sauer B, **Staes C** (11/06/2012). Factors Affecting Quality of Cause of Death on Death Certificates. In AMIA (Ed.), *AMIA 2012 fall annual meeting*.
- 14. Altamore R, Conn L, **Staes C**, McGarvey S (2013). Progress Toward a Reportable Conditions Knowledge Management System (RCKMS). *2013 Annual CSTE conference*, Pasadena: Council of State and Territorial Epidemiologists.
- Eilbeck K, Jacobs J, Staes C (2013). Optimize Querying of LOINC® with an Ontology: Give Me the Chlamydia Tests the Epidemiologists Want Me to Use! (nominated for best paper award). In University of Hawaii at Manoa (Ed.), Proceedings of the Forty-sixth Hawaii International Conference on System Sciences (HICSS), Honolulu: Computer Society Press, (2013), 2398-2407.
- 16. **Staes C**, Luensman GA, Peelay J, Baron S, Nowlin S, Edwards H (2012). Development of Interface Requirements for Patient Entry of Occupational History Information for Electronic Health Records: What Questions Need to be Asked? *2013 Annual CSTE Conference*.

- Pasadena: Council of State and Territorial Epidemiologists.
- 17. Eilbeck K, Jacobs J, McGarvey S, Vinion C, StaesC (July 8, 2013). Exploring the use of ontologies and automated reasoning to manage selection of reportable condition lab tests from LOINC. *4th International Conference on Biomedical Ontology*, Montreal.
- 18. Duncan JD, Eilbeck K, Lenert L, Clyde S, Narus SP, **Staes C** (November 2013). Using KaOS Ontologies to Model Policy Requirements for a Statewide Master Person Index. *2013 AMIA Annual Meeting*, Washington DC: AMIA.
- 19. Lin Y, Welch B, Tippetts TJ, Kukhareva P, Shields DB, **Staes CJ**, Kandula V, Bray B, Warner P, Edison-Hair A, Kawamoto K (2014). Building an OpenCDS Terminology Based on the Health Level 7 Virtual Medical Record Data Model for Clinical Decision Support and Quality Measurement. *AMIA Annual Symposium Proceedings*, Washington.
- 20. McGarvey S, Abrams DN, Hui J, Staes C and the RCKMS team (2015). Partnering to develop a service-based CDS system for public health reporting specifications. *AMIA* 2015 Annual Symposium, Washington DC: AMIA.
- 21. Duncan J, **Staes C** (11/14/2016). Delivering High Quality Birth Certificate Data from an EHR. *AMIA 2016 Annual Symposium*, Chicago: AMIA.
- 22. **Staes C**, McGarvey S, He S, Arnold R, Conn L (11/14/2016). Electronic Case Reporting: 360 perspective by public heath, informatics, and healthcare stakeholders. *AMIA 2016 Annual Symposium*, Chicago: AMIA.
- 23. Grafe C, **Staes CJ**, Samore M, Adler F, Evans RS (11/06/2017). Variation in state public health guidelines for responding to acute gastroenteritis outbreaks in healthcare settings. *AMIA 2017 Annual Conference*, Wash DC: AMIA.
- 24. **Staes CJ**, Artz N, Zarcone P, Loonsk J, Turner K (Nov 2017). Panel: Advancing electronic case reporting (eCR) to enable public health disease control and emergency response: getting into the technical weeds! *AMIA 2017 Annual Symposium*, Washington DC: AMIA.
- 25. Loonsk JW, **Staes C**, Hartsell J, Stamm J, Conn L (11/05/2018). Informatics Challenges, Solutions, and Opportunities for Public Health Electronic Case Reporting. *AMIA 2018 Annual Symposium*, Washington DC: AMIA.
- 26. Douthit B, **Staes CJ**, Del Fiol G, Richesson R. (2020). Examining the Feasibility of EHR-based Clinical Decision Support for Implementing Choosing Wisely® Guidelines: A Thematic Analysis. (March 2020) AMIA Informatics Summit, AMIA.
- 27. Dixon B, **Staes C**, Goodell J, Lehmann H. (2022) Panel: Rebuilding the Nation's Public Health Informatics Infrastructure: Recommendations from the 2022 ACMI Symposium. AMIA Annual Symposium. Washington, DC

### 10. Manuscript & Abstract Reviews (2015- present

Years Journal

2009 - present Journal of Public Health Management and Practice

2011- present Journal of the American Medical Informatics Association (JAMIA)

2018 - present JAMIA Open

Others: 2022 IMIA Yearbook of Medical Informatics

American Journal of Health-System Pharmacy (AJHSP)

**Applied Clinical Informatics** 

Archives of Pediatrics & Adolescent Medicine Computer Methods and Programs in Biomedicine

Epidemiology and Infection

International Journal of Infectious Diseases

Sexually Transmitted Diseases Methods of Information in Medicine

International Journal of Medical Informatics Journal of Biomedical Informatics

### 11. Study Sections & Funding Reviews

2007	Reviewed research proposals for the American Association for the Advancement of Science (AAAS) Research Competitiveness Program (RCP) (on behalf of the Life
	Sciences Discovery Fund ( <u>www.lsdfa.org)</u> ).
2011 - 2012	Reviewer for Small Business Innovation Research (SBIR) proposals [ZRG1 HDM
	R(11)I, National Institutes of Health, Bethesda, MD, USA

### **G. PRESENTATIONS**

### 1. Peer-Reviewed Presentations

<u>Dates</u>	Title, Sponsor	<u>Location</u>
<u>Interna</u>	<u>tional Meetings</u>	
1993	<b>Staes CJ</b> , Balk S, Ford K, Passantino R, Torrice A. Environmental factors to consider when designing and maintaining a child's day care environment. International Conference on Child Day Care Health	Atlanta, GA, USA
2007	<b>Staes CJ</b> , Evans RS, Narus S, Huff S, Sorensen J. System analysis and improvement in the process of transplant patient care. MedInfo 2007.	Brisbane, Australia
2013	Eilbeck K and <b>Staes CJ</b> . Optimize Querying of LOINC® with an Ontology: Give Me the Chlamydia Tests the Epidemiologists Want Me to Use!. 46th Annual Hawai'i International Conference on System Sciences	Maui, Hawai'i, USA
2017	deKeizer N, Ammenwerth E, Koch S, <b>Staes C</b> , Syed-Abdul S, Cornet R. Workshop: Online Learning in Health Informatics – Success factors and challenges. MedInfo 2017.	Hangzhou, China
2020	<b>Staes CJ</b> . The role of health informatics to support the reporting of COVID-19 cases – integrating laboratory, health organizations and public health entities. Congreso Argentino de informática y Salud - CAIS2020	Argentina (virtual)
Nationa	al Meetings	
1989	Staes CJ. Cost benefit analysis of Hepatitis B prenatal screening in North Carolina. Paper presented at the CDC and USPHS Regions IV and VI conference "Prevention: Challenges of the 1990's",	New Orleans, LA
1991	<b>Staes CJ</b> , Matte TD, Carter-Pokras O. Blood lead levels of Hispanic children ages six months to three years of age. American Public Health Association Annual Meeting	Atlanta, GA
2000	Olson L, Clark D, Friedman D, Fuqua-Whitley D, Klassen C, Mitchell D, Smith P, <b>Staes CJ</b> , Wiersema B. Piloting a uniform firearm fatality reporting system: implementation experience of state and local reporting sites. Paper presented at American Public Health Association 128th Annual Meeting,	
2007	Botkin J, Anderson R, <b>Staes CJ</b> . MSGRCC NBS Registry Project	Minneapolis,

	overview. Presentation given at the 2007 Newborn Screening and Genetic Testing Symposium,	MN
2007	Lobar W, Lombardo J, Mandl K, Kukafka R, <b>Staes CJ</b> . Academic Centers of Excellence in Public Health Informatics. Panel presentation at the Spring Conference of the American Medical Informatics Association (AMIA).	Orlando, FL
2007	<b>Staes CJ</b> , Turner AM, Kukafka R, Lehmann HP, Downs S. Public Health Informatics training: Report from the field on why, who, what, and how! Organized and member of panel presentation for the annual meeting of the American Medical Informatics Association (AMIA).	Chicago, IL
2008	<b>Staes CJ</b> , Xu W, Davidson A, Lynch C, Lenert L. Improving Public Health Reporting: Use Cases, Knowledgebase Development, and a Federated Model. Panel presentation given at the 2008 AMIA Spring Congress	Phoenix, AZ
2008	<b>Staes CJ</b> . "Informatics Challenges and Opportunities with Public Health Case Reporting." Invited presentation for a pre-conference workshop organized by the National Center for Public Health Informatics, CDC. 2008 Annual Conference of the Council of State and Territorial Epidemiologist (CSTE).	Denver, CO
2008	<b>Staes CJ</b> . Translating public health informatics curriculum to practice at the University of Utah. Oral presentation at the 6th Annual Public Health Information Network (PHIN) meeting. August 25, 2008.	t Atlanta, GA
2008	<b>Staes CJ</b> , LeFevre S, Price R, et al. Utah phGRID demonstration project: grid-enabling the Environmental Public Health Tracking Network. 6th Annual Public Health Information Network (PHIN) meeting	Atlanta, GA
2008	Evans RS, <b>Staes CJ</b> , Rajeev D, Klompus M. (2008) Electronic Case Reporting of Notifiable Diseases to Local and State Health Departments Using HL7. [Abstract]. American Medical Informatics Association Annual Meeting,	Washington DC.
2009	Kukafka R, Turner A, Lehman H, <b>Staes CJ</b> , Florance V. Training for Public Health Informatics Research. Panel presentation 2009 AMIA Spring Congress	Orlando, FL
2009	Gesteland P, <b>Staes CJ</b> , Samore M, Pavia A, Korgenski K, Savitz L, James B, Byington C. Enhancing Population-Based Practice and Clinical Care of Acute Respiratory Tract Infections through Data Visualization and Decision Support. Presentation for the 2009 AMIA Spring Congess	Orlando, FL
2009	<b>Staes CJ</b> , Gesteland P, Gundlapalli A, Mottice S, Garrett NY, Risk I, Rolfs RT, Samore M, Byington C. Evaluation of public health alert messages targeted for clinicians during the Influenza A H1N1 outvbreak, Spring 2009: Implications for alerting in EHRs. Public Health Information Network (PHIN) Conference	Atlanta, GA
2009	Rajeev D, Seller R, Price A, Reid J, <b>Staes CJ</b> , Risk I. Evaluating the impact of electronic disease surveillance systems on local health department work processes. Public Health Information Network (PHIN) Conference 2009	Atlanta, GA
2009	Abellara J, Kesarinath GB, <b>Staes CJ</b> , Altamore R, Giannone G, Dolin B. Development of a Public Health Case Report Implementation Guide Enabling the Exchange of Electronic Health Record data using HL7	Atlanta, GA :

	Clinical Document Architecture format. Public Health Information Network (PHIN) Conference 2009	
2009	Garrett NY, Mishra N, Nichols B, Lombardo J, <b>Staes CJ</b> , Safron C. Using decision support in electronic health records for public health alerting. Public Health Information Network (PHIN) Conference 2009	Atlanta, GA
2010	Totzke M, <b>Staes CJ.</b> Evaluation of the 2009 CSTE Position Statement for giardiasis: Is it ready for implementation in automated systems? presented by graduate student supervised by Dr. Staes at the Council of State and Territorial Epidemiologist (CSTE) Annual Meeting	Portland, OR
2010	<b>Staes CJ</b> , et al. Developing the foundation and building bridges to improve public health case reporting: a case report standardization workgroup sponsored panel. Council of State and Territorial Epidemiologist (CSTE) Annual Meeting	Portland, OR
2011	<b>Staes CJ</b> , Bradshaw R, Rajeev D, Mottice S, Lui ZW, Altamore R, Hulse N, Staggers N, Narus S. Design and Development of a Standards-based Knowledgebase to Publish Electronic Laboratory Reporting Criteria. Council of State and Territorial Epidemiologists (CSTE) Annual Meeting	Pittsburg, PA
2011	Mottice S, Rajeev D, Reid J, <b>Staes C</b> , RolfsR. Errors in the Quality of Electronic Laboratory Reporting: Understanding the impact on Public Health. Council of State and Territorial Epidemiologists (CSTE) Annual Meeting	Pittsburg, PA
2011	Xu W, Livnat Y, Petty W, Reid J, <b>Staes CJ</b> , Samore MT, Rolfs RT. Innovation Space and Stage for Public Health Informatics Research and Practice: A State Experience. Council of State and Territorial Epidemiologists (CSTE) Annual Meeting	Pittsburg, PA
2011	Abellara J, <b>Staes CJ</b> , Warzel D. Public Health Data Element Standardization and Distribution Strategy. CDC and NACCHO. Public Health Informatics 2011 conference	Atlanta, GA
2011	<b>Staes CJ,</b> et al. An Enterprise View of Knowledge Representation for What Conditions Are Reportable Where. Centers for Disease Control and Prevention 2011 PHI Conference,	Atlanta, GA
2012	<b>Staes CJ.</b> Public Health Reporting Specifications: Variation and Scope of Content. Council of State and Territorial Epidemiologists (CSTE) Annual Meeting	Omaha, NE
2012	<b>Staes CJ</b> . Survey of clinical laboratories to understand the process and burden of public health reporting. Council of State and Territorial Epidemiologists (CSTE) Annual Meeting	IOmaha, NE
2013	<b>Staes CJ.</b> Development of Interface Requirements for Patient Entry of Occupational History Information in an Electronic Health Record: What questions need to be asked?. Council of State and Territorial Epidemiologists (CSTE) Annual Meeting	Pasadena, CA
2015	<b>Staes CJ</b> . Development of a process for creating, implementing, and evaluating care process models. Association of American Medical Colleges (AAMC). 2015 Integrating Quality Meeting,	Chicago, IL
2016	<b>Staes CJ</b> . Evaluation of Content to be Included in an Initial Case Report, Council of State and Territorial Epidemiologist 2016 Annual Meeting,	Anchorage, AK
2016	Staes CJ. Oh Joy! Birth of a New Process to Automate Extraction of	Anchorage, AK

	Birth Certification Information from an EHR. Council of State and Territorial Epidemiologist 2016 Annual Meeting,	
2016	Altamore R, <b>Staes CJ</b> , Conn L, Rennick M. Electronic Case Reporting: Moving from Vision to Reality. 2016 Public Health Informatics Conference,	Atlanta, GA
2017	<b>Staes CJ</b> , Altamore R, Conn L. Governance of the Reportable Condition Knowledge Management System (RCKMS). CSTE Annual Meeting Pre-conference workshop,	Boise, ID
2017	<b>Staes CJ</b> . Evaluation Committee Update for 'Digital Bridge Progress: now and then'. Digital Bridge Collaborative/Public Health Informatics Institute. CSTE Annual Meeting Pre-conference workshop	Boise, ID
2017	<b>Staes CJ</b> . RCKMS: Cultivating the Knowledge to Support Electronic Case Reporting. Council of State and Territorial Epidemiologists (CSTE) Annual Meeting	Boise, ID
2017	Staes CJ. Trying on the RCKMS Glass Slipper: How Well Do Jurisdictional Reporting Criteria Fit local public health needs? National Association of County & City Health Officials (NACCHO) Annual Meeting	Pittsburgh, PA
2018	<b>Staes C.</b> RCKMS: Strengths/limitations of the electronic Initial Case Report (elCR) as a data source for reportable condition decision support. council of State and Territorial Epidemiologist (CSTE) Annual Meeting	West Palm Beach, FL
2018	<b>Staes C.</b> Reportable Conditions Knowledge Management System: Developing Quality Decision Support in the Data Supply Chain for Public Health Surveillance. 2018 Public Health Informatics Conference	Atlanta, GA
2019	<b>Staes C.</b> Opportunities at the intersection of Nursing & Public Health Informatics: Case study to address opioid surveillance. AMIA 2019 Informatics Educators Forum. June 2019.	St. Louis, MO
2020	Borbolla D, <b>Staes C</b> , Heermann-Langford L, Nguyen V. Education on FHIR: multi-disciplinary perspectives to incorporate FHIR in health informatics training initiatives. AMIA 2020 Annual Meeting.	Washington, DC (Virtual)
2022	<b>Staes C</b> , Lehmann H, Acharya J, Dixon B. Rebuilding the Nation's Public Health Informatics Infrastructure: Recommendations from the 2022 ACMI Symposium. AMIA 2022 Annual Meeting	Washington, DC

## 2. <u>Invited Speeches / Lectures / Demonstrations</u>

<u>Dates</u>	<u>Title, Sponsor</u>	<b>Location</b>
Interna	ational	
2011	<b>Staes CJ</b> . Invited speaker for lecture and panel during a half-day workshop: Public Health Informatics: Using Cyberinfrastructure to Improve Public Health and Well-being: Opportunities and Challenges	Koloa, Kauai, HI, USA
	for Practitioners and Researchers. 44th Hawaii International	
	Conference on Systems Science, January 2011,	
2014	Staes CJ. Communication between critical care and public health:	Atlanta GA
	Opportunities and challenges. Society for Critical Care Medicine	
	Research Summit (30 invited participants),	
2019	Staes CJ. Innovative Nursing Role in the era of electronic health	Seoul, Korea

	was and a family of Madical Information Commencious	
	records, for the Korean Society of Medical Informatics Symposium	
2020	2019. (Invited Talk)	Indonesia
2020	<b>Staes CJ.</b> Career profile of nursing informatics in the US and the world. Lecture of the Management Information System course,	(virtual)
	Universitas Indonesia. October, 2020	(virtual)
Nation	·	
2008	Staes CJ. Presented "Utah's Center of Excellence in Public Health	Atlanta GA
2000	Informatics: GRID-The Next Generation of Technology" for the	Additio OA
	national Connection Meeting sponsored by the Public Health	
	Informatics Institute, April 22-24, 2008	
2010	Staes CJ. Faculty, BioMedical Informatics MBL/NLM Course Fellow -	Woods Hole,
	Marine Biological Laboratory, Woods Hole, MA. Sponsored by the	MA
	National Library of Medicine. Certificate, Spring Course, 2010.	
2010	Staes CJ. Electronic Public Health Reporting: building the	Portland,
	infrastructure. Presented for the Centers for Disease Control and	Oregon
	Prevention sponsored Public Health Information Network (PHIN)	
	workshop prior to the 2010 Annual Meeting of the Council of State	
	and Territorial Epidemiologist,	
2013	Staes CJ. Development of Interface Requirements for Patient Entry	Morgantown,
	of Occupational History Information in an Electronic Health Record.	WV
2046	National Institute for Occupation Safety and Health (NIOSH).	Atlanta CA
2016	Altamore R, <b>Staes CJ</b> , Minami M, McGarvey S. Trying on the RCKMS Glass Slipper: How Well Do Jurisdictional Reporting Criteria	Atlanta, GA
	Fit? 2016 Public Health Informatics Conference.	
2017	Del Fiol G, Louis JF, <b>Staes CJ</b> . Integration of CDC Zika guidance into	Nationwide
2017	clinical workflow using OpenInfobutton. Webinar Sept 19, 2017 for the	webinar
	CDC Public Health – EHR Vendors Collaboration Initiative. (Available:	
	https://www.cdc.gov/ehrmeaningfuluse/Public-Health-EHR-Vendors-	
	Collaboration-Initiative.html)	
2018	Staes CJ. Overview of the Infobutton Standard. Centers for Disease	Atlanta, GA
	and Control, Adapting Clinical Guidelines for the Digital Age Meeting,	
2020	Loonsk J, Conn L, Lane S, <b>Staes C</b> . eCR Now: A Webinar	Nationwide
	Describing the Effort to Scale Electronic Case Reporting (eCR)	webinar
,	Nationwide for COVID-19. AMIA COVID19 webinar series LINK	
	Regional	Colt Lalia
2006	Presented "Public Health Informatics" for the Biomedical Informatics	Salt Lake
2006	seminar series, University of Utah (50+ attendees) Presented "Public Health Informatics" for the Nursing Informatics	City, UT Salt Lake
2000	course, School of Nursing, University of Utah	City, UT
2007	Presented "Public Health Informatics" for the Research-in-Progress	Salt Lake
2001	meeting for the Intermountain Injury Control Research Center, Dept of	City, UT
	Pediatrics, University of Utah	J. J, J
2007	Presented "Public Health Informatics" for the Public Health Law	Salt Lake
	course taught by John Blum in the School of Law, University of Utah	City, UT
	(16 students)	•
2010	<b>Staes CJ.</b> Grand Rounds: Use of Information Systems to improve the	Salt Lake
	link between Public Health and Clinical Medicine. Division of Public	City, UT
	Health, Department of Family Medicine, University of Utah	<b>.</b>
2013	Staes CJ. Development of Interface Requirements for Patient Entry	Salt Lake
	of Occupational History Information in an Electronic Health Record.	City, UT
	VA IDEAS Center	

### 3. Posters

<u>Dates</u>	<u>Title, Sponsor</u>	<u>Location</u>
1997	Staes CJ. Sources of Infection Among Persons with Acute Hepatitis A and No Identified Risk Factors During A Sustained Community-Wide outbreak.	San Francisco, CA
2003	Infectious Diseases Society of America Annual Meeting  Staes CJ, Huff SM, Tilley C, Narus SP, Sorensen JB, Evans RS.  Development of an information model for storing donor data in an electronic medical record. AMIA Annual Meeting	Washington DC.
2007	Wyman L, Gren L, Dimond M, <b>Staes CJ</b> . Evaluation of the Influenza Sentinel Provider Network surveillance system - Utah, 2006-07 Influenza season. 5 <sup>th</sup> Annual Public Health Information Network (PHIN) conference, (won 2nd place in poster competition).	Atlanta
2007	*Mayer J, Risk I, Hill M, Staes CJ (*student directed by Staes). Evaluation of a school-based varicella surveillance system: What are the opportunities and informatics needs? 5th Annual Public Health Information Network (PHIN) conference	Atlanta
2007	Gundlapalli A, Hill M, Price A, Risk I, Samore M, <b>Staes CJ</b> . Evaluation of a Local Health Department Surveillance System for the Early Detection of Meningococcal Meningitis. 5th Annual Public Health Information Network (PHIN) conference	Atlanta
2008	Rajeev D, Dimond MS, Evans RS, Wyman L, Rolfs RT, Huff S, Kurzban R, <b>Staes CJ</b> (). Development of an HL7 Message Structure to Electronically Report Notifiable Condition Information from Healthcare to Public Health. 6th Annual Public Health Information Network (PHIN) meeting	Atlanta
2008	*South BR, Wyman L, Shen S, Dimond MS, Rolfs RT, Gundlapalli A, Samore M, Staes CJ. (*Student directed by Staes). <i>The Effect of Automated Case Detection on Timeliness of Case Reporting of Influenza-Associated Hospitalization</i> . 6th Annual Public Health Information Network (PHIN) meeting	Atlanta
2008	·	Atlanta
2009	*Zafar N, Gibson B, LeFevre S, <b>Staes CJ</b> (*student directed by Staes). Evaluation of Traumatic Brain Injury Surveillance. 2009 AMIA Spring Congress	Orlando
2009	*Gibson B, Zafar N, LeFevre S, <b>Staes CJ</b> (*student directed by Staes) (). <i>An Evaluation of the Utah Injury Surveillance System.</i> 2009 AMIA Spring Congress	Orlando
2011	He S, <b>Staes CJ</b> , LeFevre S, Marti K, Thraen I, Xu W, Narus SP. <i>Improving Secure Access to Utah Public Health Data for Research.</i> AMIA Spring Meeting	Orlando
2011	Jacobs J*, Ganesan S, Altamore R, Abellera J, <b>Staes C</b> (*PhD student directed by Staes) (). <i>A framework for modeling data elements used for public health case reporting (Awarded 'Best poster' for the Surveillance and Informatics track).</i> 2011 CSTE Annual Conference	Pittsburgh
2011	Reid J, Mottice S, <b>Staes C</b> , Xu W. Assessment of Laboratory Reporting Sensitivity using ELR in Utah. 2011 CSTE Annual Conference	Pittsburgh

2011	Han E, Duncan J, <b>Staes C</b> . <i>Improving the logic for hepatitis case reporting found in the 2010 CSTE position statements.</i> 2011 CSTE Annual Conference	Pittsburgh
2014	Zhang M, <b>Staes C</b> , Knapp LA, Miller K. Best Practices for Best Practice Alerts: Evaluation of a Best Practice Alert to Detect Chronic Glucocorticoid Use. 2014 American College of Rheumatology (ACR/ARHP) Annual Meeting	Boston
2015	Abrams D, McGarvey S, <b>Staes C</b> . <i>Variability Assessment of Notifiable Disease Conditions Across State Jurisdictions</i> . 2015 CSTE Annual Conference	Boston
2016	Lipstein J, <b>Staes C</b> , McGarvey S, Conn L (). <i>Developing Clinical Rules Logic for Emerging Infectious Diseases for Use in Public Health Decision Support Engine</i> . 2016 CSTE Annual Conference	Anchorage
2016	Lipstein JM, McGarvey SR, <b>Staes CJ</b> . A Standardized Process to Represent Reporting Specifications for Emerging Conditions. 2016 Public Health Informatics Conference.	Atlanta
2018	Louis JL*, Yingling LR, DelFiol G, Staes C (*PhD student) (11/05/2018). Analysis of Public Health Guidance for Infectious Diseases to Enable Location-Aware Clinical Decision Support (poster). AMIA 2018 Annual Symposium, San Francisco: AMIA.	San Francisco
2020	Yusuf S, Hambly M, <b>Staes C</b> . Standardizing Nursing Orders to Better Assess Acuity and Improve Nursing Workflow. AMIA 2020 Annual Symposium	Washington DC (virtual)

### H. PROFESSIONAL ORGANIZATIONS & SERVICE

### 1. College of Nursing Committees

<u>Years</u>	<u>Committee</u>	<u>Role</u>
2018 - 2021	CCNE Accreditation Task Force, to prepare for the BS and MS accreditation.	Member
2018 - Present	College Council	Member
2019 - Present	Faculty Search Committee	Member
2019 - 2021	Academic Appeals Committee	Chair
2018- 2019	RPT Retention and Post-Tenure Review Team, Career Line Faculty Reappointment and Advancement	Member
	Subcommittee	
2018- 2020	Master's and DNP Program Committee	Member
2020 - 2023	Master's Program Committee	Member

### 2. <u>Department of Biomedical Informatics (School of Medicine) Committees</u>

<u>Years</u> <u>Committee</u>	<u>Role</u>
2006 - 2009 Biomedical Informatics, Admissions Committee (cha	air Chair and Member
for one year, member for two years)	
2006 - 2008 Morgan Award committee	Member
2007 - 2008 Houtchen's Memorial Award Committee	Member
2007 - 2015 Curriculum Committee	Member
2014 - 2015 Industry Relations Committee	Member
2017 - 2018 Population Health Informatics Special Interest Group	p Co-Leader

### 3. Health Sciences Center Committees

<u>Years</u>	<u>Committee</u>	<u>Role</u>
2006 - 2008	Health Sciences Center, Mountain States Genetics	Member
	Regional Collaborative Newborn Screening Workgroup	
2012 - 2015	Primary Care Research Network	<b>Board Member</b>
2014 - 2015	Knowledge Management and Mobilization	<b>Associate Director</b>
2018	Population Health System Steering Committee	Member

### 4. University Committees

<u>Years</u>	Committee	<u>Role</u>
2008 - 2009	Graduate Admissions Committee, University of Utah graduate school admission/application task force	Appointed Member
2019 - 2023	Center of Excellence for Exposure Health Informatics (CEEHI)	Member; Membership committee member; Associate Director: Student involvement

### 5. Professional Organization Committees

<u>Years</u>	<u>Committee</u>	<u>Role</u>
2000 - 2001	Workgroup to define Uniform Data Elements for the National Fatal	Member

2006 - 2012	Firearm Injury Reporting System	Marshar
2006 - 2012	Utah Department of Health, Utah Environmental Public Health Tracking Network Technical Advisory Committee	Member
2007 - 2008	Council of State and Territorial Epidemiologists/Centers for	Member
	Disease Control, CSTE/CDC Confidential Morbidity Report	
	Workgroup	
2007 - 2008	AMIA Scientific Program Committee for the 2008 American	Member
	Medical Informatics Association Fall symposium	
2007 - 2009	Utah Department of Health, Chronic Disease Genomics Standing Committee	Member
2008 - 2009	Centers for Disease Control and Prevention, HL7 CDA	Domain Expert
	development for public health case reporting. Collaboration with	
	CDC(NCPHI), CSTE	
2008 - 2009	Centers for Disease Control and Prevention, Public Health - EMR	Domain Expert
	alerting project. Collaboration with CDC, GE Healthcare, Johns Hopkins	
2009	New York City, Department of Health and Mental Hygiene,	Invited Expert
2000	Primary Care Information Project Squeezing Quality Data from	minioa Export
	Ambulatory EHRs Technical Assistance for Quality Improvement	
2009 - 2010	Council of State and Territorial Epidemiologists/Centers for	Co-Leader,
	Disease Control, Case Report Standardization Workgroup (a joint	
	CSTE/CDC workgroup of epidemiologists and informaticists convened under the CSTE Surveillance Practice and	
	Implementation Subcommittee to focus on the issues around case	
	reporting)	
2011	Institute of Medicine of the National Academies, Committee on	Appointed
	Occupational Information and Electronic Health Records	Member
2011	Centers for Disease Control and Prevention, ELR Standards	Committee
2011	Workgroup of the joint CSTE & CDC ELR Task Force.	Member
2011	Centers for Disease Control and Prevention, Program Committee (CE subcommittee) for the CDC/NACCHO sponsored Public	Appointed Committee
	Health Informatics Conference, August 2011	Member
2012 - 2013	Centers for Disease Control and Prevention, Knowledge	Co-Leader
	Representation Committee, Reportable Condition Knowledge	
	Management System Project, CDC	
2012 - 2018	Centers for Disease Control and Prevention, Steering Committee,	Co-Leader
	Reportable Conditions Knowledge Management System (RCKMS) Project. This is a nationwide collaborative project to develop a	
	knowledge management and decision support system to support	
	public health reporting of conditions from electronic health and	
	laboratory record systems.	
2014	Standards & Interoperability (S&I) Framework, Clinical Quality	Subcommittee
	Framework (CQF) Initiative Use Case Development Committee	Co-Lead
2015	Office of the National Coordinator for Health Information	Expert Panelist
	Technology, Public Health-EHR Vendors Collaboration	
	Initiative: Joint public health forum & CDC nationwide call to describe Intermountain Healthcare's experience with the	
	Reportable Condition Knowledge Management System (RCKMS)	
	pilot implementation.	
2016 - 2018	AMIA Representative on the Joint Public Health Informatics	Appointed
	Taskforce (JPHIT)	Representative

2016 - 2017	Office of the National Coordinator for Health Information Technology, ONC/CDC sponsored meeting with the leadership of Professional Associations on EHR prompts for the response to Public Health Emergencies such as Zika	Professional Advisor
2017	Digital Bridge, Evaluation Committee. The Digital Bridge is a collaborative partnership of health care, health IT and public health organizations focused on ensuring our nation's health through bidirectional information flow between health care and public health. The initial focus is on electronic case reporting (eCR). (http://www.digitalbridge.us/)	Member & Advisor
2018	ÀMIA committee to develop criteria for the Fellow in AMIA recognition program.	Appointed Member
2020	AMIA – Nursing Informatics Program Director's committee	Member
2021-22	American College of Medical Informatics (ACMI) - 2021 Elections and Nominations Committee	Member
2021-22	Nursing Education Exchange (NEXus): NEXus Systems, Leadership, Informatics, and Policy Cluster committee	CON representative
2022	ACMI Annual Symposium Planning Committee: Rebuilding the Nation's Public Health Informatics Infrastructure. Scottsdale, AZ Spring 2022	Co-Chair
2023	CDC Foundation Data Modernization Initiative Working Group: Improving Public Health System Interoperability	Member

## 6. Professional Organization membership

2001 - present	American Medical Informatics Association (AMIA)
2007 - 2018	Council of State and Territorial Epidemiologists
2009 - 2019	Health Level Seven International (HL7)
2018 - present	American College of Medical Informatics (ACMI)
2019 - 2023	American Nurses Association

### 7. Consultation and Boards

Mo/Yr 2014	Firm/Client Society of Critical Care Medicine, Invited to present at the first Critical Care Research Summit titled, Towards Better Critical Care: From Data to Information to Decision to Action. Participation requested due to expertise in communication between public health and healthcare settings.	Role Invited Speaker & Advisor,
2015	National Center for Injury Prevention and Control, CDC, convened an expert review panel to evaluate its Web-based Injury Statistics Query and Reporting System (WISQARS) to improve the utility of WISQARS for the injury community.	Expert Panelist
2018- present	HLN Consulting, LLC, Intermittent consulting on Immunization-related clinical decision support	Ad Hoc Consultant,
2019	World Health Organization - Regional Office for Europe. Participated in a meeting to strengthen the World Health Organization's Health Information System (HIS) assessment support tool.	Advisor
2019	Centers for Disease Control and Prevention. Participated in a council to guide the expansion of a Multi-state EHR-based National Disease Surveillance (MENDS)	Advisory Council

Expert Panel Member, MedStar Health National Center for Human Factors in Healthcare, The MedStar Health National Center for Human Factors in Healthcare, in collaboration with The Pew Charitable Trusts (Pew), convened four expert panels to achieve consensus for public health reporting measures for the Centers for Medicare & Medicaid Services (CMS) Promoting Interoperability Program. The panel focused on Case Reporting, when healthcare providers send extracts from patients' medical records to public health agencies, to include detailed information related to different health conditions.

Expert Panelist

## **SECTION II**

### L. CURRENT & PAST AREAS OF TEACHING RESPONSIBILITY

## 1. Courses Taught Over Past 5 Years (since 2016)

<u>Year</u>	Course No.	Title	Credits	Students	Role
•		ealth Informatics: 2007 - 2017	_	1	1
2016	BMI6701/6702	Population and Public Health Informatics	2	18	Lead instructor
2017	BMI6701/6702	Population and Public Health Informatics	2	30	Co-teach & mentor faculty
Standa	ards in biomedical	informatics: 2011 - present			
2016	BMI6120/6125	Clinical and Public Health Standards and Terminologies (online+lab)	3	13	Co-teach & mentor faculty
2017	BMI6120/6125	Clinical and Public Health Standards and Terminologies (online+lab)	3	28	Co-direct
2018	BMI6120/6125	Standards in biomedical informatics	2	34	Co-direct
2019	NURS/BMI 6120	Standards in biomedical informatics	2	54	Co-direct
2020	NURS/BMI 6120	Standards in biomedical informatics	2	22	Co-direct
2021	NURS/BMI 6120	Standards in biomedical	2	29	Co-direct
2022	NURS/BMI 6120	informatics Standards in biomedical informatics	2	43	Co-direct
Clinica	al Decision Suppor	t: 2018 - present			
2018	BMI/NURS 6300	Clinical Decision Support	3	27	Co-teach
2019	BMI/NURS 6300	Clinical Decision Support	3 3	34	Co-teach
2020	BMI/NURS 6300	Clinical Decision Support	3	46	Co-teach
Semin	ar in Clinical Infor	natics: 2018 - present			
2018	NURS6805	Seminar in Clinical Informatics	1	12	Lead instructor
2019	NURS6805	Seminar in Clinical Informatics	1	7	Lead instructor
2020 2021	NURS6805 NURS6805	Seminar in Clinical Informatics Seminar in Clinical Informatics	1 1	7 5	Lead instructor Lead instructor
2021	1101130003	Seminal in Clinical informatics	'		Lead Instructor
	rs Capstone		•	0.4	
2020 2021	NURS 6889 NURS 6889	Masters Capstone Masters Capstone	3	24 23	Co-teach Co-teach
2021	NURS 6889	Masters Capstone  Masters Capstone	3 3	11	Co-teach
			J		
Other					
2015	BMI 6950	Practicum: Process Modeling / Knowl Mgmt for Care	1-3	10	Lead instructor

		Pathways			
2020	NURS 6815	Clin/Nurs Inf Practicum	1	1	Lead instructor
2021	NURS 6815	Clin/Nurs Inf Practicum	1-1.5	4	Lead instructor

### 2. <u>Development of New Courses</u>

<u>Year</u>	Course No.	<u>Title</u>	<b>Credits</b>
2008 - 2018	BMI 6701/6702	Population and Public Health Informatics	2
2011 - ongoing	BMI 6120/6125	Clinical and Public Health Standards and Terminologies	3
2015	BMI 6950	Practicum: Process Modeling / Knowl Mgmt for Care	1-3
		Pathways	

### 3. Independent Study / Faculty Consultation

<u>Year</u>	<u>Topic</u>	<u>Students/participants</u>
2017-2018	Population Health Special Interest	Students, postdocs, and colleagues from
	Group – weekly meetings	the Utah Department of Health and the
		Medical Schools Public Health Program.

### 4. Lectures provided for each year for courses outside the College of Nursing

<u>Year</u>	<u>Topic</u>	Students/participants
2011 - 2016	"Public Health Reporting and	Medical Informatics Rotation for 3rd and
	Surveillance: current and evolving systems"	4th year AP/CP Pathology Residents. University of Utah, Salt Lake City, UT
2013 - 2019	"Screening for Antibody to the	Dept of Family and Preventive Medicine,
	Human Immunodeficiency Virus	University of Utah. (invited each year to
	(HIV) case study: public health and	moderate an interactive case study for a
	informatics issues."	course: Epidemiology of HIV.
2014 - 2017	"Health Information Technology:	Lecture for Health Policy and Leadership
	Promises, policies and practical	Course, Dept of Family and Preventive
	use".	Medicine, University of Utah

### 5. Graduate Students Supervision (current in bold)

### A. Master's of Science (MS) in Biomedical Informatics

<u>Year</u>	Student Name	Role on Committee
2013	Dan Alvrord	Chair
2013 - 2014	Chris Walls	Chair
2015	Michael Totzke	Chair
2015 - 2017	Sandi Gulbransen	Chair
2015	Michael Adair	Chair
2007 - 2008	Gregory Swanson	Member
2008 - 2010	Nephi Walton	Member
2008 - 2010	Jinqiu Kuang	Member
2009 - 2012	Anusha Muthukutty	Member
2014 - 2015	Yanhua Lin	Member
2015	Jon David Ethington	Member

Member

Chair

Chair

Chair

Chair

Chair

Chair

Chair

Chair

Chair

2017 - 2018

Amy Sheide

2017 - 2010	Arriy Orleide	Member			
2022	Peter Tabor	Member			
B. <u>Dissertations for PhD in Biomedical Informatics</u>					
Year	Student Name	Role on Committee			
<del>2007</del> - 2012	Deepthi Rajeev: Development and evaluation of new	Chair			
	strategies to enhance public health reporting				
2008 - 2013	Yuling Jiang: Risk prediction of multiple selected chronic	Chair			
	diseases using self- and proxy-reported family health history				
	and lifestyle risk factors				
2011 - 2015	Jeffrey Duncan: Birth of identity: understanding the value	Chair			
	and policy considerations of using birth certificates for				
	identity resolution				
2011 - 2015	Jason Jacobs: Evaluation of Computerized Clinical Decision	Chair			
	Support for Laboratory Monitoring of Post-liver Transplant				
	Immunosuppressive Care				
2006 - 2011	Kristina Brinkerhoff	Member			
2007 - 2009	Lisa Gren, (PhD in Public Health)	Member			
2007 - 2013	Martin Cryer	Member			
2010 - 2013	Kailah Davis	Member			
2011 - 2016	Philip Brewster	Member			
2013 - 2016	Jingran Wen	Member			
2014 - 2016	Keith Simmon	Member			
2014 - 2018	Carl Grafe	Member			
2014 - 2017	Polina Kukhareva	Member			
2021 - now	Joni Pierce	Member			
C. Master's of S	cience (MS) in Nursing (Specialty: Nursing Informatics)				
Year	Student Name	Role on Committee			
2018-2019	Christina Radloff	Chair			
2018-2019	Pedro Arzeno	Chair			
2018-2019	Jonathan Moss	Chair			
2018-2019	Terrel Pearson	Chair			
2018-2019	Elaine Kirish	Chair			
2018-2019	Sarah Ponce	Chair			
2018-2019	Ching-Yu Wang	Chair			
2018-2019	Brittany Duford-Hutchinson	Chair			
2018-2019	Sydney Reed	Chair			
2018-2019	Yinshun Chiu	Chair			
2018-2020	Alla Gaichuk	Chair			

Cynthia Anderson

Clayton Jensen

Mykel Winter

James Seely

Michael Zusi

Mason White

Nancy Ho

Brandi Thomas

Jennifer Herrmann

2018-2020

2018-2020

2018-2020

2018-2020

2018-2020

2018-2020

2018-2020 2018-2020

2018-2020

2018-2021	Kristina Hollister	Chair
2019-2021	Brett Morrill	Chair
2019-2021	Saldi Yusuf	Chair
2019-2021	Janae Cheney	Chair
2019-2021	Saifon Phengphoo	Chair
2019-2021	Renee Monter	Chair
2019-2021	Shane Smith	Chair
2019-2022	Joseph Mitchell	Chair
0000 0000		
2020-2022	Dannie Greenlee	Chair
2020-2022	Daniel Lister	Chair
2020-2022	Emma Morris	Chair
2020-2022	Gennifer Rubin	Chair
2020-2022	Lana Wolfe	Chair
2020-2022	Catherine Turcotte	Chair
2021-2023	Stacy Wells	Chair
2021-2023	Christina Rickert	Chair
2021-2023		Chair
	Joseph Anderson	
2021-2023	Jessica Gomez	Chair
2021-2023	Kira Lee Reinhardt-Storms	Chair

## D. <u>Dissertations for PhD in Nursing</u>

<u>Year</u>	Student Name	Role on Committee
2019-2020	Victoria Tiase	Member

### E. <u>Dissertations for PhD in Population Health</u>

<u>Year</u>	Student Name	Role on Committee
2022 - 2023	Joel Hartsell	Member

### 6. Continuing Education Taught

1991 - 1993	International EIS & Epi-in-action, CDC and Emory University
2007	Facilitated epidemiology training (case study of outbreak investigation) for local and
	regional public health staff (epidemiologists, nursing, environmental health).
2008	Presented afternoon session of an all day American Medical Informatics Association
	(AMIA) tutorial, "An Introduction to Biomedical and Health Informatics. pre-conference
	PHIN 2008. (21 attendees)
2010	Public Health Informatics 101: "Meaningful" Interoperability and Standards for Disease
	Surveillance. Developed and CO-taught a 3-hour training session for the pre-
	conference workshop of the International Society for Disease Surveillance (ISDS)
	annual conference, ParkCity, Utah. The 40 attendees represented public health
	epidemiologists and surveillance coordinators, vendors, and informaticists.
2010	Public Health Informatics AMIA 10x10 course (14 students - MDs, public health, others)
2010	Public Health Informatics AMIA 10x10 course (7 students - MDs, public health, others)
2011	Public Health Informatics AMIA 10x10 course (11 students - MDs, public health, others)
2011	Clinical and Public Health Standards and Terminologies. University of Utah Department
	of Biomedical Informatics. (16 students from industry and academia)

2012	Clinical and Public Health Standards and Terminologies. University of Utah Department of Biomedical Informatics. (11 students from industry and academia)
2012	Public Health Informatics AMIA 10x10 course (6 students - MDs, public health, others)
2014	Clinical and Public Health Standards and Terminologies. University of Utah Department of Biomedical Informatics. (6 students from industry and academia)
2016	Staes C. Moving to Semantic interoperability. Pre-conference workshop for the Council of State and Territorial Epidemiologists Annual Meeting, Anchorage, AK
2016	Led 90 min interactive session about "Structured documents for interoperability". NACCHO/Strengthening Health Systems through Interprofessional Education (SHINE) fellowship program. Annual workshop. 40 Population Science and Public Health Informatics fellows funded by CDC, NACCHO and CSTE.
2019	Guest Lecture on Data Exchange & Interoperability in Public Health for the Public Health Informatics Fellowship Program, Centers for Disease Control and Prevention
2020	Clinical Decision Support. University of Utah Department of Biomedical Informatics. (21 students in the AMIA 10x10 course from industry and academia)
2021	Invited speaker on 'Envisioning the future on FHIR'. Data Modernization: Building on Shared Services and Enterprise Technologies 3-day workshop for public health sponsored by the CDC
2022	Staes CJ. Three-part series of videos for public health practitioners: 'Introduction to Interoperability, Standards and the Role of the Public Health Domain expert'. Prepared for the Utah Department of Health (UDOH Contract #212701658: Opioid-related interoperability Training and research question). Available here:  https://mediaspace.utah.edu/playlist/dedicated/1_g4nr8pm0/1_sc4s3lfg