

CATHERINE H. IVORY, PhD, RNC-OB, RN-BC, FAAN

1024 Beckwith St., Franklin, TN 37064 | 423-737-1299 | civoryrnc@gmail.com

EDUCATION

2011 Vanderbilt University, Nashville, TN **Ph.D. Nursing Science** Dissertation: "Standardizing Failure to Rescue Elements in Perinatal Nursing Documentation"

2005 Georgia College & State University, Milledgeville, GA MSN, Nursing Administration/Healthcare Informatics

1996 Georgia Baptist College of Nursing of Mercer University BSN

AWARDS/HONORS/SCHOLARSHIPS

2018

Health Information Management Systems Society (HIMSS) & Alliance for Nursing Informatics (ANI) Nursing Informatics Leadership Award

2017

Fellow: American Academy of Nursing

2015

Sara K. Archer Award for Excellence in Teaching Informatics

2013

Deans Award for Faculty Achievement in Informatics, Vanderbilt School of Nursing

2012

Young Alumna Award, Georgia Baptist College of Nursing of Mercer University

2011

Betsy Brogan Award for Nursing Leadership, Mountain States Health Alliance

2009

PhD Scholarship (\$5000), Health Information Management Systems Society (HIMSS)

2003

Clinical Excellence Award for Leadership, Gwinnett Medical Center, Lawrenceville, GA

PROFESSIONAL SERVICE and ACTIVITIES

Nursing and Research

10/2019 to present Vanderbilt University Medical Center, Nashville, TN Senior Director of Nursing Research

2017- 6/2019 Indiana University Health, Indianapolis, IN Associate Chief Nurse Executive, VP, Professional Practice and Care Transformation Indiana University School of Nursing Assistant Dean for Care Transformation, Adjunct Associate Professor

2016-2017 Tennessee Improving Perinatal Quality Care (TIPQC) Maternal Quality Improvement Consultant

2012-present Vanderbilt University School of Nursing, Nashville, TN Assistant Professor- *current status part-time as needed* Secondary Appointment: Department of Biomedical Informatics 2012-2017

2008 – 2012 Mountain States Health Alliance, Johnson City, TN **Corporate Director, Women's Services** Operational responsibility for 7 obstetric units with annual birth volume of approximately 4000. 14 direct reports

2005 – 2008 Clinical Specialist, Women's Services Policy and procedure development, Evidence-based practice

2004-2005 Atlanta Women's Specialists, Atlanta, GA **Research Nurse** Coordinated subject recruitment and regulatory requirements for medication-related RCT

Vanderbilt

2012-2013	Vanderbilt Anticipatory Care Team (vACT) Steering Committee
2013	Appointment to Graduate Faculty
2014	MSN Program Evaluation Committee
2015	Vanderbilt School of Nursing Strategic Planning Technology and Innovation sub-group
2015	Vanderbilt School of Medicine Reimagine Health Professional Education workshop

2015-2016	Department of Biomedical Informatics Curriculum Committee
2015	Vanderbilt School of Nursing Department Education Coordinator (DEC) Work Redesign Task Force
2015-2017	Nashville QSP Nurse Senior Scientist Veterans Administration Quality Scholars (VAQS) Program
National	
2014	Academy Health, Interdisciplinary Research Group on Nursing Issues, Planning Committee
2016	American Medical Informatics Association (AMIA) Annual Symposium, Abstract reviewer. 2016, Scientific Program Committee
2014-2018	Microsoft Corporation, Innovation Awards, Judge
2015-2017	Nursing Informatics Committee, Health Information Management System Society (HIMSS)
2015-2020	HIMSS Nursing Informatics Symposium Planning Committee
2015	National Quality Forum's (NQF's) Technical Expert Panel (TEP) for the Value Set Harmonization project
2015-2019	Nursing Big Data Initiative Expert Workgroup on Nursing Value (sub-group Lead)
2017-2020	Nurse Certification Corporation (NCC) Perinatal Safety & Quality Certification Expert Panel
2018	The Joint Commission Technical Expert Panel on Perinatal Care eCQM
2018 to Present: American Nurses Credentialing Center (ANCC) Research Council	
2019 to Pre	sent American Medical Informatics Association, Health Informatics Certification Commission, Vice-Chair
2019 to Pre State	sent American College of Obstetrics & Gynecology, Data Advisory Group, The Birth Registry project
2015-2017	Tennessee March of Dimes Advocacy Committee Chair, Board Member
2015-2016	Tennessee Improving Perinatal Quality Collaborative (TIPQC) Project Lead

Teaching

2012-2017 Vanderbilt University School of Nursing

Course Coordinator – N381a: Introduction to Healthcare Informatics [Developed syllabus and overall course structure, and administered all grades.]

2013-2015

Course Coordinator – N392a: Informatics of Clinical Practice [Developed syllabus and overall course structure, and administered all grades.]

2013-2015

Course Coordinator – N381w: Project Management Developed syllabus and overall course structure, administer all grades

2013-2014

Faculty- N392b, N392c- Informatics Practicum I&II Mentorship of practicum students

2014 – 2016: N7032 (DNP)- Healthcare Economics and Finance 2015-2017: N8032 (PhD) – Informatics for Scholarly Inquiry

2012 to 2015 Faculty – N412-Informatics for Scholarly Practice

King College (now King University) 2007-2009 Lecturer – Introduction to Healthcare Informatics

Grant Funding

2017-2018 \$10,000. Association of Women's Health OB and Neonatal Nurses (AWHONN) & Kimberly-Clark Corporation. \$2000. CTSA award No. **UL1TR000445** from the National Center for Advancing Translational Sciences. *Quantifying the Impact of Health Information Technology on Intrapartum Nurses in the United States.* Ivory (PI)

Editorial Responsibilities

Journal Reviewer (ongoing, ad hoc) for the following:

- Applied Clinical Informatics
- Journal of Obstetric, Gynecological and Neonatal Nursing (JOGNN)
- Journal of Midwifery and Women's Health
- Journal of the American Medical Informatics Assn (JAMIA)

• Journal of Healthcare Quality

Guest Editor, In Focus Series on Informatics, Journal of OB/GYN and Neonatal Nursing, 2017

Mentoring

- Kristina Williams (2020- present) MSN Student, Cumberland University. Project: Engaging Bedside Nurses in Clinical Research Activities
- Marilyn Riley (2019-present) DNP student, University of Alabama at Huntsville. Project: Reducing Violence in the Emergency Department, Improving Perception of Safety: An Aggression Prevention Team Approach
- Erin Kirby (2018-2019) Fellow, Sigma Theta Tau Maternal Child Health Nursing Leadership Academy. Project "Keeping Moms Safe: Strategic Planning for the Transition of Maternity Services to a Pediatric Hospital"
- Leanne Boehm (2015-2017) VA Quality Scholar and Vanderbilt School of Nursing post-doctoral fellow.
- Alvin Jeffrey (2015-2017) VA Quality Scholar and Vanderbilt Department of Biomedical Informatics post-doctoral fellow.
- Raymond Romano (2016-2017) VA Quality Scholar and Vanderbilt PhD graduate student in Nursing
- Laura Hollis (2014-2016). Vanderbilt School of Nursing DNP student. Committee member. Ms.
 Hollis's project is "Evaluation of a Perioperative Preadmission Ordering Process"
- Robin Mickleson (2012-2017). Vanderbilt PhD graduate student in nursing. PhD Committee member. Ms. Mickleson's dissertation is titled: Systems-Based Patient Work Analyses of Older Adults with Heart Failure
- Haresh Bhatia (2013-2015). Vanderbilt PhD graduate student in the Department of Biomedical Informatics. PhD Committee member. Mr. Bhatia's dissertation is titled: *Measuring the Health of Medication Process Using an EHR Data Repository.*
- Shelia Ochylski (2014-2015) Vanderbilt School of Nursing DNP student. Committee member.

- Tina Williams (2013-2014). Vanderbilt School of Nursing DNP student. Advisor and Committee Chair.
- Erin Kyle (2013-2014). Vanderbilt School of Nursing DNP student. Advisor and Committee Chair.
- Christian Ketel (2013-2014). Vanderbilt School of Nursing DNP student. Committee member.

PUBLICATIONS

Published Peer-Reviewed Publications

-Sutton, D.E., Fogel, J.R., Giard, A.S., Gulker, L.A., **Ivory, C.H.,** & Rosa, A.M. (2020) Defining an Essential Clinical Dataset for Admission Patient History to Reduce Nursing Documentation Burden. *Applied Clinical Informatics, 11*(3), 464-473. doi: 10.1055/s-0040-1713634

-Ivory, C.H. (2019) The Tug of War Between Practice and Technology. Nursing Management, 50(1), 7-9.

doi: 10.1097/01.NUMA.0000544459.81451.e0

Sensmeier, J. and Ivory, C.H. (2018)

Technology Myth Busters for Nurse Leaders. Journal of Nursing Administration, 48(12), 594-596.

doi: 10.1097/NNA.00000000000686

- Kneeland, M., Ivory, C.H., Bloomingburg, P., and Choma, N.N. (2018)

-Bhatia, H.L., Patel, N.R., **Ivory, C.H.**, Stewart, P.W., Unertl, K.M., and Lehmann, C.U. (2018) Measuring nonadministration of ordered medications in the pediatric inpatient setting. International Journal of Medical Informatics, <u>https://doi.org/10.1016/j.ijmedinf.2017.11.008</u>

- Bhatia, H.L., Patel, N.R., **Ivory, C.H.**, Stewart, P.W., Unertl, K.M., and Lehmann, C.U. (2018) Medication Process Compliance in Pediatric Inpatients – Time to the First Dose. *Online Journal of Nursing Informatics, 22*(1).

- Ivory, C., Freytsis, M., Lagrew, D.C., Magee, D., Vallejo, M. and Hasley, S. (2017) Standardizing Maternity Care Data to Improve Care Coordination. *Journal of Obstetric,* Gynecologic, & Neonatal Nursing, 46(2), 284-291. http://dx.doi.org/10.1016/j.jogn.2016.07.013

-Ivory, C. (2016.) Mapping Perinatal Nursing Process Concepts to Standard Terminologies.
 Computers, Informatics, Nursing, 34(7), 312-320. doi:10.1097/CIN.00000000000243. PubMed PMID: 27081756.

-O'Brien, A., Weaver, C., Settergren, T. T., Hook, M. L., & **Ivory, C. H**. (2015). EHR documentation: The hype and the hope or improving nursing satisfaction and quality outcomes. *Nursing Administration Quarterly*, 39(4), 333-339. doi: 10.1097/naq.00000000000132. PubMed PMID: 26340245.

-Ivory, C. H. (2015). Collaboration between midwives and nurses: Past, present, and future. *Journal of Midwifery & Women's Health*, 60(2), 122-124. doi: 10.1111/jmwh.12305. PubMed PMID: 25782845.

-Ivory, C. H. (2015). The role of health care technology in support of perinatal nurse staffing. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 44(2), 309-316. doi: 10.1111/1552-6909.12546. PubMed PMID: 25652033.

-**Ivory, C**., & Wade, K. (2015). Methodological flaws in "the clinical and economic impact of nurse to patient staffing ratios in women receiving intrapartum oxytocin." *American Journal of Perinatology*, 32(1), 113-114. doi: 10.1055/s-0034-1374819. Epub 2014 May 2. PubMed PMID: 24792765.

-Ivory, C. H. (2014). Lean in to our profession. *Nursing for Women's Health*, 18(2), 101-104. doi: 10.1111/1751-486x.12105. PubMed PMID: 24750648.

-Ivory, C. H. (2014). Standardizing the words nurses use to document elements of perinatal failure to rescue. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 43(1), 13-24. doi: 10.1111/1552-6909.12273. PubMed PMID: 24428143.

-Ivory, C. H. (2011). Standardizing Failure to Rescue Elements in Perinatal Nursing Documentation. (PhD Nursing Science Dissertation), Vanderbilt University, Nashville, TN

-Ivory, C. (2008). Informatics competencies for perinatal nurses: Empowering nurses to understand and use

technology. *Nursing for Women's Health*, 12(1), 62-65. doi: 10.1111/j.1751-486X.2007.00277.x. PubMed PMID: 18257888.

-Ivory, C. (2007). Technology and Perinatal Safety. *Technology Horizons*, Joint Publication of AWHONN and AAMI.

-Ivory, C. H. (2005). Finding buried treasure in unit log books. Data mining for gold. Association of Women's Health, Obstetric and Neonatal Nurses Lifelines, 9(1), 62-66. PubMed PMID: 15786788.

-Ivory, C. (2008). Informatics competencies for perinatal nurses: Empowering nurses to understand and use technology. *Nursing for Women's Health*, 12(1), 62-65. doi: 10.1111/j.1751-486X.2007.00277.x. PubMed PMID:18257888.

-Ivory, C. H. (2007). Technology integration and perinatal safety. *Biomedical Instrumentation and Technology*,

Suppl, 45-47. PubMed PMID: 17929653.

Other Publications

-Ivory, C.H. (2015, Dec 22). Growing as a Leader. Association of Women's

Health, Obstetric and Neonatal Nurses Connections Blog. Retrieved from

https://awhonnconnections.org/2015/12/22/growing-as-a-leader/#more-1037

BOOK CHAPTERS

Wisner, K. & Ivory, C.H. (2020) Documentation of Fetal Heart Monitoring Information. In *Fetal Heart Monitoring: Principles & Practices.* 6th Edition.

AWHONN, in press

PRESENTATIONS

6/2019 Ivory, C.H. The Impact of Health Information Technology on Intrapartum Nurses in the United States Podium presentation: AWHONN National Convention, Atlanta, GA

5/2019 Ivory, C.H. Current and Future Nursing Informatics Practice Invited keynote, American Nursing Informatics Association, Midwest Chapter, Indianapolis, IN

4/2019

Ivory, C.H.

Finding the Right Dose of Technology to Support Perinatal Nursing Practice Invited, AWHONN, TN-AL-MS Regional Conference, Nashville, TN

11/2018

Ivory, C.H.

The Role of Informatics in Population Health DNP Student presentation, Indiana University School of Nursing, Indianapolis, IN

9/2018

Ivory, C.H., Oaks, A., Schaffer, J. & Willey, C. *Addressing the Overburdened Clinician with the IU Health Uplift Process* Cerner Health Conference, Kansas City, MO

5/2018

Ivory, C.H. Informatics Issues in Interdisciplinary Research: Speaking the Same Language Invited, Northwestern Nursing Research Conference, Chicago, IL

4/2018

Sensmeier, J. & **Ivory, C.H.** *Developing a Culture of Data Driven Decision Making* Invited, American Organization of Nurse Executives, Indianapolis, IN

2/2018

Ivory, C.H. & Park, S. *The EMR's Ability to Improve Efficiency and Decrease Burnout* IU Health Nursing Grand Rounds, Indianapolis, IN

2/2018

Ivory, C.H. *Optimizing the EMR to Battle the Opioid Crisis* Cerner CNO Forum, Augusta, GA

2/2018

Ivory, C.H. *Moral Distress in Perinatal Nursing: What does the ANA Code of Ethics Tell Us?* AWHONN California Section, Anaheim, CA

9/2017 Ivory, C.H. Moral Distress in Nursing: What does the ANA Code of Ethics Tell Us?

IU Health Nursing Grand Rounds, Indianapolis, IN

10/2016

Ivory, C.-*Compassion Fatigue and Burnout in Nursing.* Invited, AWHONN Tennessee Section Conference. Memphis, TN.

06/2016

Harper E, Welton J, Ivory C & Moon L. Nursing Value.
Invited, University of Minnesota School of Nursing: Nursing Knowledge: 2016 Big Data Science.

06/2016

D'Oria R & **Ivory C**. Nurses - Leading Change, Improving Outcomes. Invited, Association of Women's Health, OB and Neonatal Nursing.

06/2016

Ivory C. Increasing the Value of MFTI. Invited, Association of Women's Health, OB and Neonatal Nursing.

06/2016

Hasley S, **Ivory C**, Lagrew D & Freytsis M. The Power and Solutions Generated by Standard Data. Discussion Panel, Association of Women's Health, OB and Neonatal Nursing.

12/2015

Ivory, C. Keynote Address. Invited, Middle TN March of Dimes Nurse of the Year Gala.

11/2015

Bhatia H, **Ivory C**. Medication compliance in pediatric inpatients. Paper, American Medical Informatics Association.

10/2015

Ivory C. Engagement, empathy and ethics: Keys to nursing leadership. Invited, Association of Women's Health, OB and Neonatal Nurses-WA Section.

10/2015

Ivory, C. Maternal substance abuse: Challenges and opportunities for perinatal nurses. Invited, Association of Women's Health, OB and Neonatal Nurses-WA Section.

6/2015

Pritham, U., Hodges, A., **Ivory, C.**, Frantz, K. Legislative forum: Criminalization of pregnant women with substance use disorders. Invited discussion panel, Association of Women's Health, Obstetric and Neonatal Nursing, Long Beach, CA.

11/2014

Ivory, C. Welcome to the 2014 AWHONN Leadership Conference. Invited, Association of Women's Health, Obstetric and Neonatal Nursing, Washington DC.

9/2014

Gee, R., **Ivory, C**. The horizon: The focus and challenges for nurses & physicians. Invited discussion panel, Dignity Health, Las Vegas, NV.

9/2014

Ivory, C. Disruptive innovations in nursing. Invited, Association of Women's Health, Obstetric and Neonatal Nursing, OR.

9/2014

Ivory, C. Guidelines for professional registered nurse staffing for perinatal units. Invited, Association of Women's Health, Obstetric and Neonatal Nursing, OR.

9/2014

Ivory, C. *Meeting breastfeeding core measures.* Invited, Association of Women's Health, Obstetric and Neonatal Nursing, OR.

6/2014

Ivory, C. *President's address*. Invited, Association of Women's Health, Obstetric and Neonatal Nursing, Orlando, FL.

02/2014

Ivory, C. Perinatal Nursing Quality Measurement. Invited keynote, California AWHONN, Anaheim, CA.

2/2014

Ivory, C. EHR: Imagining the Nursing Possibilities. Invited, California AWHONN, Anaheim, CA.

10/2013

Ivory, C. *The Ability of SNOMED CT to Capture Perinatal Nursing Process Concepts*. Paper, SNOMED CT Implementation Showcase, Washington, DC.

10/2013

Jones, P., Feistritzer, N. & **Ivory, C**. *Improving outcomes with anticipatory care.* Paper, Tennessee Nurses Association Convention, Murfreesboro, TN.

5/2013

Ivory, C. *Health IT and the nurse midwife: Your paycheck depends on it.* Invited, American College of Nurse Midwives, Nashville, TN.

4/2013

Ivory, C.H. *Current strategies to improve maternal and infant outcomes*. Invited, Montana Perinatal Association, Bozeman MT.

4/2013

Ivory, C.H. *Technology's role in the support of optimal nurse staffing*. Invited, Montana Perinatal Association, Bozeman, MT.

4/2013

Ivory, C. *Health IT: Leveraging the nursing possibilities*. Invited, Association of Women's Health, Obstetric and Neonatal Nursing, Clearwater Beach, FL.

1/2013

Ivory, C. Evidenced-based use of oxytocin for labor. Invited, MMIC, Webina, IA.

10/2012

Ivory, C. Which standard terminology best represents defined perinatal nursing elements? Poster, American

Medical Informatics Association/ Nursing Informatics Working Group, Chicago, IL.

6/2012

Smithgall, L & Ivory, C. Camp meeting or revival? Challenges in coordinating a system level service line. Paper, Association of Women's Health, Obstetric and Neonatal Nursing, Washington DC.

6/2012

lvory, C. Reaching consensus on the elements of perinatal failure to rescue: A Delphi study. Paper, Association of Women's Health, Obstetric and Neonatal Nursing, Washington DC.

6/2012

Hickson, G. & Ivory, C. Change is hard! Navigating change in your workplace. Invited, Association of Women's Health, Obstetric and Neonatal Nursing, Washington DC.

6/2012

lvory, C. Reaching consensus on the elements of perinatal failure to rescue: A Delphi study. Poster, AWHONN National Convention, National Harbor, DC.

7/2011

lvory, C. Incorporating failure to rescue elements into perinatal nursing documentation. Paper, Summer Institute of Nursing Informatics, Baltimore, MD.

6/2011

lvory, C. Speaking the same language in perinatal electronic medical records. Paper, AWHONN National Convention, Denver, CO.

2/2011

lvory, C. Incorporating failure to rescue elements into perinatal nursing documentation. Poster, Nursing Informatics Symposium, HIMSS, Orlando, FL.

2/2010

Ivory, C. Nursing's role in meaningful use of healthcare IT. Paper, Nursing Grand Rounds, Johnson City Medical Center, Johnson City, TN.

10/2009

Ivory, C. Healthcare IT and perinatal safety: Friends or foes? Paper, Cerner Health Conference, Women's Health Track, Kansas City, MO.

7/2009

Ivory, C. CPOE: Challenges and opportunities. Paper, AWHONN Informatics Breakfast, San Diego, CA.

6/2009

Ivory, C. Healthcare IT and perinatal safety: Friends or foes? Paper, AWHONN, San Diego, CA.

4/2009

Ivory, C. Technology and evidenced-based practice. Paper, FL/GA/AL/TN AWHONN Conference, Atlanta, GA.

4/2008

Ivory, C. Technology and perinatal safety. Paper, TN AWHONN Conference, Chattanooga, TN.

10/2007

Ivory, C. I only smoke on the porch: Tobacco use in pregnancy. Paper, 2007 MSHA Children's Summit, Johnson City, TN.

5/2007

Ivory, C. Technology and the trigger tool. Paper, IHI Perinatal Impact Community Meeting, Boston, MA.

1/2007, 4/2007

lvory, C. The appropriate use of oxytocin in labor: Why the fastest uterus may not win. Paper, ETSU OB/GYN Department Grand Rounds, TN AWHONN Conference, Chattanooga, TN.

5/2006

Ivory, C. Computerized Documentation: Friend or Foe?" Paper, FL/GA AWHONN Section Conference, Destin, FL.

2/2006

Ivory, C. Effective communication using SBAR. Paper, OB/GYN Resident Lecture, Johnson City Medical Center, Johnson City, TN.

11/2005

Ivory, C. What's new in the smoking cessation battle? Paper, Northeast TN Chapter AWHONN, Kingsport, TN.

7/2005

lvory, C. Using technology to improve the use of an acuity tool in a perinatal setting. Paper, Summer Institute of Nursing Informatics, Baltimore, MD.

2004

Ivory, C. What is nursing informatics? Paper, Staff meeting on the High Risk Pregnancy Unit at Gwinnett Medical Center, Lawrenceville, GA.

2004

Ivory, C. Patient classification systems: Good, bad, or ugly? Paper, Georgia College and State University, Macon, GA.

2000

Ivory, C. What's new in women's health? Paper, Presbyterian Women at Northminster Presbyterian Church, Roswell, GA,

1997 & 2001

for spouses' presentations at the Southern Newspaper Publishers Association annual conventions.

PROFESSIONAL MEMBERSHIPS

- Academy Health
- American Nurses Association, Indiana Nurses Association, appointment to ANA NIDSEC committee 2008-2010; member, 2012 House of Delegates
- AMIA (American Medical Informatics Association), member nursing informatics work group (NI-WG)
- AONE (American Organization of Nurse Executives)
- AWHONN (Association of Women's Health Obstetric and Neonatal Nurses),
 - o Atlanta Chapter Coordinator2000-2004,
 - Georgia Section Secretary/Treasurer (2005-2006);
 - Tennessee Section Chair (2007-2008);
 - o Instructor, AWHONN Fetal Heart Monitoring Program (2006-2012);
 - o 2006 Nursing Informatics Advisory Panel Member;
 - o 2008 Patient Safety Advisory Panel Member;
 - Program Co-Chair, 2010 National Convention;
 - National Board of Directors, 2011-2012;
 - Founding member, Development Committee 2012-2015
 - President-Elect 2013,
 - o President 2014,
 - Nominating Committee Chair, 2015.
- **HIMSS** (Healthcare Information and Management Systems Society), member Nursing Terminology task force, 2008; member Nursing Informatics workgroup; member of Nursing Informatics Committee 2014-2016; member of Nursing Informatics Symposium Planning Committee, 2015-present.
- Sigma Theta Tau, Pi Gamma Chapter, Vice-President 1997-1999

MEDIA

Rivers, K. (2012, Nov. 16). New faculty: Cathy Ivory is committed to nursing science and research [online newsletter]. Retrieved from <u>https://news.vanderbilt.edu/2012/11/16/new-faculty-cathy-ivory/</u>