2018 Big Data at Eastern North Carolina (ENC) Symposium
April 18 (Wed), 2018 · Faulkner Gallery area, ECU Joyner Library

8:30-9am	Registration	
9-9:10am	Welcome	**Dr. Stan Eakins**, Dean, College of Business, ECU **Dr. Mary Farwell**, Assistant Vice Chancellor Research, ECU
9:10-10:10am	Healthcare Analytics: Using data as the fabric to drive informed decision making	**Rick Monaco**, Healthcare Solution Manager US Healthcare Consulting, SAS
10:10-11:30am	Keynote Team Address: Analytics to Drive Quality and Safety in Healthcare	**Joan Wynn**, PhD RN, Chief Quality and Patient Safety Officer, Vidant Health **Dave Michael**, MD, Chief Medical Informatics Officer (CMIO), Vidant **Joe Pye**, MD Assistant CMIO, Vidant **Sherri Bryant**, VP of Quality, Vidant
11:30am-1pm	Symposium poster exhibition	SAS Sponsored lunch (SAS Day event) ECU-SAS joint Business Analytics Program student poster exhibition + participant poster exhibition
1-2pm	Data Analytics at ENC	Expert Panel/Roundtable Discussion **Huigang Liang**, PhD. Professor, Center for Healthcare Management Systems, College of Business, ECU **Shane Trahan**, RTI's Research Computing Division **Qiang Wu,** PhD. Associate Professor, Dept. of Biostatistics, ECU
2-3pm	Health Analytics Solutions	**Jesse Behrens,** Manager of Advanced Analytics Health and Life Sciences, SAS **Andrew Williams,** Solutions Architect on the Health and Life Sciences Analytics
3-3:30pm	Personal Health Informatics Toolkit for mData Collection & Intervention	**Paul Kizakevich**, Senior Research Engineer in the RTI Bioinformatics Program
3:30-4pm	Symposium close	

Registration website: https://ecu.az1.qualtrics.com/jfe/form/SV_9WEFUPSKOpSSa5T
(or scan to register)

Keynote Team

Joan D. Wynn, PhD, RN, CPHQ has been with Vidant Health since 1990. In 2007 Dr. Wynn assumed executive leadership for the system quality division leading the strategic planning and annual execution of strategies to achieve zero harm and exceptional patient experiences across the Vidant enterprise. In 2015 Dr. Wynn assumed the role of President of Health Access, the systems' Home Health/Hospice and Wellness Center subsidiary. Dr. Wynn earned a bachelor's degree in nursing from the University of Maryland, a master's in nursing from Johns Hopkins University, and a PhD in nursing from East Carolina University. She is certified as a professional in healthcare quality (CPHQ). Dr. Wynn was named to Becker's Hospital Review 2014 List of 50 Experts Leading the Field of Patient Safety ad was name the Quality Professional of the Year by the North Carolina Association of Healthcare Quality in 2017.

David Michael, MD is a general internist with over 20 years as a primary care physician. As a primary care physician, he became interested in informatics when using a predictive analytics tool to change behavior and impact modifiable risk. Dr. Michael became the first Chief Medical Informatics Officer at Vidant Health in 2011 and board certified in the new specialty of Clinical Informatics in 2014. The new Vidant Health Clinical Informatics Team has continued to grow under his leadership. The team continues to impact the optimization and usability of the Epic EHR, Population Health initiatives and analytics. Dr. Michael completed medical school at The Ohio State University and his residency in internal medicine at The Brody School of Medicine at ECU. He is board certified in internal medicine and clinical informatics. He is a member of ACP, AMIA, AAPL, and AMDIS. He serves on the national CMIO roundtable committee for HIMSS.

Joseph Pye, MD is the Medical Director of Health Informatics for Vidant Health. Dr. Pye joined Vidant Health in 2009 as a rural Primary Care Physician (PCP) and Hospitalist and has been working to improve primary care and population health in eastern NC ever since. He is in active clinical practice at the Vidant Health Employee Clinic and the hospital post-discharge clinic and is on the medical staff at Vidant Medical Center. He is board certified in both Family Medicine and Clinical Informatics. His areas of administrative focus include clinical governance, quality, analytics, physician efficiency, population health and mobile strategy. Dr. Pye is also an Epic physician builder, Chair of Vidant Health's Ambulatory Advisory Council, and passionate about improving the value of the Electronic Health Record (EHR). He has served on the Board of Directors for the North Carolina Academy of Family Physicians as Chair of the Academy's Practice Management Council and Winter Conference. He serves on the Board of Directors for Vidant Health's ACO, Coastal Plains Network, and chairs their Quality Committee. Dr. Pye attended UNC-Chapel Hill as an undergraduate and St. George's University School of Medicine for medical school. He completed his residency at Moses Cone Family Medicine Residency. Eastern NC is also home to his wife, two young daughters, and extended family. Hobbies include scuba diving, Crossfit, and community volunteering.

Sherri L. Bryant, MHA, MIS, BSM, BS-IT is the Vice President of Ambulatory Quality, Home Health & Hospice Quality, Analysis & Public Reporting at Vidant Health. Sherri is a Certified MACRA-MIPS ACI Professional (CMAP), a subject matter expert in the arena of Meaningful Use insuring our Eligible Hospitals and Eligible Providers successfully attest and retained a low threshold for Audit Risk. Her work focuses on Ambulatory Quality, Home Health and Hospice Quality, IP Quality Reporting (Core Measures), Meaningful Use, QPP, and Medicare Shared Savings program adherence, data integrity along with process mapping to improve accuracy, efficiency and ease of workflow within the electronic health record and throughout the health system. Thanks to her dedication and passionate work, the Vidant Health System continues to optimize their EHR (Epic) to identify and provide patients and their families with better opportunities to manage and improve their health and health care.

SAS Morning Presentation

Healthcare Analytics: Using data as the fabric to drive informed decision making

Abstract

One thing is constant in the healthcare marketplace; change is inevitable. Innovations in technology, mergers & acquisitions, and new entrants into the marketplace create opportunities for generating unforeseen data sources. And these unforeseen data sources generate a greater opportunity for organizations to realize new insights through analytics. As organizations strive to improve outcomes and consumer experiences while also reducing costs, incorporating new data sources and analytic approaches will be an imperative.

During this session, learn more about trends in the marketplace, real-world analytic case studies, and points to consider as organizations are advancing their analytic maturity.

Bio

Rick Monaco, US Healthcare Consulting, SAS Health & Life Sciences

Rick provides strategic insights across the healthcare marketplace, with a specialty in health plan government program populations. With over 15 years of experience in the health insurance industry, he has engaged in an analytical capacity within many facets of an organization; including Finance, Sales and Marketing, Network/Provider Management, Medical Management, Product Development, and Medical Economics/Informatics.

Rick joined SAS in 2010 and currently leads US Healthcare Industry Consulting at SAS. He specializes in the identification, development and adoption of strategies to leverage SAS' advanced analytics to drive maximum value within the healthcare industry.

Prior to joining SAS, Rick held a variety of positions within Highmark BlueCross/BlueShield, West Penn/Allegheny Health System (now Allegheny Health Network), and UPMC Health Plan in Pittsburgh, PA. During his tenure in the health insurance industry, he directed organizational initiatives with a dedicated emphasis on enhancing accurate and comprehensive risk adjustment profiling within the Medicare Advantage market. Rick also managed multiple teams with the strategic goal of identifying drivers to minimize expenses and maximize efficiency, developing tactical initiatives to promote financial viability, and designing business plans to determine the cost effectiveness of future endeavors.

Rick holds a Bachelor of Science in Health Management Systems and a Master of Health Management Systems from Duquesne University in Pittsburgh, PA. Also, Rick achieved an Executive Certificate in Effective Leadership and Management from the University of Notre Dame.

SAS Afternoon Presentation
How SAS Executes Analytics

Abstract

The SAS platform is an advanced analytics platform that allows users to garner insights from data using techniques from statistical inference and data mining to forecasting and optimization. The foundation to a strong analysis is the underlying data. The life of a data table goes through three fundamental phases in the SAS platform:

1) *Define: Sourced from a data source: attach to, quality check, govern, master, combine and enhance*
2) *Derive: Manipulated, transformed, and analyze*
3) *Deliver: Surfaced as a result a decision can be based upon.*

In support of these efforts, the SAS platform enables multiple computing paradigms. From managing lots of jobs to single big jobs, the SAS platform enables users to get results without making tradeoffs to analyze large volumes of data or handle complex mathematics. The SAS platform expands these capabilities to Python, R, and other open-source users.

What we will cover:

1) *How the SAS platform enables users to design, derive, and deliver results and valuable insights*
2) *Scaling the number of jobs and handling big jobs - understand how SAS processes data tables in a variety of ways to allow users fast, accurate, and complex computation*
3) *The SAS platform offers users of different skill sets the ability to trigger SAS from their native language*

Bios

Jesse Behrens, Manager of Advanced Analytics Health and Life Sciences, SAS
Behrens' focus is working with health care and life sciences companies to use advanced analytics to extract valuable information and insights from data. Before focusing on HLS, Behrens joined SAS in 2010 as an analytical consultant working across domains. He holds a BS in applied mathematics and an MS in advanced analytics from North Carolina State University.

Andrew Williams is a Solutions Architect on the Health and Life Sciences Analytics team at SAS
He graduated from UNC-Chapel Hill with a BSPH in Biostatistics and obtained an MS in Analytics from NC State. While at UNC, Andrew interned in the Biostatistics group at Quintiles as a statistical programmer, working on Phase II and III clinical trials with large pharmaceutical companies. After graduating from NC State, he spent a year in the Analytics group at Cigna, where he led projects that included marketing, program evaluation, pricing, customer segmentation, and Accountable Care Organizations. In his nearly 3 years at SAS, Andrew has worked with customers in all areas of the Health and Life Sciences industries to achieve their goals throughout the analytics life cycle from data integration, manipulation, and exploration to machine learning, data mining, predictive modeling, and forecasting to visualization and model deployment.

Panelists

Huigang Liang, PhD is Robert Dillard Teer Jr. Endowed Chair Professor in Research at Department of MIS, East Carolina University. He is the director of the Center for Healthcare Management Systems. His research interests are focused on social, behavioral, psychological, and managerial aspects of information systems phenomena, including IT adoption, IT compliance, IT security, IT strategy, IT implementation, outsourcing, knowledge management, e-commerce/online behaviors, health informatics, and data analytics. He is a prolific author over 50 papers on peer-reviewed academic journals. Since 2007 he has published over 10 papers on the four top journals in the information systems discipline. He was an associate editor of MIS Quarterly (2013-2017). He is serving on the editorial board of JAIS and as an associate editor for Information & Management. He has worked or is working as principal investigators or co-investigators on projects funded by companies, non-profitable organizations, and federal agencies such as Biogen, GSK, Stand Among Friends, CCHIE, HRSA, and NIH. The total amount of grants he has been involved with is over $2 million.

Shane Trahan, Research Computing Division, RTI
Mr. Trahan has more than 20 years of experience working with survey and data collection systems, focused primarily on the integration of web-based survey management systems for large national data collection efforts. He has developed systems and tools to maximize response rates and allow project stakeholders to assess and manage these efforts in cost-effective ways. Mr. Trahan also works closely with multidisciplinary staff across RTI to build solutions that meet the needs of agencies including the Centers for Disease Control and Prevention, the Substance Abuse and Mental Health Services Administration, and others. These solutions frequently involve collecting and managing large datasets for a wide range of users with varying technical abilities, including data analysts, subject matter experts and the general public. Mr. Trahan's interests include the use and analysis of data to better communities and stimulate economic activity in areas looking to increase opportunities for citizens. Mr. Trahan holds a bachelor's degree in computer information systems and a master of business administration degree from Thomas College in Waterville, Maine. He also earned a master's degree in economics with a concentration in statistics from North Carolina State University.

Qiang Wu, PhD is an associate professor in ECU Department of Biostatistics and has been at ECU since 2007. His main research interests are in mixture models and nonparametric statistics. But he is also an active collaborator across ECU campus. Since joining ECU, he has been collaborating with researchers from Brody School of medicine, Allied Health Sciences, College of Nursing, Public health, School of Dental medicine, Psychology, and etc. Dr. Wu holds his PhD degree in statistics from University of Pittsburgh.

RTI Speaker

Paul Kizakevich, RTI
Mr. Kizakevich is a Senior Research Engineer in the RTI Bioinformatics Program, a component of the Research Computing Division at RTI International. During his 40-year tenure at RTI, he has participated in a wide range of research including medical instrumentation, mobile health, patient care and physiological simulation for trauma and chemical exposures, virtual reality based training, and environmental monitoring and health.   For over 30 years he has developed mobile sensors and analytics for personal monitoring of health, activity, diet, location, substance use, and environmental conditions, and is currently exploring their use in precision medicine and personalized health intervention.   He conceived RTI's Personal Health Informatics Toolkit, a framework to ease implementation of mHealth research apps. Mr. Kizakevich holds degrees in electrical engineering from Carnegie-Mellon University and biomedical engineering from the University of Miami.