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### **SUMMARY OF PROFESSIONAL and RESEARCH INTERESTS**

**Research:** Research opportunities leading to breakthroughs in health outcomes, health economics, patient care quality, evidence-based medicine, and the national problem of delivering affordable accessible high-quality care. Cutting-edge research leading to partnership opportunities with thought leaders in academia and industry, as well as publications in the top-tier journals. Transition theory into practice utilizing current professional background and multidisciplinary skills, leading to significant gains in patient care effectiveness and efficiency to save lives, improve quality of life, and turn the troubled healthcare sector of the economy around. Focus on the following niches of biomedical informatics: health outcomes research, economics of health information systems, clinical & patient accounting documentation, patient data management, population health, and clinical/financial decision support.

**Professional:** Large visible healthcare-oriented technical, clinical, and operational projects leading to improvements in patient/drug safety, operational excellence, access to care, patient and physician/associate satisfaction, and quality of care. Projects and partnerships that require unique multidisciplinary combination of technical, analytical, business, management, clinical, operational, and academic skills to achieve successful outcomes and position the organization for growth, stability, and work environment that fosters achievement, care, and innovation.

### **ACADEMIC EXPERIENCE**

**2013 – Present**

**UNIVERSITY OF ILLINOIS AT CHICAGO, Chicago, IL**

**College of Applied Health Sciences, Department of Biomedical and Health Information Sciences**

*Clinical Associate Professor*

- Teach graduate level courses in clinical decision support systems, predictive analytics, healthcare computer networking & telecommunications, systems analysis & design, mobile health, healthcare project management, information security, and healthcare data science.
- Design graduate curriculum in healthcare data science, artificial intelligence, project management, networking and telecommunications, clinical decision support systems, computer security, research informatics, and process engineering.
- Co-founding faculty for the healthcare data science curriculum in the department.
- Perform cutting-edge research in the areas of biomedical informatics, clinical data management & documentation, health outcomes, and economics of healthcare information technology investments & management.
- Present and publish internationally.

**2013 – Present**

**NOVA SOUTHEASTERN UNIVERSITY, Fort Lauderdale, FL**

**School of Osteopathic Medicine, Department of Biomedical Informatics**

*Adjunct Assistant Professor and Course Director*

- Design, manage, and teach graduate-level clinical decision support systems course.
- Mentor and coach students with professional and academic aspirations to become health informaticists, biomedical informatics researchers, and leaders in the healthcare information technology field.

- Co-founding faculty and curriculum design contributor for healthcare data analytics courses and the future healthcare analytics track of the biomedical informatics program.
- Perform research in the medical informatics economics, healthcare quality, clinical data analytics, and clinical/financial decision support subject areas.
- Publish and present research internationally.

**2019 – Present**

**UNIVERSITY OF CHICAGO PRITZKER SCHOOL OF MEDICINE, Chicago, IL**

*Clinician Researcher*

- Perform applied scientific and operational inquiry into the subjects of health informatics, mobile health, medical artificial intelligence, pharmacogenomics, and clinical analytics.
- Collaborate with physicians and business leaders across University of Chicago and NorthShore University Health organizations.

**2005 - 2013**

**UNIVERSITY OF MARYLAND UNIVERSITY COLLEGE, Adelphi, MD**

**Graduate School of Management and Technology, MBA Program**

*Lead Faculty Assistant*

- Assisted in teaching AMBA 660 Global Management course.
- Participated in the course design, management, and IT expertise dissemination and new faculty training activities.
- Mentored and coached business students in preparation for leadership careers.
- Participated in numerous research programs in the areas of online learning and competency development that led to several conference presentations and publications.

**ACADEMIC PERFORMANCE AWARDS**

**2018 - Excalibur Award for Teaching Excellence from the University of Illinois at Chicago  
Biomedical and Health Information Sciences graduating class.**

This award is presented to professors who are role models in their professions, who provide encouragement for learning in the classroom or clinical setting, who help guide students in the achievement of their goals, and who are supportive of the students' individual efforts.

**2016 – ‘Golden Apple’ outstanding faculty award from Nova Southeastern University’s School of  
Osteopathic Medicine, Department of Biomedical Informatics**

Faculty of the Year award selected by students' vote

**PROFESSIONAL EXPERIENCE**

**2018 – Present**

**NORTHSHORE UNIVERSITY HEALTH SYSTEM, Skokie, IL**

*Senior Manager – Clinical Analytics*

- Lead a talented and energetic clinical analytics team on an exciting journey towards providing the most clinically advanced and financially efficient medical care to our patients.
- Operationally manage a large team of experienced and early career data analytics professionals and project/management leaders.
- Project mix includes predictive analytics, prescriptive analytics, clinical and value-based care performance dashboards, strategic/operational/executive level data visualization, reporting, data warehousing and extraction, patient care quality analytics, funded clinical research, personalized medicine and pharmacogenomics, closed loop analytics, EMR/CPOE analytics, and many other analytics services and scientific innovations.
- Emphasize strong focus on predictive and prescriptive analytics, thereby translating biomedical informatics science innovations achieved through research into immediate application to patient care practices,

- resulting in continually improving quality, reduced mortality, complications, and readmissions rates among patients with complex medical conditions.
- Introduced technology management innovations enabling the team to take better control of its growing footprint within the increasingly data driven organization, including business analyses added to strong data expertise, focus on both short-term operations and long-term strategy, deriving greater clinical value from existing analytics products, quantitative analytics value estimation, and proactive quality control embedded into technical workflows.

## 2016 – 2018

### IBM WATSON HEALTH, Chicago, IL

#### *Senior Managing Consultant – Advanced Analytics Group*

- As a clinical business analyst, assisted life sciences clients with defining and translating clinical, pharmaceutical, technology, and business requirements. Performed clinical, epidemiological, and pharmacovigilance translational research for internal and external IBM projects.
- As a data scientist, worked with numerous data types, standards, and tools to unleash the power of secondary post-EMR clinical data to help identify new treatments, develop innovative drugs, effectively match patients to clinical trials, create new predictive and prescriptive analytics models, and visualize medical information.
- As a researcher and scientist, helped generate new ideas and expand existing solutions in the healthcare cognitive and artificial intelligence engineering spaces.
- As a technical program manager and Watson Platform for Health software component development lead, headed development of the medical research cloud solutions for life sciences, focusing on: (1) HIPAA and FDA Part 11 security standards & regulations (audit service), (2) clinical data ingestion, integration, and exchange via HL7 FHIR standard, and (3) performance management strategy and benchmarking.
- Worked with a wide variety of tools, such as Tableau, Explorys Real World Evidence, Phytel care management, Bluemix, Spark, Watson Discovery Advisor, Watson for Clinical Trials, Watson for Oncology, Watson for Genomics, SPSS, QRadar, Guardium, and more.
- Covered a broad spectrum of artificial intelligence developments in life sciences, from general cloud-based analytics integrating a wide spectrum of medical data into cohesive data science services to complex medical conditions that included asthma, congestive heart failure, cardio-oncology, Alzheimer's, dementia, flu and other infectious diseases, and diabetes.

## 2015 – 2016

### VALENCE HEALTH, Chicago, IL

#### *Program Manager & Product Analyst – Big Data and Population Health Technology*

Clinical software development in an Agile environment serving growing patient population management needs of 135 hospitals/health systems, 89,000 physicians, and 20 million patients. Clinical software engineering leader in charge of several complex technical and clinical innovations, with specific emphasis on the following products:

- Big Data: enterprise data warehouse (EDW) replatforming effort to transition from relational SQL Server to Hadoop database technologies. Includes new EMPI application design.
- EMR/ETL – patient data acceptance, management, and analysis tools for population health.
- Clinical Measures – development of the new innovative measures for effective management of patient populations.
- ICD-10 – transition of all provider and payer products to the new documentation standard.
- Clinical Quality, Health Outcomes, and Biomedical Informatics Research – documenting success in clinical software product development for the purpose of rapid translation of research into practice.
- Integration – clinical quality measures and care management software products interoperability to deliver predictive and prescriptive analytics solutions to healthcare clients.
- Client Portal – development of the new comprehensive web-based program to combine technical support, client management, documentation, clinical content, and other capabilities.
- Member Matching & Master Patient Index – new algorithms for fast and reliable linking of patient records in support of population health analytics: technical and leadership work using statistical, programming, and healthcare data skills. R for statistics and Duke engine for de-duplication.

**2003 – 2015**

**ADVOCATE HEALTH CARE, Oak Brook, IL**

*Manager, Information Systems – Clinical Software Engineering, Integration & Analytics*

*Other Positions: Project Manager, PMO; Manager, Information Systems – Financial and Decision Support Systems; Senior Systems Programmer*

- Initiated and managed Advocate’s combined clinical software engineering and systems integration program. Focus on the following areas: population health management, predictive analytics, master data management (MDM) & enterprise master patient index (EMPI), patient/provider & employee portals, healthcare enterprise data warehouse, business and clinical intelligence, decision support, health information exchanges (HIE), interfaces and interoperability.
- Strategized and operationalized population health and predictive analytics models that rely on data delivery and integration from a large variety of sources feeding cloud-based analytics engine.
- Developed data governance strategy for MDM/EMPI and workforce management platform.
- Linked core components of the population health strategy via integration services that included management of 800+ interfaces, adding new sources and business entities, and providing services across the enterprise regardless of technologies employed by individual units of the organization.
- Designed, promoted, and built a \$4.3 million integrated workforce management platform that incorporates powerful Time & Attendance and Staffing & Scheduling products that serve 36,000 associates and represent the largest healthcare workforce architecture to date.
- Managed global enterprise projects of the utmost importance to the organization, such as \$13 million Security Command Center and \$7.5 million Infant Security & Protection System.
- Fostered enhanced partnership and collaboration between nursing, administration, and technology areas through mutually beneficial technology management and implementation initiatives. This partnership produced tangible outcomes in the areas of productivity, lean business process engineering, overtime reduction, and low agency staffing utilization. It also led to implementation of an aggressive road map incorporating new projects in the clinical and non-clinical areas.
- Managed implementation of \$3.3 million decision support system with budgeting, contract management, strategic patient volume and cost analysis, productivity, and business intelligence software modules.
- Managed clinical systems interface programming team and led the \$1.3 million effort of replacing legacy application with more modern HL7 Intersystems Ensemble data integration solution.
- Effectively delivered complex technologies to customers utilizing small teams of highly qualified professionals, on time and within budget.
- Responsible for numerous technological, project management, and customer service innovations that are featured at conferences and in publications.
- Past Unix and Windows systems architecture experience. OS/hardware focus: IBM/AIX, Sun/Solaris, HP/UX, backups, business continuity and disaster recovery. Software focus: Lawson ERP suite, WebSphere, BMC Patrol, TSM, Oracle, SQL Server, Sybase, Cache, DB2.

**1999 – 2003**

**TEK SYSTEMS CORPORATION, Rolling Meadows, IL**

**List of Clients:**

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**NEWARK ELECTRONICS, Chicago, IL**

*Senior Systems Architect/Project Manager/Consultant*

- Led architecture and design of the highly available clustered systems intended for mission-critical use in the E-Commerce and B2B applications environment.
- Advised on systems security and consolidation issues. Consulted application developers and database administrators on a variety of project implementations. Resolved network problems.

**HEALTH CARE SERVICES CORPORATION, Chicago, IL**

**(Blue Cross Blue Shield of Illinois)**

*Senior Systems Architect/Project Manager/Consultant*

- Provided full project life cycle management services, including project definition, cost estimates, scheduling, systems architecture and design, implementation, and evaluation.

- Advised on a variety of information technology issues, financial risks versus benefits analysis. Presented ROI models for technical projects to the upper management.
- Led in hardware and software selection processes, vendor negotiations, and technology evaluation. Addressed technology integration issues and their impact on the enterprise environment.
- Evaluated and updated change management procedures.
- Designed and managed Unix-based systems that included 100+ AIX, Sun and SCO servers. Maintained SQL and DB2 databases on Unix and Windows platforms. Project base included Customer Relations, E-Commerce, Marketing, E-Directory, FTP and Networking, etc.

### **UNITED AIRLINES CORPORATION, Chicago, IL**

#### *Senior Systems Architect/Project Manager/Consultant*

- Designed complex Unix and Windows based systems for several multi-million dollar projects in a large distributed environment. Examples of the projects include Electronic Procurement, corporate Intranet and Internet access systems, internal Web based information databases, customer information databases, compensation management, payroll processing, United Cargo systems management, Mileage Plus, etc.
- Advised on budget allocation issues within the Information Technology division. Evaluated financial risks and long-term impacts of technology investments.
- Participated in the assessments of support agreement contracts across different functional organizations. Addressed issues and risks associated with supporting newly added systems. Advised in the process improvement procedures.
- Worked closely with vendors to provide 99.9% and higher availability solutions for projects. Used several software and hardware redundancy solutions to support such architectures. Software packages included HP MC/Service Guard, HP Port Aggregation, IBM HACMP, Veritas, EMC, etc.
- Implemented, upgraded, and supported Internet systems of critical importance to the company's operations. Projects included Internet systems (United Reservations, United.com, Unitedcargo.com, & Unitedvacations.com) and Intranet applications (Skynet, internal reservations Web List database, HR, benefits, & Information Services division web pages). Applications used included Iplanet Application Server, Iplanet LDAP Server, IBM WebSphere, Apache, Web Logic, JRUN, Perl, C++, along with many more.
- Participated in computer security decision-making process, along with other teams. Examples include firewalls, proxy servers, LAN design, Unix software (Sendmail, Secure Mail, CA Access Control, HP Trusted systems, etc).

### **COMDISCO CORPORATION, Rosemont, IL**

#### *Senior Consultant/Project Manager*

- Led a team of engineers in providing consulting and technical support for a new, distributed architecture project. Provided Unix technical support for HP and Sun Solaris servers.
- Assisted in planning and implementation of the large data center move from Minnesota to Illinois. Led in hardware, software, and space planning. Provided schedule and costs tracking, negotiated with vendors, and trained junior team members and operations supervisors.
- Evaluated current environment and advised management of ways to improve it by adding new technology and reducing overall maintenance and systems management costs. Provided comprehensive information regarding financial and strategic risks of investing or not investing in the new technology.
- Planned, designed and implemented new complicated distributed systems for the Internet Service Providing and Web hosting solutions.
- Worked closely with DBAs to provide Oracle and Sybase support to all internal and external clients. Application base included Sybase 11 and 12, Oracle Server 7.x and 8.x, Oracle Financials, Oracle Parallel Server, EMC Time Finder, etc. Helped to set up and maintain a highly available database environment.
- Built HP Open View network and applications monitoring Unix server from the ground up, including programming of applications, events and traps. Also used the Web interfaces and incorporated BMC Patrol and Best/1 products into the architecture. Worked with an array of HP Openview products, including Network Node Manager, OmniBack, Glance Plus, Measure Ware, ITO, ITA, etc.

1998 – 1999

**DATA PROCESSING RESOURCES CORPORATION, Chicago, IL**

**List of Clients:**

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**CNA INSURANCE CORPORATION, Chicago, IL**

*Senior Consultant*

- Effectively managed technical projects in the systems and network administration areas. Tasks included, but were not limited to budgeting, planning, scheduling; project costs, vendor negotiations and labor costs; project implementation and evaluation.
- Provided third level technical support for all critical and development systems in the Unix environment. This included HP, AIX, and Sun production systems support, as well as applications development.
- Changed, created, and updated technical procedures and policies to match the latest industry standards.

**SPIEGEL CORPORATION, Westmont, IL**

*Project Leader/Consultant*

- Managed a multi-million dollars project of installation and implementation of the new merchandise management system. Advised in budget allocation, vendor selection, cost effectiveness and systems architecture processes. Addressed technical capacity issues.
- Successfully implemented technology that reduced overall spending on maintenance and usage with critical business applications.
- Led systems installation and administration activities including AIX and Sun Solaris support on all levels, TCP/IP configuration, and network architecture.

1998

**IBM GLOBAL SERVICES, Schaumburg, IL**

*Senior Systems Integration Specialist*

- Led in providing Unix systems and network support for the large international E-Commerce project.
- Coordinated Web based design activities for the corporate Intranet. Participated in the process of planning and designing of firewalls.
- Communicated with other technical leaders across the organization to find the best possible technical solutions in a large enterprise environment.
- Led in planning and implementation of the disaster recovery procedures. Provided support for the infrastructure and external clients.

1996 - 1998

**LOCKHEED MARTIN AIR TRAFFIC CONTROL, Rockville, MD**

*Associate Software Engineer*

- Designed, implemented, and supported real-time Air Traffic Control infrastructure for FAA (includes most major airports nationwide) and several other countries around the world.
- Received numerous corporate awards for different implementations, project completions, and innovations.
- Coordinated activities focused on improving existing and coming up with new architectures across local functional organizations and external clients. External clients included many officials and technical leaders across the globe responsible for maintaining safe and reliable air traffic control operations.
- Actively participated in a continuous business and technical process improvement, including ISO 9000.

**FORMAL EDUCATION**

2013 NOVA SOUTHEASTERN UNIVERSITY, Fort Lauderdale, FL

**Doctor of Philosophy (PhD) in Information Systems & Biomedical Informatics**

Specialization: Biomedical Informatics

Dissertation Topic: “*Effectiveness of Evidence-Based CPOE Medication Order Sets Measured by Health Outcomes*”.

GPA: 3.97

**2006 UNIVERSITY OF MARYLAND UNIVERSITY COLLEGE, Adelphi, MD**  
*Master of Science in Management Information Systems*  
GPA: 4.0

**2005 UNIVERSITY OF MARYLAND UNIVERSITY COLLEGE, Adelphi, MD**  
*Master of Business Administration*  
GPA: 4.0

**2002 UNIVERSITY OF MARYLAND UNIVERSITY COLLEGE, Adelphi, MD**  
*Bachelor of Science in Management Studies and Computer Studies*  
GPA: 3.5

**ACADEMIC HONORS:** Upsilon Pi Epsilon (2008), Phi Kappa Phi (2006), Annual Dean's List (2001/2002)

**PROFESSIONAL ASSOCIATIONS:** Association for Computing Machinery (ACM)  
Institute of Electrical and Electronics Engineers (IEEE)  
American Medical Informatics Association (AMIA)  
Healthcare Information & Management Systems Society (HIMSS)  
Scottsdale Institute  
Institute for Healthcare Improvement (IHI)  
Healthcare Technology Research Alliance & Council (HTRAC)

**PROFESSIONAL SERVICE AWARDS:**

**2018 – IEEE status elevation to the Senior Member grade** in recognition of the long-term professional standing and academic achievements in the fields of biomedical informatics and systems engineering.

**2017 – IBM Managers Choice Award from Tokyo Research Labs** for extending medical research cloud capabilities from the US security and patient privacy standards to the global ones; in particular, for embedding European Union's latest General Data Protection Regulation (GDPR), adopted in 2016, into the service.

**2017 – IBM Lab Service Award** in the **Client Success** category for innovation and designing healthcare industry's first HIPAA and FDA Part 11 compliant audit service for logging and monitoring activity in the medical research cloud.

**2013 – Advocate Health Care Mission Values Philosophy (MVP) Award** for **Partnership** with administrators and clinicians to design the healthcare provider industry's largest fully integrated workforce management system.

**1998 – Lockheed Martin Mission Success Award** for innovation, design, and delivery of the firewall and data integration solutions for air traffic control systems.

**JOURNAL AND BOOK PUBLICATIONS**

Krive, J. (2019). Is the healthcare industry ready to embrace a consumer wearable device revolution? *MedTech Intelligence*, Open access: <https://www.medtechintelligence.com/column/is-the-healthcare-industry-ready-to-embrace-a-consumer-wearable-device-revolution/>

Krive, J., & Lou, J.Q. (2017). Artificial intelligence in healthcare: When can I see my Dr. iRobot? *South Florida Hospital News and Healthcare Report*, 13(8), <http://www.southfloridahospitalnews.com>

Krive, J., Hendrickx, A., & Godar, T. (2016). Resolving disconnected patient records to support patient care and population health. *Online Journal of Public Health Informatics*, 8(1), e130.

Krive, J. (2016). Six Sigma applicability and implementation in healthcare. In A. Ortenblad, R. Sheaff, & C.

- Abrahamson Lofstrom (Eds.), *Management innovations for healthcare organizations*. Oxford, United Kingdom: Routledge. ISBN-10: 1138825697. ISBN-13: 978-1138825697.
- Krive, J., Mahatkumar, P., Gehm, L., Mackey, M., Kulstad, E., Li, J., Lussier, Y.A., & Boyd, A.D. (2015). The complexity and challenges of the ICD-9-CM to ICD-10-CM transition in emergency departments. *American Journal of Emergency Medicine*, 33(5), 713-718.
- Krive, J., Shoolin, J.S., & Zink, S.D. (2015). Effectiveness of evidence-based pneumonia CPOE order sets measured by health outcomes. *Online Journal of Public Health Informatics*, 7(2). Open access: <http://ojphi.org/ojs/index.php/ojphi/article/view/5527>
- Krive J. (2014). Health Infonomics: The Changing Landscape of Health Information Technology (HIT) and the Factors Driving HIT Investment and Measurement. *Austin Journal of Computational Biology and Bioinformatics*, 1(2), 2-3. Open access: <http://austinpublishinggroup.com/computational-biology-bioinformatics/fulltext/ajcbb-v1-id1007.php>
- Krive, J. (2013). Building effective workforce management practices through shared governance and technology systems integration. *Nursing Economics*, 31(5), 231-236.
- Krive, J. (2007). The use of open source software in enterprise distributed computing environments. In J. Feller, B. Fitzgerald, W. Scacchi, A. Silitti (Eds.), *Open Source Development, Adoption and Innovation*, 277-282. New York, USA: Springer. ISBN-13: 978-1-4419-4439-9. DOI: 10.1007/978-0-387-72486-7\_28

#### **CONFERENCE PRESENTATIONS & PUBLICATIONS, INVITED TALKS**

- Krive, J. (2019). AI in medicine: Today and tomorrow. *University of Illinois Rockford, Department of Medicine, Rockford, IL, United States of America*, <https://rockford.medicine.uic.edu/departments/academic-departments/medicine/>
- Imas, P., & Krive, J. (2019). Physician engagement and self-service powered by SlicerDicer. *Epic Experts Group Meeting (XGM) conference, Madison, WI, United States of America*, <https://xgm.epic.com>
- Krive, J., & Isola, M. (2019). Rapid infusion of emerging disciplines into modern online curriculum. *35<sup>th</sup> Annual Distance Teaching and Learning Conference, Madison, WI, United States of America*, <https://dtlconference.wisc.edu>
- Gniadek, T. J., Kang, J., & Krive, J. (2019). Explainable artificial intelligence in pathology: A multifaceted framework to guide development and evaluation. *Pathology Informatics Summit, Pittsburg, PA, United States of America*, [https://pathologyinformatics.org/path\\_summit\\_2019.php](https://pathologyinformatics.org/path_summit_2019.php)
- Krive, J. (2019). Healthcare analytics journey from prediction to action: The new wave of communications by electronic prescriptive engines. *3<sup>rd</sup> Annual Health Communication: Barriers, Breakthroughs, and Best Practices (HCB3) conference, University of Illinois, Urbana-Champaign, United States of America*, <http://conferences.illinois.edu/hcb3>
- Chair/Moderator/Contributor: White, C., & Coughlin, B. (2019). A quality and analytics-based approach to the opioid epidemic. *Healthcare Information Management and Systems Society Annual Conference, Orlando, Florida, United States of America*.
- Krive, J. (2018). Artificial intelligence in medicine: New developments, opportunities, and application challenges. *International Council on Systems Engineering (INCOSE), Schaumburg, Illinois, United States of America*, <https://www.incose.org>



- Krive, J. (2018). Effectiveness of CPOE-based order sets in reducing care management practices variability. *Fall 2018 Scientific Research Reception, NorthShore University Health System Research Institute, Evanston, Illinois, United States of America*, <https://www.northshore.org/research-institute/>
- Krive, J., & Isola, M. (2018). Teaching strategies for competency-based learning in data science. *34<sup>th</sup> Annual Distance Teaching and Learning Conference, Madison, WI, United States of America*, <https://dtlconference.wisc.edu>
- Isola, M., & Krive, J. (2018). Data science curriculum. *American Medical Informatics Association (AMIA) Informatics Educators Forum, New Orleans, Louisiana, United States of America*, <https://www.amia.org/2018-informatics-educators-forum>
- Krive, J. (2018). Contextual application of analytics: Rational algorithms in the irrational world. *2nd Annual Biomedical Data Science Day, Northwestern University, Chicago, Illinois, United States of America*.
- Boyd, A.D, Li, J, Kenost, C, Zaim, S.R., Krive, J., Mittal, M., Satava, R., Burton, M., Smith, J., & Lussier, Y.A. (2018). ICD-10 procedure codes produce transition challenges. *AMIA Informatics Summit 2018, San Francisco, California, United States of America*, <https://www.amia.org/2018-informatics-summit>
- Krive, J. (2017). Nurturing student teamwork at a distance as a career success factor. *33<sup>rd</sup> Distance Teaching and Learning Conference, Madison, Wisconsin, United States of America*, <https://dtlconference.wisc.edu>
- Krive, J. (2016). Healthcare big data research opportunities through the prisms of economics, health outcomes, and bioethics. *2<sup>nd</sup> Annual Third Coast Biomedical and Health Informatics Consortium: Big Data Workshop, University of Wisconsin, Milwaukee, United States of America*, <http://www.bighealthdata.org>
- Krive, J. (2016). Patient care index as an all-inclusive predictor of health information technology performance. *IEEE International Conference on Healthcare Informatics, Chicago, Illinois, United States of America*, <http://www.ieee-ichi.org>
- Krive, M., & Krive, J. (2016). Opportunities for analytical and cognitive technology innovation in cardiac oncology. *Global Cardio-Oncology Summit 2016, Vancouver, Canada*, <http://cardiaconcolgy.ca/current-conference/>
- Swirsky, E. S., Krive, J., & Brauner, D. (2016). Data wars: the ethical conundra arising from the use of health information. *18<sup>th</sup> Annual Meeting of the American Society for Bioethics and Humanity, Washington, DC, United States of America*, <http://asbh.org/annual-meeting/bioethics-humanities-meeting>
- Krive, J. (2016). Tailoring project management curriculum to an emerging niche field. *32<sup>nd</sup> Distance Teaching and Learning Conference, Madison, Wisconsin, United States of America*, <https://dtlconference.wisc.edu>
- Krive, J. (2016). Effectiveness of academic online learning environments: Enhanced experience through live interaction. *8<sup>th</sup> Annual International Conference on Education and New Learning Technologies EDULEARN'16, Barcelona, Spain*, <http://iated.org/edulearn/>
- Krive, J. (2016). New trends in healthcare economics and data analytics. *Lecture for current and prospective Valence Health clients, Chicago, Illinois, United States of America*, <http://www.valencehealth.com>
- Krive, J. (2016). Challenges and complexity of ICD-10 transition: Post-implementation risk management. *January Meeting of the Healthcare Financial Management Association (HFMA) South Dakota Chapter, Chamberlain, South Dakota, United States of America*.
- Krive, J. (2016). Trends in healthcare analytics, population health, and economics of health information technology investment. *January Meeting of the Healthcare Financial Management Association (HFMA) South Dakota Chapter, Chamberlain, South Dakota, United States of America*.

- Krive, J., Hendrickx, A., & Godar, T. (2015). Resolving disconnected patient records to support patient care and population health. *Proceedings of the 14<sup>th</sup> International Society for Disease Surveillance Conference, Denver, CO, United States of America*, <http://www.syndromic.org/annual-conference/2015-isds-conference>.
- Krive, J., & Eggleston, M. (2015). Population health management and patient privacy: Unique patient identification. *Health Technology Research Alliance & Council's Secure Health Summit, Hot Springs, VA, United States of America*, <http://htracnov2015.htrac.org>
- Krive, J. (2015). ICD-10 post implementation risk management. *Health Technology Research Alliance & Council's Secure Health Summit, Hot Springs, VA, United States of America*, <http://htracnov2015.htrac.org>
- Krive, J., Shoolin, J. S., & Zink, S. D. (2015). Effectiveness of evidence-based venous thromboembolism (VTE) CPOE order sets measured by health outcomes. *University of Illinois at Chicago College of Applied Health Sciences Research Day, Chicago, IL, United States of America*.
- Krive, J. (2015). Health infonomics as a framework for making smart health information technology decisions. *University of Illinois at Chicago College of Applied Health Sciences Research Day, Chicago, IL, United States of America*.
- Krive, J., Shoolin, J. S., & Zink, S. D. (2015). Effectiveness of evidence-based venous thromboembolism electronic order sets measured by health outcomes. *Proceedings of the IEEE/EMBS International Conference on Biomedical and Health Informatics, Haikou, China*, <http://icbhi.org>
- Krive, J. (2015). Aligning online graduate curriculum with a rapidly evolving niche field. *31<sup>st</sup> Distance Teaching and Learning Conference, Madison, Wisconsin, United States of America*, <https://dtlconference.wisc.edu>
- Krive, J. (2015). Patient outcomes as transformative mechanisms to bring health information technology industry and research informatics closer together. *Proceedings of the 15<sup>th</sup> World Congress on Health and Biomedical Informatics, 216, 410, Sao Paulo, Brazil*, <http://www.medinfo2015.org>
- Krive, J. (2015). Complexity and challenges of ICD-10 transition. *Lecture for current and prospective Valence Health clients, Chicago, Illinois, United States of America*, <http://www.valencehealth.com>
- Krive, J. (2015). Population health data management strategies: Analytics and clinical informatics. *Health Technology Research Alliance & Council Meeting, Gettysburg, PA, United States of America*, <http://htracjune2015.htrac.org>
- Krive, J. (2015). Data quality in health outcomes and biomedical informatics research. *University of Illinois College of Medicine, Chicago, IL, United States of America*, <http://www.medicine.uic.edu>
- Krive, J. (2015). Student experience transformation in the online learning environment supported by live lectures and office hours. *7<sup>th</sup> International Conference on Education and New Learning Technologies EDULEARN'15, Barcelona, Spain*, <http://iated.org/edulearn/>
- Krive, J. (2015). Evolution of asynchronous discussion based online graduate courses to comprehensive student experience with live instruction components. *9<sup>th</sup> International Technology, Education, and Development Conference INTED2015, Madrid, Spain*, <http://www.iated.org/inted>
- Chair/Moderator: Harris, J. & Rumsey, D. (2015). Pediatricians Pioneer Population Healthcare Approaches. *Healthcare Information Management and Systems Society Annual Conference, Chicago, Illinois, United States of America*.

- Krive, J., Shoolin, J.S., & Zink, S.D. (2014). Effectiveness of evidence-based congestive heart failure (CHF) CPOE order sets measured by health outcomes. *Proceedings of the American Medical Informatics Association (AMIA) Annual Symposium, Washington, DC, United States of America, 815-824*, <http://knowledge.amia.org>
- Krive, J., Cole, J., Mierzwa, S., Beighe, B., Mason, P. (2014). Population vs. personalized health – tools and strategies to find the right balance. *East Health Technology Research Alliance & Council Meeting, Leesburg, VA, United States of America*, <http://east2014.htrac.org/>
- Krive, J. (2014). Key strategies for population health management and research. *East Health Technology Research Alliance & Council Meeting, Leesburg, VA, United States of America*, <http://east2014.htrac.org/>
- Krive, J. & Kerfoot, K. (2014). Clinical outcomes in the era of accountable care organizations (ACO). *API Healthcare / GE Healthcare Client Forum in Milwaukee, Wisconsin, United States of America*.
- Krive, J. & Snegur, M. (2014). Reporting governance. *API Healthcare / GE Healthcare Client Forum in Milwaukee, Wisconsin, United States of America*.
- Chair/Moderator/Contributor: Levy, B. (2014). Leveraging analytics to capture the full benefit of ICD-10. *Healthcare Information Management and Systems Society Annual Conference, Orlando, Florida, United States of America*.
- Chair/Moderator: Kochendorfer, K. (2014). Using clinical decision support and knowledge management in healthcare settings. *Healthcare Information Management and Systems Society Annual Conference, Orlando, Florida, United States of America*.
- Krive, J. (2013). Measuring success: Demonstrating clinical and business outcomes of IT initiatives. *Washington Health Technology Research Alliance & Council Meeting, Washington, DC, United States of America*, <http://htrac.org/council-meeting/november-2013>
- Krive, J. (2013). How informatics is changing decision support today and will revolutionize healthcare tomorrow. *Washington Health Technology Research & Council Meeting, Washington, DC, United States of America*, <http://htrac.org/council-meeting/november-2013>
- Krive, J. (2013). Building effective workforce management practices through shared governance and integration. *API Healthcare Client Forum in Milwaukee, Wisconsin, United States of America*.
- Krive, J. (2013). Innovation in healthcare information technology project management: Improving efficiency and effectiveness. *Chicago HealthTech Council Meeting, Itasca, Illinois, United States of America*, <http://www.healthtechcouncil.org/index.php/council-meeting/april-2013>
- Chair/Moderator/Contributor: Nelson, M. & Rolf, E. (2013). Mitigating fraud risk for payers. *Healthcare Information Management and Systems Society Annual Conference, New Orleans, Louisiana, United States of America*.
- Chair/Moderator: Waldren, S. & Boerger, G. (2013). Improving outcomes with benchmarking data: The AAFP's clinical data repository. *Healthcare Information Management and Systems Society Annual Conference, New Orleans, Louisiana, United States of America*.
- Krive, J. (2012). Effectiveness of evidence-based CPOE medication order sets measured by health outcomes. *Advocate Research and Innovation Forum, Advocate Lutheran General Hospital in Park Ridge, Illinois, United States of America*, <http://www.advocatehealth.com/documents/clinicalresearch/poster/2012researchposter005.pdf>

- Krive, J. (2012). Migrating from v.6 to v.9 – A client’s perspective (AdvocateWorks workforce management platform implementation story). *API Healthcare Client Forum in Milwaukee, Wisconsin, United States of America*.
- Bliss, J., Ross, J., Krive, J., Backhaus, W., & Graul, L. A. (2008). Competency-based active learning: is your faculty on-board? Research applications in active learning. *Proceedings of the 14th Annual Sloan-C International Conference on Online Learning in Orlando, Florida, United States of America*, <http://sloanconsortium.org/>
- Bliss, J., Ross, J., Krive, J., & Graul, L. A. (2008). Competency development in online business learning environments – MBA program, University of Maryland University College (UMUC). *Proceedings of the International Conference of Education, Research, and Innovation ICERI’08 in Madrid, Spain*, <http://www.iated.org/iceri2008/>
- Krive, J. (2007). The use of open source software in enterprise distributed computing environments: A decision-making framework for OSS selection and planning. *Proceedings of the Third International Conference on Open Source Systems OSS’07, Limerick, Ireland*, 277-282.
- Krive, J., Graul, L.A., Bliss, J., & Ross, J. (2007). Competency development in blended and online business learning environments. *Proceedings of the 13th Annual Sloan-C International Conference on Online Learning in Orlando, Florida, United States of America*, <http://sloanconsortium.org/>

### **CLINICAL RESEARCH/TRIAL**

Agency: Advocate Health Care  
Protocol Number: 5038  
Primary Investigator: Jacob Krive  
Title: Effectiveness of evidence-based CPOE medication order sets measured by health outcomes

### **PROFESSIONAL CERTIFICATIONS**

**Certified Professional in Healthcare Information Management and Systems (CPHIMS)** certification from Healthcare Information Management and Systems Society (HIMSS)

**Lean Six Sigma Green Belt** certification from Purdue University

**Cogito Project Manager (CPM)** certification from Epic Systems

### **SERVICE TO ACADEMIC AND PROFESSIONAL COMMUNITIES**

#### ***Physician Board Exam Item Writing:***

American Medical Informatics Association (AMIA) / American Board of Preventive Medicine (ABPM)  
Item Writer – Clinical Informatics Subspecialty Board Examination

#### ***Peer Reviews:***

2020 Healthcare Information Management and Systems Society Annual Conference, Orlando, Florida, United States of America. Analytics track.

2019 American Medical Informatics Association (AMIA) Annual Symposium, Washington, DC, United States of America.

2019 Healthcare Information Management and Systems Society Annual Conference, Orlando, Florida, United States of America. Analytics track.

2019 Illinois Discovery Partners Institute (DPI) seed grant reviewer.

2019 International Medical Informatics Association (IMIA) MedInfo conference, Lyon, France, artificial intelligence and machine learning track.

2018 The Institution of Engineering and Technology, England, United Kingdom, book proposal review.

2018 Healthcare Information Management and Systems Society Annual Conference, Orlando, Florida, United States of America. Great Societal Challenges track.

2018 American Medical Informatics Association (AMIA) Annual Symposium, San Francisco, California, United States of America.

2017 International Journal of Functional Informatics and Personalized Medicine manuscript reviewer.

2017 Online Journal of Public Health Informatics (OJPHI) manuscript reviewer.

2017 Healthcare Information Management and Systems Society Annual Conference, Las Vegas, Nevada, United States of America. Clinical and Business Intelligence track.

2017 American Medical Informatics Association (AMIA) Annual Symposium, San Francisco, California, United States of America.

2017 BMJ Open manuscript reviewer.

2016 International Journal of Clinical Practice manuscript reviewer.

2016 American Medical Informatics Association (AMIA) Annual Symposium, Chicago, Illinois, United States of America.

2016 Online Journal of Public Health Informatics (OJPHI) manuscript reviewer (several manuscripts).

2016 International Journal of Healthcare Technology and Management (IJHTM) by Inderscience manuscript reviewer.

2016 Healthcare Information Management and Systems Society Annual Conference, Chicago, Illinois, United States of America. Clinical and Business Intelligence track.

2015 Netherlands Organization for Health Research and Development TOP science grant reviewer.

2015 Peer reviewer for Generating Evidence and Methods to Improve Patient Outcomes (eGEMs), the Electronic Data Methods (EDM) Forum's journal.

2015 American Medical Informatics Association (AMIA) Annual Symposium, San Francisco, California, United States of America.

2015 Healthcare Information Management and Systems Society Annual Conference, Chicago, Illinois, United States of America. Clinical and Business Intelligence track.

2014 American Medical Informatics Association (AMIA) Annual Symposium, Washington, DC, United States of America.

2014 20<sup>th</sup> Americas Conference on Information Systems (AMCIS), Savannah, Georgia, United States of America. Healthcare Information Systems and Technology track.

2014 Academy of International Business Annual Conference, Vancouver, Canada. Innovation and Knowledge Management, International Business Research Methodology tracks.

2014 Healthcare Information Management and Systems Society Annual Conference, Orlando, Florida, United States of America. Clinical and Business Intelligence track.

2013 Academy of International Business Southeast USA Conference, Atlanta, Georgia, United States of America. International Business Research track.

2013 Academy of International Business Annual Conference, Istanbul, Turkey. Innovation and Knowledge Management track.

2013 Healthcare Information Management and Systems Society Annual Conference, New Orleans, Louisiana, United States of America. Financial Information Systems and Business Operations Optimization track.

2012 Academy of International Business Southeast USA Conference, Fort Lauderdale, Florida, United States of America. Innovation and Knowledge Management, Emerging Markets tracks.

2012 Academy of International Business Annual Conference, Washington, DC, United States of America. Innovation and Knowledge Management track.

2011 Academy of International Business Annual Conference, Nagoya, Japan. Innovation and Knowledge Management track.

2010 Academy of International Business Annual Conference, Rio de Janeiro, Brazil. Innovation and Knowledge Management track.

## **PUBLIC RELATIONS/MEDIA EXPOSURE**

### ***Retail Dive*** (July 2019)

“Wear it out: How smart tech and data collection will impact retail”

A detailed review of the consumer reactions and sentiments towards application of wearables and other mobile technologies in various environments, including by employers

<https://www.retaildive.com/news/wear-it-out-how-smart-tech-and-data-collection-will-impact-retail/557903/>

### ***Supply Chain Dive*** (May 2019)

“Wearables in the warehouse bring privacy concerns to the forefront”

Healthcare data analytics insights related to benefits, risks, and clinical opportunities for employers collecting data from wearables on employees

<https://www.supplychaindive.com/news/wearables-IoT-tracking-workers/555232/>

### **Ambassador, Health Technology Research Alliance & Council** (2014-2016)

<http://htrac.org/ambassador>

Serve as a council member, subject matter expert & industry insider, and researcher - to help collect, analyze, and disseminate health information technology knowledge. Consult on a wide range of topics and help grow awareness about the Council among researchers and practitioners in the field.

### ***Healthcare Finance News*** (September 2013)

“Cut Labor Costs with Smarter Scheduling”

Interview in collaboration with J.P. Fingado, CEO of API Healthcare, on the subjects of healthcare scheduling efficiency and positive effects of automation on associate and patient satisfaction

**Reuters/Business Wire Press Release (June 2013)**

“Advocate Health Care Improves Patient and Staff Experience”

Highlighting Advocate’s success in employing workforce management software to improve patient and associate satisfaction

**Reuters/Business Wire Press Release (March 2013)**

“API Healthcare Redefines Workforce Technology for the Future”

Introduction of the HwIE concept in collaboration with J.P. Fingado, API Healthcare’s CEO and President

**CONTINUING PROFESSIONAL EDUCATION**

<b>Ongoing</b>	Scottsdale Institute Lectures
<b>Ongoing</b>	HIMSS Events and Continuing Education
<b>Ongoing</b>	FDA Quality Management System (QMS) Training
<b>2018</b>	Cogito Analytics Fundamentals – Epic Systems
<b>2018</b>	Cogito Project Management – Epic Systems
<b>2016-2018</b>	HIPAA and FDA Part 11 Compliance and Regulatory Training - IBM
<b>2018</b>	Principles of Secure Software Engineering
<b>2016</b>	Secure Engineering for Healthcare - IBM
<b>2016</b>	Natural Language Processing – IBM Watson Academy
<b>2016</b>	Watson for Oncology – IBM Watson Academy
<b>2016</b>	Watson for Clinical Trials Matching – IBM Watson Academy
<b>2016</b>	Watson Discovery Advisor – IBM Watson Academy
<b>2016</b>	Explorys Real World Evidence for Life Sciences – IBM Watson Academy
<b>2016</b>	IBM SPSS Workshops – University of Illinois at Chicago
<b>2015</b>	Hadoop Training (environment, architecture, Pig, Hive) - MapR
<b>2015</b>	Agile Scrum Master Education, Training, and Coaching – Valence Health
<b>2014</b>	Grant Writing Workshops – Nova Southeastern University
<b>2013</b>	Cache System Management – Intersystems
<b>2013</b>	Fundamentals of Data Warehousing in Healthcare – HIMSS/University of Central Florida
<b>2013</b>	Building and Managing HL7 Productions - Intersystems
<b>2012</b>	Healthcare Quality Improvement – Institute for Healthcare Improvement (IHI)
<b>2012</b>	Managing Healthcare Operations - Institute for Healthcare Improvement (IHI)
<b>2012</b>	Healthcare Project Management - Milwaukee School of Engineering
<b>2012</b>	Negotiation Institute – Northwestern University
<b>2012</b>	Application of LEAN and Six Sigma in Healthcare – University of Wisconsin, Madison
<b>2012</b>	Human Research Curriculum – Collaborative Institutional Training Initiative (CITI)
<b>2012</b>	HIMSS Chicago Chapter Healthcare IT Education Symposium - HIMSS
<b>2012</b>	Crucial Conversations - Advocate
<b>2012</b>	Operational Excellence in Nursing Summit – Advisory Board
<b>2011</b>	Leadership in Chaotic World (leadership training for healthcare professionals) – Kathy Malloch
	Healthcare Leadership Systems
<b>2010</b>	Protecting Human Research Participants – National Institutes of Health (NIH)
<b>2010</b>	Conflict Management and Assertive Leadership Training - Advocate
<b>2009</b>	ITIL Foundation – Learning Tree
<b>2009</b>	API Time & Attendance Technical Training – API Healthcare
<b>2008</b>	API LaborWorkx Technical Training – API Healthcare
<b>2008</b>	New Leader Orientation and Launch Training - Advocate
<b>2007</b>	IBM AIX 6 and Power 6 - IBM
<b>2006</b>	IBM WebSphere Application Server Administration, V6 AIX - IBM
<b>2006</b>	IBM WebSphere V6 Proof of Technology - IBM
<b>2006</b>	IBM Advanced Power 5 Virtualization - IBM
<b>2004</b>	BMC Patrol Architecture and Best Practices – BMC

**KEYWORD INDEX OF SKILLS*****Software, Languages, Operating Systems, Databases***

SPSS, R, SAS, Tableau, Duke Deduplication Engine, Excel, MATLAB, Mathematica, Lindo, C, C++, Pascal, BASIC, PL/1, Cobol, Lisp, Java, JavaScript, HTML, Unix Shells (C-shell, Korn-shell, Bourne-shell, Z-shell), Unix Operating Systems (AIX, Sun, HP-UX, SCO, Linux), Windows Operating Systems (XP, 2008, 7), Performance Monitoring Tools (HP Openview, BMC Patrol, IBM Tivoli), Lawson ERP, API LaborWorkx workforce management, EPSi budgeting and strategic planning, Oracle eGate and Intersystems Ensemble HL7/CCD clinical systems integration, IBM MDM/Initiate/EMPI, Cerner Millennium, Cerner Healthy Intent, SumTotal learning management, Advisory Board Compass dashboard products, Computer Databases (Oracle, DB2, SQL, Access), IBM WebSphere eCommerce, Ariba Supply Chain, Cerner Millenium, Epic, Meditech, eClinicalWorks, Allscripts TouchWorks, Explorys, Phytel, IBM Watson Discovery Advisor, Watson for Oncology, Watson Clinical Trials Matching, Qradar, Guardium.

***Knowledge, Skills, and Process Management***

Operations and scheduling optimization programming, mathematical and business statistics, applied mathematics (numerical analysis, linear algebra, discrete math, calculus), research methodology, historical data trends, ex post facto research, qualitative research, research design, medicine/clinical concepts, clinical trials, nursing effectiveness and workflow, Lean, Six Sigma, TQM, evidence based medicine and healthcare operations research, financial analysis, clinical and financial decision support, computer programming, systems architecture and design, networking, information technology, computer science, agile software development, Scrum Master, waterfall software development, SDLC, clinical informatics, project management, program management, budget planning, fiscal responsibility, productivity, people management, team building, relationship building, vendor collaboration, change and process management, organizational transformation, organizational leadership, effective communication, negotiation, presentation, political savvy.