Curriculum Vitae Michael R. Waldrum, MD. MS. MBA.

Personal Information

Name: Michael R. Waldrum, MD. MS. MBA.

Citizenship: United States of America

Home Address: 721 Chesapeake Place Greenville NC 27858

Home Phone: 1-520-975-7310 **Date of Birth:** April 5, 1962

Place of Birth: Nashville, Tennessee

Gender: Male Marital Status: Married

Spouse: Susan Elizabeth Eddleman Waldrum

Children: Martha Anne, (Annie) 1-30-88, Julia Elizabeth, 3-28-91, Michael Rooney,

Jr. 5-12-94, Sarah Nance 4-6-98

Title: Chief Executive Officer Vidant Health

Title Begin Date: 6/1/2015

Rank: Distinguished Professor

Rank Begin Date: 6/1/2015

Discipline: Pulmonary/Critical Care

Division: Pulmonary, Allergy and Critical Care Medicine

Email: Michael.waldrum@vidanthealth.com

Education

- · University of The South Sewanee, Tennessee, BA English, May 1984
- University of Alabama at Birmingham, Pre-Med, June 1984
- University of Alabama SOM at Birmingham, M.D., June 1989
- Harvard School of Public Health, Clinical Effectiveness Program Master of Science Epidemiology, 1994-1996
- University of Michigan Ross School of Business, Masters of Business Administration August 2006- April 2008.

Licensures

- State of Alabama Medical Licensure Commission, # 16581, June 1992
- State of Arizona Medical License, #47418, March 2013

Licensure Examinations/Board Certifications

- American Board of Internal Medicine/Pulmonary, # 145624, November 1994, Recertified November 2014.
- Critical Care Medicine, # 145624, November 1995, Recertified November 2004.
- American Board of Internal Medicine, # 145624, November 1992, Recertified November 2002.

Postdoctoral Training

- July 1989 July 1992, Residency, Mayo Internal Medicine, Rochester, Minnesota
- July 1992 June 1995, Fellowship, Pulmonary/Critical Care, University of Alabama at Birmingham
- July 1994 June 1996, Master of Science Epidemiology, Harvard School of Public Health, Boston, Mass
- August 2000, Executive Physician in Management PIM I, American College of Physicians
- August 2001, Executive Physician Management PIM II, American College of Physicians

- February 2002 September 2002, The Advanced Leadership in Healthcare Program Global Leadership in Healthcare, University of Michigan Ross School of Business, Ann Arbor, Michigan
- August 2006 April 2008. Masters of Business Administration, University of Michigan Ross School of Business, Ann Arbor, Michigan

Appointments

(In Reverse Chronological Order)

- June 2015-Present, Chief Executive Officer Vidant Health
- June 2015-Present, Distinguished Professor of Medicine Brody School of Medicine at East Carolina University
- March 2015 June 2015, Academic Medical Center Integration Advisor to Banner Health
- February 2013 February 2015, President and Chief Executive Officer, The University of Arizona Health Network
- February 2013 February 2015, Professor of Medicine, Pulmonary and Critical Care Medicine, University of Arizona College of Medicine
- November 2006 January 2013, Chief Executive Officer, UAB University Hospital
- December 2004 October 2006, Chief Operating Officer, UAB University Hospital
- October 2006 January 2013, Professor of Medicine, Pulmonary, Allergy and Critical Care Medicine, UAB School of Medicine
- October 2000 September 2006, Associate Professor of Medicine, Pulmonary, Allergy and Critical Care Medicine, UAB School of Medicine
- June 1999 November 2004, Chief Information Officer, UAB Health System Information Services, UAB Health System
- October 1999 December 2004, Medical Director MICU, UAB Hospital
- July 1999 January 2013, Professor (Adjunct) Health Informatics Masters Program, School of Health Related Professions, University of Alabama at Birmingham
- September 1997 June 1999, Medical Director, Health System Information Services, UAB Health System.
- UAB Hospital staff appointment July 1995 to January 2013
- July 1995 October 2000, Assistant Professor, Medicine/Pulmonary/Critical Care Medicine, University of Alabama at Birmingham
- July 1995 October 1999, Co-Medical Director, Pulmonary Rehab, University of Alabama at Birmingham Hospital
- July 1995 October 1999, Co-Medical Director, MICU, University of Alabama at Birmingham

Awards and Honors

- 1984, University of Alabama at Birmingham Presidential Honor Roll
- 1987, University of Alabama School of Medicine Achievement Award for Clinical Clerkship in Internal Medicine
- 1995, AOA Induction 1995
- 1998 1999, 2002 University of Alabama at Birmingham, Department Of Medicine Outstanding Division Teachers Award
- 2012 University of Alabama at Birmingham, Department of Medicine Education Excellence award for Pulmonary and Critical Care Medicine
- 2000, 2001, 2004 University of Alabama Department of Medicine Top Ten Outstanding Teacher Award

- 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, Listed in "Best Docs" in Pulmonary Medicine Birmingham Magazine.
- MBA Degree awarded with Distinction
- 2008 Beta Gamma Sigma International Honor Society

Scientific and Professional Societies

- 1994 1997, Affiliates Committee of American College Chest Physicians
- September 1999 October 2006, College of Healthcare Information Management Executives (CHIME)
- May 19, 2000 Present, American College of Physician Executives
- October 19, 2000 February 28, 2001, Association of American Medical Colleges Group Steering Committee on the Healthcare Security.
- January 1, 2001 January 2002, American Thoracic Society. President of Alabama Chapter
- January 2001 January 2002, Alabama Lung Association
- November 2002 2005, ACCP Governor for Alabama
- 2003 2006, True North The Advisory Board Company
- · Associate Society of Critical Care Medicine
- · Health Information and Management Systems Society
- American Thoracic Society
- Fellow American College of Chest Physicians

Councils and Committees

- 1995 1998, Intern Selection Committee, Department of Medicine, University of Alabama at Birmingham Hospital
- 1995 1999, Introduction To Clinical Medicine, University of Alabama School of Medicine
- 1995, Medical Informatics Task Force, Department of Medicine
- 1996 Present, Clinical Practice Committee, Department of Medicine
- 1996 January 2013, UAB Hospital Critical Care Committee
- 1997 2001, University of Alabama Health System and Dental Staff Performance Improvement Core Advisory Team/Quality Council
- 1998 January 2013, University of Alabama Hospital Clinical Council
- 1998 January 2013, Chair of the Affiliate Committee American College of Chest Physicians
- 1998 January 2013, Information Technology Advisory Committee Chair, University of Alabama Health System
- 1999 Present, UAB Health System Security and Privacy Committee
- January 2000 January 2013, The University of Alabama Hospital Revenue Cycle Improvement Process-Management Committee
- May 2000 January 2013, UAB Health System HIPAA Executive Steering Committee
- June 2003 January 2013, Chair UAB HIPAA Executive Steering Committee
- UAB Professional Liability Trust Fund Committee 1/2006 January 2013

External Committees and Appointments

- Southern Governors Association: Gulf Cost Task Force June 2006-2008
- Baptist Health System Board of Directors July 2006-July 2011
- Alabama Hospital Association Board of Directors June 2006–January 2013.
- Alabama Hospital Association Secretary Treasurer July 2012- January 2013
- Alabama Hospital Association Finance Committee June 2006- January 2013
- Alabama Hospital Association Trauma Task Force January 2006-2009
- Alabama Hospital Association Medicaid Task Force January 2008-2010
- Alabama Hospital Association State Legislative Committee August 2008-2010
- Alabama Hospital Association HIT Committee: Chair 2010
- State of Alabama Health Information Exchange Commission 2009- January 2013

- Americas Essential Hospitals Policy Advisory Committee 2012 2015
- Arizona Hospital and Healthcare Association Member February 2013 2015.
- Arizona Hospital and Healthcare Association Member Policy Committee July 2013-2015.
- Southern Arizona Leadership Council June 2013-2015.
- Association of American Medical Colleges COTH Administrative Board November 2014-present
- North Carolina Hospital Association Board of Directors November 2015-present
- North Carolina Healthcare Association Board of Directors Chairman 2019-2020
- North Carolina East Alliance, USA Board of Directors October 2016 present
- East Carolina University Board of Visitors, January 2016 present

Professional Expertise and Interests

 The use of aggregate data to make operational clinical decisions. Intensive care outcomes management. Health information management to facilitate the care delivery process and to measure performance effectiveness. Healthcare operations management.

Major Teaching Responsibilities

- 1992 2002, Pulmonary Division Research Lecture Series, Division of Pulmonary and Critical Care Medicine, Department of Medicine, The University of Alabama at Birmingham School of Medicine
- 1992 Present, Pulmonary Grand Rounds, Division of Pulmonary and Critical Care Medicine, Department of Medicine. The University of Alabama at Birmingham School of Medicine
- 1994 1999, Introduction to Clinical Medicine, The University of Alabama at Birmingham School of Medicine
- 1994 Present, Topics in Pulmonary Medicine, Resident Lecture Series, Department of Medicine, The University of Alabama at Birmingham School of Medicine
- 1995 1997, Pathology Lecture on Pulmonary Pathology, Pulmonary, The University of Alabama at Birmingham School of Medicine
- 1996 Present, Pulmonary Nuts and Bolts Fellows lecture series, Pulmonary and Critical Care Medicine, The University of Alabama at Birmingham School of Medicine
- 1997 2000, UAB IM Board Review Course, Pulmonary and Critical Care, The University of Alabama at Birmingham School of Medicine
- 1997 2002, Department of Rehabilitation Medicine Grand Round Series, Pulmonary Rehabilitation, The University of Alabama at Birmingham School of Medicine
- 1998 2003, Ambulatory Information Systems, Health Informatics Masters Course, School of Health Related Professions, University of Alabama at Birmingham
- 2003 2005, Program Director, Executive Master of Science HA640, University of Alabama at Birmingham
- 2003 2005, UAB Department of Internal Medicine Interns, Central Venous Line Primer Course, University of Alabama Hospital at Birmingham

Grant Support

- HSF-General Endowment Fund Clinical Care Initiative: UAB Health System Image Management System Phase 1. M. Waldrum Pl. Awarded 2/2000. Completed 5/2001. Total Grant awarded: \$250,000
- Multi-Center Clinical Trial of the Bard® Silver-Coated Endotracheal Tube to Reduce Ventilator-Associated Pneumonia" C.R. Bard. Principal Investigator: James Johnson, MD, Co-Investigators: Michael Waldrum, MD, Keith Wille, MD, Mark Dransfield, MD, John Lang, MD September 2003 September 2005 \$55,200 Direct Costs

 "Prevention of Recurrent Venous Thomboembolism" - HHS/Brigham Hospital – UAB Investigator: Michael R. Waldrum, MD November 1998 – November 2003 \$23,688 Direct Costs

Bibliography

MANUSCRIPTS Manuscripts Published

- "Data Collection Helps ICU Define CPR Outcomes". Medical Ethics Advisor.81-82, July 1996.
- Joseph Goedert: Building Support for an Intranet. Health Data Management. 25-29, March 1999.
- Joan Hicks, MS, RHIA, Michael R. Waldrum, MDMS, Valeria Wilson, MS, Jeffery Marwell, MS: Transcription System Overhaul Reaps Savings, Efficiency. *Journal of AHIMA:* 58-63, December 2000.
- AMC/HIPAA Work Group: Guidelines For Academic Centers on Security and Privacy, Web Publication www.amc-HIPAA.org. May 2001.
- Ridke PM, Goldberger S, Danielson E, et al: Long Term, Low Intensity Warfarin Therapy for Prevention of Recurrent Venous Thromboembolism. New England Journal of Medicine (348:15): 2003.
- D. Smaltz, R. Callander, M.Turner, G. Kennamer, H. Wurtz, A. Bowen and M. Waldrum: "Making Sausage-Effective Management of Enterprise-wide Clinical IT Project". *Journal of Healthcare Information Management (JHIM)*. Chicago, IL, Spring 19(2), 2005.
- Heslin MJ, Doster BE, Daily SL, Waldrum MR, Boudreaux AM, Smith AB, Peters G, Ragan DB, Buchalter S, Bland KI, Rue LW. Durable improvements in efficiency, safety, and satisfaction in the operating room. *J Am Coll Surg* 2008; 206(5): 1083-9;
- Park YA, Waldrum MR, Marques MB. Platelet Count and Prothrombin Time Help Distinguish Thrombotic Thrombocytopenia Purpura-Hemolytic Uremic Syndrome from Disseminated Intravascular Coagulation in Adults. Am J Clin Pathol 2010;133:460-465.
- Marques MB, Polhill SR, Waldrum MR, Johnson J, Timpa, Patterson A, Salzman D. How we closed the gap between red blood cell utilization and whole blood collections in our institution. TRANSFUSION 2012;52:1857-1867.

Published Abstracts

- M. Waldrum, Nancy Dunlap: The Outcomes of Cardiopulmonary Resuscitation in a Medical Intensive Care Unit. *Chest* 1996 110(4): 150's, November 1996.
- Patricia Patterson, Michael R. Waldrum, and Robert Cerfolio: Pulmonary Artery Aneurysm and Pulmonary Thromboembolism. *Chest* 112(3): 172's, November 1997.

- Michael R. Waldrum, M. Cushman, P Enright, AR Sherrett, and RP Tracy: Hemostasis, Inflammation and COPD in the Elderly. *Chest 1997* 112(3): 69's, November 1997.
- B. Gerald, Bonnie Sanderson, David Redden, Mike Waldrum, Nancy Dunlap, and William Bailey: Stages of COPD: Comparison of Pulmonary Rehabilitation Outcome. *Journal of Cardiopulmonary Rehabilitation* 18(5): 357, October 1998.
- Lynn Gerald, B. Sanderson, M. Waldrum, and W. Bailey: Clinical Events Detected During Pulmonary Rehabilitation: Using The ATS Staging System As A Measure Risk. *Chest* 114(4): 339'S, November 10, 1998.
- Patricia Patterson, Michael R. Waldrum, and Scott Ebbinghouse: Mycobacterium Tuberculosis Presenting As Immune Mediated Thrombocytopenia Purpura. *Chest* 114(4): 411'S, November 10, 1998.
- Michael R. Waldrum, MD, MS, Michael S. Eggert, MD: Gamma-Hydroxy-butyrate Intoxication with Respiratory Failure: A Still Growing Epidemic Among Adolescents and Young Adults. Chest 118(4): 87S, October 23, 2000.
- Joe K. Gerald MD, PhD; Jorge Alsip MD, MBA, CPE; Joan Hicks; Mike Waldrum, MD, MS, MBA; Nancy E. Dunlap, MD, PhD, MBA. Predictors Of In-Hospital Mortality Among Patients Identified As Having Severe Sepsis By An Automated Clinical Decision Rule. American Thoracic Society Denver National Meeting May 2011.pA4696.
- Joe K. Gerald MD, PhD; Jorge Alsip MD, MBA, CPE; Joan Hicks; Mike Waldrum, MD, MS, MBA; Nancy E. Dunlap, MD, PhD, MBA Pattern of Clinical and Laboratory Abnormalities Among Hospitalized Patients Identified As Having Severe Sepsis By An Automated Clinical Decision Rule. American Thoracic Society Denver National Meeting May 2011.pA3860.
- Joe K. Gerald MD, PhD; Jorge Alsip MD, MBA, CPE; Joan Hicks; Mike Waldrum, MD, MS, MBA; Nancy E. Dunlap, MD, PhD, MBA. Using the EMR to Perform Continuous, Automated, Real-Time Surveillance to Identify Hospitalized Patients at Risk of Sepsis. Chest poster 10/2011.

Other Publications

- Contributor to: Smaltz, D., Glaser, J. Skinner, R. Cunningham III,T.,.: "The CEO-CIO Relationship-A Roundtable Discussion "Harnessing the Value of IT. HIMSS Publications, Chicago, IL, January 2005.
- Operations Management In Healthcare, Strategy and Practice, co-authored with Corinne M. Karuppan, PhD and Nancy E. Dunlap, MD, PhD, MBA. New York: Springer Publishing Company, 2016.

ORAL PRESENTATIONS

 Intensive Care Unit Outcomes At Southern Section of American Federation of Clinical Research, February 1995.

- Institute For HealthCare Improvement, National Congress, "Reducing Codes In A MICU", May 9, 1997.
- American Thoracic Society 1997 International Meeting, "Application of Outcomes Assessment To ICU Clinical Problems", May 19, 1997.
- American Thoracic Society 1997 International Meeting, "Evidence Based Medicine And Outcomes Assessment In Pulmonary Disease Management", May 19, 1997.
- New Orleans, LAAMC/HIPAA Workshop Group: Guidelines for Academic Medical Centers on Security and Privacy, February 2001.
- American Association of Blood Banks Annual Meeting: "How a Large Academic Medical Center Decreased It's Dependency on Imported Blood", October 26, 2009
- Healthcare Financial Management Association Annual National Institute 2016 Panelist: Integration Trends, Best Practices, and Post-Integration Opportunities June 27, 2016.

Invited Lectures at Local and Regional Courses and Meetings

- Alabama Department of Rehabilitation Services Topic: Assessment of Pulmonary Disability, August 1997.
- Internal Medicine Grand Rounds Baptist Montclair Medical Center, 1997. -1998.
- Invitational Scientific Symposium-Edna Merle Carraway Convention Center, Birmingham Alabama, President's Invitational Address- "To Code Or Not To Code, That Is The Question", January 24, 1998.
- UAB Hospital Respiratory Services Retreat Lecture Series, May 1998.
- Grand Rounds College of Community Health Sciences at the University of Alabama, January 1999.
- Washington County Virginia Medical Society Annual Meeting: Update on Venous Thromboembolic Disease, December 13, 1999.
- Washington County Virginia Medical Society Annual Meeting: Integration of Clinical Information, December 13, 1999.
- UAB Department of Medicine Chiefs Society "Inflammation, Coagulation Life and Death", February 2002.
- Grand Rounds, UAB Department of Physical Medicine and Rehabilitation (PM&R), April 16, 2004. "UAB Information Management: Past, Present and the Future"
- AAHIM -Alabama Association of Health Information Management Presentation "Electronic Health Record: All About Information Management", May 6, 2004.
- Health Information Management System Society Presentation "Making the Most of Change in the University Emergency Department." February 2006.

- Health Information Management System Society Presentation "Point of Care Capture: Model for Chronic Disease Management". February 2008.
- Health Information Management System Society Alabama Chapter: "Healthcare Reform Business of Healthcare, Change, and Information Technology." October 1, 2010.
- American Association of Blood Bankers and National Blood Foundation CEO Summit. Invited panelist. October 11, 2010
- Studer Group HCAHPS National Summit. Key note address: N=1 The Role of Leadership in Quality, Safety, and the Patient Experience. August 24 2012.
- Jose G. Albernaz Golden Apple Distinguished Lecture at East Carolina University Brody School of Medicine August 10, 2015.
- UAB Operations Management Course Guest Lecturer, February 20, 2017.
- Epic CEO Council, UGM 2017, Invited Speaker: Maximize your Epic investment. September 26, 2017.
- 14th Annual HPI Press Ganey Safety Summit, Providing Perspectives: Vidant Health's Journey to engage patients and families in safety and reliability. October 4, 2017.

Miscellaneous

Films, Educational Tapes, Syllabi, Software Packages and Courses Developed, etc.

- UAB Health Administration: HA 640. Developed course syllabi, conducted and managed course.
- Developed and conduct UAB Department of Medicine Central Venous Line (CVL) mandatory course.
- Clinical Document Access Project. Clinical Leader that developed UAB Health System Document Access Project, 1997.
- UAB Hospital Physician Order Entry. Project Leader. Organized complete problem based order sets, 1998.
- Horizon development. Clinical Leader in organizing Horizon system that incorporates Clinical Document Access, Lab Values Repository, Clinical Research Information System and Medical Staff Interactive, 1999.
- UAB Enterprise Image Management Project, 2003. Lead Project Manager

Miscellaneous Other

Executive Sponsor: Academic Chronic Care Collaborative 10/2005-10/2007

- March of Dimes: Birmingham Area Walk Chair 2006 and 2007
- National Kidney Foundation recipient of The Charles McKay –Mark Naïve Memorial Award for service above and beyond the call of Duty June 2007
- Leadership Alabama October, 2011 June, 2012
- Tucson Regional Economic Opportunities: Chairman's Circle and Healthcare Committee, April 2013 to present.
- Southern Arizona Leadership Council, April 2013 to present.