

Matthew F. Baretich

Curriculum Vitae

Contact Information

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Education

- Ph.D., Hospital and Health Administration.
The University of Iowa, 1986.
Dissertation: *Managing Technology: An Empirical Investigation of Clinical Engineering Effectiveness*.
Award: First Annual Richard Covert Scholarship, Hospital Information and Management Systems Society.
- M.S., Biomedical Engineering.
Iowa State University, 1977.
Thesis: *Projects in Clinical Engineering*.
- B.S., Electrical Engineering.
Iowa State University, 1975.
Award: Graduation with Distinction.

Credentials

- Certified Professional in Patient Safety (CPPS).
Certification Board for Professionals in Patient Safety, 2015.
- Certified Professional in Healthcare Risk Management (CPHRM).
American Hospital Association Certification Center, 2009.
- Certified Clinical Engineer (CCE).
Healthcare Technology Certification Commission, ACCE Healthcare Technology Foundation, 2004.
- Certified Healthcare Facility Manager (CHFM).
American Hospital Association Certification Center, 2000.
- Professional Engineer (PE), Colorado.
State Board of Registration for Professional Engineers and Professional Land Surveyors, 1987.
- Certified Clinical Engineer (CCE).
Healthcare Technology Certification Commission, 1980.

Employment

- 1997 – Baretich Engineering, Inc., Fort Collins CO (incorporated 1998):
President.
- 1992 – 1997 University of Colorado Hospital, Denver CO:
Manager (1992-1995), Director (1995-1997).
- 1987 – 1992 University of Colorado Health Sciences Center, Denver CO:
Director, Bioengineering.
- 1986 - 1987 Center for Health Services Research, University of Iowa, Iowa City IA:
Research Associate.

- 1982 – 1986 Graduate Program in Hospital and Health Administration, University of Iowa, Iowa City IA: Research Assistant (1982-1985), Faculty Associate (1985-1986).
- 1979 – 1982 Children’s Hospital of the King’s Daughters, Norfolk VA: Director, Clinical Engineering.
- 1977 – 1979 Eastern Virginia Medical Authority, Norfolk VA: Director, Bioengineering Laboratory.

Recognition

- ACCE Lifetime Achievement Award.
American College of Clinical Engineering, 2019.
- AAMI Fellow (AAMIF).
Association for the Advancement of Medical Instrumentation, 2017.
- AAMI HTM Leadership Award.
Association for the Advancement of Medical Instrumentation, 2017.
- Associate Member of the National Academy of Forensic Engineers.
National Academy of Forensic Engineers, 2015.
- Fellow of the American Institute of Medical and Biological Engineering (FAIMBE).
American Institute of Medical and Biological Engineering, 2012.
- ACCE/AHTF Shepherd Patient Safety Award.
American College of Clinical Engineering, 2008.
- Fellow of the American Society for Healthcare Engineering (FASHE).
American Society for Healthcare Engineering, 2007.
- ACCE Professional Development Award.
American College of Clinical Engineering, 2006.
- ASHE Regional Leader Award.
American Society for Healthcare Engineering, 2006.
- Fellow of the American College of Clinical Engineering (FACCE).
American College of Clinical Engineering, 2003.

Current Professional Activities

- *Global Clinical Engineering Journal*.
Member of the Editorial Review Board.
- *24x7 Magazine*.
Member of the Editorial Review Board.
- *NAFE Journal* (National Academy of Forensic Engineers).
Member of the Editorial Review Board.
- American Society for Healthcare Engineering.
Member of the Editorial Review Board.

International Workshops

- 2015 Advanced Clinical Engineering Workshop, Denver CO and Toronto ON.
Faculty for Health Technology Management Seminar (Denver CO).
- 2010 Advanced Clinical Engineering Workshop, San Salvador, El Salvador.
Faculty leader. Consultant to the Pan American Health Organization.
- 2009 2nd Technical Advisory Group Meeting on Health Technology, Rio de Janeiro, Brazil.
Member of the Technical Advisory Group on Health Technology, World Health Organization.
- 2009 II Curso de Trabalho sobre Segurança e Gerenciamento de Risco em Tecnologia Médica (2nd Workshop on Safety and Risk Management for Medical Technology), São Paulo, Brazil. Faculty member.
- 2007 Symposium on Healthcare Technology Management and Workshop on Clinical Engineering, Medellín, Colombia. Faculty member. Consultant to the Pan American Health Organization.
- 2004 Advanced Clinical Engineering Workshop, Managua, Nicaragua.
Faculty leader. Consultant to the Pan American Health Organization.
- 2002 Advanced Clinical Engineering Workshop, San José, Costa Rica.
Faculty member. Consultant to the Pan American Health Organization.

Publications (Books, Book Sections, and Monographs)

- 2020 *Medical Equipment Servicing Guide: Managing Compliance, Quality, and Cost.*
Monograph to be published by the Association for Medical Instrumentation.
- 2020 *Computerized maintenance management systems.*
Chapter 34 (with others) in *Clinical Engineering Handbook* (2nd edition), Elsevier.
- 2020 *Hospital safety programs.*
Chapter 52 in *Clinical Engineering Handbook* (2nd edition), Elsevier.
- 2020 *American College of Clinical Engineering*
Chapter 58 (with others) in *Clinical Engineering Handbook* (2nd edition), Elsevier.
- 2020 *Electrical power.*
Chapter 92 in *Clinical Engineering Handbook* (2nd edition), Elsevier.
- 2020 *Construction and renovation.*
Chapter 94 in *Clinical Engineering Handbook* (2nd edition), Elsevier.
- 2018 *AEM Program Guide: Alternative PM for Patient Safety.*
Monograph published by the Association for the Advancement of Medical Instrumentation.
- 2017 *Computerized Maintenance Management Systems for Healthcare Technology Management* (3rd ed.).
Book (with Cohen) published by the Association for the Advancement of Medical Instrumentation.
- 2016 *HTM Levels Guide (2nd edition).*
Monograph (with others) published by the Association for the Advancement of Medical Instrumentation.
- 2016 *HTM Benchmarking Guide.*
Monograph (with others) published by the Association for the Advancement of Medical Instrumentation.
- 2015 *Electrical Safety Manual* (2015 edition).
Book published by AAMI.
- 2015 Healthcare Facility Management.
Chapter in *A Practicum for Healthcare Technology Management* published by AAMI.
- 2014 *HTM Levels Guide.*
Monograph (with others) published by the Association for the Advancement of Medical Instrumentation.

- 2011 *Medical Equipment Maintenance Programme Overview*.
Manual (with Painter) in the WHO Medical Device Technical Series (World Health Organization).
- 2008 *Electrical Safety Manual* (2008 edition).
Book (with Shepherd) published by the Association for the Advancement of Medical Instrumentation.
- 2008 Healthcare Facility Management.
Chapter in *A Practicum for Biomedical Technology Management* published by Kendall/Hunt.
- 2008 HIPAA Medical Device Security (with Grimes).
Chapter in *A Practicum for Biomedical Technology Management* published by Kendall/Hunt.
- 2004 Construction and Renovation.
Article in the *Clinical Engineering Handbook* published by Elsevier Academic Press.
- 2004 Electrical Power.
Article in the *Clinical Engineering Handbook* published by Elsevier Academic Press.
- 2004 *Electrical Safety Manual* (2004 edition).
Book (with Shepherd) published by the Association for the Advancement of Medical Instrumentation.
- 2004 Equipment Control and Asset Management.
Article in the *Clinical Engineering Handbook* published by Elsevier Academic Press.
- 2004 Hospital Safety Programs.
Article in *The Handbook of Clinical Engineering* published by Elsevier Academic Press.
- 2004 Patient Safety and Facility Management: The Role of Healthcare Facility Engineers.
Monograph in the ASHE Management Monograph Series.
- 2003 Advanced Clinical Engineering Workshop Syllabus (editor, with others).
Manual developed for the World Health Organization.
- 2003 *Medical Device Incident Investigation & Reporting*.
Book (with Shepherd) published since 2003 by Baretich Engineering, Inc.
- 2001 Enhancing Patient Safety: The Role of Clinical Engineering (editor, uncredited).
ACCE White Paper published by the American College of Clinical Engineering.
- 2001 Revised JCAHO Environment of Care Standards for 2001.
Monograph in the ASHE Healthcare Facilities Management Series.
- 1997 Hospital Information Systems.
Article in *The Electrical Engineering Handbook* (2nd edition) published by CRC Press.
- 1993 Hospital Information Systems.
Article in *The Electrical Engineering Handbook* (1st edition) published by CRC Press.
- 1993 Guideline for Establishing and Administering Medical Instrumentation Maintenance Programs (editor, with Fennigkoh) for the Association for the Advancement of Medical Instrumentation.
- 1992 Safety in the Clinical Environment.
Chapter (with Bronzino) in *Management of Medical Technology* published by Butterworth-Heinemann.
- 1987 Clinical Engineering Effectiveness from the Hospital Administrator's Perspective.
Monograph in the ASHE Technical Document Series.
- 1985 The Use of Clinical Engineers and Biomedical Equipment Technicians in Iowa Hospitals.
Monograph in the IHERF Research Monograph Series.

Podcasts and Online Recordings

- 2018 Developing an AEM Program (audio).
The AAMI Podcast (www.aami.org), Episode 24.
- 2015 Electrical Safety in Healthcare Facilities (audio).
Healthcare Tech Talk (healthcaretechtalk.net), Episode 43.
- 2015 Medical Device Incident Investigation (audio).
Healthcare Tech Talk (healthcaretechtalk.net), Episode 33.
- 2014 Building Stronger HTM Departments (audio).
The AAMI Podcast (www.aami.org), Episode 3.
- 2014 HTM Levels Guide (video).
AAMI (www.aami.org/productspublications/ProductDetail.aspx?ItemNumber=1391).
- 2014 Managing Medical Equipment-Related Incidents (audio-visual).
ASHRM (learning.ashrm.org/products/1054/managing-medical-equipment-related-incidents).
- 2011 Benchmarking and the Value of Certification (audio-visual).
AAMI (my.aami.org/store/detail.aspx?id=BVCWCD).
- 2009 The Importance of Benchmarking (audio, 3-part series, with Kirst).
24x7 Magazine Podcast Series (www.24x7mag.com).

Publications (Journal Articles)

- 2018 A Rational Approach to Efficient Equipment Maintenance, Part 2: A Comprehensive AEM Program.
Biomedical Instrumentation & Technology 52(5):350-356.
- 2018 A Rational Approach to Efficient Equipment Maintenance, Part 1: A Simple, Basic AEM Program.
Biomedical Instrumentation & Technology 52(4):272-280.
- 2017 CMMS Data Integrity (with Cohen).
24x7 Magazine 22(7);28-30 November.
- 2017 How to Meet CMS and TJC Power Strip Requirements.
AAMI News 52(11):15.
- 2017 Seize the Day with New Joint Commission Requirements.
AAMI News 52(3):15.
- 2016 Risk Assessment for a Healthcare System's Clinical Technology Services Program.
Biomedical Sciences Instrumentation 52.
- 2016 How to Write a Medical Equipment Management Plan.
24x7 Magazine 21(3):30-34.
- 2015 Assessing Risk in the Kaiser Permanente Clinical Technology Program (with others).
Biomedical Instrumentation & Technology Horizons (Spring 2015):138.
- 2015 Managing Medical Device Incident Investigations.
Biomedical Sciences Instrumentation 51:260-265.
- 2013 The CMS Directive: Is There Really a Silver Lining? (with others).
24x7 Magazine 18(4):46.
- 2012 The New NFPA 99.
24x7 Magazine 17(3):10-13.
- 2012 The Value of Certification.
Biomedical Instrumentation & Technology 46(1):68-71.

- 2011 How to Use Financial Benchmarks.
Biomedical Instrumentation & Technology 45(5):405-407.
- 2010 Clinical Engineering and the World Health Organization.
Biomedical Sciences Instrumentation 46:68-71.
- 2010 National Quality Forum Releases Recommendations for Safe Practices.
Biomedical Instrumentation & Technology 44(4):334-335.
- 2009 Excellence in Clinical Engineering Leadership and the Inaugural AHTF ExCEL Award (with others).
Journal of Clinical Engineering 33(4):201-205.
- 2009 Focus On: The 2009 JC Standards.
24x7 Magazine 14(4):36.
- 2008 Clinical Engineering Workshops in Latin America.
Biomedical Sciences Instrumentation 44:59-62.
- 2008 Healthcare facility management in the United States.
Revista Ingeniería Biomédica (Colombia) 2(4):84-91.
- 2008 The “Other” Environment of Care Management Plans.
Biomedical Instrumentation & Technology 42(3):222-224.
- 2007 Impact of Clinical Alarms on Patient Safety (with others).
Journal of Clinical Engineering 32(1):22-33.
- 2007 Medical Device Incident Investigation.
Biomedical Sciences Instrumentation 43:302-305.
- 2007 The Isolated Power Systems Debate.
24x7 Magazine 12(12):29-30,35-38.
- 2005 Six Things We Can Do About Medical Device User Error.
24x7 Magazine 10(6):27-30.
- 2005 Think Outside the Basement.
Biomedical Instrumentation & Technology 39(1):4.
- 2004 Identification of Human Errors During Device-Related Accident Investigations (with others).
IEEE Engineering in Medicine & Biology Magazine 23(3):66-72.
- 2004 Meeting the Challenge of Sentinel Events.
24x7 Magazine 9(3):22-26.
- 2003 JCAHO and You: The Performance Improvement Cycle.
24x7 Magazine 8(11):40.
- 2002 JCAHO Patient Safety Standards and the Environment of Care
New Perspectives on Healthcare Auditing 21(2):21.
- 2002 Medical Technology Management in U.S. Hospitals.
Biomedical Sciences Instrumentation 38:273-275.
- 1994 Equipment Organization in the Emergency Department Adult Resuscitation Area (with others).
The Journal of Emergency Medicine 12(6):845-848.
- 1988 Clinical Engineering Effectiveness.
Biomedical Technology Today 3(3):79-82.
- 1988 Health Leaders of Tomorrow: A Descriptive Analysis (with Levey, Lane, and Levey).
Journal of Health Administration Education 7(2):244-273.

- 1987 Factors Affecting the Incidence of Patient Falls in Hospitals (with Raz). *Medical Care* 25(3):185-195.
- 1985 ARMIS: A Microcomputer-based Hospital Risk Management Information System (with Raz). *Journal of Medical Systems* 9(5/6):315-324.
- 1985 On Adopting a Managerial Perspective in Clinical Engineering Practice. *IEEE Engineering in Medicine and Biology Magazine* 4(2):27-28.
- 1979 A Simple Tester for Respiration Rate Meters. *Journal of Clinical Engineering* 4(4):339-340.
- 1978 Sources of Clinical Engineering Employment Information (with Craft). *Journal of Clinical Engineering* 3(2):183-185.
- 1967 Automatic Pickle-Picker-Outer. *Treasure Chest Magazine* (January 12).

Publications (Reviews)

- 2017 Review of: Healthcare Technology Management: A Systematic Approach (CRC Press, 2017). *Biomedical Instrumentation & Technology* 51(2):169.
- 2016 Review of: Usability Testing of Medical Devices, 2nd edition (CRC Press, 2016). *Biomedical Instrumentation & Technology* 50(5):385.
- 2016 Review of: Medical Instruments and Devices: Principles and Practices (CRC Press, 2016). *Biomedical Instrumentation & Technology* 50(1):76.
- 2014 Review of: Health Care Engineering – Part I and Part II (Morgan & Claypool, 2013). *Biomedical Instrumentation & Technology* 48(2):138.
- 2011 Review of: Biomedical Device Technology: Principles and Design (Charles C. Thomas, 2008). *Biomedical Instrumentation & Technology* 45(4):324.
- 2010 Review of: Biomedical Engineering for Global Health (Cambridge University Press, 2010). *Biomedical Instrumentation & Technology* 44(3):198.
- 2009 Review of: *Environment of Care Essentials Ninth Edition* (Joint Commission, 2009). *Biomedical Instrumentation & Technology* 43(6):444.
- 2005 Review (with Shepherd) of: *Using Human Factors to Improve Patient Safety* (JCAHO, 2005). *Biomedical Instrumentation & Technology* 39(6):439-440.
- 1991 Review of: *The Atheist and the Holy City: Encounters and Reflections* (MIT Press, 1990). *IEEE Engineering in Medicine and Biology Magazine* 10(2):65.
- 1989 Review of: *Unexplained Patient Burns: Investigating Iatrogenic Injuries* (Quest Publishing Company, 1988). *IEEE Engineering in Medicine and Biology Magazine* 8(3):54.
- 1987 Review (with Raz) of: *Hospital Information Systems for Case Mix Management* (John Wiley & Sons, 1986). *Journal of Health Administration Education* 5:647.
- 1984 Review (with Levey) of: *Health Care Policy in America* (Annals of the American Academy of Political and Social Science, Volume 468). *Journal of Health Administration Education* 2:248-249.
- 1983 Review (with Ludke) of: *Hospital Management Engineering* (Prentice Hall, 1982). *Inquiry* 20:94-95.
- 1983 Review of: *By Design: Why There Are No Locks on the Bathroom Doors in the Hotel Louis XIV and Other Object Lessons* (St. Martin's Press, 1982). *IEEE Spectrum* 20(10):14.

Presentations: Academic lectures (Since 2010)

-
- 2020 Managing Medical Equipment-Related Incidents. Spring Clinical Engineering Week. University of Connecticut (online).
 - 2020 Managing Medical Equipment-Related Incidents. BIOE 5041 Clinical Experiences. University of Colorado Denver.
 - 2019 Managing Medical Equipment-Related Incidents. BIOE 5041 Clinical Experiences. University of Colorado Denver.
 - 2018 Managing Medical Equipment-Related Incidents. BIOE 5041 Clinical Experiences. University of Colorado Denver.
 - 2017 The Curious History of Electrical Safety Testing / AAMI 2015 Electrical Safety Manual (BME 5050). BME 5050 Engineering Problems in the Hospital. University of Connecticut (online).
 - 2015 Managing Medical Equipment-Related Incidents. BE 4810 Bioinstrumentation. University of Wyoming, Laramie WY.
 - 2015 The Curious History of Electrical Safety Testing / AAMI 2015 Electrical Safety Manual (BME 5050). University of Connecticut Clinical Engineering (online).
 - 2014 Electrical Safety (BME 5020). University of Connecticut Clinical Engineering (online).
 - 2014 Managing Medical Equipment-Related Incidents. University of Colorado Bioengineering, Denver CO.
 - 2013 Electrical Power (BME 5050). University of Connecticut Clinical Engineering (online).
 - 2011 Electrical Systems. University of Connecticut Clinical Engineering, Hartford CT.

Presentations: Professional webinars (Since 2010)

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- 2020 How Modern CMMS Technology Can Improve your AEM Program. Association for the Advancement of Medical Instrumentation: Summer Learning Series.
 - 2020 Getting the CMMS to work for us: Optimizing the *Failure Code* field. Association for the Advancement of Medical Instrumentation: HTMLive.
 - 2020 Don't Take Risks With Medical Device Risk Scoring (with Davis-Smith). TechNation and Nuvolo: Webinar Wednesday.
 - 2020 Translating the CMS CODID-19 Emergency Declaration Waiter for HTM Leaders (with Painter). PartsSource.
 - 2019 Establishing an Automated, Compliant AEM Program with Modern CMMS Technology (with others). TechNation and Nuvolo: Webinar Wednesday.
 - 2018 CMMS "How To" Series. Association for the Advancement of Medical Instrumentation (six webinars).
 - 2018 Your AEM Program: Patient Safety, Standards Compliance, and Less PM! (with Painter) Association for the Advancement of Medical Instrumentation.
 - 2010 Benchmarking, Best Practices, and CE Performance Data (with Painter). ACCE Educational Teleconference Series.

Presentations: AEM Workshops (with Painter)

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- 2020 AEM Cost Containment Forum. PartsSource, Ann Arbor MI.
 - 2019 AEM Workshop. NESCE Northeastern Healthcare Technology Symposium, Framingham MA.
 - 2019 AEM Cost Containment Forum. PartsSource, Pinehurst NC (NCBA Conference).
 - 2019 AEM Cost Containment Forum. PartsSource, Chicago IL (CEAI Conference).
 - 2019 AEM Workshop. Association for the Advancement of Medical Instrumentation, Kansas City KS.
 - 2019 AEM Workshop. Association for the Advancement of Medical Instrumentation, Cleveland OH
 - 2019 AEM Workshop. Association for the Advancement of Medical Instrumentation, Anaheim CA.
 - 2019 AEM Workshop. Association for the Advancement of Medical Instrumentation, Tampa FL.
 - 2019 AEM Workshop. Association for the Advancement of Medical Instrumentation, Indianapolis IN.
 - 2018 AEM Cost Containment Forum. PartsSource, Minneapolis MN.
 - 2018 AEM Cost Containment Forum. PartsSource, New York NY.
 - 2018 AEM Cost Containment Forum. PartsSource, Philadelphia PA.
 - 2018 AEM Cost Containment Forum. PartsSource, San Francisco CA.
 - 2018 AEM Cost Containment Forum. PartsSource, Dallas TX.
 - 2018 AEM Cost Containment Forum. PartsSource, Miami FL.
 - 2018 AEM Workshop. Northeastern Healthcare Technology Symposium, Sturbridge MA.
 - 2018 AEM Workshop. Hospital Shared Services, Denver CO.
 - 2017 AEM Workshop. Northeastern Healthcare Technology Symposium, Groton CT.

Presentations: Additional teaching (since 2010, with others)

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- 2019– CCE Review Course.
 - 2018 American College of Clinical Engineering (in person and online)
 - 2010– CBET Study Group.
 - 2018 Colorado Association of Biomedical Equipment Technicians (online).
 - 2010– ASHE Healthcare Construction Certificate Program Workshop.
 - 2012 Denver CO, San Antonio TX, Boston MA, Chicago IL, Nashville TN

Presentations: Other professional presentations (Since 2010)

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- 2019 Clinical Engineering Certification Review (with others).
Veterans Administration, Frederick MD.
 - 2019 AEM Program Update (with Thukral).
NESCE Northeastern Healthcare Technology Symposium, Framingham MA
 - 2019 Leveraging the HTM Community to Advance your AEM Program.
PartsSource Leadership Summit, Cleveland OH.
 - 2019 Your AEM Program: Patient Safety, Standards Compliance, and Less PM.
MDExpo, Houston TX.

- 2019 Writing the HTM Service Guide.
CABMET Symposium, Aurora CO.
- 2018 Your AEM Program: Patient Safety, Standards Compliance, and Less PM.
Healthcare Technology Management Association Midwest, Kansas City MO.
- 2018 Your AEM Program: Patient Safety, Standards Compliance, and Less PM.
Northeastern Healthcare Technology Symposium.
- 2018 Your AEM Program: Patient Safety, Standards Compliance, and Less PM.
CABMET Symposium, Aurora CO.
- 2018 Your AEM Program: Patient Safety, Standards Compliance, and Less PM.
PartsSource Leadership Summit, Cleveland OH.
- 2017 Planning a Computerized Maintenance Management System (CMMS) for a Hospital System.
Rocky Mountain Bioengineering Symposium, Aurora CO.
- 2017 Cost of Service Ratio (COSR) and other HTM Performance Metrics.
Northeastern Healthcare Technology Symposium, Groton CT.
- 2017 Risk Assessment for Medical Equipment in a Shared Services Program (with others).
Rocky Mountain Bioengineering Symposium, Aurora CO.
- 2017 HTM Task Force Update on Benchmarking.
AAMI Conference & Expo, Austin TX.
- 2017 What the heck are those people thinking!
CABMET Symposium (Colorado Association of Biomedical Equipment Technicians), Aurora CO.
- 2017 How to choose a new CMMS.
CABMET Symposium (Colorado Association of Biomedical Equipment Technicians), Aurora CO.
- 2016 What the heck are those people thinking! (keynote address).
Healthcare Technology Management Association of South Carolina, Columbia SC.
- 2016 AAMI Benchmarking: What do multi-hospital HTM programs need? (with others).
AAMI 2016 Conference & Expo, Tampa FL.
- 2016 Risk Assessment for Isolated Power Systems.
CABMET Symposium. Colorado Association of Biomedical Equipment Technicians, Aurora CO.
- 2016 The Curious History of Electrical Safety Testing.
Clinical Technology Services (Northern California), Kaiser Permanente, Oakland CA.
- 2016 How to become a consultant and have fun doing it (keynote address).
53rd Annual Rocky Mountain Bioengineering Symposium, Denver CO.
- 2015 Alternative Equipment Maintenance Programs.
CABMET Symposium. Colorado Association of Biomedical Equipment Technicians, Aurora CO.
- 2015 RPTs: CMS, TJC, and the Eclipse of Clinical Engineering.
New England Society of Clinical Engineering, New London CT.
- 2015 Risk Assessment of Kaiser Permanente's Clinical Technology Program (with others).
AAMI 2015 Conference & Expo, Denver CO.
- 2015 AAMI's HTM Benchmarking: Learn What's New and How to Strengthen Your CE Program (with others). AAMI 2015 Conference & Expo, Denver CO.
- 2015 Benchmarking Solutions – Healthcare Technology Management.
Clinical Engineering Society of Ontario, Toronto ON.

- 2015 Managing Medical Device Incident Investigations.
53rd Annual Rocky Mountain Bioengineering Symposium, Denver CO.
- 2014 Benchmarking Data: Just Give Me Five (with others).
AAMI 2014 Conference & Expo, Philadelphia PA.
- 2014 CMS Maintenance Requirements 2013.
Colorado Association of Biomedical Equipment Technicians, Colorado Springs CO.
- 2014 CMS Maintenance Requirements 2013 / The Curious History of Electrical Safety Testing.
CEAI Meeting. Clinical Engineering Association of Illinois, Addison IL.
- 2014 Medical Device Incident Investigation.
High Plains IEEE, Fort Collins CO.
- 2014 Taking it to a new level: Standardizing and elevating our roles (with others).
AAMI 2014 Conference & Expo, Philadelphia PA.
- 2013 The Curious History of Electrical Safety Testing.
CABMET Meeting. Colorado Association of Biomedical Equipment Technicians, Aurora CO.
- 2013 New Maintenance Requirements from CMS: Where do we stand? (Keynote Address)
BAW Annual Conference 2013. Biomedical Associations of Wisconsin, Green Bay WI.
- 2013 Medical Device Incident Investigation
BAW Annual Conference 2013. Biomedical Associations of Wisconsin, Green Bay WI. Keynote.
- 2013 New Maintenance Requirements from CMS: Where do we stand?
CABMET Symposium. Colorado Association of Biomedical Equipment Technicians, Aurora CO.
- 2012 NFPA 99 (2012) and CMS Maintenance Requirements.
Intermountain Clinical Instrumentation Society (ICIS), Salt Lake City UT and online.
- 2012 Managing Equipment-Related Patient Incidents.
COPIK Risk Management and Patient Safety Forum, Denver CO.
- 2012 New Maintenance Requirements from CMS / NFPA 99 (2012) Health Care Facilities Code.
Catholic Health Initiatives (CHI) Clinical Engineering Annual Meeting, Englewood CO.
- 2012 New Maintenance Requirements from CMS.
CABMET 2012 Symposium, Denver CO.
- 2012 NFPA 99 (2012) Health Care Facilities Code.
CABMET January Meeting, Denver CO.
- 2011 CMS and the Joint Commission.
University of Vermont Technical Services Partnership, Burlington VT.
- 2010 Clinical Engineering and the World Health Organization.
RMBS 47th Annual Conference, Laramie WY.
- 2010 Environment of Care Workshop (short course).
Indian Health Service, Oklahoma OK.
- 2010 Joint Commission 101 Workshop (short course).
CABMET Annual Symposium, Denver CO.
- 2010 Patient Safety and Incident Investigation (short course).
2010 Heartland Biomedical Association Symposium, Omaha NE>
- 2010 Using Benchmarking and Benchmarking and Best Practices to Improve Departmental Performance
(with others). AAMI 2010 Conference & Expo, Tampa FL.

- 2010 Benchmarking.
University of Vermont Technical Services Program, Burlington VT.
- 2010 ASHE Healthcare Construction Certificate Program Workshop.
United States Army Corps of Engineers, Salado TX.

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