# LYLE L. BERKOWITZ, MD, FACP, FHIMSS

Physician, Informaticist, Innovator, Entrepreneur www.DrLyle.com

# **EXECUTIVE SUMMARY**



Dr. Lyle Berkowitz is a primary care physician, health system executive and entrepreneur who has worked in the field of medical informatics and healthcare innovation throughout his professional career. He has a passion to improve the healthcare system by creating and scaling real world solutions which improve the quality and efficiency of care for patients and physicians alike. He has been listed as one of HealthLeader's "Twenty People Who Make

Healthcare Better", Healthspottr's Top 100 Healthcare Innovators, and Modern Healthcare's "Top 25 Clinical Informaticists". His "Change Doctor" blog has been voted one of the Top 50 Healthcare IT Blogs, he's been named one of the top ten "Healthcare Innovation Thought Leaders to Follow on Twitter", and he was a winner of the Mayo Clinic's Center for Innovation's iSpot Competition for "Ideas that Will Transform Healthcare" (an idea that evolved into healthfinch... *The Doctor Happiness Company*).

### **BIOGRAPHY**

Lyle Berkowitz, MD, FACP, FHIMSS is Chief Medical Officer and EVP of Product for MDLIVE, as well as President of the MDLIVE Medical Group, one of the largest virtual primary care groups in the nation. Previously, Dr. Berkowitz had a long history of leading healthcare IT and innovation for Northwestern Medicine, where his mission was to find, create, pilot and spread innovative technologies, processes and business models that improved the value and experience of care delivered. Projects included primary care redesign, telehealth strategy, population health, complex patient care, medical homes, executive health, provider workflow efficiencies and transforming the digital patient experience. Leadership roles have ranged from managing both Cerner and Epic EMR rollouts, to chairing the Complex Patient Workgroup and the EMR Innovations Committee, as well as helping head up Virtual Care strategies.

Dr. Berkowitz is additionally the founder and executive director of the Szollosi Healthcare Innovation Program (SHIP), a philanthropically endowed program housed within Northwestern Medicine. The SHIP's mission is to use creative thinking and diverse technologies to produce a better healthcare experience for patients, physicians and others associated with their care. Projects have ranged from setting up care coordination processes to creating a system to provide free iPads to hospitalized cancer patients.

Dr. Berkowitz currently sits on the boards of three healthcare IT companies, has co-founded several companies in the healthcare IT and innovation space, has served as Chief Medical Officer for two publicly traded companies and advisor to many more. As president of his own healthcare IT consulting firm, he also has a successful track record as an independent consultant to a wide variety of investors, hospital organizations, pharmaceutical companies, healthcare IT vendors and startups.

Dr. Berkowitz is a nationally recognized speaker and author, with a focus on healthcare innovation and information technologies. Dr. Berkowitz's book, <u>Innovation with Information Technology in Healthcare (2013)</u>, was the first of its kind to bring together the concepts of innovation with the realities of healthcare IT. He serves on the Governance Board of the Innovation Learning Network; the Advisory Board of the Association of Medical Directors of Information Systems (AMDIS), and the Editorial Board of *Clinical Innovation + Technology*. Dr. Berkowitz is an Associate Professor of Clinical Medicine in the Feinberg School of Medicine at Northwestern University, has achieved Fellowship rank in both the Healthcare Information Management Systems Society (HIMSS) and the American College of Physicians (ACP). He graduated with a Biomedical Engineering degree from Penn, and received his MD from the University of Illinois College of Medicine.

# Lyle L. Berkowitz, MD, FACP, FHIMSS

### **CURRENT & RECENT POSITIONS**

# • CMO and EVP Product, MDLIVE, Inc.; President, MDLIVE Medical Group (2018 – Present)

Responsible for the operations and quality of MDLIVE's growing provider network, as well as overseeing product strategy to both evolve and expand the current offerings.

### • Board Member, Oneview Healthcare (2016 – Present)

Serve as a Board Member for this publicly traded company which has a patient engagement software platform for hospitals and long term care facilities. Created and chairs the Clinical Value Committee, and serves as a Special Advisor to the CEO on Innovation.

# • Founder, Chairman and Chief Medical Officer, Healthfinch (2011 – Present)

Co-founded a Healthcare IT company which builds workflow automation software to make life easier for physicians and better for patients. Responsibilities include executive management, recruiting the Board and key employees, running Board meetings, raising capital, setting comp, and being intimately involved in strategic vision, product design, and business development. Healthfinch was the winner of the Allscripts Grand Prize for "Best App" in 2013 and currently processes over 2 million clinical tasks a year. Series A funded 12/15. Total fund raise of over \$10M.

# Advisor, Abundant Venture Partners (2011 – Present)

Support a Chicago based healthcare innovation incubator and investment holding company to find, build, evolve and scale digital health solutions across large healthcare organizations.

# • Founder and Director, Szollosi Healthcare Innovation Program (2007 – Present)

Founder and leader of this non-profit, philanthropically endowed program, with a mission to use creative thinking and diverse technologies to produce a better healthcare experience for patients, physicians and other medical providers. This program combines process improvement with product development to develop and implement real world solutions for healthcare users at Northwestern and beyond. Has raised over \$750,000 in philanthropic donations to date.

# • President and CEO, Back 9 Healthcare Consulting (1996 – Present)

Founder and leader of an independent consulting firm that works with healthcare delivery systems, pharmaceutical companies, IT vendors and other healthcare organizations. Projects involve Healthcare Innovation, Internet and eBusiness Strategy & Tactics; Electronic Medical Records; Physician & Consumer Health Portals; Organizational Change Management; and Physician Adoption Strategies. Clients have included large healthcare providers, HIT vendors, medical device manufacturers and pharmaceutical companies, as well as a variety of venture capital and investment companies.

#### • Director of Innovation, Northwestern Memorial HealthCare System (2012 – 2017)

Identify, pilot and spread innovative technologies, processes and business models across the NM system, with a special focus on population health, telehealth, workflow efficiencies and digital technologies, with a goal to increase value and improve both the patient and provider experience. Major accomplishments include creating a care coordination infrastructure now in use by over 1200 physicians, starting and expanding Northwestern's BCBS Intensive Medical Home project, and launching multiple ""innovation" projects across the campus that supported both inpatient and outpatient care. Served on the Project One Committee (the system's EMR unification process) as well as the Advisory Board for NU's Center for Behavioral Intervention Technologies (CBITs).

#### • Medical Director of IT & Innovation, NMPG (1995 – 2012)

Northwestern Memorial Physician Group (NMPG) was a hospital owned primary care group which started in 1995 and grew to become the largest primary care group in Chicago before merging with other groups to form NMG in 2014. Highlights: Overseeing the implementation and optimization of a multi-million dollar ambulatory Electronic Medical Record system and integrated secure patient portal. Exploring, developing and spreading innovative new primary care processes and healthcare information technologies to improve quality, efficiency and value for patients, physicians and payors. Deep Cerner and Epic experience.

# • Primary Care Physician, Northwestern Medicine (1995 – 2017)

Twenty years of experience as an internal medicine physician. Helped found Northwestern Memorial Physician's Group (NMPG) in 1995. Worked in various executive and operational roles in growing to over 200 physicians, which merged with multiple other medical groups on campus to create the 1200 physician Northwestern Medical Group (NMG) in 2014. Served as Medical Director for Northwestern's Bucktown Medical Clinic, a consistent winner of patient satisfaction awards. This office served as the hub of innovative new technologies and practices, including being the first Northwestern clinic to go fully paperless on an EMR in 2002, the first to go live with an electronic patient portal (2005), the developmental site for a secure sign in/out hardware device, the creation of various care coordination tools, and more.

#### TOP ACCOMPLISHMENTS AT NORTHWESTERN

- Created Northwestern Medicine's first Innovation program in 2007, and later helped evolve it to the system level
  Department of Innovation in 2016, overseeing multiple projects across all regions. Early wins included the
  implementation of a service to better support second opinions, multiple telehealth initiatives, several workflow
  automation projects, creation of an Innovation Award, and the kickoff for a dedicated NM mobile app.
- Oversaw the creation and growth of the IT systems and innovative culture which helped a small group of doctors grow into the largest and most successful primary care group in the city of Chicago over two decades.
- Guided NMPG's early adoption of electronic medical records, going paperless in 2002 with Cerner's ambulatory care EMR system. Then was responsible for the clinical conversion of NMPG's providers from Cerner to Epic in 2014. Additionally involved with converting 100+ other PCPs to Epic in 2014-2015.
- Launched NMPG's patient portal by implementing the RelayHealth system in 2006 and achieving record adoption over 60% of patients. Later converted to Epic's MyChart system.
- Chaired and active member in multiple IT, EMR and Population Health Committees. Lead early exploration of multiple hot topics (e.g. workflow efficiency, virtual care, complex patient care)
- Helped design, implement and run Northwestern's world-class Executive Health program (launched 2005).
- Created a care coordination infrastructure that has improved quality for patients, efficiency for physicians and staff, while also increasing revenue for the system. Examples include a robust referral authorization service, a Clinical Pathway System, and major rehaul of the system-wide Mammogram ordering process
- Management of NMG's Intensive Medical Home (IMH) Program with BCBS. Helped negotiate contract enhancements to increase PMPM payments and allow for greater flexibility in care management.
- Created NMPG's physician Intranet in 2005; fully rebuilt and launched system-wide in 2015.

# OTHER RELEVANT PROFESSIONAL EXPERIENCE

#### • Co-Founder and Chief Medical Officer, Rise Health (2008 – 2011)

Co-founded a company which provides innovative healthcare services and technologies to help healthcare organizations prepare for population health management. Helped create vision and strategy, assemble an executive management team, enhance business development, and secure over \$12 million in series A funding. Sold to Best Doctors in Sept, 2014.

#### • Senior Healthcare Strategist, Tribune Company (2009 – 2010)

Adviser to one of the largest multimedia companies in the world on the creation of their healthcare strategy, including high level vision, partnerships, acquisitions, product development, and business models. Created and starred in the "High Tech Doc" series for print, web and TV.

#### • Chief Medical Officer, Adivi (2001-2003)

Founded the Healthcare and Pharmaceutical Practice for this Chicago-based E-business consulting company. Provided strategic corporate vision, supported business development and client strategy.

# • Chief Medical Officer, Lifestart (2001-2002)

Supported LifeStart's management of multiple health clubs and wellness programs in the Midwest. Oversaw testing protocols and assisted in developing effective preventive health strategies for clients (large employers). Provided strategic vision for use of the Internet to support and expand LifeStart's services via a new venture, LifeStart Online. Sold to Healthways in 2002.

# • Chief Medical Officer, Proxicom (1999-2001)

Created the Healthcare and Pharmaceutical Practice for this publicly-traded global E-business consulting company. Helped grow Healthcare practice revenue to almost \$2 million a quarter. Worked with clients such as Astra-Zeneca, Bayer, BestSelf.com, Confer, JNJ, TAP Pharmaceuticals and Wellpoint. Worked with alliance partners such as Microsoft, Intel and Sun. Responsibilities included client strategy, business development, alliance relationships, and internal and external thought leadership.

#### • Chief Medical Officer, Advanced Health Technologies (1997-1999)

Provided strategic vision for product and business development at this publicly-traded healthcare information technology vendor. Helped to evolve and expand product lines consisting of an EMR system that included e-prescribing, lab ordering, results reporting, E&M coding and patient history documentation. Initiated and oversaw the creation of the world's first Internet-based electronic prescription writer. Devised implementation strategies and plans to ensure physician adoption of these systems.

# • Founder, CEO and President, ApolloHealth (1999)

Co-founded a company which focused on Internet-based data collection and analysis. Created initial concept, recruited key executives, wrote majority of the business plan, and helped establish a formal relationship with a highly regarded research organization (the RAND Corporation).

# CLINICAL EXPERIENCE, PROFESSORIAL APPOINTMENTS AND LICENSURE

- Twenty years experience as a primary care physician at Northwestern Memorial Hospital
- Associate Professor of Clinical Medicine, Northwestern University Feinberg School of Medicine
- Board-Certified in Internal Medicine, National Board of Medical Examiners
- Medical License, State of Illinois

# **BOARD ACTIVITY**

- Chairman of the Board, healthfinch
- Member of the Board, Oneview Healthcare
- Member of the Board, Intelligent Locations
- Governance Board, Innovation Learning Network (ILN)
- Editorial Board, Clinical Innovation and Technology
- Editorial Board, Healthcare Innovation News
- Advisory Board, Northwestern U's Center for Behavioral Intervention Technologies (CBITs)
- Advisory Board, Association of Medical Directors of Information Systems (AMDIS)
- Advisory Board, Roche Pharmaceutical's Personalized Health Care Group
- Advisory Board, HISTalk
- Clinical Advisory Board, CIMIT's POCT Research Center in Primary Care
- Scientific Advisory Board, Chicago Life Sciences Consortium
- National Steering Committee, Abundant Ventures Innovation Accelerator (AVIA)
- Past Non-Profit Boards: American Health Information Management Association (AHIMA) Foundation (Board Member, 2009-2012), Wing & Groove Theatre Company (Board Member and Vice-President 1998-2007), American Brain Tumor Association Junior Board (Co-Founder and Chairman, 1994-1996)
- Past Editorial Boards: Healthcare Informatics (2000-2012), Modern Physician (Crain Publications), e.MD (McGraw-Hill Publications), EHR Alert Magazine, Healthcare Innovation News
- Past Advisory Boards: ABC News Medical Unit, Global Medical Microtechnology Association (GMMA), Revolution Health, eHealthcare World, Healthcare Informatics Expo, Medical.com, "The Internet's Impact on the Healthcare Sector" (a joint RAND-California Healthcare Foundation research project), Illinois Institute of Technology (IIT) Health Management Program, The Council of Healthcare Advisors, Wiley & Sons' Health Sciences Division, Institute for Health Technology Transformation (iHT2).

#### PROFESSIONAL ORGANIZATIONS

- American College of Physicians (ACP)
  - Fellowship Status awarded in 2011
- Association of Medical Directors of Information Systems (AMDIS)
  - Advisory Board 2000 Present
  - Annual Symposium Planning Committee: 2014, 2015
- Healthcare Information and Management Systems Society (HIMSS)
  - Fellowship Status awarded in 2007
  - Annual Conference Presenter 1999-2004, 2006-2009, 2011-2015
  - Annual Conference Reviewer and/or Moderator 2005, 2007, 2010, 2011, 2015, 2016
  - Physicians' IT Symposium Planning Committee: 2010, 2012, 2013
  - Task forces: Innovation, EHR Usability, EHR Implementation, Barriers to IT in Ambulatory Care

#### **GOVERNMENT ACTIVITY**

- Illinois Governor's Office of Health Innovation and Transformation (2014-2015)
  - o Care Coordination Subcommittee, Alliance for Health Data and Technology Work Group
- Healthcare Task Force, Illinois Workforce Improvement Board (2013-2014)

- Helped craft the overall strategy around promoting a future where IT empowered paramedical personnel will help make physicians more efficient. Influence new legislation to promote the formalization of Community Healthcare Workers
- Invited speaker to Federal Government meetings and workshops:
  - o HHS/ONC Hearings on EHRs and Meaningful Use (January, 2011)
  - o NIST Workshop on Improving the Usability of Electronic Health Records (June, 2011)
  - o AHRQ Expert panel: Emerging Healthcare Technology Horizon Scanning (June, 2011)
  - ONC Task Force on increasing Healthcare IT Innovation (August, 2011)

#### MEDIA PRESENCE

- Editorial Board and contributor for **Clinical Innovation** + **Technology**, a TriMedia print and online magazine (2013-present). Editor at Large in 2013.
- Editorial Board and contributor for **Healthcare Innovation News.**
- Author of "**The Change Doctor**", voted one of the Top 50 Healthcare IT Blogs (2010)... sharing thoughts, anecdotes and experiences on the subjects of Healthcare IT and Healthcare Innovation.
- Named one of the top "HIT and Healthcare Experts You Should Follow on Twitter" (2016)
- Named one of the top ten "Healthcare Innovation Thought Leaders to Follow on Twitter" (2014)
- Regular Contributor to the infamous **HISTalk blog**.
- Creator of "The High Tech Doc", a multi-media series advising consumers how to use today's information technology to better manage their health (2009-2010).

#### THOUGHT LEADERSHIP

- Editor and Author of "<u>Innovating with Information Technologies in Healthcare</u>", a first of its kind book exploring the intersection of healthcare IT and innovation. Published, Springer, 2013.
- Extensive experience as an accomplished thought leader, addressing topics such as EMR usability, Healthcare Innovation, Strategic use of healthcare IT and Doctor Happiness. Additionally has written, spoken, and mentored on the role and importance of physician leadership in the field of healthcare information technology.
- An active speaker, moderator and planner for national meetings, including multiple presentations for HIMSS, AMDIS, iHT2, TEPR (Towards an Electronic Patient Record), NMHCC (National Managed Healthcare Congress), eHealthcareWorld, World Healthcare Congress and the Healthcare Informatics Expo & Conference.
- The author of multiple articles in periodicals such as Healthcare Informatics, Modern Physician, Physicians and Computers, e.MD, Essential Informatics, Pharmaceutical Executive, Product Management Today, The Journal of Medical Practice Management and TeleHealth.
- Contributing author to books about Electronic Medical Records published by both the American College of Physicians and the Healthcare Information Management Systems Society.
- Lead teacher for the "Organization and Economics of Medicine" course for medical students, Feinberg School of Medicine at Northwestern University.
- Lead teacher for "Delivery of Optimal Care" course for medical students, and author of the section on "Disruptive Forces in Healthcare".
- Guest Lecturer at the Illinois Institute of Technology (IIT), Stuart Graduate School of Business.
- Advisor to public policy entities such as Health Affairs and the Hope Street Group.

# EDUCATION AND RESEARCH EXPERIENCE

- Residency training in Internal Medicine at Northwestern Memorial Hospital (1992-1995)
  - Senior Resident research projects included a critical analysis of medical record workflow processes and the design and evaluation of a computer program to retrieve and organize clinically relevant data from an IDX-based administrative database.
  - Served on several computer and technology related committees.
- Research sub-fellowship, The Decision Systems Group at Harvard Medical School (1991)
  - Medical informatics research sponsored by a grant from the NLM (National Library of Medicine).
- Medical degree from the University of Illinois at Chicago College of Medicine (1988-1992)
  - Finalist for the William Grove Award for Outstanding Medical Student.
  - Performed medical informatics research, oversaw creation and management of the medical student computer lab, served on multiple computer-focused committees and helped to develop the medical informatics research curriculum for the medical school.
- BSE, Biomedical Engineering, The University of Pennsylvania (1984-1988)
  - Benjamin Franklin Scholar (1984-1988)
  - Winner of both the Nassau Fund Research Grant for outstanding research proposal (1987) and the Rose Foundation Award for outstanding research (1988)

#### SPECIAL INTERESTS

Physician consultant to a wide variety of movie, television and theatrical productions, including Chicago Fire, Chicago PD, Chicago Med, Chicago Justice, Empire, Chiraq, Shameless, Sense8, Unexpected, Divergent, Sirens, Underemployed, Sinister 2, Drinking Buddies, Crisis, Betrayal, Mind Games, Jupiter Ascending, Man of Steel, Transformers 3 & 4, Boss, Playboy Club, The Dilemma, Public Enemies, Wanted, The Beast, A Nightmare on Elm St., Nothing Like the Holidays, The Unborn, The Jamie Foxx Tour, The Dark Knight, Batman Begins, Stranger than Fiction, Road to Perdition, My Best Friend's Wedding, Barbershop I and II, Soul Food, Ocean's 11 & 12, The Express, Quebec, The Weatherman, Ice Harvest, What Women Want, Chain Reaction, The Day of the Jackal, Home Alone III, Hellcab, Payback, US Marshals, Hoods, Stir of Echoes, Message in a Bottle, Lord of the Dance, Streetcar Named Desire, Prison Break, Early Edition, Cupid, Save the Last Dance, ER, The Joan Cusack Show, Real World Chicago, Starting Over, The Producers, The Oprah Show, and Million Dollar Quartet.

#### REFERENCES

• Available upon Request

# RELEVANT PUBLICATIONS & PRESENTATIONS

Berkowitz LL. How Automating and Virtualizing the Hell Out of Healthcare Is the Only Way to Save It. The Health Analytics Summit. Sept 14, 2018.

Berkowitz LL. Making an Impact: Leveraging a Clinical Background to Develop Meaningful Innovation. Health:Further Conference. Aug 27, 2018.

Berkowitz LL. Healthcare Innovation. Becker's Health IT + Clinical Leadership Conference. May 10, 2018.

Berkowitz LL. The Future of Healthcare. HLTH Annual Conference, May 9, 2018.

Alexander S, Berkowitz LL, Gamble M, May J. Innovation and Information Technology. Becker's Annual Healthcare Conference, April 12, 2018.

Berkowitz LL, Desai K, Thornberry W. Health Innovation Roundtable. Society of Teachers of Family Medicine Conference on Practice Improvement. Dec 2, 2017.

Berkowitz LL, Collens S, Shah S, Van Winkle B. Evidence Based Digital Health In Practice - Prioritize Tech Investment for Impact. HealthImpact Chicago. Nov 16, 2017.

Berkowitz LL, Conger M, Cornue C, Dunn T, Evans J, Wainwright L. Closing General Session: High Impact Change – Stretching our Minds and Inventing our Futures. Mercy Health Systems CEO Annual Leadership Retreat. September 11, 2017.

Berkowitz LL, At the Intersection of Innovation: Perspective from a Physician, Entrepreneur, and Health System Executive - Fireside Chat with Neil Patel. Healthbox Fall Conference. October 10, 2017.

Berkowitz LL. Transformative Times in Healthcare: How Innovation and Disruption Can Save Your System. Keynote Address, Mercy Health Network Leadership Advance. Sept 10, 2017.

Berkowitz LL. Driving Transformative Care Through Technology. Keynote Address, CDW-Intel Healthcare Advisory Board Meeting. Aug 31, 2017.

Berkowitz LL, Honken S, Sudow T and Dunn T. What Determines Which Digital Health Technologies Hospitals Will Embrace. MedCity INVEST. May 18, 2017.

Berkowitz LL. Healthcare 2027: How Telehealth is the Key to Saving Healthcare. Australian Telehealth Conference 2017. April 28 2017.

Berkowitz LL and Kopetsky E. Innovation and Information Technology. Becker's Hospital Review. April 18, 2017.

Berkowitz LL, Gridley M, Karam C, Sotos J. Artificial Intelligence Systems in Medicine: Servants, Colleagues or Overlords? Becker's Hospital Review. April 18, 2017.

Berkowitz LL. Aligning your Startup Vision with the Reality of Healthcare Systems. Matter Startup Lecture Series. April 14, 2017

Berkowitz LL, Claud D, Cordes and Steltenkamp C. Provider Perspectives on Technology Adoption. HIMSS 2017 Venture+ Forum. Feb 19, 2017.

Berkowitz LL. Innovation Intersections: Lessons Learned from a Physician, Entrepreneur and System Executive. Healthbox Innovation Summit. Nov 10, 2016.

Berkowitz LL, Feldstein J, Portillo M. Strategies for Successful Care Model Re-Design to Improve Population Health Management. 2016 Population Health Management Congress for Health Plans and Hospitals. Sept 30, 2016.

Berkowitz LL. Using IT to Improve Doctor Happiness! Becker's Hospital Review (7th Annual Meeting). April 30, 2016.

Berkowitz LL. rEvolution Outlook: Telehealth. Health Evolution Summit. April 15, 2016.

Berkowitz LL, Hwang J, Ellenberger M, Benjamin R, Jordan N. Health: State of the industry. Microsoft Envision Conference. April 5, 2016.

Berkowitz LL. Keynote Presentation: The Future of Healthcare: It's Time to Innovate. MGMA/AMA Collaborate in Practice Conference. March 22, 2016.

Berkowitz LL (Moderator). Driving Value from Technology. HIMSS Physician Symposium. February 29, 2016.

Berkowitz LL, Beken L, Lombard D. Innovations in Health Care Delivery: From Idea to Reality for Innovators. Peds 2040 Innovation: Trends and Innovations for the Next 25 Years. January 6, 2016.

Berkowitz LL. Keynote Presentation: Healthcare Innovation - Leading to Success. Medical University of South Carolina (MUSC) Leadership Symposium. December 17. 2015.

Berkowitz LL, Sinsky, C. Practice Transformation: Optimizing IT for Doctor Happiness. American College of Physicians (ACP) Illinois Scientific Meeting. November 13, 2015.

Berkowitz LL. Keynote Presentation: Innovation: An Opportunity for Health IT Today and in the Future. College of Healthcare Information Management Executives (CHIME) Annual AEHIX Fall Forum. Oct 8, 2015.

Hagland M, Berkowitz LL, Kaelber D, Nelson H. An Analytics-Driven Approach to Population Health Management. iHT<sup>2</sup> Health IT Summit in Chicago. Oct 6, 2015.

Berkowitz LL. Developing, Testing, & Deploying New Technologies for an Improved Experience. Health 2.0 Innovate Smarter Chicago Roundtable. Sept 17, 2015.

Berkowitz LL. Extreme Problem Oriented Charting: Twilight Zone or Reality? Epic User Group Meeting (UGM). Aug 31, 2015.

Berkowitz LL and Longhurst C. Deriving Value from Healthcare Information Technology (Moderators). The Association of Medical Directors of Information Systems (AMDIS) Annual Physician-Computer Symposium. June 25, 2015.

Berkowitz LL, Ury A. Major System Transformation: Post-EHR platforms. National Healthcare Innovation Summit. June 17, 2015.

Berkowitz LL. Keynote Presentation: Smarter and More Usable Healthcare IT is the Answer to Bringing the Joy Back into Medicine. Joy of Medicine Challenge. June 8, 2015.

Berkowitz LL. Sparking Innovation through Health Information Technology. Becker's Hospital Review 6th Annual Meeting, May 8, 2015.

Coye M, Berkowitz LL, Blaufuss C, Dowling C. Care Delivery Innovation. Health Evolution Summit. May 1, 2015.

Berkowitz LL, Spurrier B, Jensen E. Innovation in Action: A Deep Dive into Patient Experience. HX360 Annual Conference, April 14, 2015.

Berkowitz LL. Leveraging IT to Eliminate Waste and Achieve Workflow Efficiencies. iHT<sup>2</sup> Webinar. Dec 4, 2014.

Blum M, Bria W, Karson T, Berkowitz LL, Liebovitz, D. Using the EMR to Transform Research and Clinical Care Delivery: The Power of Innovation in Healthcare. AHA Scientific Sessions Conference - Global Congress on Big Data. November 16, 2014.

Berkowitz LL. Keynote: Innovating Towards The Future of Healthcare. The Association of Medical Directors of Information Systems (AMDIS) Fall Symposium. October 21, 2014.

Berkowitz LL. Keynote: Hacking our Way to Innovation! Care Innovation Patient Engagement Hackfest. September 21, 2014.

Berkowitz LL. Bringing Healthcare to Consumers and Engaging Them in the Process. The 2014 Accountable Care and Health IT Strategies Summit, September 18, 2014.

Li Y, Berkowitz LL, Noskin G, Mehrotra S. Detection of Patient's Bed Statuses in 3D Using A Microsoft Kinect. 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC). Aug 26, 2014.

Berkowitz LL. CMIOs and Innovation. The Association of Medical Directors of Information Systems (AMDIS) Annual Meeting. June 28, 2014.

Gibson D, Shoolin J, Nilsen E, Berkowitz LL. The Evolution of the CMIO's Role. The Association of Medical Directors of Information Systems (AMDIS) Annual Meeting. June 28, 2014.

Berkowitz LL. The Healing Edge: Where Innovation Meets Information Technology. Scottsdale Institute Webinar. June 12, 2014.

Hagland M, Berkowitz LL, Estes B, Saldana L, Valitchka M, Hamdorf J. Trends and New Developments Transforming Health Care. iHT<sup>2</sup> Health IT Summit. Chicago. June 10, 2014.

Berkowitz LL. Keynote. The Power of Innovation in Healthcare: Stories from the Healing Edge. Stryker Annual Innovation Conference. June 4, 2014.

Berkowitz LL. Healthcare IT and Innovation for Today's CMIO. Chicago Medical Informatics Organization. March 10, 2014.

Berkowitz LL. Keynote. Innovating in Today's World of Healthcare IT. National Healthcare CMO/CMIO Summit. March 6, 2014.

Berkowitz LL. Keynote: The Challenges and Promise: Innovation in Healthcare. HIMSS Innovation Symposium (Health IT Innovation: From Concept to Results). February 23, 2014.

Berkowitz LL. The Power of Designing for Doctor Happiness. HIMSS Silicon Valley Innovation Showcase: The Physician's Perspective on Innovation in Healthcare. January 16, 2014.

Berkowitz LL. The Healing Edge: Where Innovation Meets Information Technology. Northwestern University Master of Science in Medical Informatics Webinar. December 18, 2013.

Berkowitz LL. The Power of Doctor Happiness: Why the Ideal Patient Experience Needs to Start with the Ideal Provider Experience. HISTalk Webinar. December 17, 2013.

Berkowitz LL. The Healing Edge: Where Innovation Meets Information Technology. The Connecticut Association for Healthcare at Home Annual Meeting & Expo. November 20, 2013.

Berkowitz LL, Vidula MK, Wadhwani A, Roberts K. Use of a Once-Daily NSAID in Treatment of Cyclic Vomiting Syndrome. J Gen Intern Med. 2013. 10.1007/s11606-013-2624-9.

Berkowitz LL. The Doctor Happiness Company. Entrepreneurship and Innovation in Healthcare Lecture. Rush University. October 22, 2013.

Berkowitz LL. Why The Ideal Consumer Experience Needs to Start with the Ideal Provider Experience. The Well Conference. October 22, 2013.

Berkowitz LL. Innovation with Information Technologies in Healthcare: An Overview. Guest Lecturer. Health Care Management, Technology and Innovation. Illinois Institute of Technology, Stuart School of Business. October 9, 2013.

Berkowitz LL, Ernest O, Grossman R. Best Collaborative Approaches to Population Health Management through Improved Quality of Care and Reduced Costs. 2013 Congress on Population Health Management for Health Plans and Hospitals. September 23, 2013.

Berkowitz LL. Healthy Disruptions: Care Innovations that Make Sense. Children's Hospital Association (CHA) Executive Forum. September 10, 2013.

Berkowitz LL. The Healing Edge: Where Healthcare Innovation Meets Information Technology. Hoosier Healthcare Innovation Challenge. July 12, 2013.

Berkowitz LL, Casey JT, et al. A Protocol-based, EMR-enabled Care Coordination System Improves the Timeliness, Efficiency, and Quality of Care for Patients with Hematuria. The Journal of Urology. July, 2013.

Berkowitz LL. Defining Healthcare Innovation. Clinical Innovation + Technology. June 25, 2013.

Berkowitz LL, Carleton PF, Fried N, Moerer J. Established Innovators -- Critical Success Factors. National Healthcare Innovation Summit. June 11, 2013.

Berkowitz LL, Makoul G, Rosin R, Spurrier B, Temes P, Coye MJ. Bringing an Innovation Center to Life: Lessons from New and Established Centers. National Healthcare Innovation Summit. June 10, 2013.

Berkowitz LL. The Hat Trick: Physician + Informatics + Innovation. Clinical Innovation + Technology. May 23, 2013.

Berkowitz LL. Do the Easy First. Clinical Innovation + Technology. April 24, 2013.

Berkowitz LL. The Healing Edge: Where Innovation Meets Information Technology. Keynote Presentation, Telehealthcare Leaders Forum. April 18, 2013.

Berkowitz LL. Population Health or Bust! Clinical Innovation + Technology. April 1, 2013.

Berkowitz LL. Innovation in Primary Care and Complex Patients. Institute for Healthcare Improvement (IHI) Webinar. February 21, 2013.

Berkowitz LL. The HIT Productivity Paradox — It's Gonna Be OK! HISTalk Blog. February 21, 2013.

Berkowitz LL. The Healing Edge: At the Intersection of Innovative Thinking and HIT. Clinical Innovation + Technology. February 3, 2013.

Berkowitz LL. In Defense of Copy Forward. HISTalk Blog. January 28, 2013.

Berkowitz LL. We Don't Have a Shortage of PCPs, We Have a Shortage of Using Them Efficiently. Clinical Innovation + Technology. January 3, 2013.

Berkowitz LL. "The Inflection Navigator." <u>Innovation with Information Technologies in Healthcare</u>, Ed. Berkowitz LL and McCarthy C. First Edition. London: Springer Publishing, 2013.

Berkowitz LL and McCarthy C. Editors. <u>Innovation with Information Technologies in Healthcare</u>. London: Springer Publishing, 2013.

Berkowitz LL. "The Healing Edge: Where Innovation Meets Information Technology". HIMSS Innovation Community. Webinar. December 14, 2012.

Berkowitz LL. Keynote: "The Healing Edge: The Power of Innovating with HIT". iHT<sup>2</sup> Health IT Summit. Austin. December 5, 2012.

Berkowitz LL, Bardhan I, Dollar J, Phillips B. "Health Care Intelligence Panel: Quality, Safety & Performance Analysis". iHT<sup>2</sup> Health IT Summit. Austin. December 5, 2012.

Berkowitz LL and Nyman M. Healthcare Technology and Innovation. MIT Enterprise Forum. November 12, 2012.

Berkowitz LL. Creating Effective Care Teams. Clinical Care Innovations Safety Net Innovation Network Meeting. November 7, 2012.

Berkowitz LL and Landa H. Using Clinical Informatics to Improve System Performance. Modern Healthcare Virtual Conference & Expo. October 16, 2012.

Berkowitz LL. Breaking Barriers: Transformations in Physician Engagement. Catalyzing Health Technology Innovation: Opportunities to Breakthroughs. Health 2.0. Chicago. September. 28, 2012.

Berkowitz LL, Ahier B, Burzynski M. How EHRs can propel your hospital toward Meaningful Use and beyond. FierceHealth IT Webinar. September 13, 2012.

Berkowitz LL. The Healing Edge: HIT and Innovation. The Association of Medical Directors of Information Systems (AMDIS) Annual Meeting. June 28, 2012.

Berkowitz LL. How Doctors are Paid, Evaluated, and Incentivized... and Why That Is Important for Healthcare IT Entrepreneurs. Rock Health: Healthcare Boot Camp. June 2, 2012.

Berkowitz LL. Designing Healthcare: HIT and Design Theory. Segal Design Institute Seminar. May 3, 2012.

Berkowitz LL. Innovating with Care Coordination in Today's World. Scottsdale Institute Webinar. March 8, 2012.

Berkowitz LL and Lewis G. What is the Role of the Community Pharmacy within the Medical Home? Medical Home News. March, 2012: 4 (3): 1-7.

Berkowitz LL and Duncan I. Innovative Care Delivery Models: Pharmacy & Health Systems Collaborations. Population Health and Care Coordination Colloquium. February 28, 2012.

Berkowitz LL. How to Create a Care Coordination Team using Spare Parts. Healthcare Information Management Systems Society (HIMSS) Annual Conference. February 23, 2012.

Berkowitz LL. The Future of HIT: Innovative uses of EMRs, TeleHealth and Personal Health Devices. Healthcare Information Management Systems Society (HIMSS) Annual Conference. February 20, 2012.

Podcast: Dr. Lyle Berkowitz discusses growing role of clinical informatics. Modern Healthcare. November 14, 2011. http://www.modernhealthcare.com/article/20111114/PODCAST/312019996

Berkowitz LL. EHR Optimization – The Path to Quality Improvements and Achieving Meaningful Use. The 7th Annual World Healthcare Innovation & Technology Congress. Washington, DC. November 7, 2011.

Berkowitz LL. "EMR 2.0: What Does the Future Hold?" The Academy CMIO Conference. Chicago. October 27, 2011.

Berkowitz LL. "Doctors 2.0". Health 2.0 Annual Conference. San Francisco. September 25, 2011.

Berkowitz LL. Conference Co-Chair. "Pathways to Value: Health IT Strategy Summit". iHT<sup>2</sup> Health IT Summit. New York City. September 20-21, 2011.

Berkowitz LL, Adler J, Ganguly N, Mason J, Nace L. "A Comprehensive Look at Healthcare Delivery Reform: From ACO's to PCMH and Beyond". iHT<sup>2</sup> Health IT Summit. New York City. September 21, 2011.

Berkowitz LL, Bria W, Chelico J, Cnossen R, Cushman B, DeShazer C. "Moving Beyond the Data Vacuum". iHT<sup>2</sup> Health IT Summit. New York City. September 20, 2011.

Berkowitz LL and Baron J. Usability is the Key to Healthcare Innovation. User Experience (UX) MasterClass. September 15, 2011.

Berkowitz LL. Expert panel member. AHRQ Panel on Emerging Healthcare Technology Horizon Scanning. June 8-9, 2011.

Berkowitz LL. Electronic Health Record Usability Strategies. A Community-Building Workshop: Measuring, Evaluating and Improving the Usability of Electronic Health Records. National Institute of Standards and Technology (NIST). June 7, 2011.

Berkowitz LL, Casey J, Cashy J, Tourne-Schwab A, Wickramasinghe N, Schaeffer A, Gonzalez C. New Care Coordination System Improves the Quality, Efficiency and Cost of Care for Patients with Hematuria. American Urological Association Annual Conference Proceedings. May 14, 2011.

Berkowitz LL. How to Create a Care Coordination Team using Spare Parts. World Congress Leadership Summit on Building the Data Infrastructure to Drive Evidence-based Improvements in Health Care. March 29, 2011.

Berkowitz LL. The primary care dilemma (Letter to the Editor). Hospitals and Health Networks, 2011: 85 (10).

Berkowitz LL (Moderator). Iron Programmer Challenge: Agile Programming for Web and Mobile Health Applications. Healthcare Information Management Systems Society (HIMSS) Annual Conference. February 23, 2011.

Berkowitz LL (Moderator). Drazen E, Garets D, Teich J. HIT Geeks Got Talent. Healthcare Information Management Systems Society (HIMSS) Annual Conference. February 21-22, 2011.

Berkowitz LL. Early Adoption of Meaningful Use. Testimony to the Implementation Workgroup of the Office of the National Coordinator for Health Information Technology. January 11, 2011.

Deo S (Moderator). Berkowitz LL, Perry D, Cook, M. Provider Operations: Innovation within Healthcare Systems. Kellogg School of Management: Business of Healthcare Conference. November 10, 2010.

Berkowitz LL (Moderator). Moerer J, Schaffer J, Abrams H, Malven D. Telemedicine and its Role in Redefining Care Delivery. Kellogg School of Management: Business of Healthcare Conference. November 10, 2010.

Kanwa S (Moderator). Berkowitz LL, Burde H, Hade S, Williams V. Computerized Provider Order Entry: Engaging the End User. Institute for Health Technology Transformation Fall Conference. November 4, 2010.

Ponkshe, S (Moderator). Berkowitz, LL, Meyers, A, Raz, M, Miner, C, Block J. Redefining Telehealth for the 21st Century Healthcare System. Institute for Health Technology Transformation Fall Conference. November 3, 2010.

Berkowitz LL. The Diabetes Tune-Up Project. Innovation Learning Network National Conference. October 15, 2010.

Schumacher, RM, Berkowitz LL, Abramson P, Liebovitz D. Electronic Health Records: Physician Perspective on Usability. Proceedings of the Human Factors and Ergonomics Society Annual Meeting September 2010 vol. 54 no. 12 816-820.

Berkowitz LL. The Future of EMRs. Mayo Clinic Center for Innovation's Transform Symposium: Thinking Differently about Health Care. September 14, 2010.

Berkowitz LL. Innovation, Brainstorming and Hot Topics in HIT. The Association of Medical Directors of Information Systems (AMDIS) Annual Meeting. July 15, 2010.

Berkowitz LL (Moderator). Health 2.0 Tools for Patient and Provider Communication. Health 2.0 Conference: In the Doctor's Office. April 24, 2010.

Berkowitz LL, Klepper B, Kuraitis V. EMRs: Meaningful Use & Clinical Groupware. Health 2.0 Webinar. March 30, 2010.

Berkowitz LL, Wilson M. EMR Adoption Strategies that Work. Open Health IT Exchange (OHITX) Webinar. November 18, 2009.

Berkowitz LL, Diamond J, Pietraszek W, Rotival L. IT for Operational Effectiveness for Healthcare Providers (Panel Presentation). Kellogg School of Management: Business of Healthcare Conference. November 11, 2009.

Berkowitz LL, Schumacher RM, Arnold S. EHR Usability - The What, Why and How of Applying Usability to EHR Design. HIMSS Podcast. Fall, 2009.

Berkowitz LL. The Inflection Navigator: Using a new web-based tool to provide low cost navigation for acute healthcare inflection points. Exploratorium Exhibit. CIMIT (Center for Integration of Medicine and Innovative Technology) Innovation Congress. October 28, 2009.

Berkowitz LL. EMRs and Innovation: What they Mean for the Future of Healthcare. Keynote Address at the IT Optimization in HealthCare Conference. October 22, 2009.

Berkowitz LL. Meaningful Discussion about Meaningful Use. HISTalk Blog. May 1, 2009.

Berkowitz, LL. Science and Technology Law at the Intersection of National Recovery. American Bar Association Annual Meeting. July 31, 2009.

Berkowitz LL. The Future EMR: Strategies and Design. Innovation Learning Network National Conference. May 6, 2009.

Berkowitz LL. Information Overload and Risk of Over-Interoperability. HISTalk Practice Blog. May 1, 2009.

Berkowitz LL. How to Improve EMRs and Incorporate Innovation In All We Do. Healthcare Information Management Systems Society (HIMSS) Annual Conference. April 5, 2009.

Berkowitz LL. ExpectED: HIT Innovation Supporting Emergency Room Visits. Innovation Learning Network National Conference. October 16, 2008.

Berkowitz LL. Keynote Speaker. Enabling the Future for Care Delivery: Innovation in Healthcare. Health Informatics Society of Australia (HISA) National Conference. August 31, 2008.

Berkowitz LL. Interview by Richard Reece. Fixing Health Care from the Inside: Applying Innovative Thinking and Information Technology to Health Care Conundrums. Health and Hospital Network Most Wired Online. Part 1 and 2. August, 2008.

Berkowitz LL. "Physician Adoption Strategies." <u>Electronic Health Records</u>, Ed. Jerome Carter. Second Edition. Philadelphia, PA: American College of Physicians; 2008: 249-274.

Berkowitz LL. How Curbing Clicking May Boost Benefits of EMRs. CAP (College of American Pathologists) Today. May, 2008.

Berkowitz LL, Blackford M, Conlon P, Gibson P. The Unintended Consequences of Combining Automation and Human Workflow. HIMSS Annual Conference Physicians IT Symposium. February 24, 2008.

Berkowitz LL and Brostoff G. Balancing Access and Security. Behavioral Healthcare. December, 2007.

Berkowitz LL. A Time of Change: New Technology-Enhanced Care Models May Change Everything. Healthcare Informatics. July, 2007.

Berkowitz LL and Liederman E. Point-Counterpoint: Best of Breed vs. Single Vendor and Structured vs. Unstructured Documentation. The Association of Medical Directors of Information Systems (AMDIS) Annual Meeting. July 25, 2007.

Berkowitz LL and Strier K. Enabling the Future of Care Delivery: IT-Driven, Molecular Medicine. Healthcare Information Management Systems Society (HIMSS) Annual Conference. February 27, 2007.

Berkowitz LL, Hamilton A, Jacobs B. Information Technology Tools that Improve Quality. Quality Symposium, Healthcare Information Management Systems Society (HIMSS) Annual Conference. February 25, 2007.

Berkowitz LL. Contributing Author to Chapters on Driving EHR Implementation and Managing Change, in <u>Guide to the Electronic Medical Practice</u>. Edited by Steven Arnold. Published by the Healthcare Information and Management Systems Society (HIMSS), 2007.

Berkowitz LL. Preparing for Pay for Performance. Physician Leadership Forum, presented by Cerner Corporation and the American College of Physician Executives. October 7, 2006.

Berkowitz LL. Real-World Wellness and Disease Management Using Ambulatory Electronic Health Records (EHRs). Healthcare Information Management Systems Society (HIMSS) Annual Conference. February 22, 2006.

Berkowitz LL. The Real Story on EHR Tales. Healthcare Informatics. February, 2006.

Berkowitz LL, Fiorillo A, Tiberio A. Approach to Disease Management with an Electronic Health Record System. Panel Presentation. Cerner Annual Healthcare Conference. October 11, 2005.

Berkowitz LL, Bryant J, Fairchild M, Leff L, Sharp D. Physician Adoption Strategies with Electronic Health Records. Panel Presentation. Cerner Annual Healthcare Conference. October 11, 2005.

Berkowitz LL. Now that You've Opened the Box... Ways to Make the Most of Your EHR System. The Association of Medical Directors of Information Systems (AMDIS) Annual Meeting. July 21, 2005.

Berkowitz LL. Hospital Sponsorship of Ambulatory EHR Systems. Most Wired Online. July 10, 2005.

Berkowitz LL. The New World of E-Prescribing. Pri-Med Midwest Conference. June 17, 2005.

Berkowitz LL. Electronic Health Records (EHRs): Succeeding in the Outpatient Environment. Keynote Address at the 2005 National CIO/IT Leadership Conference for Catholic Health Initiatives. May 18, 2005.

Berkowitz LL. The Real Story on EHR Stories: Part 1 (Efficiency) and Part 2 (Quality and ROI). Healthcare Informatics Extra. May, 2005.

Berkowitz LL. Real World Disease Management with Ambulatory EHRs. Doctor's Office Quality-Information Technology (DOQ-IT) National Quality Improvement Organization (QIO) Development Program. April 20, 2005.

Berkowitz LL and Giannangelo K. "SNOMED CT Helps Drive EHR Success." Journal of AHIMA 76, no.4 (April 2005): 66-67.

Berkowitz LL, Kibbe D, Zoph T, Rovner J. Presenter and Moderator. The Business Case for Ambulatory IT Investments. Scottsdale Institute Winter Conference. "Enabling Ambulatory Patient Centered Care". February 3, 2005.

Berkowitz LL and Shabot M. Physician IT Leaders: A New Era. Scottsdale Institute Teleconference. December 1, 2004.

Berkowitz LL. Electronic Medical Records in the 21<sup>st</sup> Century. Educational Lecture. Medical University of South Carolina. October 29, 2004.

Berkowitz LL and Parkulo M. Physician Documentation in PowerNote. Cerner Healthcare Conference. October 12, 2004.

Berkowitz LL and Giannangelo K. Using Snomed in an Electronic Health Record Application. Poster Presentation. American Health Information Management Association (AHIMA) National Convention. October 9, 2004.

Berkowitz LL and Giannangelo K. Using Snomed in an Electronic Health Record Application. Poster Presentation. SNOMED Users Group Conference. September 23, 2004.

Berkowitz LL, Mon D, Hanson S, Bowers D, Sullivan A, Henderson L. Changing Roles and Responsibilities – Frontline Experts Speak Their Minds. Healthcare Informatics and Journal of AHIMA. September 20, 2004.

Berkowitz LL. E-Prescribing: Trading in the Prescription Pad for Greater Safety and Efficiency. Pri-Med Midwest Conference. June 17, 2004.

Berkowitz LL. Optimizing Physician Adoption of EMR Systems. Towards an Electronic Paper Record (TEPR) Annual Conference. May 20, 2004.

Berkowitz LL and Slone C. Physician and Nurse Alliance Creates EMR Project Success. Healthcare Information Management Systems Society (HIMSS) Annual Conference. February 24, 2004.

Berkowitz LL. Successfully Using the Internet in Clinical Practice. The Year in Internal Medicine Conference. January 21, 2004.

Berkowitz LL. How to Maximize Physician Adoption of Clinical Information Systems. Crossing the Information Chasm: Strategies for the Continuum of Care (The Kennedy Group Fall 2003 Executive Conference). November 5, 2003.

Berkowitz LL, Beardman, Bernstein, Hodge. Physician Documentation in PowerNote. Cerner Health Conference. October 9, 2003.

Berkowitz LL and Conn J. Presentation of the First Annual "Physician-Informatics Executive Survey". The Association of Medical Directors of Information Systems (AMDIS) Annual Meeting. July 24, 2003.

Berkowitz LL and Pan E. Real World Issues in Outpatient CPOE. The Association of Medical Directors of Information Systems (AMDIS) Annual Meeting. July 23, 2003.

Berkowitz LL. PowerNote: Paperless Documentation at the Point of Care. Cerner Physicians' User Group Meeting. June 12, 2003.

Berkowitz LL and Slone C. Nurse/Doc Dyad: Supporting Effective Clinical Practice. Healthcare Information Management Systems Society (HIMSS) Summer Conference. June 9, 2003.

Berkowitz LL. Northwestern Memorial Hospital: The Outpatient EMR Experience. Cerner Regional User Group Meeting. May 9, 2003.

Berkowitz LL. Selling Clinical Information Systems to Physicians. Cerner Regional Sales Meeting. May 7, 2003.

Berkowitz LL. Review of Internet-based Clinical Reference Tools. Hospital Decisions International. Sovereign Publications. Edited by Deanna Wilson. Published by Sovereign Publications Limited. Spring, 2003.

Berkowitz LL. Electronic Medical Records: From Vision to Reality (Strategies for Choosing, Customizing and Implementing EMR Systems). The 15<sup>th</sup> Annual National Managed Health Care Congress (NMHCC). March 10, 2003.

Berkowitz LL. Roles and Responsibilities of Physician Executives Involved in Clinical Information Systems. Modern Physician. February, 2003.

Berkowitz LL, Middleton B, Churgin P. The Outpatient EMR. The Association of Medical Director of Information Systems (AMDIS) and Healthcare Information Management Systems Society (HIMSS) Physician Symposium. February 9, 2003.

Berkowitz LL, Hersh W, Button P, Hersher B and Middleton B. Meeting the Needs of the Applied Clinical Informatician. American Medical Informatics Association (AMIA) Annual Conference. November 11, 2002.

Berkowitz LL. Physician Leadership in IT: The Successful Pursuit of Creating Change. Cerner Executive Conference. October 21, 2002.

Berkowitz LL. Review and Evaluation of Internet-based Clinical Tools for Physicians. e.MD. Fall, 2002.

Berkowitz LL. Review and Evaluation of Internet-based Clinical Reference Tools for Physicians. White Paper commissioned by UpToDate. September 26, 2002.

Berkowitz LL. EMR Implementation: Case Study and Lessons Learned. The Association of Medical Directors of Information Systems (AMDIS) Annual Meeting. July 18, 2002.

Berkowitz LL. Computerized Physician Order Entry: Outpatient Perspectives and Experiences. The Illinois Health Information Management Association (ILHIMA) and Greater Chicago Chapter - Healthcare Information Management Systems Society (GCC-HIMSS) 49<sup>th</sup> Annual Meeting. June 14, 2002.

Berkowitz LL, Bria W, Dolen W, Karson T, Fotsch E. Physician Panel: The Realities of Physician Adoption of Technologies. ePharma Spring Summit. May 22, 2002.

Berkowitz LL, Conn J, Sayles C, Flory, J. Roundtable Moderator. The "Internet-Empowered" Patient: Helpful or Harmful. The 14<sup>th</sup> Annual National Managed Health Care Congress (NMHCC). April 17, 2002.

Berkowitz LL, Bergeron B, McClay J. Wireless: Which Tools are Best for You? Healthcare Informatics e.MD Expo and Conference. April 11, 2002.

Berkowitz LL and Stone C. Taking Your Patient Records Electronic. Healthcare Informatics e.MD Expo and Conference. April 10, 2002.

Berkowitz, LL. Clinical Informatics Tools in Physician Practice. Healthcare Informatics. April, 2002: 41-44.

Berkowitz, LL. The Reality of Mobile Computing in Healthcare. Ortho-McNeil Regional Consultant Conference. March 6, 2002.

Berkowitz LL, Bass S, Jaffe C, Bloder R, Wiles A, McCord J. Emerging Technologies and Multi-Channel Strategies to Support the Clinical Research Trial Process. Strategic Research Institute Conference: Web-Based Solutions Accelerating Clinical Drug Development. May 8, 2001.

Berkowitz LL, Bergeron B, McClay J. E-Health Tools and Applications. Healthcare Informatics Expo and Conference. April 18, 2001.

Berkowitz LL. The CPR Diary, A Medical Practice's Journey to Become Paperless. e.MD. April, 2001: 10-11.

Berkowitz LL. "Physician Adoption Strategies." <u>Electronic Health Records</u>, Ed. Jerome Carter. American College of Physicians. Philadelphia, PA. Spring, 2001.

Berkowitz LL, Devlin MD, Breuer J, Szuminksi J. FDA Regulations and DTC Advertising On the Web: Interpretation, Implications and Suggestions. Pharmaceutical Executive. April, 2001.

Berkowitz LL, Alger RA, Spranca M. Strategies for Creating Effective Physician-Oriented Web Sites. Panel presentation and publication. The 2001 Healthcare Information and Management Systems Society (HIMSS) Conference. February 7, 2001.

Berkowitz LL, Drennan K, Watkins D. Physicians as Investigators: The Impact of the Internet on Clinical Trials. eHealthcareWorld 2000. December 5, 2000.

Berkowitz LL. Portals that Shine: Physicians Web Portal Review and Analysis. Postgrad Med. 2000 Sep 15;108(4): suppl 12-8.

Berkowitz LL. E-Launch: Internet Strategies for New Drug Launches. Product Management Today. August, 2000.

Berkowitz LL. Mobile E-Healthcare: The Wireless Web. Healthcare Informatics Expo and Conference. May 24, 2000.

Berkowitz LL. E-Health: Click and Mortar Strategy. Healthcare Informatics Expo and Conference. May 24, 2000.

Berkowitz LL. Guest Lecture: The E-Business of Healthcare. Illinois Institute of Technology, Stuart Graduate School of Business. April 26, 2000.

Berkowitz LL, Bria WF, Classen D. Physician Adoption Strategies for CPR Systems. Pre-conference educational course. The 2000 Healthcare Information and Management Systems Society (HIMSS) Conference. April 9, 2000.

Berkowitz, LL. The Value of Lost Health Information: Brief Review and Discussion. Essential Informatics. November, 1999: 1(11): 1-4.

Berkowitz LL. Internet Applications: 12 Ways to Draw Patients to Your Web Site and Keep Them There. TeleHealth. August, 1999: 21-24.

Berkowitz LL. Evaluation of Diagnostic Coding Software Programs. Physicians and Computers. May, 1999: 12-16.

Berkowitz LL, Alger R, Bergeron B, Buskett D. Computer Networking in an Ambulatory Health Care Setting. The Journal of Medical Practice Management. May-June, 1999: 303-307.

Berkowitz LL. Advice on Implementing a Successful CPR System. Essential Informatics. March, 1999: 1-3.

Berkowitz LL, Bria WF, Gaillour FR, Wald J. Physician Adoption Strategies for CPR Systems. Panel presentation and publication. Healthcare Information and Management Systems Society (HIMSS) Conference. February, 1999; Volume 3: 11-20.

Berkowitz LL. Diagnosing Doctors: Four types of physicians require four approaches to promote clinical computing acceptance. Healthcare Informatics. November, 1998: 93-96.

Berkowitz LL. Tools of the Trade: Choosing a Clinical System for Automated Lab Ordering and Results Reporting. e.MD. September, 1998: 11-13.

Berkowitz LL. Security Issues Associated with Electronic Mail. e.MD. September, 1998: 28.

Berkowitz LL and Bergeron B. Spending Wisely: Physicians Share their Thoughts on Buying Hardware and Software. Physicians and Computers. March 1998: 10-15.

Berkowitz LL. Breaking Down the Barriers: Improving Physician Buy-In of CPR Systems. Healthcare Informatics. October 1997: 73-76.

Berkowitz LL. Computerized Patient Interviews: Background and Proposal, Internal Publication and SBIR Grant Proposal. Advanced Health Technologies. August, 1997.

Berkowitz LL. Standardizing Healthcare. e.MD. May 1997: 19.

Berkowitz LL. So You Want to Buy a CPR (Part 2): Finding the Right System. e.MD. May 1997: 16-18.

Berkowitz LL. So You Want to Buy a CPR (Part 1): An Introduction. e.MD. February 1997: 22-24.

Masood D, Brown JE, Patterson R, Greenberger PA, Berkowitz L. Recurrent anaphylaxis due to unrecognized latex hypersensitivity in two healthcare professionals. Ann Allergy Asthma Immunol. 74 (4): 311-3. April, 1995.

Berkowitz LL. Clinical Accuracy of Patient Information Obtained from an Administrative Database. Senior Resident Research Paper. Internal Publication and Poster Presentation. Northwestern Memorial Hospital. March, 1995.

Berkowitz LL. Report on the Medical Record at Northwestern Memorial Faculty Foundation. Senior Resident Research Paper. Internal Publication. Northwestern Memorial Hospital. October, 1994.

Berkowitz LL. Medical Education Software Evaluation Form. Interactive Instruction in Nursing and Other Health Sciences: Review of Evaluation Instruments. Lister Hill Monograph #LHNCBC 93-1. February, 1993: 147-150.

Berkowitz LL. Object Oriented Analysis of a Patient-Doctor Interaction: Asthma in the Emergency Room. Internal Publication, Decision Systems Group of Harvard Medical School, Boston, MA. Research sponsored by the National Library of Medicine. 1992.
Lauffenburger D, Linderman J, Berkowitz L. Analysis of Mammalian Cell Growth Factor Receptor Dynamics. Annals of the New York Academy of Sciences: 1987: 506 (1).