

# CURRICULUM VITAE

Blackford Middleton, MD, MPH, MSc

## Current Positions

Corporate Director Clinical Informatics Research & Development  
Chairman, Center for Information Technology Leadership  
Partners Healthcare System, Inc.  
Research Scientist, Decision Systems Group  
Assistant Professor of Medicine  
Brigham & Women's Hospital  
Harvard Medical School

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## Education

Degree	Year	School, Location	Subject
B.A.	1979	University of Colorado, Boulder	Biochemistry, Molecular Biology, History
	1979	University of East Anglia, Norwich, England	Biochemistry
M.P.H.	1981	Yale University	Chronic Disease Epidemiology, Health Services Administration
M.D.	1985	SUNY-Buffalo	Medicine
	1985- 1988	University of Connecticut John Dempsey Health Sciences Center	Internship and Residency in Categorical Internal Medicine
	1988- 1991	Stanford University AHCPR Fellowship in Division of General Internal Medicine, Section on Medical Informatics	Health Services Research, and Medical Informatics
M.Sc.	1991	Stanford University	Health Research and Policy

## Employment History

- 2000-2001 Senior Vice President and Chief Medical Officer  
MedicaLogic/Medscape, Inc. (dba Medscape, Inc.)
- 1997-2001 Associate Professor of Medical Informatics and Outcomes Research (Clinical)  
Biomedical Information and Communication Center (BICC)  
Oregon Health Sciences University, Portland, OR
- 1995-2001 Attending Physician, St. Vincents Department of Medicine Faculty Practice,  
Providence Health System, Portland, OR
- 1998-2000 Senior Vice President for Clinical Informatics, MedicaLogic, Inc.
- 1995-8 Vice President for Clinical Informatics, MedicaLogic, Inc.
- 1994-5 Medical Director, Department of Information Management and Technology,  
Stanford Health Services.
- 1992-4 Medical Director Clinical Information Systems, Stanford University Hospital.
- 1991-5 Associate Director, Co-Founder, The Institute for Decision Systems Research  
4894 El Camino Real, Suite 101, Los Altos, CA 94022.
- 1991 Acting Chief, Internal Medicine Clinic, Stanford University Medical Center, July  
- December.
- 1991-5 Assistant Professor of Medicine (Clinical), Section on Medical Informatics  
Division of General Internal Medicine, Stanford University School of Medicine,  
Stanford, CA 94305.
- 1989-91 Physician Specialist, Department of Medicine, Stanford University Medical  
Center, Stanford, CA 94305.
- 1989-90 Voluntary Clinical Staff Attending, Palo Alto Veteran's Administration  
Hospital, Palo Alto, CA 94304.
- 1988-91 Agency for Health Care Policy and Research Fellow, Section on Medical  
Informatics, Division of General Internal Medicine, Stanford University Medical  
Center.
- 1985-99 Intern and Resident in Internal Medicine, University of Connecticut Health Center  
and affiliated hospitals, Farmington and Hartford, CT.
- 1980 Commissioned Officer Student Training Externship Program (COSTEP),  
Administrative Assistant, USPHS Hospital, Norfolk, VA, Mr. Brian Gooch, Preceptor.

1975-76 Summer Student Research Intern, Harvard Medical School, Beth Israel Hospital, Boston, MA, Dr. Gary Huber, Preceptor.

### Honors

2005 Partners Healthcare System, Inc. "Partners in Excellence Award" for Outstanding Contributions and Commitment to Excellence: Smart Forms and Quality Dashboards Team, December, 2005

2005 Recognition by Modern Physician as one of the Top 50 (#36) most powerful physician executives in 2005

2005 Elected Chairman, Healthcare Information Management and Systems Society (HIMSS), Board of Directors

2005 Nominated to serve on the MassPRO Quality Improvement Organization Board of Directors

2005 Nominated to serve on the HealthAlliant, Inc., Board of Directors

2005 Elected to Treasurer, American College of Medical Informatics (two year term)

2004 Elected to Chairman-Elect, Healthcare Information Management and Systems Society Board of Directors (one year term)

2002 Elected to serve on Healthcare Information Management and Systems Society Board of Directors (three year term)

2002-5 Served on Foundation for eHealth Initiative Board of Directors

2002 Elected to Fellowship, Healthcare Information and Management Systems Society

2000 Elected to Fellowship, American College of Medical Informatics

2000 -01 Nominated to serve on Internet Healthcare Coalition eHealth Ethics Steering Group

1999-2000 Elected by CPRI Board of Directors as Chairperson, Executive Committee, CPRI (Computer-based Patient Record Institute), Bethesda, MD

1997-9 Elected by CPRI Board of Directors as Director-at-Large, Executive Committee, CPRI (Computer-based Patient Record Institute), Bethesda, MD

1994 Elected to Fellowship, American College of Physicians

1988 Agency for Health Care Policy and Research (AHCPR) National Research Service Award for Fellowship at Stanford University School of Medicine, 1988-1991

- 1985 Upjohn Achievement Award for Outstanding Research Ability, SUNY-Buffalo School of Medicine
- 1983 Glenn H. Leak Memorial Cancer Fellowship, American Cancer Society
- 1982 The Buffalo Foundation Student Research Grant
- 1975 University of Colorado Regent Scholarship

### **Clinical Practice, Research Interests, and Awards**

#### LICENSURE

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MA Physician's License 213036 (active); OR Board of Medical Examiners, License 19771 (expired); CA Board of Physician Registration G063192 (expired); CT Medical Board 028275 (expired)

Diplomate National Board of Medical Examiners Parts I-III, Certificate number 305052, 1987

Diplomate American Board of Internal Medicine, Certificate number 119956, 1989

#### RESEARCH INTERESTS

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Design, implementation, and evaluation of integrated clinical information management systems, clinical decision support systems, quality management, population database analysis, patient healthcare information access and disease management.

#### POST-DOCTORAL RESEARCH FUNDING

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##### ACTIVE

1R01HS015169-01 (Middleton, PI)	09/30/04-09/29/07	25%
AHRQ	\$330,343	
Evaluating Smart Forms and Quality Dashboards in an EHR Demonstrating the Value of Health Information Technology		
1 R01 HS 13326-03 (Middleton, PI)	09/30/02-09/29/05 ext.	15%
AHRQ	\$354,670	
Shared Online Health Records for Patient Safety and Care Patient Center Care – Customizing Care to Meet Patient's Needs		
1 UC1 HS155397-01 (Bates, PI)	09/30/04-09/29/07	5%
AHRQ	\$468,614	
Statewide Implementation of Electronic Health Records Transforming Healthcare Quality Through Information Technology (THQIT)		

1 R01 HS 015226-01 (Gandhi, PI) AHRQ Improving Safety and Quality with Outpatient Order Entry Demonstrating the Value of Health Information Technology	09/03/04-08/31/07 \$288,913	5%
Center for IT Leadership (Walker J, PI) AHRQ \$1,010,000 The National Healthcare Information Technology Resource Center (HITRC).	9/30/2004-10/1/2009	15%

## PRIOR AWARDS

2004 Center for IT Leadership (Middleton, PI). The value of information technology for healthcare information exchange and interoperability. EHealth Foundation – Connecting Communities for Better Health \$ 75,000

2003 Center for IT Leadership (Middleton, PI) The Value of Healthcare Information Technology in Chronic Disease Management. Robert Wood Johnson Foundation \$297,504

2003 Center for IT Leadership (Middleton, PI). Assessing the Value of IT for Healthcare Information Exchange and Interoperability. eHealthInitiative – Connecting Communities for Better Health \$63,750

2003 Tablet PC Research (Middleton, PI), Clinical Informatics R&D, Partners Healthcare., Microsoft Corporation \$40,000

2003 The Value of Ambulatory CPOE in California. (Middleton, PI) Center for Information Technology Leadership, Boston, MA, California Health Care Foundation (CHCF) \$65,000.

2001 Planning a Center for Knowledge-based Practices. US Army Medical Research Acquisition Activity. (Greenes, PI), one year support, \$181,000. Brigham & Women's Hospital.

1994 CalREN (California Research and Education Network - Pacific Bell Trust) support for BACHEN: Bay Area Community Health and Education Network. 24 months for broadband network services. (Middleton, PI) Stanford.

1994 ARPA (Advanced Research Projects Agency) Technology Reinvestment Program support for NAMCIC: National Academic Medical Center Information Collaborative. (Middleton, PI) Stanford.

1992 NSF Grant Project IRI-9120330. Practical Decision Analytic Techniques in Large Belief Networks. 3 years support, \$625,000. Senior Research Scientist, The Institute for Decision Systems Research, Palo Alto, CA.

1988 Agency for Health Care Policy and Research (AHCPR) National Research Service Award (NRSA), 1988-1991, for Fellowship in the Division of General Internal Medicine, Stanford University School of Medicine.

### Professional Activities

- 2006-7 Member, American Health Information Community (AHIC; DHHS Secretary Michael Leavitt, Chair) Breakthrough Workgroup on Electronic Health Records
- 2003-6 Member, Healthcare Information and Management Systems Society (HIMSS) Board of Directors
- 2002-3 Member, Data Standards Work Group, Markle Foundation Connecting for Health, e-Health Initiative
- 2002-3 Member, Physician Advisory Board, Express Scripts, Inc.
- 2002-3 Member, Business Strategy Task Force, American Medical Informatics Association
- 2002 - Chair, Clinical Systems Strategy Committee, Partners Healthcare System, Inc.
- 2002-3 Member, Brigham & Women's Hospital Clinical Council, and Ambulatory Care Subcommittee
- 2001- Referee, Journal of the American Medical Informatics Association
- 2000- Member, American College of Medical Informatics (ACMI), Scientific Affairs Committee.
- 2000-2001 Member, American Medical Informatics Association (AMIA) Membership Committee.
- 1997-9 Member, American Medical Informatics Association (AMIA) Professional Education Committee.
- 1997-9 Member, Healthcare Information Management and Systems Society (HIMSS) Professional Development Committee.
- 1997-9 Member, Healthcare Information Management and Systems Society (HIMSS) Clinical Advisory Council to the HIMSS Board of Directors.
- 1997- Referee, Evidence Based Medicine
- 1997-9 Director-at-Large, Executive Committee, Computer-based Patient Record Institute (CPRI), Schaumburg, IL.
- 1997 Expert Advisor - NCQA Committee on Performance Measurement: "A Road Map for Information Systems: Evolving Systems to Support Performance Measurement."
- 1996 Consultant - External Reviewer for the John A. Hartford Foundation grant program.
- 1995 - Member, Scientific Board of Advisors, Multimedia Medical Systems.

- 1995-2001 Computer-based Patient Record Institute (CPRI) Board of Directors.
- 1994-5 Alton Ochsner Medical Foundation/Sandia National Laboratory Contract #AN-6271 "The Role of Technology in Reducing Health Care Costs", Dr. Richard Re, PI.
- 1994-5 Member, National Library of Medicine Integrated Advanced Information Management System (IAIMS) grant program review panel.
- 1994-5 Secretary/Treasurer, American Telemedicine Association.
- 1994 Agency for Health Care Policy and Research, and National Library of Medicine (AHCPR/NLM) RFA LM-94-002 "Applied Research Relevant to an Electronic Medical Record", Member Special Study Section.
- 1994 Chair, Stanford Clinical Data Repository Steering Committee.
- 1994 Chair, Stanford Clinical Data Repository Focus Group Committee.
- 1994 Member, Stanford University Hospital Clinical Advisory Team.
- 1994 Consultant to Andersen Consulting, Cambridge, MA.
- 1994 Consultant to Cornerstone Research, Menlo Park, CA.
- 1993-5 Member, Stanford University Hospital Medical Records Reengineering Project Steering Committee.
- 1993-5 Member, Stanford University Hospital Critical Care Information System Steering Committee.
- 1993 Consultant to New Enterprise Associates, San Francisco, CA.
- 1993-4 Member, Stanford University Hospital Laboratory Information System Steering Committee.
- 1993-5 Member, Stanford University Medical Center Lane Library Steering Committee.
- 1992-5 Small Business Innovation Research (SBIR) Grant Program Technical Review Panel Member, Phases I and II; Agency for Health Care Policy and Research Topic 005 - Electronic Patient Data Systems.
- 1992-5 Member, Stanford University Hospital Information Systems Action Team.
- 1992-5 Member, Stanford University Medical Center Information Systems Committee (formerly Medical Center Information Systems Planning Committee).
- 1992-5 Member, CAMIS (Center for Advanced Medical Informatics at Stanford) Executive Committee, Stanford University School of Medicine, *ex officio*.

- 1992-4 Member, Systems Evaluation Work Group, Computer-based Patient Record Institute (CPRI).
- 1992-3 Member, Requirements Advisory Board Healthcare Information Systems Working Group, Microelectronics and Microcomputer Technology Corporation (MCC).
- 1992 Referee, Sixteenth Annual Symposium on Computer Applications in Medical Care (SCAMC).
- 1991-2 Consultant to Knowledge Data Systems, Inc., Larkspur, CA, Medical logic development for expert database system.
- 1991-2 Member, Division of General Internal Medicine Executive Committee, Stanford University School of Medicine, July-December.
- 1991- Referee, Computers and Biomedical Research.
- 1991- Referee, Computer Methods and Programs in Biomedicine.
- 1991-2 Referee, Fifteenth Annual Meeting of the Society for Medical Decision Making.
- 1990- Referee, Journal of the American Medical Association.
- 1989-90 Consultant to Lexical Technology, Inc., Alameda, CA, Medical Editor Unified Medical Language System Metathesaurus.
- 1989 -91 Stanford Medical School Internal Medicine House staff Mentor.
- 1988 University of California at San Francisco, School of Medicine Clinical Epidemiology Program, Research Methods Workshop.
- 1984-8 Referee, Nutrition and Cancer.

### **Other Professional Memberships**

- 1999- Member, American College of Physician Executives (ACPE)
- 1991- Member, Healthcare Information and Management Systems Society (HIMSS), (Fellow 2002; Board of Directors 2003-2007, Chair-Elect 2004-2005, Chairman 2005-6)
- 1990- Member, Society for Medical Decision Making (SMDM)
- 1989- Member, American Medical Informatics Association (Fellow, 2000; elected Treasurer 2005)
- 1988- Member, American College of Physicians (Fellow 1994)
- 1987- Member, Society for General Internal Medicine (SGIM)



## Invited Presentations

### KEYNOTE ADDRESSES

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*2006*

Health Information Technology Symposium at the Massachusetts Institute of Technology (HIT Symposium at MIT), “The Need for a Third Hand in Stimulating the US HIT Market”, Boston, MA, July 17.

CHIMA/CHITA’06 (Chinese National Healthcare Information Technology Associations): “Progress toward the NHIN in the USA”, Xi’an, China, May 27.

Post Approval Summit at Harvard: “The Role of Healthcare Information Technology in Post-award Pharmacovigilance”, Boston, MA, May 8

Harvard Medical School Continuing Medical Education Course Patient-centered Computing and eHealth – State of the Field (Course Co-Director), “The Value of Healthcare Information Technology”, Boston, MA, April 29.

National Managed Health Care Congress (NMHCC): “Taking the Necessary Steps to Achieve Clinical and Financial Transparency in America’s Healthcare System”, Washington, D.C., April 26.

National Managed Health Care Congress (NMHCC): “Identifying and Communicating the Benefit of Electronic Health Records for Payers, Providers, and Consumers”, Washington, D.C., April 25.

Asia-Pacific HealthCare Information Technology Forum: “US NHIN: Perspectives from the Center for IT Leadership and Partners Healthcare System”, Beijing, China, Feb. 27.

Healthcare Information Management and Systems Society Annual Healthcare Conference and Exhibition, Opening Ceremony Keynote Address: “HIT and the Hippocratic Oath”, San Diego, CA, Feb. 13.

Eclipsys Annual Executive Forum, “Improving America's Healthcare System by Investing in Healthcare Information Technology”, Dana Point, CA, Jan. 18.

*2005*

Claremont Graduate University School of Information Sciences and Technology Symposium on Personal Health Records: “The Many Faces of Person-centric Electronic Health Systems”, Claremont, CA, Dec. 3

American Medical Informatics Association Annual Symposium Semi-Plenary: “Realizing the Financial Benefits of Electronic Health Records: What Do the Data Show?”, Washington, D.C., October 25.

International Standards Organization Technical Committee 215 (ISO TC-215) Global Healthcare Information Technology Summit – *Rapporteur* “The Need for Global Informatics Standards Harmonization”, Hamamatsu City, Japan, September 20.

Pennsylvania Medical Society eHealth Summit Keynote: “The Value of Healthcare Information Technology in Clinical Practice”, Harrisburg, July 26.

US Senate Centrists Caucus: “The Value of Healthcare Information Technology”, Washington, D.C., July 12.

Colorado Medical Society Annual Meeting Keynote Address: “The Value of Healthcare Information Technology in Clinical Practice”, Denver, June 24.

Selecting Expert Rules for Inclusion in Computerized Physician Order Entry Systems: National Consensus Development Conference: “Knowledge Engineering for HIT: The Need for a National Clinical Knowledge Repository”, San Francisco, June 22.

American Medical Association Organized Medical Staff Section Annual Assembly Keynote Address (AMA-OMSS): “The Challenge to Achieve Electronic Connectivity in Healthcare”, Chicago, June 18. Kryptiq Corporation Annual Connectivity Summit: “The Financial Case for Interoperability”, Portland, May 19.

ASTHO (Association of State and Territorial Health Officials) – PHIN (Public Health Information Network) Annual Conference: “Value of HIT to Public Health”, Atlanta, May 10.

University of Medicine and Dentistry of New Jersey (UMDNJ) – Robert Wood Johnson Medical School, Informatics Institute IAIMS *Clinical Informatics Symposium*: “EHR – State of the Art”, Piscataway, May 3.

American Medical Informatics Association (AMIA) 2005 Spring Congress: “The Value of ACPOE”, Boston, Apr 11.

CIMIT Research Forum, Massachusetts General Hospital: “Information Technology in Ambulatory Clinical Practice and Disease Management”, Boston, Mar 15.

University of Pittsburgh Medical Center: “The Value of Healthcare Information Technology”, Pittsburgh, Mar 1.

World Healthcare Information Technology Conference: “Disruptive Technologies: Building the Case for Healthcare IT Investment”. Washington, D.C., Feb 1.

2004

California Health Care Foundation HealthCare Information Technology Summit: “Challenges to EMR/Clinical IT Systems Acquisition”, San Francisco, Nov. 18.

Cedars-Sinai Medical Informatics Grand Rounds: “Keeping Clinical Systems Smart: Knowledge Management for Effective Clinical Decision Support”, Oct. 21.

HealthCare Information Technology Summit: “The Value of Healthcare Information Technology”, Oct. 20.

eHealth Initiative – Connecting Communities for Better Health: “The Value of EHR and Healthcare Information Exchange”, June 25.

Virginians Improving Patient Safety and Care Leadership Conference: “Technological Realities When Designing for Quality”, May 26.

Workgroup on Electronic Data Interchange (WEDI): “The Value of IT and EHR: Making the Case”. May 21

A View from the Top, HIMSS: “The Value of Healthcare Information Exchange and Interoperability”. Orlando, FL., Feb. 23.

*2003*

MIC2003: “US Perspectives on Clinical Informatics: The Experience at Partners Healthcare”. Rotterdam, The Netherlands, Nov. 21.

IMIA Primary Care Informatics Symposium: “Primary Care Informatics Research at Partners Healthcare”. Washington, D.C., Nov. 9.

Virginia Health Quality Center Annual Symposium: “Deriving Value from IT: The Quality Connection”. Pentagon City, VA. Oct. 4.

Muller Symposium at University of Chicago Hospitals & Health System: “Clinical Computing”. Chicago, IL. June 9.

*2002*

GE Medical Systems, MedicaLogic Users’ Group Forum: “Defining Quality and Value in HealthCare: What can Medical Informatics Do?”. St. Louis, MO, May 8.

Children’s Hospital Boston Biomedical Informatics Grand Rounds: “Patient Computing in Partners HealthCare System.” Boston, MA, February 25.

*2001*

MedicaLogic/Medscape Users’ Group Forum, Invited Keynote Address: “E-Health and Disease Management, Where is the world going in the 21st Century?” Houston, TX, November 17.

ACMI (American College of Medical Informatics) Annual Debate: “Does national regulatory mandate for provider order entry, to take effect by the end of 2005, portend greater benefit than risk for health care delivery? -- Affirmative.” American Medical Informatics Association Annual Symposium, Washington, D.C., November 7.

*2000*

California Healthcare Information Association/Healthcare Information Management and Systems Society -- Keynote Address: Online Health Records. Newport Beach, CA, September 7.

AMA/Intel Internet in Healthcare, Invited Keynote Address: The Internet in Healthcare: Implications for Physicians and their Patients. Miami, FL, Jan. 29.

*1999*

Oregon Health Sciences University web@ohsu conference, Keynote Address: Internet Health Records: Implications for Healthcare Quality, Service, and Satisfaction. Portland, OR, Oct. 15.

*1998*

Electronic Patient Record in Medical Practice (EPRiMP), Joint Conference of IMIA WG 17, EMD 98, and EUROREC 98 Invited Keynote Address: State of the Market for EMR in the USA. Rotterdam, The Netherlands, Oct. 6-11.

*1993*

IBM Information Systems Conference: Keynote Address: Clinical Information Systems - We're All in this Together. Fresno, CA, Oct. 21.

#### SELECTED OTHER INVITED PRESENTATIONS

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*2006*

American College of Medical Informatics Annual Symposium: "Knowledge Management", Phoenix, AZ, Feb 20.

*2005*

Source Media 6<sup>th</sup> Annual Healthcare Bond Buyer's Conference: "Information Investments: Making Them Pay", Boston, MA, Nov. 14, 2005

World Healthcare Innovations and Technology Congress: "Quality Perspectives: Impact of Healthcare IT", Washington, D.C., November 10, 2005

World Healthcare Innovations and Technology Congress: "IT and Patient Interaction Case Studies: The Partners Patient Gateway", Washington, D.C., November 10, 2005

US New Democrats Coalition Caucus: "The Value of Healthcare Information Exchange and Interoperability", Washington, D.C., July 25.

*2002*

American Medical Directors of Information Systems (AMDIS) Physician-Computer Connection: "Computer-based Provider Order Entry at Partners HealthCare". Ojai, CA, July 22.

Toward and Electronic Patient Record (TEPR) Annual Meeting: “Best Practices for Clinical Transformation: Partners HealthCare”. Seattle, WA. May 13.

Healthcare Information Management and Systems Society Annual Meeting: “Clinical Careers--Making The Leap From Patient Care To Informatics.” Atlanta, GA, January 29.

*2001*

The Clinic Club Fall Conference: “E-Health – Connecting with Patients and Consumers.” Bemidji, MN, September 9.

California Health Information Executives Forum: New Paradigm for Provider-Patient Disease Management: The Shared Digital Health Record. Long Beach, CA, Jan. 19.

*2000*

National Committee on Vital and Health Statistics: Invited Testimony on the Interim Reports Toward a National Health Information Infrastructure and Shaping a Vision for 21st Century Health Statistics. San Francisco, CA, October 30.

Harvard/UCSF Partnerships for Quality Education: Technology As a Wild Card in Transformative Change for Healthcare. La Jolla, CA, October 21.

Merck Pharmaceuticals Managed Care Medical Directors Meeting: A New Paradigm in Shared Provider-Patient Disease Management. Santa Fe, NM, October 20.

Healthcare Marketing and Communications Council: Medical Ethics - Promises and Perils of the Internet in Healthcare. Hoffman-La Roche, Nutley, NJ, October 18.

l'accès au dossier médical (UNPHC): Patient Access to Online Health Records: The Medscape Experience. Paris, France, October 12.

Internet Healthcare Coalition Annual Meeting: Consumer Perceptions of Online EMR: Results from Pilot Study. Las Vegas, NV, October 3.

Future of Healthcare Technology Annual Meeting: Building Electronic Trust with Self Help Tools, and Future of Medical Decision Support and Knowledge Management. MIT Media Lab, Boston, MA, September 26.

The eHealth Colloquium - Harvard University: Clinical Implications of the Healthcare Internet. Boston, MA, August 22.

Bureau of Primary Health Care, HRSA, DHHS -- Quality Management Network Meeting: Current Technology in Healthcare. Vail, CO, July 28.

Association of Medical Directors of Information Systems - Physician/Computer Connection: Online Health Records. Ojai, CA, July 20.

International Patient Safety Forum: Clinical Decision Support: It's Not Just for Your Doctor Anymore. Dallas, TX, June 29.

Association for Health Services Research Annual Meeting: Health Services Research and Informatics: Data, Data Everywhere - Nary a Byte to Study. Los Angeles, CA, June 26.

Stanford University School of Medicine, Section on Medical Informatics, Medical Informatics Short-course: Introduction to Electronic Health Records. Stanford, CA, June 13 and August 14.

American Medical Informatics Association Spring Congress: Practice Profiling: Real Time Clinical Benchmarking at the Point of Care. Boston, MA, May 24.

TEPR2000 (Toward and Electronic Patient Record): Consumer Impressions Using Internet Health Records. San Francisco, CA, May 11.

TEPR2000 (Toward and Electronic Patient Record), The Internet Health Record. San Francisco, CA, May 9.

Healthcare Information Management and Systems Society (HIMSS) Annual Meeting: Journal of Healthcare Information Management Editor's Panel - Clinical Decision Support. Dallas, TX, April 11.

Healthcare Information Management and Systems Society (HIMSS) Annual Meeting: CEO/CIO Roundtable participant. Dallas, TX, April 10.

Institute of the Future Invited Participant - Envisioning eHealthcare Futures. San Francisco, CA, April 6.

Drug Information Association: Online Health Records for Office-based Practice. Duke University, Durham, NC, April 4.

Federal Bureau of Primary Care, Health Research Services Administration: Online Health Records for the Federal Bureau of Primary Care. Washington, DC, March 28.

AMA Leadership Conference Invited Address: The Internet in Healthcare: Implications for Physicians and their Patients. Miami, FL, March 25.

American Association of Allergy, Asthma, and Immunology (AAAAI) Invited Presentation: Medical Informatics and Technology: Where is the Doctor? San Diego, CA, March 6.

Oregon State University, Invited Lecture: Healthcare Information Systems and the Internet: 4th Generation Clinical Computing. Corvallis, OR, Feb. 26.

Agency for Healthcare Research and Quality (AHRQ) invitational meeting: Developing the AHRQ Research Agenda. Washington, DC, Feb. 17.

Privacy, Security, and Confidentiality of Medical Records 2000: HIPAA and Internet Health Records. University of Utah, Salt Lake City, Jan. 24.

1999

Healthcare Open Systems Trials (HOST) Annual Meeting: Internet Health Records. National Institute for Standards and Technology, Gaithersburg, MD, Dec. 15

Pri-Med East Conference: What's important in an EMR system? Harvard Medical School, Boston, MA, Dec. 12.

Radiological Society of North America: Scientific Session - Integrating the Healthcare Enterprise, Consumer-focus, Outreach, Patient-centered Care. Chicago, IL, Dec. 2.

Yale University School of Medicine Department of Medical Informatics Seminar: Internet-based Healthcare Technologies to support Clinical Practice: Research Issues. New Haven, CT, Nov. 22.

American Medical Informatics Association Annual Symposium: Knowledge Engineering for the EMR- From Vocabulary Term, to Encounter, to Report. Washington, D.C., Nov. 6.

American Association of Health Plans Annual Convention: Internet-based Healthcare Services for Physicians. Palm Springs, CA, Oct. 28.

Buffalo Allergy Society First Elliott Middleton, Jr., MD Memorial Lectureship: The Internet in Medicine. Buffalo, NY, Oct. 21.

National Committee on Vital and Health Statistics, Workgroup on Computer-based Patient Records: Data Standards. Washington, D.C., Oct. 14.

MISA/MISPA Conference: EMR and Efficient Management of Outpatient Medical Practice. New York, NY, Oct. 11.

The Clinic Club, Panel Presentation: Overcoming Challenges in Implementing EMR. New Orleans, LA, Oct. 9.

Institute of Medicine, National Academy of Sciences Roundtable: Information Technology and the Quality of Care. Washington, D.C., Sep. 29.

Memorial Care Technology Conference: Visualize the Future. Memorial Care Health System. Long Beach, CA, Sep. 18.

American Medical Association / Intel Internet in Health Day: The Internet and Physicians. Austin, TX, Sep. 17.

Provider-Patient Relationships and the Hospitalist Movement, Annual Meeting of the National Association of Inpatient Physicians: Information Linkages Between Inpatient and Outpatient Physicians. San Francisco, CA, Sep. 11.

The Academic Medicine and Managed Care Forum Panel Presentation: Methods for the Madness: Critical Factors for Deriving Value from Electronic Health Records. Washington, D.C., Jun. 18.

Toward an Electronic Patient Record '99 (TEPR). Panel Coordinator and Presenter: Perspectives on Cost-Benefit for the EMR. Orlando, FL, May 4.

Toward an Electronic Patient Record '99 (TEPR): Linking the Patient and the Provider with the Internet and the EMR. Orlando, FL, May 3.

Toward an Electronic Patient Record '99 (TEPR): Status of the Marketplace for EMR. Orlando, FL, May 3.

Medical Group Management Association (MGMA) Cardiovascular/Thoracic Surgery & Assembly: Office Management with Electronic Medical Records. Orlando, FL, Apr. 19-20.

Healthcare Information and Management Systems Society Annual Conference Hot Topic Panel: Automated Clinical Guidelines. Atlanta, GA, Feb. 24.

Healthcare Information and Management Systems Society Annual Conference panel presentation: The Role of the Computer-based Patient Record in the Healthcare Enterprise. Atlanta, GA, Feb. 22.

American Medical Directors of Information Systems (AMDIS) Mini-conference at Healthcare Information and Management Systems Society Annual Conference: The Electronic Automation of the Practice of Medicine. Atlanta, GA, Feb. 21.

*1998*

Expert testimony delivered to the Workgroup on Computer-based Patient Records of the National Committee on Vital and Health Statistics (NCVHS) regarding implications to Vendors of the Health Insurance Portability and Accountability Act (HIPAA) of 1996. Department of Health and Human Services, Washington, DC, Dec. 8-9.

American Medical Informatics Association - American Academy of Family Practice Mini-conference on Healthcare Informatics panel presentation: I Still Have a Dream (for Medical Informatics). Orlando, FL, Nov. 10-11.

Computer-based Patient Records Institute Fall Meeting panel presentation: What Makes a Good EMR Customer? Orlando, FL, Nov. 6.

Zeneca Pharmaceuticals Healthcare Symposium: Clinical Information Management and Decision Support for Physician Prescribing. West Palm Beach, FL, Oct. 23-24.

Microsoft Healthcare Users Group Windows on Healthcare IV Conference invited presentation: Critical Factors in Selecting and Implementing Electronic Patient Records. Orlando, FL, Oct. 11-14.

Seventh Annual Physician-Computer Connection panel participant: Return on Investments for Ambulatory Practice Information Technology Investments. Ojai, CA, Jul. 22-24.

Medical Group Management Association (MGMA), Southern Chapter Annual Meeting invited presentations: 1. Introduction to Electronic Medical Records for the Office Practice, 2. Deriving Value from the EMR. Orange Beach, AL, Jul. 12-15.



Computer-based Patient Record Institute (CPRI) Seventh Annual Conference invited presentation: Deriving Value from the EMR. Washington, D.C., Jul. 9.

Stanford University School of Medicine, Section on Medical Informatics, faculty for Medical Informatics Short-course: Introduction to Clinical Systems: Practical Issues in Knowledge Engineering for the EMR. Palo Alto, CA, Jun. 15-19.

National Association of Inpatient Physicians First Annual Conference: Information Systems and Data Management for Hospitalists. San Diego, CA, Apr. 1.

Healthcare Information Management Systems Society Annual Conference: Invited Hot Topic panel participant - Implementing CPR (Computer-based Record). Orlando, FL, Feb. 24.

Washington Medical Center Clinical Informatics Lecture Series - Kickoff Address: Introduction to Medical Informatics. Washington, D.C., Jan. 13.

*1997*

First Annual Managed Care Institute: Electronic Medical Records to Support Managed Care. Portland, OR, Nov. 7.

American Society of Nephrology Post-graduate Education Course: Practical Computing for Nephrologists: Computerized Medical Records for Office Practice. San Antonio, TX, Nov. 1.

Shikany Primary Care Day: Introduction to Computer-based Patient Records for Ambulatory Care, and Directing Office Traffic with the EMR. Spokane, WA, Oct. 17.

Andover Working Group Fall Member Conference: Perspectives on Information Architecture and Solutions to Support the Physician. Boston, MA, Oct. 7.

Tenth National Conference on Clinical Computing in Patient Care, Harvard Medical School, Department of Continuing Education, Center for Clinical Computing: Office Systems from a Vendor's Perspective. Boston, MA, Sep. 26.

Minnesota Health Data Institute: Standards for Ambulatory Practice Clinical Information. Minneapolis, MN, Sep. 19.

Oregon Health Sciences University Continuing Medical Education Program: Computer-based Patient Records for Office-based Practice: Implementing the Electronic Medical Record. Portland, OR, Sep. 6.

Sixth Annual Physician-Computer Connection: Ambulatory Care Information Systems - Panel Discussion. Ojai, CA, Jul. 16.

Ninth National Conference on Clinical Computing in Patient Care: Capturing the Clinical Encounter. Harvard Medical School, Department of Continuing Education, Center for Clinical Computing: A Marketplace perspective: Status of the electronic patient record. San Francisco, CA, Apr. 18.

MediSpan Executive Visioning Consultant's Meeting, Panelist. Indianapolis, IN, Mar. 31.

The Sixth Annual National Managed Health Care Congress - WEST: Electronic Medical Records - Successfully Moving Toward Life-long Data Utilization. Palm Springs, CA, Jan. 31.

*1996*

The Sixth Annual Northeast Managed Health Care Congress: Essential Information System Requirements to Make the Longitudinal Patient Record a Reality. New York, NY, Nov. 14.

Information Systems Caucus Western Conference of Prepaid Medical Service Plans: The Role of Clinical Information Software in the Integrated Delivery System. Park City, UT, Jul. 15.

American College of Physicians Annual Session: State of the Art Lecture: Diagnostic Decision Support. San Francisco, CA, Apr. 22.

Stanford University School of Medicine, Section on Medical Informatics Colloquium - Electronic Medical Records: What's real and what's not. Stanford, CA, May 12.

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INTERNET and the Practicing Physician. Healthcare Financial Management Association. Berkeley, CA, Aug. 10.

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#### MANUSCRIPTS IN PREPARATION

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