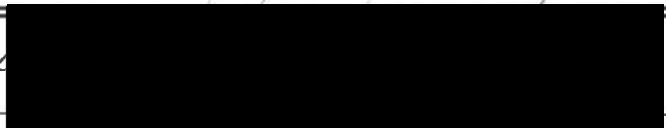


Committee on Energy and Commerce
U.S. House of Representatives
Witness Disclosure Requirement - "Truth in Testimony"
Required by House Rule XI, Clause 2(g)(5)

1. Your Name: Dr. Donald Rucker		
2. Your Title: National Coordinator for Health Information Technology		
3. The Entity(ies) You are Representing: U.S. Department of Health and Human Services		
4. Are you testifying on behalf of the Federal, or a State or local government entity?	Yes x	No
5. Please list any Federal grants or contracts, or contracts or payments originating with a foreign government, that you or the entity(ies) you represent have received on or after January 1, 2015. Only grants, contracts, or payments related to the subject matter of the hearing must be listed.		
6. Please attach your curriculum vitae to your completed disclosure form.		

Signature: _____



Date: 12.7.18

Donald W. Rucker, M.D.

Office of the National Coordinator, 330 C Street SW, Washington DC 20201

Profile	Physician leader with national clinical informatics success. Created computerized physician order entry tools and implementation processes to support successful enterprise transformation of multiple customer hospitals. Co-developer of the first Microsoft Windows based electronic medical record in the world. Designer of the computerized physician order entry module that won the 2003 HIMSS Nicholas Davies Award as the best hospital computer system in the US. Extensive vendor-based health care policy experience. Strong scientific, computational and practical background in medical computing and decision sciences. Board certified physician with broad clinical experience including at Kaiser Permanente, Beth Israel Deaconess, University of Pennsylvania and Ohio State University.	
Education	A.B. Harvard College (Chemistry) <i>magna cum laude</i>	1977
	M.D. University of Pennsylvania	1981
	M.B.A. Stanford University Graduate School of Business	1987
	M.S. Stanford University (Medical Computer Science)	1988
Clinical	Residency - General Internal Medicine, Univ. of California San Diego	1981 - 1984
	NIH - National Library of Medicine Fellowship	1985 - 1988
	Board Certified - American Board of Internal Medicine #098078	1984
	Board Certified - American Board of Emergency Medicine #950779	1996 - 2026
	Licensed in California, Pennsylvania, Ohio	current
	DEA FR3853707	current
	Board Certified - American Board of Preventive Medicine - Clinical Informatics #71215	2015 - 2025
Career	Office of the National Coordinator of Health Information Technology, Dept. of Health and Human Services, Washington DC <i>National Coordinator of Health Information Technology</i>	2017 – current
	<ul style="list-style-type: none">• Presidential appointment to lead the nation’s federal health IT agency• ONC leads adoption of EMR and HIT standards nationally and often globally• ONC provides certification of electronic health records with incentives for use in CMS payment Medicare and Medicaid programs• Work with CMS and White House to increase interoperability• Co-leadership with CMS in physician burden reduction including reform of 1995 Evaluation & Management code payments• Leadership of 21st Century Cures Act rule-writing to encourage open API’s and stop information blocking• Leadership of 21st Century Cures Act design of “Trusted Exchange Framework and Common Agreement”• US Co-lead of the Global Digital Health Partnership	

- Policy work to promote population-level FHIR queries to facilitate learning health systems and cross-provider use of machine learning and artificial intelligence approaches for comparing clinical care
- Supervisory management of 165 employees and 60 million dollar budget

Premise Health, Brentwood, TN

2015 – 2016

Chief Medical Officer

- Premise Health is the largest US onsite medical clinic provider serving 230 large self-insured corporations at approximately 500 sites throughout the United States. Private equity funding by Water Street Partners and Walgreens.
- As Chief Medical Officer and member of the senior management team, provided leadership for approximately 130 physicians and 250 nurse practitioners
- Supervision of full range of ambulatory clinical governance and risk management portfolios for multiple clinical service lines
- Broad range of responsibilities for clinical IT structure including enterprise electronic medical records, patient portals and an electronic data warehouse
- Led design of strategies for comprehensive provider-facing population health management with commercial SaaS platform

**Ohio State University Wexner Medical Center and
Ohio State University College of Medicine, Columbus, OH**

2013 – 2017

Associate Dean for Innovation (2013-2015)

Chief Operating Officer, IDEA Studio (2013-15)

Professor of Clinical Emergency Medicine and Biomedical Informatics (Affiliated 2015-2017)

- Hired to help OSU with commercialization of new technologies and more impactful use of clinical software technologies
- COO of IDEA Studio (Innovation, Design, Application) working to increase innovation among OSUWMC faculty and staff and support ongoing commercialization in partnership with OSU Technology Transfer Office
- Attending Emergency Physician in OSU's Level 1 trauma center performing full range of emergency medicine care and procedures. Ongoing housestaff and medical student teaching.
- Department of Biomedical Informatics faculty member providing teaching and research project guidance
- Research on workflow automation with machine learning to identify the labor-intensive clinical tasks underlying VOIP telephony call patterns
- Design and programming of clinical workflow software discovery framework based on OSUWMC enterprise-wide clinical communications log files. Invention of novel mapping algorithms. Separate software to automate "data scrubbing" of medical center cost center data using regular expression programming. High performance architecture with this framework able to process an entire 94 million data field VOIP phone call database for end-user interactive graphical network display in 6 minutes.
- Identified 40,000 hour (~ 1,000 FTE's) time spent on phone calls per week with half of calls being short calls averaging 27 seconds

- Board Certification in Clinical Informatics – 98th percentile score on the national board examination for all physician informaticians
- Member, Board of Scientific Counselors, Lister Hill Center, National Library of Medicine, NIH (2012-2016)
- Member, HHS ONC (Office of the National Coordinator) HIT Policy Committee Certification/Adoption Workgroup (2012-2014)

Siemens Healthcare USA, Malvern, PA

2000 – 2013

Vice President and Chief Medical Officer

- Chief Medical Officer for this \$4 billion annual revenue imaging, laboratory and IT enterprise
- Started as VP and CMO for Shared Medical Systems in 2000
- Deep customer and prospect contact throughout the United States. Broad ranging collaboration with many customers in all phases of CPOE with strong emphasis on implementation of clinical decision support and operational efficiencies measured by shorter cycle times.
- Led the total redesign of the flagship computerized physician order entry module used by approximately 30,000 physicians. First install at Cincinnati Children's Hospital Medical Center won the 2003 HIMSS Nicholas E. Davies Award as the best hospital information system in the US in February 2004. KLAS rated this as 2nd most intensively used CPOE system in the United States (July 2010).
- Worked with customers to generate over a dozen MEDLINE-cited peer-reviewed academic journal articles describing successes with CPOE
- Chief clinical spokesman for Siemens Healthcare in US press and at national meetings with multiple satellite media tours including approximately 100 television and radio interviews
- Member, Medicare Evidence Development & Coverage Advisory Committee (2006 – 2007)
- Commissioner, Certification Commission for Healthcare IT (2007-2010)
- Siemens representative to multiple public and private health technology assessment panels including two National Quality Forum Steering Committees on Imaging Efficiency setting quality measures
- Extensive work representing the imaging and HIT businesses before Congress, MedPAC, OMB, HHS, USPSTF, AHRQ and CMS on behalf of Siemens and industry trade associations. Policy outreach included defining appropriateness of CT scan imaging use with legislative language, helping obtain coverage for cardiac CT angiography, advocating for CT colonoscopy, and working with industry teams to negotiate RBRVS rates as part of the 2009 healthcare reform law.
- Member multiple external advisory boards including for the American College of Radiology's research foundation ACRIN, American Medical Informatics Association's Vendor Contracts task force, Columbia University's NY State Bio-informatics grants, and Denver Health and Hospital re-engineering. Board member of the Greater Philadelphia Chamber of Commerce and the Imaging for a Cause Foundation.
- Pioneered CPOE design using multi-tiered knowledge architecture coupled to vocabulary and workflow data structures
- US Patent #7,451,096 linking VOIP telephony with HIT systems
- US Patent #7,895,527 for object-oriented screen architecture with display of multiple simultaneous clinical parameters

University of Pennsylvania, Philadelphia, PA

2000 – 2013

Clinical Assistant Professor of Emergency Medicine

- Part-time attending physician at University of Pennsylvania Presbyterian Medical Center and Pennsylvania Hospital Emergency Departments
- Full range of busy high performance emergency medicine practice and procedures
- Participant in multiple practice quality improvement and patient satisfaction projects
- Resident and medical student teaching including core curriculum

Beth Israel Deaconess Medical Center, Boston, MA

1989 – 2000

Emergency Department Physician

- First full-time ED attending and Asst. Director for Walk-in and Travel Clinics at Beth Israel Hospital
- Instructor at Harvard Medical School
- Initially part-time and full-time after 1992
- Multiple administrative and academic duties including serving as Beth Israel emergency department representative to Harvard's Risk Management Foundation
- Multiple peer-reviewed research articles on emergency department care
- Multiple statistical analyses performed using SAS programming

Datamedic Corporation, Waltham, MA

1988 – 2000

Medical Scientist and Product Manager

- Co-developed first Microsoft Windows based electronic medical record 1989 (Windows 2.1!) with 4 colleagues at precursor firm CIAI.
- Broad business experience at venture-capital funded software startup
- Product Manager for EMstation – EMR for emergency departments – this product was still being sold and actively installed throughout the US through Vitalworks until its 2005 purchase by Cerner
- Extraordinarily detailed understanding of all aspects of designing and implementing time-efficient physician documentation including speech recognition, templates, and complex clinical knowledge management
- Experience in design and use of a domain-specific programming language and C language
- Simultaneously on clinical staff at Waltham Weston Medical Center as hospitalist and ED physician
- Simultaneously on staff at Kaiser Permanente in California serving as primary care and ED physician at San Diego, Redwood City and Santa Clara from 1983-1993

Articles:

Rucker DW, Shortliffe EH. A Methodology for Implementing Clinical Algorithms Using Expert System and Database Tools. 13th Annual Proceedings of the Society for Computer Applications in Medical Care, IEEE Computer Society Press, 1989: pp 33-38.

Rucker DW, Maron DJ, Shortliffe EH. Temporal Representation of Clinical Algorithms Using Expert-System and Database Tools. Computers and Biomedical Research, Vol. 23: No. 3, 1990: pp 222-239.

- Rucker DW, Johannes RS, Finley SW, Kahane SN. Designing an Emergency Medicine Physician Workstation to Support Risk Management in Decision Making. JAMIA Symposium Supplement, AMIA Proceedings, Hanley & Belfus, 1996: pp. 787-791.
- Rucker DW, Edwards RA, Burstin HR, O'Neil AC, Brennan TA. Patient-Specific Predictors of Ambulance Use. Annals of Emergency Medicine, Vol. 29: No. 4, 1997: pp 484-491.
- Rucker DW. '98 HCFA Regulations: Let the documentation begin. Health Mgmt Technology, Vol. 19: No 2, 1998: pp 97-98.
- Burstin HR, Conn A, Setnik G, Rucker DW, Cleary PD, O'Neil AC, Orav EJ, Sox CM, Brennan TA. Benchmarking and quality improvement: the Harvard Emergency Department Quality Study. Am J Medicine, Vol. 107: No. 5, 1999: pp 437-449.
- Sox CM, Burstin HR, Orav EJ, Conn A, Setnik G, Rucker DW, Dasse P, Brennan TA. The Effect of Resident Supervision and Quality of Care in Five University-affiliated Emergency Departments. Academic Medicine, Vol. 73: No. 7, 1998: pp 776-782.
- Sun B, Adams JG, Orav EJ, Rucker DW, Brennan TA, Burstin HR. Determinants of Patient Satisfaction and Willingness to Return with Emergency Care. Annals of Emergency Medicine, Vol. 35: No. 5, 2000: pp 426-434.
- Rucker DW, Burstin HR, Brennan TA. Delay in Seeking Emergency Care. Academic Emergency Medicine, Vol. 8: No.2, 2001: pp 163-169.
- Rucker DW, Steele AW, Douglas IS, Coucerc CA, Hardel GG. Design and use of a joint order vocabulary knowledge representation tier in a multi-tier CPOE architecture. AMIA Annual Symposium Proceedings, 2006: pp. 669-673.
- Rucker DW. Will computerization drive a convergence of pathology and radiology? Archives Pathology Lab Medicine, Vol. 132: No. 5, 2008: pp 785-787.
- Goodman KW, Berner ES, Dente MA, Kaplan B, Koppel R, Rucker D, Sands DZ, Winkelstein P; AMIA Board of Directors. Challenges in ethics, safety, best practices, and oversight regarding HIT vendors, their customers, and patients: a report of an AMIA special task force. J Am Med Inform Assoc, Vol. 18. No. 1, 2011: pp 77-81.
- Frank RA, Rucker DW, Ferguson MA, Sweeney TJ. Evidence requirements for innovative imaging devices: from concept to adoption. J Am Coll Radiol, Vol. 8. No. 5, 2011: pp 124-31.
- Jacobs BR, Hart KW, Rucker DW. Reduction in Clinical Variance Using Targeted Design Changes in Computerized Provider Order Entry (CPOE) Order Sets. Applied Clinical Informatics, Vol. 8. No. 3(1), 2012:pp 52-63.
- Rucker DW. Using telephony data to facilitate discovery of clinical workflows. Appl Clin Inform. 2017 Apr 19;8(2):381-395.
- Reviews:**
- Rucker DW, and Kane B. Artificial Intelligence in Medicine, AI Expert; Vol 3: No. 11, 1988: pp 48-55.
- Rucker DW. Diabetic Ketoacidosis chapter in "eMedicine – The Emergency Medicine Online Reference" at <http://www.emedicine.com/emerg/index.shtml> 1998-2008
- Rucker D, Eisenberg F, Stewart K. The Changing Experience of the American Medical Landscape, Electromedica; Vol 69: No. 1, pp 5-8.
- Rucker DW. Computerized Physician Order Entry in Hospitals. Hospital Build Magazine, No. 4, 2009: pp 24-27.

Other Publications:

Rucker DW. White Paper: Finally a Tool to Re-engineer Health Care: The Workflow Engine. Montgomery Research Institute, Health Care Technology Yearbook – Volume 1, 2003.

Computer Programs:

Co-developer with RS Johannes, SW Finley, SN Kahane of:

CIAI RADstation version 1.0, EMstation versions 1.0, 1.5, 2.0, 2.6

Datamedic Clinical Systems EMstation version 3.0, 3.5; FPstation 1.0

These products were the first electronic medical records using Microsoft Windows (starting with Windows version 2.1) in the world.

Co-developer with RS Johannes, J Logan, A Dighe, H Shedden of:

Datamedic Clinical Systems EMstation version 4.0

Datamedic Clinical Systems, 95 Sawyer Road, Suite 200, Waltham, MA 02154

Purchased by Cerner, EMstation included speech recognition, complete customizable emergency medicine clinical content, and an integral database. In addition to being responsible for the overall clinical layout and much of the clinical content as the prime emergency medicine physician developing this software, I was also solely responsible for incorporation of risk management tools and billing content into the products. Additionally, as product manager was involved in product marketing to all major emergency medicine groups and at multiple ACEP Scientific Assemblies.

EMstation Risk Management Browser - Greg Henry MD, Neal Little MD

I was responsible for the identification and incorporation of this risk management syllabus into EMstation and its programming as a Hypertext browser.

CIAI QA Tool Version 1.0

Designed and personally programmed this quality assurance tool which performs both structured and free text queries on a clinical emergency medicine electronic record.

Siemens Invision Version 25 - 27

Led the complete redesign of the workflow, interfaces and content for computerized physician order entry for this mainframe/browser based hospital information system. The first install at Cincinnati Children's Hospital Medical Center won the 2003 HIMSS Nicholas Davies Award for the best hospital computer system in the United States. Over the course of this product lifetime, over 30,000 physicians have used this interface to place orders.

Ohio State University – Telephony Research Framework for Clinical Workflow Discovery

Designed and programmed software written in Perl to map voice over internet phone (VOIP) Cisco log files at an enterprise-wide scale into clinical communication patterns grouped by medical center cost center categories as well as by individual clinical areas. A separate indexed enterprise telephone number cost center database was built using regular expression programming. End user discovery of the underlying clinical workflows was enabled by construction of interactive graphical networks of the communication patterns for display using the Gephi© graph visualization tool. Preliminary results showed enterprise phone calls of over 130,000 calls per day with approximately 40,000 hours of employee time spent on the phone per week. Work with clinical teams to identify individual optimization targets based on these network graphs.