

American Medical Informatics Association Annual Symposium (AMIA 2023)

New Orleans, Louisiana, USA
11-15 November 2023

Volume 1 of 3

ISBN: 979-8-3313-1629-7

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2023) by American Medical Informatics Association
All rights reserved.

Printed with permission by Curran Associates, Inc. (2025)

For permission requests, please contact American Medical Informatics Association
at the address below.

American Medical Informatics Association
4720 Montgomery Lane, Suite 500
Bethesda, Maryland 20814
USA

Phone: (301) 657-1291
Fax: (301) 657-1296

www.amia.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

VOLUME 1

Towards Inferring Implicit Bias in Clinical Interactions using Social Signals	1
<i>Manas Bedmutha, Amrit Bhat, Sabrina Mangal, Emily Bascom, Wanda Pratt, Brian Wood, Janice Sabin, Nadir Weibel, Andrea Hartzler</i>	
AI for Assisting Gene Linking at the National Library of Medicine Stage III: Comprehensive Evaluation of the AI Implementation	3
<i>Rezarta Islamaj, Chih-Hsuan Wei, Po-Ting Lai, Melanie Huston, Cathleen Coss, Preeti G. Kochar, Nicholas Miliaras, Olga Printseva, Oleg Rodionov, Keiko Sekiya, Dorothy Trinh, Deborah Whitman, Craig Wallin, Zhiyong Lu</i>	
Development and Evaluation of an AI-Based Workflow for the Prioritization of Patient Portal Messages	5
<i>Jie Yang, Jonathan So, Hao Zhang, Simon Jones, Denise M. Connolly, Claudia Golding, Esmelin Griffes, Adam C. Szerencsy, Tzer Wu, Yindalon Aphinyanaphongs, Vincent Major</i>	
Towards Human-AI Collaboration in Radiology: A Clinical Evaluation of AI for Image Analysis of Chest Radiographs to Assist with Diagnosing Pulmonary Tuberculosis	7
<i>David Hua, Neysa Petrina, Alan J. Sacks, Noel Young, Jin-Gun Cho, Ross Smith, Simon K. Poon</i>	
Development, Optimization, and Evaluation of CONCERN Early Warning Score in Multi-Site Clinical Trial.....	17
<i>Sarah Rossetti, Patricia C. Dykes, Jennifer Withall, Graham Lowenthal, Chris Knaplund, Rachel Lee, Mollie Hobensack, Dave Albers, Temiloluwa Daramola, Cathy Ivory, Po-Yin Yen, Brian Douthit, Min J. Kang, Frank Y. Chang, Mohtashim Bokhari, Mai Tran, Kenrick Cato</i>	
Development and Simulated Evaluation of a Neurosurgical Readmissions Reduction Program (NSRRP) using Machine Learning, Workflow Analysis, and Simulation in an Adult Academic Health Center.....	19
<i>Tzu-Chun Wu, Abraham Kim, Ching-Tzu Tsai, Andy Gao, Taran Ghuman, Anne Paul, Alexandra Castillo, Joseph Cheng, Owoicho Adogwa, Laura Ngwenya, Brandon Foreman, Danny Wu</i>	
DISRUPT DETERIORATION: Implementation Outcomes of an AI-Powered Early Warning System	21
<i>Thomas Byrd, Molly Mattson, Thomas Phelan, Benjamin Langworthy, Genevieve B. Melton-Meaux, Christopher Tignanelli</i>	
Multi-Modal Data Based Machine Learning for Cardiovascular and Cardioresnal Patient Stratification	22
<i>Sudeshna M. Fisch, Bhavna Adhin, Kelly Fader, Xuemei Cai, Junrui Di</i>	
Development of an AI-Enabled Clinical Decision Support System of Patient Reported Outcomes Prediction for Adolescent Idiopathic Scoliosis Patients	23
<i>Wenqi Shi, Yuanda Zhu, Felipe O. Giuste, Andrew Hornback, Ashley M. Carpenter, Coleman Hilton, Henry J. Iwinski, J. Michael Wattenbarger, May D. Wang</i>	
Evaluating ChatGPT as an Agent for Providing Genetic Education.....	33
<i>Nephi Walton, Sara Gracefo, Nykole Sutherland, Beth A. Kozel, Christopher J. Danford, Scott P. McGrath</i>	

Design of a Stepped-Wedge Clinical Trial to Evaluate the Impact of a Machine Learning System on Unplanned Acute Care in Oncology	34
<i>Jason Weinreb, David Walsh, Renee D. George, Benjamin H. Ellis, Neema Navai, Domenica A. Delgado, Chris J. Sidey-Gibbons, Christine L. Swisher</i>	
The Impact of Social Determinants of Health on Onset of New Diseases from Medication Adverse Events-Using Machine Learning Models.	36
<i>Joanna Usifo</i>	
Resolution: Clinical Decision Support Resources Should Be Freely and Publicly Available to All	45
<i>Tiffani Bright, Edwin A. Lomotan, Blackford Middleton, Angela Dobes, Brian Levy</i>	
ICD-11: Debating Adoption Issues	48
<i>Christopher Chute, Susan Fenton, Mary Stanfill, Kathy Giannangelo</i>	
Generative Applications of Large Language Models for Medical Education and Knowledge Searching: Shall We Count on ChatGPT and Co?	50
<i>Stéphane Meystre, Yanshan Wang, Kirk Roberts, Victor Tseng, William Hersh</i>	
Should Generative Artificial Intelligence Be Used for Patient Care?	53
<i>Adam Wright, George Hripcsak, James Cimino, Yaa Kumah-Crystal, Jon Duke</i>	
Learning R Online to Empower Biomedical Science Predoctoral Trainees	56
<i>Alexander Alekseyenko, Matthew Greseth, Paula Traktman</i>	
Updating of a Doctoral Nursing Informatics Program to Align with AACN Essentials, Industry Trends, and Workforce Needs	58
<i>Robin Austin, Sripriya Rajamani</i>	
Developing a Model for Inclusive Excellence in Higher Education	60
<i>Leandra Celaya, Jessica H. Williams, Nia Close, Ashleigh Allgood, Geoffrey Silvera, Nancy Borkowski, Christy Lemak</i>	
Developing a Comprehensive List of Knowledge and Skills for Research-Oriented Graduate Education Through Faculty Expertise	62
<i>Sharon E. Davis, Jessica S. Ancker, Thomas A. Lasko, Brenda Kulhanek, Monika E. Grabowska, Victor A. Borza, Bryan D. Steitz, Kim M. Unertl</i>	
SDOH is More than Sexy: Why Communities Need Informatics	63
<i>Joy Doll</i>	
Undergraduate Health Informatics Accreditation: Benefits, Timeline, Pathways, and Milestones	64
<i>Sue Feldman, Stephen E. Bronsburg, Christina Eldredge, Matthew Scotch, Linde Tesch</i>	
How the Professional Doctorate in Health Informatics Differs from the PhD	67
<i>Susan Fenton, Angela Ross, Debora Simmons</i>	
A Nurse-Designed Big Database and Suite of Applications for Teaching/Learning Informatics	68
<i>Ramya Govindarajan, Judy Katz, Rose Hayes, Roy Simpson</i>	
Bridging the Gap Between Research and Outcomes: A Collaborative Approach to Developing Intelligent and Automated Education Interventions to Improve Bowel Preparation Before Colonoscopy at Mayo Clinic	69
<i>Sarah Harper, Lauren Rost, Joshua Ohde, Ian Bezahler, Omar Mousa, Sushil Garg, Lu Zheng, Rajeev Chaudhry</i>	

Building Human and Data Capacity in the NIH Data Science for Africa Initiative	71
<i>William Hersh, Andrea Krussel, Judy Gichoya</i>	
Impact of Generative AI on Health Informatics Education	74
<i>Miriam Isola, Mohan Zalake, Laura Mills, Jacob Krive</i>	
Big Data Education for Clinical Documentation	76
<i>Melinda Jenkins, Judith Katz, Courtney Omary, Suzan Ahmad, Ramya Govindarajan, Roy Simpson</i>	
Integrating OpenEMR in Health Informatics Education: Students View	77
<i>Joseette Jones, Cathy Fulton, Saptarshi Purkayastha, Pranitha Valluripalli</i>	
Implementing Artificial Intelligence in Hospitals to Achieve a Learning Healthcare System: A Systematic Review of Current Enablers and Barriers	79
<i>Amir Rahimi, Oliver Pienaar, Moji Ghadimi, Oliver J. Canfell, Jason D. Pole, Sally Shrapnel, Anton H. Van Der Vegt, Clair Sullivan</i>	
AMIA Ignite Talk: Fighting Fire with FHIR	81
<i>Katherine Koo</i>	
Bridging Training Gaps Through Voice: An Ethics-Based Approach to Teaching Trustworthy AI.....	83
<i>Andrea Krussel, Philip Payne, Steven Bedrick, David Dorr, William Hersh</i>	
Clinical Informatics Education in Low- And Middle-Income Countries (LMICs): A Scoping Review.....	86
<i>Lynn Kysh, Tamara Galoyan, James Dickhoner, Payal Lariya, Margarita Margaryan, Armine Lulejian</i>	
Development of a Clinical Informatics Elective Course for Diverse Clinical and Non-Clinical Learners at an Academic Medical Center	88
<i>Wayne Liang, Evan Orenstein</i>	
Health Informatics Education in LMICs: A Call for Action.....	89
<i>Armine Lulejian, Lynn Kysh, James Dickhoner</i>	
Mapping AACN Sub-Competencies to Course Learning Outcomes using Semantic Similarity Scores	90
<i>Christopher Macintosh</i>	
Teaching the Policymakers: A Health Informatics Course for Ministry of Health Employees in the Republic of Armenia.....	93
<i>Ruzanna Movsesyan, Tsaghkanush Sargsyan, Gohar Yerimyan, Armine Lulejian</i>	
Developing Nursing Faculty to Teach Entry-Level Healthcare Informatics Competencies	94
<i>Ronald Piscotty</i>	
Data Science and Data Literacy in Nursing.....	96
<i>Lisiane Pruinelli, Steve Johnson</i>	
Physician-Led Informatics Education Design	98
<i>Lauren Rost, Joshua Reed, Adria Hoffman, Carilyn Wieland</i>	
Building an Online Orientation, Evaluation and Reference Tool in a Pediatric Academic Center with Two Different Institutions Represented	99
<i>Shubho Sarkar</i>	

Enhancing the Master of Health Informatics Program for International Students: An Evidence-Based Approach.....	100
<i>Suhila Sawesi, Mohamed Rashrash, Guenter Tusch</i>	
A Hands-On, Practical Experience for a Clinical Informatics Medical Student Rotation	101
<i>David Schneider, Heidi Twedt, Brian Patterson</i>	
Building an Interorganizational Collaboration to Enhance Biomedical Informatics Experiential Education for Diverse Students	103
<i>Kim Unertl, Lei Qian, Todd Gary, Bradford Patton, Marcel Edinbough</i>	
Expanding Inclusive Pathways into Informatics: High School Internships.....	106
<i>Kim Unertl, Dasha Cohen, Indra N. Sarkar</i>	
Clinical Competency Assessment Dashboard for Internal Medicine Residents	107
<i>Scott Vennemeyer, Michelle I. Knopp, Daniel P. Schauer, Benjamin Kinnear, Eric Warm, Danny T. Y. Wu</i>	
Applying Visual Analytics in Medical Education: A Scoping Review	108
<i>Scott Vennemeyer, Andy Gao, Gargi Rajput, Umberto Tachinardi, Mark H. Eckman, Eric Warm, Danny Wu</i>	
Challenges and Opportunities Developing a Biomedical Informatics Curriculum in a New Medical School.....	110
<i>Jon Walsh, Shamsi D. Berry, Philip Kroth</i>	
Blue State, Red State: The Effects of U.S. Political Polarization on Informatics Workforce, Research, and Training	112
<i>Jessica Ancker, Martin Were, Christoph Lehmann, Kenneth Goodman, Alvin Jeffery</i>	
Fostering Inclusive and Equitable Health Care and Public Health: Addressing Stigma and Discrimination with Informatics.....	115
<i>Marcy Antonio, Byron Lowens, Ashley Beals, Andrea Hartzler, Li Zhou, Tiffany Veinot</i>	
Leading Interoperability: ONC and CMS Pave the Way with LTPAC	118
<i>Sara Armson, Elisabeth Myers, Brenda Akinnagbe, Lorraine Wickiser</i>	
Advancing Healthcare Through Equity-Focused Informatics and Data Practices.....	120
<i>Oliver Bear Don'T Walk, Denis Newman-Griffis, Reggie Casanova-Perez, Diane Korngiebel, Krystal Tsosie, Kevin Wiley</i>	
“The Machine Learned What About Me?” - Perspectives on Patient-Facing Machine Learning Algorithms.....	123
<i>Natalie Benda, Meghan Turchioe, Megan Salwei, Pooja Desai, Laurie Novak</i>	
Overcoming Barriers in EHR-Based Research to Enable Health Equity	126
<i>Andrew Boyd, Katharine Lawrence, Alice Pressman, Andrea Cheville, Keith Marsolo</i>	
Making EHRs SAFER: Evidence-Based Informatics Solutions for Supporting Clinician Cognition.....	129
<i>Kevin Chaney, Aaron Hettinger, Yalini Senathirajah, Jason Adelman, Hardeep Singh</i>	
Engaging Stakeholders in Technology Design for Older Adults and People with Disabilities: Implications for Research and Implementation	132
<i>Jane Chung, Anne Turner, Rupa Valdez, Robin Brewer, George Demiris</i>	

Algorithmic Bias and Health Equity: The Challenge and Response	135
<i>Irene Dankwa-Mullan, Eileen Koski, Elisabeth Scheufele, Tina Hernandez-Boussard, Fei Wang</i>	
NIH Funding and Resources Supporting Clinical Informatics and Data Science Research	138
<i>Allison Dennis, Richard Palmer, Bart Trawick, Hsinyi Tsang, Yanli Wang</i>	
Integrating Patient Preferences in Patient-Centered Clinical Decision Support: Where Are We Now and Where Do We Go Next?	141
<i>Priyanka Desai, Gilad Kuperman, Rachel Richesson, Liz Salmi, James Swiger</i>	
‘Lower-Tech’ Solutions to Advance Health Informatics in Low Resource Settings.....	144
<i>Kylie Dougherty, Yashika Sharma, Sakie Zawtha, Sarah Iribarren, Olivia Velez</i>	
Empowering Women in Biomedical Informatics: Pivoting for Success in the Post-Pandemic World	147
<i>Prerna Dua, Hilda Klasky, Arlene Chung, Andrew Phillips</i>	
Consent Management and Enforcement Panel: Clinical and Technological Challenges and Solutions.....	150
<i>Adela Grando, Mohammad Jafari, Chethan Sarabu, Lin Zhao</i>	
Aggregate De-Identified EHR Data – Research using Resources from Two Major EHR Vendors	153
<i>Mark Hoffman, Louis Ehwerhemuepha, Feifan Liu, Jeffrey Thompson, Natalie J. Kane</i>	
Implementing HL7 FHIR: The Implementation Divisions Heralds the Future of Interoperability	156
<i>Charles Jaffe, Caroline Macumber, Viet Nguyen, Daniel Vreeman, Julia Skapik</i>	
Optimizing Screening for Digital Inclusion in Diverse Populations	160
<i>Elaine Khoong, Emilia Marchis, Jorge Rodriguez, Alejandra Casillas, Oanh Nguyen</i>	
CDS RoundUp: Exterminating Roaches in Clinical Decision Support	163
<i>Lindsey Knake, Leonid Bederman, Adam Dziorny, Allison McCoy, Eric Kirkendall</i>	
Developing a Curriculum for Registry Science: The Top Ten Topics You’ll Need to Survive in the Trenches	166
<i>Steven Labkoff, Leon Rozenblit, Rachel Richesson, James Tcheng</i>	
Health Systems as Product Innovators: Creating an Ecosystem to Build, Implement, and Scale Emerging Technologies	169
<i>Ron Li, Andy Chu, Haipeng Zhang, Yevgeniy Gitelman, Jennifer Tran</i>	
The Informatics of Multimorbidity Research	172
<i>Charisse Madlock-Brown, Stephanie Gilbertson-White, Heath Davis, Carol Geary, Boyd Knosp</i>	
The CEDAR Workbench: Semantic Technology to Ensure FAIR Data	175
<i>Mark Musen, Anthony Juehne, Mirjam Reisen, Erik Schultes, Rachel Richesson</i>	
Will AI Make Terminology Irrelevant?	178
<i>Stuart Nelson, Qing Zeng-Treitler, Mark Tuttle, Keith Campbell, James Cimino</i>	
Implications of Digital Advances on Clinical Guideline Trustworthiness and Dissemination Through a Reimagined National Repository	181
<i>Mary Nix, Edwin Lomotan, Mario Teran, David Dorr</i>	
Responsible Implementation and Use of AI in Healthcare Organizations.....	183
<i>Laurie Novak, Craig Kuziemy, Polina Kukhareva, Peter Embi</i>	

Optimizing Referrals to the Supplemental Nutrition Assistance Program (SNAP) Through a Clinically Integrated, Interoperable, Standards-Based, and Scalable Social Services Referral Management System	186
<i>Eliel Oliveira, Jawanna Henry, Evelyn Gallego, Sari Vatske, Anjum Khurshid</i>	
Physicians in AMIA Endorsed Panel - Informatics: Cost or Revenue Center? 3rd in a Series AMIA Shark Tank CMIO-to-CEO Resource Pitch-A-Thon	189
<i>Deepti Pandita, Randa Perkins, Adam Landman, Christopher Longhurst, Edmondo Robinson, Benjamin Rosner, James Merlino</i>	
Using AI to Improve Mental Health Care: Challenges and Opportunities	192
<i>Jyotishman Pathak, Trevor Cohen, Juliet Edgcomb, Vasa Curcin, Yiye Zhang</i>	
Large Language Models in Healthcare: Opportunities and Challenges.....	195
<i>Yifan Peng, Yuan Luo, Xia Hu, Chunhua Weng, Bradley Malin</i>	
Extending the EHR to Support Clinical and Research Use of Social Drivers of Health (SDoH) Data	198
<i>Jimmy Phuong, Charisse Madlock-Brown, Rena Patel, Carol Geary, Nisha Mathews, Anthony Solomonides, William Adams</i>	
Data Modernization Initiative in Public Health: Efforts to Strengthen the Public Health Information Infrastructure and the Informatics Workforce.....	201
<i>Sripriya Rajamani, Jamie Pina, Theresa Cullen, Susan Fenton, Brian Dixon</i>	
Beyond Completeness: Considerations for Systematic Assessment of Fitness in Secondary Use of Clinical Data.....	204
<i>Hanieh Razzaghi, Harold Lehmann, Nicole Weiskopf, Clair Blacketer, Charles Bailey</i>	
Clinical Decision Support for Treating Opioid Use Disorder with Buprenorphine: Challenges and Opportunities	207
<i>Thomas Reese, Adriane Cruz, Casey Distaso, Edward Melnick, Adam Wright</i>	
Measuring Long Term Impact on Health Professionals' Documentation Burden Reduction: 25x5 Task Force Logic Model, Mixed-Methods, and Innovative Approaches.....	210
<i>Sarah Rossetti, Julia Adler-Milstein, Thomas Kannampallil, Amanda Moy, Judy Murphy</i>	
Harnessing the Electronic Safety Net to Improve Patient Care at the Bedside: Critical Practices for Sustainable Implementation	213
<i>Kyan Safavi, David Bates, Vincent Liu, Sara Murray, Edward Shortliffe</i>	
Automating Clinical Workflows to Support Clinicians: A Multidisciplinary Lens	216
<i>Sameh Saleh, Kenrick Cato, Kenneth Goodman, Allison McCoy</i>	
Health Data Privacy Risks in a Post-Dobbs Era for Patients and Clinicians - Is Data Segmentation a Plausible Strategy to Mitigate Risk?.....	219
<i>Marianne Sharko, Chethan Sarabu, Julia Adler-Milstein, Bradley Malin, Fabienne Bourgeois</i>	
The Role of Informatics in Reducing Environmental Pollution and Impacting Climate Change.....	222
<i>Dean Sittig, Farah Magrabi, Andrew Draper, Enrico Coiera, Hardeep Singh</i>	
Functional Status Data Interoperability and Artificial Intelligence Challenges and Opportunities	225
<i>Paulina Sockolow, Edgar Chou, Suzanne Tamang, Jessica Skopac, Denis Newman-Griffis</i>	
The Unique Privacy Challenges for Vulnerable Pediatric Populations, Including Sexual and Gender Minorities, Adolescents in Foster Care, Unaccompanied and Undocumented Minors, and Victims of Child Abuse.....	228
<i>Brittany Taylor, Marianne Sharko, Kenrick Cato, Yashika Sharma, Stephanie De Rivera</i>	

Building Pathways to Biomedical Health Informatics Training and Careers: Snapshots of Intersectional AMIA Activities and Initiatives	231
<i>Kim Unertl, Jenna Marquard, Humayera Islam, Neil Sarkar, Sripriya Rajamani</i>	
Building (Inter)national Phenotype Libraries	234
<i>Laura Wiley, Vasa Curcin, Martin Chapman, Spiros Denaxas, Mark Weiner</i>	
Social Determinants of Health: Methods for Detection and Epidemiological and Clinical Applications.....	237
<i>Hong Yu, Dan Berlowitz, Kun Chen, Honghuang Lin, Candyce Kroenke, Katherine L. Tucker</i>	
FHIRizing Health Research Data for Sharing and Reuse: Challenges and Opportunities.....	240
<i>Teresa Zayas-Cabán, Robert Carroll, Allison Heath, Mike Feolo, Liz Amos</i>	
Understanding Cancer Caregiving and Predicting Burden: An Analytics and Machine Learning Approach	243
<i>Armin Abazari, Samir Chatterjee, M. Moniruzzaman</i>	
QuizTime: Innovative Learning Platform to Support Just-In-Time Asynchronous Quizzes to Improve Health Outcomes.....	253
<i>Toufeeq Ahmed, Katie Stinson, Jay Johnson, Zainab Latif</i>	
Discovering Predictive Temporal Patterns for Acute Kidney Injury from Critical Care Data.....	261
<i>Beatrice Amico, Carlo Combi, Giovanni Gambaro</i>	
Optimizing the Synergistic Potential of Pseudo-Labels from Radiology Notes and Annotated Ground Truth in Identifying Pulmonary Opacities on Chest Radiographs for Early Detection of Acute Respiratory Distress Syndrome.....	270
<i>Mehak Arora, Carolyn M. Davis, Angana Mondal, Niraj R. Gowda, Dennis G. Foster, Rishikesan Kamaleswaran</i>	
Use of Health Belief Model-Based Deep Learning to Understand Public Health Beliefs in Breast Cancer Screening from Social Media Before and During the COVID-19 Pandemic.....	280
<i>Michelle Bak, Chieh-Li Chin, Jessie Chin</i>	
Auditing Learned Associations in Deep Learning Approaches to Extract Race and Ethnicity from Clinical Text	289
<i>Oliver Bear Don'T Walk Iv, Adrienne Pichon, Harry Nieva, Tony Sun, Jaan Altosaar, Karthik Natarajan, Adler Perotte, Peter Tarczy-Hornoch, Dina Demner-Fushman, Noemie Elhadad</i>	
Development of a Knowledge Graph Embeddings Model for Pain	299
<i>Jaya Chaturvedi, Tao Wang, Sumithra Velupillai, Robert Stewart, Angus Roberts</i>	
Semantically Oriented EHR Navigation with a Patient Specific Knowledge Base and a Clinical Context Ontology.....	309
<i>Tiago Colicchio, John Osborne, Clementino Do Rosario, Nicholas Timkovich, Matthew Wyatt, Ankit Anand, James Cimino</i>	
Real-World Application of Racial and Ethnic Imputation and Cohort Balancing Techniques to Deliver Equitable Clinical Trial Recruitment	319
<i>Kelly Craig, Yanrong Ji, Yuxin Zhang, Alexandra Berk, Amanda Zaleski, Omar Abdelsamad, Henriette Coetzer, Dorothea Verbrugge, Guangying Hua</i>	
Unsupervised SoftOtsuNet Augmentation for Clinical Dermatology Image Classifiers	329
<i>Miguel Dominguez, John Finnell</i>	

Testing of an Electronic Clinical Quality Measure for Diagnostic Delay of Venous Thromboembolism (DOVE) in Primary Care	339
<i>Patricia Dykes, Mica Bowen, Frank Chang, Jin Chen, Krissy Gray, John Laurentiev, Lucy Liu, Purushottam Panta, Michael Sainlaire, Wenyu Song, Ania Syrowatka, Tien Thai, Li Zhou, David Bates, Lipika Samal, Stuart Lipsitz</i>	
Pilot Implementation of a Post-Surgical Remote Wound Monitoring Program	349
<i>Heather Evans, Cheryl Hamill, Michael Aiken, Jasmine Richards, Kenneth Catchpole, Lynne Nemeth</i>	
Web-Based Prototype for Graphical Exploration of FHIR® Questionnaire Responses	351
<i>Johann Frei, Florian J. Auer, Steffen Netzband, Yevgeniia Ignatenko, Frank Kramer</i>	
Leveraging a Clinical Dashboard and Process Mappings to Improve Treatment Access and Outcomes for Women Veterans with Urinary Incontinence	359
<i>Grace Gao, Camille Vaughan, Alayne Markland, Kayla Reinicke, Neeraja Annavaram, Zachary Burningham</i>	
Effects of Porting Essie Tokenization and Normalization to Solr	369
<i>Soumya Gayen, Dina Demner-Fushman, Deepak Gupta, Nicholas Ide, Russell Loane</i>	
Identifying TBI Physiological States Clustering of Multivariate Time-Series Data.....	379
<i>Hamid Ghaderi, Brandon Foreman, Amin Nayebi, Sindhu Tipirneni, Chandan Reddy, Vignesh Subbian</i>	
Can Gamification Reduce the Burden of Self-Reporting in mHealth Applications? A Feasibility Study using Machine Learning from Smartwatch Data to Estimate Cognitive Load.....	389
<i>Michal Grzeszczyk, Paulina Adamczyk, Sylwia Marek, Ryszard Precikowski, Maciej Kus, Monika Lelujko, Rosmary Blanco, Tomasz Trzcinski, Arkadiusz Sitek, Maciej Malawski, Aneta Lisowska</i>	
How Are Leading Research Institutions Engaging with Data Sharing Tools and Programs?.....	397
<i>Eric Hall, Genevieve Melton-Meaux, Philip Payne, David Dorr, David Vawdrey</i>	
Annotation and Information Extraction of a Consumer-Friendly Health Articles for Enhancing Laboratory Test Reporting.....	407
<i>Zhe He, Shubo Tian, Arslan Erdengasileng, Karim Hanna, Yang Gong, Zhan Zhang, Xiao Luo, Mia Lustria</i>	
Choice Architecture in Opioid Safety Alerting.....	417
<i>James Hellewell, Kevin Lindsay, Kellyann Nielsen, Erick Christensen, Lynsie Daley, Kristy Jones, Kim Compagni</i>	
Subtyping Gastrointestinal Surgical Outcomes from Real World Data: A Comprehensive Analysis of UK Biobank	426
<i>Uri Kartoun, Kingsley Njoku, Tesfaye Yadete, Sivan Ravid, Koski Eileen, William Ogallo, Joao Bettencourt-Silva, Natasha Mulligan, Jianying Hu, Julia Liu, Thaddeus Stappenbeck, Vibha Anand</i>	
Bridging the Skills Gap: Evaluating an AI-Assisted Provider Platform to Support Care Providers with Empathetic Delivery of Protocolized Therapy	436
<i>William Kearns, Alex Marin, Yinzhou Wang, Trevor Cohen, Myra Divina, Weichao Yuwen, Jessica Bertram, Lauren Kemp</i>	
Integrating Commercial and Social Determinants of Health: A Unified Ontology for Non-Clinical Determinants of Health.....	446
<i>Navya Kollapally, Vipina Keloth, Julia Xu, James Geller</i>	

De-Identifying Norwegian Clinical Text using Resources from Swedish and Danish	456
<i>Anastasios Lamproudis, Torbjorn Torsvik, Phuong Ngo, Sara Mora, Hercules Dalianis, Taridzo Chomutare, Therese Svenning</i>	
Using a Large Open Clinical Corpus for Improved ICD-10 Diagnosis Coding	465
<i>Anastasios Lamproudis, Therese Svenning, Phuong Ngo, Hercules Dalianis, Thomas Vakili, Taridzo Chomutare, Andrius Budrionis</i>	
Assessing Telemedicine Competencies: Developing and Validating Learner Measures for Simulation-Based Telemedicine Training.....	474
<i>Blake Lesselroth, Helen Monkman, Ryan Palmer, Craig Kuziemy, Andrew Liew, Kristin Rodriguez, Deirdra Kelly, Ainsly Wolfenbarger, Frances Wen, Liz Kollaja, Shannon Ijams, Juell Homco</i>	
Capturing Individual-Level Social Determinants from Clinical Text.....	484
<i>Jennifer Liang, Diwakar Mahajan, Ananya Iyengar, Ching-Huei Tsou</i>	
Applicability Area: A Novel Utility-Based Approach for Evaluating Predictive Models, Beyond Discrimination.....	494
<i>Star Liu, Shixiong Wei, Harold Lehmann</i>	
Analysis of Task Attributes Associated with Crisis Checklist Compliance in Pediatric Trauma Resuscitation	504
<i>Angela Mastrianni, Leah Hamlin, Emily C. Alberto, Travis M. Sullivan, Adesh Ranganna, Ivan Marsic, Randall S. Burd, Aleksandra Sarcevic</i>	
The SMART Text2FHIR Pipeline	514
<i>Tim Miller, Andrew McMurry, James Jones, Dan Gottlieb, Kenneth Mandl</i>	
Improving Machine Learning with Ensemble Learning on Observational Healthcare Data	521
<i>Behzad Naderalvojud, Tina Hernandez-Boussard</i>	
Framework for Research in Equitable Synthetic Control Arms	530
<i>Nafis Neehal, Vibha Anand, Kristin Bennett</i>	
From Free-Text Drug Labels to Structured Medication Terminology with BERT and GPT	540
<i>Hoa Ngo</i>	
Transferable and Interpretable Treatment Effectiveness Prediction for Ovarian Cancer via Multimodal Deep Learning	550
<i>Emily Nguyen, Zijun Cui, James Enouen, Georgia Kokaraki, Joseph Carlson, Yan Liu</i>	
Validation Approaches for Computational Drug Repurposing: A Review	559
<i>Malvika Pillai, Di Wu</i>	
Analyzing Patient-Provided Responses to Improve Collection of Health Equity Data Elements	569
<i>Jennifer Dawson, Heather Finn, Aliasgar Chittalia, David Vawdrey</i>	
“In Conferences, Everyone Goes ‘Health Data is the Future’”: An Interview Study on Challenges in Re-Using EHR Data for Research in Clinical Data Warehouses	579
<i>Sonia Priou, Guillaume Lame, Marija Jankovic, Emmanuelle Kempf</i>	
Computable Phenotypes for Post-Acute Sequelae of SARS-CoV-2: A National COVID Cohort Collaborative Analysis.....	589
<i>Sarah Pungitore, Toluwanimi Olorunnisola, Jarrod Mosier, Vignesh Subbian</i>	

Automatic Mapping of Terminology Items with Transformers	599
<i>Alberto Purpura, Joao Bettencourt-Silva, Natasha Mulligan, Tesfaye Yadete, Kingsley Njoku, Julia Liu, Thaddeus Stappenbeck</i>	
Improving Physical Activity Among Prostate Cancer Survivors Through a Peer-Based Digital Walking Program.....	608
<i>Savitha Sangameswaran, Reggie Casanova-Perez, Harsh Patel, David Cronkite, Ayah Idris, Dori Rosenberg, Jonathan Wright, John Gore, Andrea Hartzler</i>	
Clinical Feature Vector Generation using Unsupervised Graph Representation Learning from Heterogeneous Medical Records	618
<i>Tomohisa Seki, Yoshimasa Kawazoe, Kazuhiko Ohe</i>	
DiffusionCT: Latent Diffusion Model for CT Image Standardization.....	624
<i>M. Selim, Jie Zhang, Michael Brooks, Ge Wang, Jin Chen</i>	
Comparative Merits of Available Mortality Data Sources for Clinical Research	634
<i>Evan Sholle, Marcos A. Davila, Kristin Kostka, Sajjad Abedian, Marika Cusick, Spencer Krichevsky, Jyotishman Pathak, Thomas R. Campion</i>	
MentalHealthAI: Utilizing Personal Health Device Data to Optimize Psychiatry Treatment	641
<i>Manan Shukla, Oshani Seneviratne</i>	
Exercise Exertion Level Prediction using Data from Wearable Physiologic Monitors	653
<i>Aref Smiley, Te-Yi Tsai, Aileen Gabriel, Ihor Havrylchuk, Elena Zakashansky, Taulant Xhakli, Xingyue Huo, Wanting Cui, Fatemeh Shah-Mohammadi, Joseph Finkelstein</i>	
Creating Augmented Reality Holograms for Polytrauma Patients using 3D Slicer and Holomedicine Medical Image Platform	663
<i>Wei-Shao Sun, Chun-Chuan Sun, Lorenzo Porta, Ting-Kai Yang, Shih-Hao Su, Shih-Hung Liu, Tsung-Hsin Chou, Shyr-Chyr Chen, Joshua Ho, Chien-Chang Lee</i>	
Towards Understanding the Generalization of Medical Text-to-SQL Models and Datasets	669
<i>Richard Tarbell, Kim-Kwang Choo, Glenn Dietrich, Anthony Rios</i>	

VOLUME 2

Prediction of Transfusion Among In-Patient Population using Temporal Pattern Based Clinical Similarity Graphs	679
<i>Amara Tariq, Su Leon, Bhavik Patel, Imon Banerjee</i>	
HereditGene Population Study IT Infrastructure: A Model to Support Genomic Research Recruitment and Precision Public Health	689
<i>David Taylor, Bret Heale, Benjamin Chisum, Bryce Christensen, Darin Wilcox, Kevin Banks, Jacob Tripp, Teresa Liu, James Ruesch, Travis Sheffield, Jesse Breinholt, Clay Harward, Erin Hakoda, Ted May, Joshua Bonkowsky, Nephi Walton, Howard McLeod, Lincoln Nadauld, Pallavi Ranade-Kharkar</i>	
Development and Usability Testing of an Exercise-Based Primary Care Fall Prevention Clinical Decision Support Tool.....	699
<i>Christian Tejada, Pamela Garabedian, Hannah Rice, Lipika Samal, Nancy Latham, Patricia Dykes</i>	

Challenges and Opportunities for Professional Medical Publications Writers to Contribute to Plain Language Summaries (PLS) in an AI/ML Environment – A Consumer Health Informatics Systematic Review	709
<i>Holly Tomlin, Michel Wissing, Sai Tanikella, M. Pharm, Preetinder Kaur, M. Pharm, Linda Tabas</i>	
Towards a Machine Learning Empowered Prognostic Model for Predicting Disease Progression for Amyotrophic Lateral Sclerosis	718
<i>Hamza Turabieh, Askar Afshar, Jeffery Statland, Xing Song</i>	
Usability Evaluation of Virtual Reality Ontology Object Manipulation (VROOM) System	726
<i>Margarita Vinnikov, James Geller, Veena Chaudhari</i>	
Multimodal Pediatric Lymphoma Detection using PET and MRI.....	736
<i>Hongzhi Wang, Amirhossein Sarrami, Joy Wu, Lucia Baratto, Arjun Sharma, Chun Wong, Shashi Singh, Heike Daldrup-Link, Tanveer Syeda-Mahmood</i>	
Leveraging Unlabeled Clinical Data to Boost Performance of Risk Stratification Models for Suspected Acute Coronary Syndrome	744
<i>Yutong Wu, David Conlan, Siegfried Perez, Anthony Nguyen</i>	
Fatigue, Pain and Medication: Mining Online Posts Regarding Rheumatoid Arthritis from Reddit.....	754
<i>Yi Xin, Congning Ni, Qingyuan Song, Zhijun Yin</i>	
Identification of Outcome-Oriented Progression Subtypes from Mild Cognitive Impairment to Alzheimer’s Disease using Electronic Health Records	764
<i>Jie Xu, Rui Yin, Yu Huang, Hannah Gao, Yonghui Wu, Jingchuan Guo, Glenn Smith, Steven Dekosky, Fei Wang, Yi Guo, Jiang Bian</i>	
Imagining Improved Interactions: Patients' Designs to Address Implicit Bias.....	774
<i>Connie Yang, Leslie Coney, Deepthi Mohanraj, Reggie Casanova-Perez, Emily Bascom, Niyat Efrem, Joseph Garcia, Janice Sabin, Wanda Pratt, Nadir Weibel, Andrea Hartzler</i>	
Leveraging Clinical Informatics to Address the Quintuple Aim for End-of-Life Care	784
<i>Amanda Zaleski, Kelly Craig, Eamon Caddigan, Hannah Yang, Zenon Cheng, Sherrie McNutt, Alena Baquet-Simpson</i>	
Experiences and Perceptions of Distinct Telehealth Delivery Models for Remote Patient Monitoring Among Older Adults in the Community	794
<i>Zhan Zhang, Jina Huh-Yoo, Karen Joy, Monica Angeles, David Sachs, John Migliaccio, Melody Schiaffino</i>	
Information Seeking and Sensemaking in Emergency Medical Service Through Simulation Video Review.....	804
<i>Zhan Zhang, Karen Joy, Aastha Bhadani, Tejas Joshi, Kathleen Adelgais, Mustafa Ozkaynak</i>	
Sensitive Data Detection with High-Throughput Machine Learning Models in Electrical Health Records.....	814
<i>Kai Zhang, Xiaoqian Jiang</i>	
Promoting TEFCAs with Blockchain Technology: A Decentralized Approach to Patient-Centered Healthcare Data Management	824
<i>Yan Zhuang, Luxia Zhang</i>	

Standardizing Multi-Site Clinical Note Titles to LOINC Document Ontology: A Transformer-Based Approach	834
<i>Xu Zuo, Yujia Zhou, Jon Duke, George Hripcsak, Nigam Shah, Juan Banda, Ruth Reeves, Tim Miller, Lemuel Waitman, Karthik Natarajan, Hua Xu</i>	
The SIMPLE Architectural Pattern for Integrating Patient-Facing Apps into Clinical Workflows: Desiderata and Application for Lung Cancer Screening.....	844
<i>Christian Balbin, Kensaku Kawamoto</i>	
A QUEST for Model Assessment: Identifying Difficult Subgroups via Epistemic Uncertainty Quantification.....	854
<i>Katherine Brown, Steven Talbert, Douglas Talbert</i>	
Characterizing Autism Spectrum Disorder and Predicting Suicide Risk for Pediatric Psychiatric Emergency Services Encounters.....	864
<i>Katherine Brown, Elizabeth Chen, Kathleen Donise, Mary Cancelliere, Dilum Aluthge</i>	
Using a Standardized Nomenclature to Semantically Map Oncology-Related Concepts from Common Data Models to a Pediatric Cancer Data Model.....	874
<i>Bradley Carlson, Michael Watkins, Brian Furner, Mei Li, Ellen Cohen, Samuel Volchenbom</i>	
Towards Fair Patient-Trial Matching via Patient-Criterion Level Fairness Constraint	884
<i>Chia-Yuan Chang, Jiayi Yuan, Sirui Ding, Qiaoyu Tan, Kai Zhang, Xiaoqian Jiang, Xia Hu, Na Zou</i>	
Using Natural Language Processing to Study Homelessness Longitudinally with Electronic Health Record Data Subject to Irregular Observations	894
<i>Alec Chapman, Daniel Scharfstein, Ann Montgomery, Thomas Byrne, Ying Suo, Atim Effiong, Tania Velasquez, Warren Pettey, Richard Nelson</i>	
Use GPT-J Prompt Generation with RoBERTa for NER Models on Diagnosis Extraction of Periodontal Diagnosis from Electronic Dental Records	904
<i>Yao-Shun Chuang, Xiaoqian Jiang, Chun-Teh Lee, Ryan Brandon, Duong Tran, Oluwabunmi Tokede, Muhammad Walji</i>	
Multi-Task Learning for Post-Transplant Cause of Death Analysis: A Case Study on Liver Transplant.....	913
<i>Sirui Ding, Qiaoyu Tan, Chia-Yuan Chang, Na Zou, Kai Zhang, Nathan Hoot, Xiaoqian Jiang, Xia Hu</i>	
Backdoor Adjustment of Confounding by Provenance for Robust Text Classification of Multi-Institutional Clinical Notes.....	923
<i>Xiruo Ding, Trevor Cohen, Meliha Yetisgen, Serguei Pakhomov, Zhecheng Sheng</i>	
Community Health Recommendations Driven by mHealth Population Surveillance Data Amongst Burmese Displaced People in Eastern India: A Pilot Usability Assessment of a Mobile Health Application for Data Collection	933
<i>Kylie Dougherty, Ruth Creber, Beichotha Zawtha, Natalie Benda</i>	
Leveraging Informative Missing Data to Learn About Acute Respiratory Distress Syndrome and Mortality in Long-Term Hospitalized COVID-19 Patients Throughout the Years of the Pandemic	942
<i>Emily Getzen, Amelia Tan, Gabriel Brat, Gilbert S. Omenn, Zachary Strasser, Qi Long, John H. Holmes, Danielle Mowery</i>	

Perspectives on Privacy in the Post-Roe Era: A Mixed-Methods of Machine Learning and Qualitative Analyses of Tweets	951
<i>Yawen Guo, Rachael Zehrung, Katherine Genuario, Xuan Lu, Qiaozhu Mei, Yunan Chen, Kai Zheng</i>	
Real-World Analysis of Antipsychotic Drugs' Effect on Weight Gain: An EHR Application	961
<i>Shraddha Gupta, Xing Song</i>	
Identifying the Optimal Look-Back Period for Prior Antimicrobial Resistance Clinical Decision Support	969
<i>John Hanna, Marlon Diaz, Abdi Wakene, Catherine Chen, Lauren Cooper, Richard Medford, Christoph Lehmann</i>	
A GCN-Based Approach to Uncover Misaligned Synonymous Terms in the UMLS Metathesaurus	977
<i>Xubing Hao, Rashmie Abeysinghe, Jay Shi, Licong Cui</i>	
Digital Solutions Observed in Clinical Trials: A Formative Feasibility Scoping Review	987
<i>Taylor Harrison, Sungrim Moon, Liwei Wang, Sunyang Fu, Hongfang Liu</i>	
COVID-19 Vaccine and Health Equity Conversations on Twitter.....	997
<i>Nishant Jain, Iris Zachary, Sue Boren</i>	
Probabilistic Prediction of Laboratory Test Information Yield.....	1007
<i>Yixing Jiang, Andrew Lee, Xiaoyuan Ni, Conor Corbin, Jeremy Irvin, Andrew Ng, Jonathan Chen</i>	
Mapping Clinical Documents to the Logical Observation Identifiers, Names and Codes (LOINC) Document Ontology using Electronic Health Record Systems Structured Metadata	1017
<i>Huzaiifa Khan, Abu Mosa, Vyshnavi Paka, M. Zaman Rana, Vasanthi Mandhadi, M. Islam, Hua Xu, James McClay, Shraboni Sarker, Praveen Rao, Lemuel Waitman</i>	
Mobile Apps for Children's Health and Wellbeing: Design Features and Future Opportunities	1027
<i>Jamie Lee, Zhaoyuan Su, Yunan Chen</i>	
Variability in Nursing Documentation Patterns Across Patients' Hospital Stays.....	1037
<i>Rachel Lee, Chris Knaplund, Jennifer Withall, Syed Bokhari, Kenrick Cato, Sarah Rossetti</i>	
Split Learning for Distributed Collaborative Training of Deep Learning Models in Health Informatics.....	1047
<i>Zhuohang Li, Chao Yan, Xinmeng Zhang, Gharib Gharibi, Zhijun Yin, Xiaoqian Jiang, Bradley Malin</i>	
A Computable Phenotype for the Identification of Sexual and Gender Minorities in Electronic Health Records	1057
<i>Yongqiu Li, Xing He, Christopher Wheldon, Yonghui Wu, Mattia Prosperi, Elizabeth Shenkman, Michael Jaffee, Jingchuan Guo, Fei Wang, Yi Guo, Jiang Bian</i>	
Predicting Premature Discontinuation of Medication for Opioid Use Disorder from Electronic Medical Records.....	1067
<i>Ivan Rodriguez, Sajjad Fouladvand, Scott Kollins, Chwen-Yuen Chen, Jeremiah Bertz, Tina Hernandez-Boussard, Anna Lembke, Keith Humphreys, Adam Miner, Jonathan Chen</i>	
An Automated Strategy to Calculate Medication Regimen Complexity	1077
<i>Yuzhi Lu, Ariel R. Green, Rosalpie Quiles, Casey Taylor</i>	

Evaluation of Discrepancies Among National Library of Medicine (NLM) Value Set Authority Center (VSAC) Value Sets: Case Study for Diagnoses of Common Chronic Conditions, Implications, and Potential Solutions	1087
<i>Nikolay Lukyanchikov, Kensaku Kawamoto</i>	
Computational Phenotyping of OMOP CDM Normalized EHR for Prenatal and Postpartum Episodes: An Informatics Framework and Clinical Implementation on All of Us	1096
<i>Tianchu Lyu, Chen Liang</i>	
Understanding the Benefits and Challenges of using Large Language Model-Based Conversational Agents for Mental Wellbeing Support	1105
<i>Zilin Ma, Yiyang Mei, Zhaoyuan Su</i>	
Creating Conversion Factors from EHR Event Log Data: A Comparison of Investigator-Derived and Vendor-Derived Metrics for Primary Care Physicians.....	1115
<i>Honor Magon, Daniel Helkey, Tait Shanafelt, Daniel Tawfik</i>	
Caregivers Attitude Detection from Clinical Notes.....	1125
<i>Gaetano Manzo, Leo Celi, Yasmeen Shabazz, Rory Mulcahey, Lorenzo Flores, Dina Demner-Fushman</i>	
Stepping Beyond Assessment: Fall Risk Prediction Models Among Older Adults from Cumulative Change in Gait Parameter Estimates	1135
<i>Noah Marchal, Marjorie Skubic, Grant Scott</i>	
RECAP-KG: Mining Knowledge Graphs from Raw Primary Care Physician Notes for Remote COVID-19 Assessment in Primary Care	1145
<i>Rachel Mekhtieva, Brandon Forbes, Dalal Alrajeh, Brendan Delaney, Alessandra Russo</i>	
Contextual Variation of Clinical Notes Induced by EHR Migration	1155
<i>Kurt Miller, Sungrim Moon, Sunyang Fu, Hongfang Liu</i>	
Evaluation of Accessibility of Open-Source EHRs for Visually Impaired Users.....	1165
<i>Megha Moncy, Manya Pilli, Manasi Somasundaram, Saptarshi Purkayastha, Cathy Fulton</i>	
Outliers in Diagnosis Ratios: A Clue Toward Possibly Absent Data	1175
<i>Dmitry Morozhuk, Mark Weiner</i>	
A Computational Framework to Evaluate Emergency Department Clinician Task Switching in the Electronic Health Record using Event Logs.....	1183
<i>Amanda Moy, Kenrick Cato, Eugene Kim, Jennifer Withall, Sarah Rossetti</i>	
Extracting Thyroid Nodules Characteristics from Ultrasound Reports using Transformer-Based Natural Language Processing Methods	1193
<i>Aman Pathak, Zehao Yu, Daniel Paredes, Elio Monsour, Andrea Rocha, Juan Brito, Naykky Ospina, Yonghui Wu</i>	
Using Case Mix Index Within Diagnosis-Related Groups to Evaluate Variation in Hospitalization Costs at a Large Academic Medical Center.....	1201
<i>Selina Pi, Jonathan Masterson, Stephen P. Ma, Conor K. Corbin I, Arnold Milstein, Jonathan H. Chen</i>	
Integrating Clinical and Air Quality Data to Improve Prediction of COPD Exacerbations.....	1209
<i>Grace Ratcliff, Michael E. Matheny, Jeremiah R. Brown, Iben Sullivan, Bradley W. Richmond, Laura M. Paulin, Adrienne K. Conger, Sharon Davis</i>	

Evaluating Deep Learning Performance for P300 Neural Signal Classification	1218
<i>Yashwanth Ravipati, Nader Pouratian, Corey Arnold, William Speier</i>	
Deep Representations of First-Person Pronouns for Prediction of Depression Symptom Severity.....	1226
<i>Xinyang Ren, Xinyang Ren, Hannah Burkhardt, Thomas Hull, Patricia Areán, Trevor Cohen</i>	
Local Contrastive Learning for Medical Image Recognition	1236
<i>Syed Rizvi, Ruixiang Tang, Xiaoqian Jiang, Xia Hu</i>	
A Practical Approach to Optimize Computerized Provider Order Entry Systems and Reduce Clinician Burden: Pre-Post Evaluation of Vendor-Derived “Order Friction” Data	1246
<i>Elise Ruan, Sarah Rossetti, Hanson Hsu, Eugene Kim, Richard Trepp</i>	
Co-Designing Mind-Body Technologies for Sleep with Adolescents	1257
<i>Savitha Sangameswaran, Megan Laine, Nick Reid, Serena Xie, Elizabeth Zampino, Michelle Garrison, Dori Rosenberg, Jason Yip, Andrea Hartzler</i>	
Characterization of Adult Patients with Autism Spectrum Disorder that Use Patient Portal.....	1267
<i>Hannah Slater, Zhijun Yin, Colin Walsh</i>	
Designing Support to Help Health Communication Professionals Convey Numbers Clearly to the Public – A Needs Assessment and Formative Usability Evaluation	1277
<i>Uday Suresh, Jessica Ancker, Brian Zikmund-Fisher, Natalie Benda</i>	
Examining and Addressing Telemedicine Disparities Through the Lens of the Social Determinants of Health: A Qualitative Study of Patient and Provider During the COVID-19 Pandemic.	1287
<i>Christina Wang, Rahma Mkuu, Katerina Andreadis, Kimberly Muellers, Jessica Ancker, Carol Horowitz, Rainu Kaushal, Jenny Lin</i>	
Identifying Reuse and Redundancies in Respiratory Flowsheet Documentation: Implications for Clinician Documentation Burden	1297
<i>Jennifer Withall, Mai Tran, Bobby Schroeder, Rachel Lee, Amanda Moy, Syed Bokhari, Kenrick Cato, Sarah Rossetti</i>	
Text Classification of Cancer Clinical Trial Eligibility Criteria	1304
<i>Yumeng Yang, Soumya Jayaraj, Ethan Ludmir, Kirk Roberts</i>	
A Systematic Temporal Extraction Pipeline for Medical Concepts in Clinical Notes.....	1314
<i>Deahan Yu, Ryan Stidham, V. G. Vinod Vydiswaran</i>	
Large Language Models for Healthcare Data Augmentation: An Example on Patient-Trial Matching	1324
<i>Jiayi Yuan, Ruixiang Tang, Xiaoqian Jiang, Xia Hu</i>	
Self-Expression and Sharing Around Chronic Illness on TikTok	1334
<i>Rachael Zehrung, Yunan Chen</i>	
Patient-Level Thyroid Cancer Classification using Attention Multiple Instance Learning on Fused Multi-Scale Ultrasound Image Features	1344
<i>Luoting Zhuang, Jeffrey Feng, Vedrana Ivezic, Ashwath Radhachandran, Vivek Sant, Maitraya Patel, Rinat Masamed, Corey Arnold, William Speier</i>	

VOLUME 3

Associations Between Physician EHR-Mediated Behaviors and Patient Satisfaction	1354
<i>Julia Adler-Milstein, Chris Toretsky, Elaine Khoong</i>	

Leveraging Natural Language Processing and Electronic Health Record Data to Estimate the Delivery of Goal-Discordant Care at the End of Life.....	1356
<i>Alaa Albashayreh, Keela Herr, Weiguo Fan, Stephanie Gilbertson-White</i>	
Dysmenorrhea Phenotyping via Prompt-Based Learning.....	1358
<i>Eugenia Alleva, Erwin Böttinger, Leslee Shaw, Jovita Rodrigues, Ipek Ensari</i>	
Temporal Trends of Pediatric PASC Subphenotypes: An EHR-Based Retrospective Cohort Study from the RECOVER Program	1360
<i>Andrea Allen, Hanieh Razzaghi, Charles Bailey, Suchitra Rao, Vitaly Lorman, Kimberley Dickinson</i>	
Development and Usability Evaluation of a Prescribing Feedback Tool.....	1362
<i>Shilo Anders, Carrie Reale, Thomas Reese, Russ Beebe, Robert Winter, Dax Westerman, Jesse Wrenn, Jin Han, Melissa Rubenstein, Michael Ward, Michael Matheny</i>	
Shortening Time to Diagnosis for Critically Ill Neonates with Machine-Aided Genetic Testing Recommendations	1364
<i>Austin Antoniou, Bimal Chaudhari</i>	
Physician Documentation Support and EHR Burden: Time Savings and Implications for Burnout.....	1366
<i>Nate Apathy, A. Holmgren, Dori Cross</i>	
Examining Note Length & Documentation Time After One Year of Reduced Evaluation & Management Visit Documentation Requirements	1368
<i>Nate Apathy, A. Holmgren, Dori Cross</i>	
Value-Based Payment Model Participation and Documentation Burden	1370
<i>Nate Apathy, A. Holmgren</i>	
Learning About Patient Safety Concerns During Implementation of a Provincial Clinical Information System	1372
<i>Elizabeth Au, Reed Sutton, Pritma Dhillon-Chattha, Patrick Yu, Elise De Jager, Claire Goldring, Farah Magrabi, David Meurer</i>	
Digital Health Company Experiences using EHR APIs	1374
<i>Wesley Barker, Natalya Maisel, Catherine Strawley, Grace Krueger, Julia Adler-Milstein, Benjamin Rosner</i>	
A Systematic Review of Methods to Identify Transgender Patients in Electronic Health Records.....	1376
<i>Robert Becker, Jhansi Kolli, Colin Walsh</i>	
A Long COVID Risk Predictor Focused on Clinical Workflow Integration	1378
<i>Biplab Bhattacharya, Elliot Mitchell, Gaurav Shetty, Grant Delong, Tamanna Munia, Abdul Tariq</i>	
Subtyping Social Determinants of Health in <i>All of Us</i> : Opportunities and Challenges for Designing Precision Interventions	1380
<i>Suresh Bhavnani, Weibin Zhang, Daniel Bao, Yong-Fang Kuo, Susanne Schmidt, Monique R. Pappadis, Alex Bokov, Timothy Reistetter, Shyam Visweswaran, Brian Downer</i>	
Sharing Dynamic Survival Results in Distributed Settings	1382
<i>Luca Bonomi, Marilyn Lionts, Liyue Fan</i>	
MedMorph Implementation Guidance: Navigating the Standards Stack	1384
<i>Nathan Botts, Eric Pan, Maria Michaels, Mary Nix</i>	

Evaluating Feature Stability to Temporal Dataset Shift in Electronic Medical Records	1386
<i>Raphael Brosula, Conor Corbin, Jonathan Chen</i>	
ECG-AI in Fatal Coronary Heart Disease Risk Prediction as a Proxy for Sudden Cardiac Death.....	1388
<i>Liam Butler, Ibrahim Karabayir, Turgay Celik, Lokesh Chinthala, Robert Davis, David McManus, David Herrington, Oguz Akbilgic</i>	
Implementation of Precision Medicine for Rare Genetic Disease in the EHR of a Large Academic Pediatric Health System	1390
<i>Ian Campbell, Marianne Henin, Amrom Obstfeld, Matthew Dulik, John Potter, Livija Medne</i>	
From Single Predictor to Two-Stage Screening Pipeline: Advancing NICU Sepsis Prediction for Improved Clinical Outcomes.....	1392
<i>Lusha Cao, Aaron Masino, Lyle Ungar, Elease McLaurin, Gerald Shaeffer, Lakshmi Srinivasan, Dean Karavite, Alexander Fidel, Mary Harris, Robert Grundmeier</i>	
A Framework for Developing Clinical Decision Support Tools in Home Health Care Patients with Heart Failure Based on Time-Series Risk Models.....	1394
<i>Sena Chae, Anahita Davoudi, Jiyoun Song, Lauren Evans, Mollie Hobensack, Kathy Bowles, Margaret McDonald, Yolanda Barrón, Danielle Scharp, Sungho Oh, Se Min, Maxim Topaz</i>	
Association Between Social Vulnerability and Place of Death During the First Two Years of COVID-19 in Massachusetts	1396
<i>Marie-Laure Charpignon, Maimuna S. Majumder</i>	
Sanofi Genetic Data Lake: Combining Genomic Data, Clinical Phenotypes and Statistical Genetics to Enable Therapeutic Target Discovery at Scale	1398
<i>Clement Chatelain, Samuel Lessard, Michael Chao, Mathieu Beauvais, Katherine Klinger, Shameer Khader, Emanuele De Rinaldis</i>	
National Research Participant Perception Database for Evaluation, Benchmarking, and Process Improvement	1400
<i>Alex Cheng, Eva Bascompte, Ellis Thomas, Lindsay O'Neal, Natalie Schlesinger, Cameron Coffran, Adam Qureshi, Issis Pumarol, Joseph Andrews, James Goodrich, Raneer Chatterjee, Carrie Dykes, Ann Dozier, Liz Martinez, Daniel Ford, Paul Harris, Rhonda Kost</i>	
Artificial Intelligence System for the Automatic Measurement of Spinopelvic Alignment Parameters in Spine X-Rays Based on Landmarks Localization.....	1402
<i>Bruno Franchi, Sonia Benítez, Federico Landriel, Santiago Hem, Fernando Padilla, Candelaria Mosquera, Martina Aineseder</i>	
N3C Scorecards: A Centralized and Systematic Approach to Data Quality	1404
<i>Sofia Dard, Bryan Laraway, Stephanie Hong, Tim Schwab, Katie Bradwell, Hyun Kim, Maya Choudhury, Christophe Roeder, James Cavallon, Emily Pfaff</i>	
Improving Drug Sensitivity Prediction by Resolving Inconsistency Across Multiple Pharmacogenomic Datasets.....	1406
<i>Trisha Das, Nansu Zong, Kritib Bhattarai</i>	
Fairness Analysis in the Prediction of Hospitalization or Emergency Department Visits for Home Healthcare Patients with Heart Failure.....	1408
<i>Anahita Davoudi, Sena Chae, Lauren Evans, Sridevi Sridharan, Yolanda Barrón, Jiyoun Song, Mollie Hobensack, Kathy Bowles, Margaret McDonald, Se Min, Sungho Oh, Danielle Scharp, Maxim Topaz</i>	

LeafAI: A Data Model-Agnostic Query Application for Cohort Discovery and Multi-Hop Reasoning using Natural Language.....	1410
<i>Nicholas Dobbins, Bin Han, Weipeng Zhou, Kristine Lan, H. Kim, Robert Harrington, Ozlem Uzuner, Meliha Yetisgen</i>	
User Guide for Social Determinants of Health Survey Data in the <i>All of Us</i> Research Program.....	1412
<i>Caitlin Dreisbach, Susan Grayson, Maichou Lor, Katelyn Leggio, Alex Conway, Theresa Koleck</i>	
Reducing Burden, Improving Documentation Efficiency and Suggestion Adoption by Tailoring Decision Support Format to Nurses' Graph Literacy: A National Web-Based RCT	1414
<i>Karen Lopez, Yingwei Yao, Ragnhildur Bjarnadottir, Tamara Macieira, Fabiana Santos, Olatunde Madandola, Hwayoung Cho, Karen Priola, Jessica Wolf, Diana Wilkie, Gail Keenan</i>	
Method for Determining Encounter Context as Setting of Care for Administration of a Therapy Under EUA.....	1416
<i>Scott Duvall, Julie Lynch, Michael Matheny, Patrick R. Alba, Marc A. Suchard, Craig Parker, Amanda Shields, Lisa Glasser, Sudhir Venkatesan, Carla Talarico, Sylvia Taylor, Aaron Kamauu</i>	
Examining Disparities in Care Coordination Structures for Bariatric Surgery Patients: A Comparative Analysis Across Race, Ethnicity, Surgery Type, and Gender.....	1418
<i>Yubo Feng, Xinyu Li, You Chen</i>	
Graph-Based Clinical Recommender: Predicting Specialists Procedure Orders using Graph Representation Learning.....	1420
<i>Sajjad Fouladvand, Federico R. Gomez, Hamed Nilforoshan, Matt Schwede, Morteza Noshad, Olivia Jee, Jiaxuan You, Rok Sosic, Jure Leskovec, Jonathan Chen</i>	
Structured Genomic Data in FHIR: New Resources for Precision Medicine.....	1422
<i>Robert Freimuth, Aly Khalifa, Srikar Chamala</i>	
Toward Systematic Error Analysis for Multi-Site EHR Concept Extraction.....	1424
<i>Sunyang Fu, Liwei Wang, Huan He, Andrew Wen, Hongfang Liu, Jennifer Sauver, Sunghwan Sohn</i>	
Domain Adaptation for Clinical Relation Extraction	1426
<i>Yujuan Fu, Yujuan Fu, Giridhar Ramachandran, Nianiella Dorvall, Emily Stiles, Spencer Raub, Kevin Lybarger, Bridget McInnes, Meliha Yetisgen, Ozlem Uzuner</i>	
Regression Discontinuity Analysis of a Deterioration Prediction Model	1428
<i>Robert Gallo, Lisa Shieh, Margaret Smith, Ben Marafino, Pascal Geldsetzer, Kenny Shum, Jerri Westphal, Ron C. Li</i>	
Mixed Methods Evaluation of an Online Counseling Intervention Linking Students with Elevated Suicide Risk to Mental Health Services	1430
<i>Katherine Genuario, Xi Lu, Madeline K. Nguyen, Daniel Eisenberg, Jacqueline Pistorello, William Coryell, Ronald C. Albuher, Adam G. Horowitz, Kai Zheng, Cheryl A. King</i>	
Provider and Community Organization Perspectives on Healthcare-Focused Human Trafficking Socio-Technical Interventions in Tennessee.....	1432
<i>Michelle Gomez, Ellen Clayton, Colin Walsh, Kim Unertl</i>	
Detecting Occurrence of and Characterizing Clinical Events of Patients with BRCA Cascade Testing using Commercial Claims Data	1434
<i>Kevin Gorman, Xuyang Li, Carolyn Applegate, Casey Taylor</i>	

Validation of Large Language AI Based Patient Message Classification to Automate Workflows and Reduce Inbox Burden.....	1436
<i>Krishna Gorrepati, Julian Genkins, Shreya Shah, Theadora Sakata, Amelia Sattler, Ayush Sangari, Alan Safdi, Anin Sayana, Ryan Han, Steven Lin, Anna Devon-Sand, Margaret Smith, Timothy Tsai, Kevin Tang</i>	
Developing and Evaluating Pediatric Phecodes (Peds-Phecodes) for High-Throughput Phenotyping of Pediatric Patients.....	1438
<i>Monika Grabowska, Prince Kannankeril, Sara Driest, Wei-Qi Wei</i>	
A Randomized Controlled Trial of a Mobile App and Tailored Messages for Breast Cancer Survivors	1440
<i>Ilana Graetz, Xin Hu, Mehmet Kocak, Rebecca A. Krukowski, Janeane N. Anderson, Teresa M. Waters, Andrea N. Curry, Andrew Robles, Andrew Paladino, Ed Stepanski, Gregory A. Vidal, Lee S. Schwartzberg</i>	
POINT: Pipeline for Offline Conversion and Integration of Geocodes and Neighborhood Datasets.....	1442
<i>Kevin Guo, Allison McCoy, Thomas Reese, Adam Wright, S. Rosenbloom, Siru Liu, Elise Russo, Bryan Steitz</i>	
Uncovering Social Determinants of Health from School-Based Physical Fitness Testing Data: A Geospatial Analysis	1445
<i>Yawen Guo, Allen Yu, Kai Zheng, Dan Cooper</i>	
Designing an Artificial Intelligence-Based Intervention in Breast Screening to Enable Same-Day Diagnostic Exams.....	1447
<i>William Hsu, Anne Hoyt</i>	
Promoting Equity in Clinical Research: The Role of Social Determinants of Health	1449
<i>Betina Idnay, Yilu Fang, Edward Stanley, Brenda Ruotolo, Wendy Chung, Karen Marder, Chunhua Weng</i>	
Facilitating Improved Electronic Communication Between Community-Based Organizations and Healthcare Systems to Address Patients' Social Needs	1451
<i>Bradley Iott, Elizabeth Sherwin, Anurima Chattopadhyay, Erika Brown, Michelle Loya-Talamantes, Vanessa Ruiz, Jacqueline Banuelos, Rosario Sabala, Patricia Erwin, Seth Pardo, Elaine Khoong, Courtney Lyles, Laura Gottlieb, Matthew Pantell</i>	
Physician Documentation of Social Determinants of Health: Results from a National Survey of Family Physicians.....	1453
<i>Bradley Iott, Vaishali Patel, Chelsea Richwine</i>	
Structured and Unstructured Social Risk Factor Documentation in the Electronic Health Record Underestimates Patients' Self-Reported Risks	1455
<i>Bradley Iott, Samantha Rivas, Laura Gottlieb, Julia Adler-Milstein, Matthew Pantell</i>	
Variation in Data Sharing Practices and Privacy Gaps in US Hospitals and Health Systems	1457
<i>Brian Jackson, Richard Schreiber, Ross Koppel, Victoria Nichols-Johnson, Anthony Solomonides, Paul Demuro, Larry Ozeran, Bonnie Kaplan</i>	
Measuring and Improving Diagnosis in Pneumonia: A Learning Health Systems Approach.....	1459
<i>Barbara Jones, Alec Chapman, Peter Taber, Teresa Taft, Elizabeth Rutter, Jian Ying, McKenna Nevers, Makoto Jones, David Classen, Matthew Samore, Charlene Weir, Jorie Butler</i>	

Human Performance Evaluation of Machine Learning Based Clinical Decision Support: A Pediatric Sepsis Use Case.....	1461
<i>Swaminathan Kandaswamy, Naveen Muthu, Edwin Ray, Rebekah Carter, Reena Blanco, Thuy Bui, Evan Orenstein</i>	
Improving Clinical Evaluations for Non-Accidental Trauma using Clinical Decision Support.....	1463
<i>Swaminathan Kandaswamy, Sarah Thompson, Edwin Ray, Reena Blanco, Kiesha Doh, Ting Chang, Stephen Messner, Evan Orenstein</i>	
Perspectives of Community-Based Organizations on Digital Health Equity: A Key Informant Study	1465
<i>Katherine Kim, Uba Backonja</i>	
Predicting Return to Play in Sports Medicine: A Scoping Review	1467
<i>Abraham Kim, Danny Wu, Tzu-Chun Wu, Taran Ghuman, Rohan Sachdeva, Scott Bonnette, Kelsey Logan</i>	
Prospective Predictability of Novel Next-Generation Sequencing Tests in Real-World Clinical Settings	1469
<i>Grace Kim, Conor Corbin, Sajjad Fouladvand, Jonathan Chen, Matthew Schwede, Rondeep Brar, David Iberri, William Shomali, Jean S. Oak, Dita Gratzinger, Henning Stehr</i>	
Care Traffic Control: Access Model Transformation for Inter-Professional Musculoskeletal Triage	1471
<i>Dominic King, A. K. Emar, V. E. Krebs, N. S. Puzzi, J. L. Schaffer</i>	
Conceptualization and Development of the Maryland Suicide Data Warehouse to Improve Mortality Prediction.....	1473
<i>Christopher Kitchen, Elyse Lasser, Hadi Kharrazi, Hadi Kharrazi</i>	
Pilot Randomized Controlled Trial of a Patient-Centered mHealth Intervention for Patients with Heart Failure to Improve Self-Care Adherence	1475
<i>Spyros Kitsiou, Todd Rupp, Susan Pressler, Susan Buchholz, Mayank Kansal, Ben Gerber</i>	
Enriching Electronic-Health-Record Cohorts by Identifying Patients with Complete Data.....	1477
<i>Jeffrey Klann, Darren Henderson, Michele Morris, Hossein Estiri, Griffin Weber, Diane Keogh, Shyam Visweswaran, Shawn Murphy</i>	
Understanding Enterprise Data Warehouses to Support Clinical and Translational Research: Initial Findings on Impact, Sustainability, Demand Management, and Accessibility	1479
<i>Boyd Knosp, Catherine Craven, David Dorr, Elmer Bernstam, Thomas Campion</i>	
Sex-Specific Diagnostic Associations and Long-Term Outcomes of Delirium.....	1481
<i>Lay Kodama, Sarah Woldemariam, Alice Tang, Yaqiao Li, Tomiko Oskotsky, Eva Raphael, Marina Sirota</i>	
Algorithmic Reliability and Dataset Shift in a National Readmission and Mortality Prediction Algorithm	1483
<i>Likhitha Kolla, Ravi Parikh, Jinbo Chen, Sae-Hwan Park, Kristin Linn, Amol Navathe, Craig Kreisler, Christopher Roberts</i>	
Towards Continuous and Efficient Detection of Paroxysmal Sympathetic Hyperactivity (PSH) Episodes Among Traumatic Brain Injury Patients: Exploring Human-In-The-Loop Anomaly Detection Approach	1485
<i>Xiangxiang Kong, Lujie K. Chen, Sancharee H. Chowdhury, Fourkanul Islam, Peter Hu, Neeraj Badjatia, Jamie E. Podell</i>	

Foresight - Generative Pretrained Transformer (GPT) for Modelling of Patient Timelines using EHRs	1487
<i>Zeljko Kraljevic, Daniel Bean, Anthony Shek, Rebecca Bendayan, Harry Hemingway, Joshua Au Yeung, Alexander Deng, Alfred Baston, Jack Ross, Esther Idowu, James T. Teo, Richard Dobson</i>	
Improving a Clinically Operational Suicide Risk Prediction Model with Natural Language Processing and Machine Learning.....	1489
<i>Kevin Krause, Sharon Davis, Zhijun Yin, Colin Walsh</i>	
Precision Phone Calls: Using Predictive Modelling and A/B Testing to Identify the Best Way to Target Hospital Resources	1491
<i>Holly Krelle, Simon A. Jones, William King, Leora I. Horwitz</i>	
System Demonstration of Ethicara: Bias Detection and Mitigation for Responsible AI in Healthcare.....	1493
<i>Maria Kritharidou, Anatasios Ventouris, Vaios Tsarapastanis, Georgios Chrysogonidis, Ahsan Huda, Pei-Yun (Sabrina) Hsueh</i>	
Identifying Informatics Feedback Tools for Assessing Diagnostic Performance: A Scoping Review and the Development of GoodDx.org.....	1494
<i>Grace Krueger, Sarah Rosenthal, Jake Joseph, Benjamin Rosner</i>	
Investigating COVID-19 Outcomes for Rare Disease Patients using Semantic Similarity and Computational Phenotyping	1496
<i>Bryan Laraway, Justin Reese, Katherina Cortes, Andrew Williams, Julie McMurry, Tiffany Callahan, Peter Robinson, Melissa Haendel</i>	
Addressing Translational Challenges in an Enterprise-Wide Precision Medicine Initiative using FHIR-Based Middleware.....	1498
<i>Leslie Lenert, Wei Ding, Ekaterina Pekar, Bryan Rogers, Caitlin Allen, Amy Jackson, Daniel Judge</i>	
Assessing the Value of ChatGPT for Clinical Decision Support Optimization	1500
<i>Siru Liu, Aileen Wright, Barron Patterson, Jonathan Wanderer, Robert Turner, Scott Nelson, Allison McCoy, Dean Sittig, Adam Wright</i>	
Towards Equitable and Effective Implementation: Refining and Validating a Postpartum Depression Risk Prediction Model	1502
<i>Yifan Liu, Rochelle Joly, Meghan Turchioe, Natalie Benda, Alison Hermann, Ashley Beecy, Jyotishman Pathak, Yiye Zhang</i>	
Strategies for Overcoming Obstacles in Developing Data-Driven Pressure Injuries Staging Phenotypes.....	1504
<i>Luwei Liu, Luwei Liu, Wenyu Song, Michael Sainlaire, Sandy Cho, Debra Furlong, Wadia Gilles-Fowler, Lisa Herlihy, Min Kang, Tanya Martel, Jacqueline Massaro, Beth Melanson, Paula Wolski, Stuart Lipsitz, Patricia Dykes</i>	
Value Set Curation in a Clinical Data Research Network: Certifying National COVID Cohort Collaborative (N3C) Recommended Concept Sets	1506
<i>Johanna Loomba, Stephanie Hong, Lisa Eskenazi, Andrea Zhou, Xiaohan Zhang, Sigfried Gold, Richard Moffitt, Richard Zhu, Amin Manna, Saad Ljazouli, Christopher Chute, Harold Lehmann</i>	
Comparison of EHR-Derived Clinical Workload and Reimbursement	1508
<i>Sunny Lou, Laura Baratta, Daphne Lew, Derek Harford, Michael Avidan, Thomas Kannampallil</i>	

Social Determinants of Health and Mental Health Outcomes in Older Adults: An Analysis of All of Us COVID Survey Data	1510
<i>Phillip Ma, Yijun Shao, Yan Cheng, Youxuan Ling, Stuart Nelson, Qing Zeng</i>	
An Exclusive Covering Provider Role Improves Primary Provider Identification: Results from a Phased Implementation	1512
<i>Stephen Ma, Stav Cullum, Brian Phillips, Charlene Chen, Lauren Wozniak, Janice Jiang, Mohanad Alazzeah, Kelly Darmawan, Maki Nakazato, Mugdha Joshi, Arjun Gokhale, Gretchen Brown, Matthew Eisenberg, Christopher Sharp, Lisa Shieh, Cliff Schmiesing</i>	
Putting the Cart in Front of the Horse: Defining Workflows and Tasks to Inform Model Prediction Targets	1514
<i>Mark Mai, Swaminathan Kandaswamy, Naveen Muthu, Nikolay Braykov, Evan Orenstein</i>	
Implementation and Impact of a Machine Learning-Based Pediatric Risk Stratification Model	1516
<i>Anoop Mayampurath, K. Carey, B. Palama, M. Gonzalez, J. Reid, A. H. Bartlett, M. Churpek, D. Edelson, P. Jani</i>	
Bridging the Digital Health Divide – Patient Experiences with Mobile Integrated Health and Facilitated Telehealth by Community Level Indicators of Health Disparity	1518
<i>Christina McGinnis, Meghan Turchioe, Ruth Creber, Rahul Sharma, Brock Daniels</i>	
Natural Language Processing of Clinical Progress Notes Can Be Used to Model Core Psychosocial Concepts in Temporal Proximity of Suicide	1520
<i>Esther Meerwijk, Asqar Shotqara, Cheng Chen, Suzanne Tamang, Ruth Reeves, Mark Ilgen, Andrea Finlay, Alex Sox-Harris</i>	
Evaluating Data Quality of Missouri’s Immunization Information System (IIS) ‘ShowMeVax’	1522
<i>Muhammad Islam, Lemuel Waitman, Eduardo Simoes, Zachary Kempf, M. Zaman Rana, M. Hossain, M. Islam, Vasanthi Mandhadi, Yaswitha Jampani, Vyshnavi Paka, David Walsh, Tamara McMahon, Abu Mosa</i>	
State of Awareness of MLOps Principles Ascertained from AI/ML-Enabled Healthcare Solution Implementation Papers: A Scoping Review	1524
<i>Madelena Ng, Alexey Youssef, Vaibhavi Shah, Tina Hernandez-Boussard</i>	
Impact of COVID-19 on Gender Representation in U.S. Biomedical Informatics Leadership and Recognition	1526
<i>Vickie Nguyen, Ashley Griffin, Marisa Conte, Tasneem Motiwala, Sullafa Kadura, Jacqueline You, Carolyn Sun, Kathryn Kuttler, Xia Jing, Megan Gregory, Andrea Hartzler, Katherine Kim, Ece Uzun, Pei-Yun Hsueh</i>	
“It’s a Little Bit Scary”: How Academic Medical Centers Implement Predictive Models in the Context of Uncertainty and Inequity	1528
<i>Paige Nong, Reema Hamasha, Sharon Kardia, Jodyn Platt</i>	
Leveraging Electronic Medical Records for Drug Discovery and Validation: Investigating the Role of Individual Statins in COVID-19	1530
<i>Tomiko Oskotsky, Ivana Maric, Megan Sperry, Alice Tang, Boris Oskotsky, Idit Kosti, Brian Le, Ronald Wong, Nima Aghaeepour, David Stevenson, Donald Ingber, Richard Novak, Marina Sirota</i>	
Latent Class Analysis of Social Needs in Medicaid Population and Its Impact on Risk Adjustment Models	1532
<i>Chintan Pandya, Junbo Wu, Elham Hatef, Hadi Kharrazi, Hadi Kharrazi</i>	

Structure and Funding of Clinical Informatics Fellowships: A National Survey of Program Directors	1534
<i>Tushar Patel, Aaron Chaise, John Hanna, Kunal Patel, Christoph Lehmann</i>	
Can Natural Language Processing Support Cultural Adaptation of Digital Health Interventions? A Scoping Review	1537
<i>Amandalynne Paullada, Serena Xie, Yinzhou Wang, Diana Louden, Weichao Yuwen, Trevor Cohen</i>	
Synthesizing Gaps and Priorities for a Justice Informatics Research Agenda	1539
<i>Adrienne Pichon, Salvatore Volpe, Aparajita Kashyap, Pooja Desai, Tara Anand, Elizabeth Campbell, Kayla Schiffer, Courtney Diamond, Bria Massey, Christopher Allsman, Abigail Newbury, Lauren Richter, Tiffani Bright, Suzanne Bakken, Oliver Bear Don'T Walk</i>	
OHDSI Phenotype February - A Community Wide Experience of Applying Standardized Open-Source Tools to Collaboratively Develop, Evaluate and Curate Phenotype Algorithms.	1541
<i>Gowtham Rao, Azza A. Shoaibi, Evan Minty, Joel Swerdel, Anna Ostroplets, Christopher Mecoli, Fabricio Kury, Zachary Wang, Andrea Noel, Allan Wu, David Vizcaya, Jamie Gilbert, Martijn J. Schuemie, Patrick B. Ryan</i>	
Enabling a Learning Public Health System: Enhanced Surveillance of Sexually Transmitted Infections	1543
<i>Harry Nieva, Jason Zucker, Emma Tucker, Delivette Castor, Michael Yin, Peter Gordon, Noemie Elhadad</i>	
Progress and Ongoing Challenges in Electronic Public Health Reporting for Non-Federal Acute Care Hospitals	1545
<i>Chelsea Richwine</i>	
Differences Between Patient and Clinician Submitted Images: Implications for Virtual Care of Skin Conditions	1547
<i>Rajeev Rikhye, Grace Hong, Preeti Singh, Vijaytha Muralidharan, Rory Sayres, Yuan Liu, Yun Liu, Justin Ko, Steven Lin</i>	
Clinician Experiences with VA Electronic Health Record Transition: A Mixed Methods Evaluation at an Initial Transition Site	1549
<i>Seppo Rinne, Ellen Ahlness, Ekaterina Anderson, Sherry Ball, Julian Brunner, Adena Cohen-Bearak, Sarah Cutrona, Christian Helfrich, Bo Kim, Deborah Levy, Brianne Molloy-Paolillo, Megan Moldestad, Jay Orlander, Justin Rucci, George Sayre</i>	
Development and Validation of a Machine-Learning Model to Predict Cochlear Implant Eligibility from Routine Audiogram Data	1551
<i>Santiago Romero-Brufau, Valentina Carducci, Nicholas Deep, Melissa Dejong, Gayla Poling, Matthew Carlson</i>	
An AI-Driven Radiotherapy Workflow Management System	1553
<i>Doori Rose, Anyi Li, Ankur Arya, Grace Chow, Laura Cervino, Joseph Deasy, Aiqi Dong, Sharif Elguindi, Greg Niyazov, Jean Moran, Darian Pazgan-Lorenzo, Aleksandr Petrov, Ellen Pinto, Lakshmi Santanam, Arshdeep Singh, Niral Shah, Pengpeng Zhang</i>	
Sequential Regression and Simulation (SRS): A Method for Estimating Causal Effects from Heterogeneous Clinical Trials Without a Common Control Group	1555
<i>Vivek Rudrapatna, Vignesh Ravindranath, Douglas Arneson, Arman Mosenia, Atul Butte, Shan Wang</i>	

A Personalized Treatment Selection Algorithm for Crohn’s Disease	1557
<i>Vivek Rudrapatna, Vignesh Ravindranath, Doug Arneson, Arman Mosenia, Atul Butte, Shan Wang</i>	
Using Deep Learning to Estimate Corrected QT Intervals from Multi-Lead Conventional ECG in a Large Pediatric Population	1559
<i>Victor Ruiz, Luiz Silva, Lingyun Shi, Ivor Asztalos, Fuchiang Tsui</i>	
Variation in Measures of EHR Use Outside Scheduled Clinic Hours	1561
<i>Adam Rule, Jeffrey Baltus, Christine Sinsky, Mark Micek, Brian Arndt</i>	
Illuminating the Landscape of Clinical Trial Eligibility in the All of Us Research Program	1563
<i>Cathy Shyr, Lina Sulieman, Paul Harris</i>	
Design and Implementation of an Automated Electronic Opioid Scorecard	1565
<i>Benjamin Slovis, Cara Martino, Melanie McArthur, Soonyip H. Pharm, Tasia Beers, Meghan Labella, Jeffrey M. Riggio, Edmund A. Pribitkin</i>	
Drug Safety Surveillance with EHR Data – A Promise Not Yet Fulfilled	1567
<i>Joshua Smith, Luke Zabotka, Rishi Desai, Shirley Wang, Judith Maro, Kevin Coughlin, Jose Hernandez-Munoz, Danijela Stojanovic, Nigam Shah, Sharon Davis</i>	
Identifying Time Trajectories in Risk Factors Documented in Clinical Notes and Predicting Hospitalizations and Emergency Department Visits During Home Health Care.....	1569
<i>Jiyoun Song, Se Min, Sena Chae, Kathy Bowles, Margaret McDonald, Mollie Hobensack, Yolanda Barron, Sridevi Sridharan, Anahita Davoudi, Sungho Oh, Lauren Evans, Maxim Topaz</i>	
An EHR-Based Comparative Analysis of the Distribution of Pressure Injury Anatomical Locations and Stages and Associated Disparities Across a Large Healthcare System	1571
<i>Wenyu Song, Luwei Liu, Michael Sainlaire, Sandy Cho, Debra Furlong, Wadia Gilles-Fowler, Lisa Herlihy, Min Kang, Stuart Lipsitz, Beth Melanson, Jacqueline Massaro, Tanya Martel, Paula Wolski, Linying Zhang, Patricia Dykes</i>	
Virtual Conversational Agents Versus Online Forms: Patient Experience and Preferences for Health Data Collection.....	1573
<i>Hiral Soni, Hattie Wilkzewski, Julia Ivanova, Triton Ong, Janelle Barrera, Mollie Cummins, Brian Bunnell, Brandon Welch</i>	
Assessing Potential Racial Disparities using EHR and Claims Data Across Common Type 2 Diabetes Phenotype Definitions	1575
<i>Priyanka Sood, Star Liu, Hadi Kharrazi</i>	
Theory of Trust and Acceptance of Artificial Intelligence Technology (TrAAIT): Assessing Clinician Trust and Acceptance of Artificial Intelligence.....	1577
<i>Alexander Stevens, Peter Stetson</i>	
Consistent Perceptions of Infographics Across Heterogeneous Latino Groups.....	1579
<i>Samantha Stonbraker, Yazmina Castro, Pamela Caraballo, Stefanie Mayorga, Maria Dunn, Sofia Centi, Bryan McNair, Jacob Michel, Molly Goggin-Kehm, Paul Cook</i>	
Between-Visit Symptom Monitoring in Primary Care: A Mixed-Methods Assessment of a Clinically Integrated Intervention for Asthma	1581
<i>Jorge Flores, Anuj Dalal, Savanna Plombon, Jessica Sousa, Robert Rudin, Jorge Rodriguez</i>	

Development of Pharmacological Statin-Associated Muscle Symptoms Phenotyping Algorithms using Electronic Health Records Data.....	1583
<i>Boguang Sun, Pui Yew, Chih-Lin Chi, Meijia Song, Matthew Loth, Rui Zhang, Robert Straka</i>	
DeepHeme: A Generalizable, Bone Marrow Classifier with Hematopathologist-Level Performance	1585
<i>Shenghuan Sun, Jacob Cleave, Linlin Wang, Fabienne Lucas, Laura Brown, Jacob Spector, Leonardo Boiocchi, Jeeyeon Baik, Menglei Zhu, Orly Ardon, Chuanyi Lu, Ahmet Dogan, Dmitry Goldgof, Iain Carmichael, Sonam Prakash, Atul Butte, Gregory Goldgof</i>	
What Happens When We're Not There?: A Longitudinal Descriptive Study at an Assisted Living Facility.....	1587
<i>Carolyn Sun, Caitlin Burke</i>	
Innovative Analysis of Social Determinants to Enhance Suicide Prevention for Black Youth.....	1589
<i>Zhaoyi Sun, Song Wang, Ying Ding, Yongkang Zhang, Jyotishman Pathak, Yifan Peng, Yunyu Xiao</i>	
The Current Landscape of Algorithmic Vigilance and a Framework for the Future of Clinical AI Governance.....	1591
<i>Sameer Sundrani, Nigam Shah, Michael Pencina, Shauna Overgaard, John Halamka, Nicoleta Economou-Zavlanos, Laurie Novak, Peter Embi</i>	
Building a Multidisciplinary Approach to Reduce Documentation Burden in a Canadian Mental Health Setting.....	1593
<i>Tania Tajirian, Gillian Strudwick, Brian Lo, Jessica Kemp, Uzma Haider, Damian Jankowicz</i>	
How Much Do Social Determinants of Health Determine Health?.....	1595
<i>Abdul Tariq, Elliot Mitchell, David Vawdrey</i>	
Documentation of Sexual Orientation and Gender Identity in Electronic Health Records.....	1597
<i>Brittany Taylor, Kasey Jackman, Kenrick Cato</i>	
Conjoint and Latent Class Analysis of Remote Care Preferences for Tailored Hypertension Management Among Adult Patients	1599
<i>Aaron Tierney, Timothy Brown, Adrian Aguilera, Stephen Shortell, Hector Rodriguez</i>	
Predicting Population-Level Youth Suicide Attempts from Electronic Health Records in a Large Healthcare System.....	1601
<i>Fuchiang Tsui, Victor M. Ruiz, Neal D. Ryan, Nadine Melhem, David A. Brent, Jeffrey McKibben, Amanda Malecky, Pedram Gharani, Oscar Marroquin, Kurt Ackerman, Abigail Schlesinger, David Wolfson, Deborah Brodine</i>	
Trends of Real Time Patient Portal Use Among Emergency Department Patients: An SAEM Informatics Collaborative Report	1603
<i>Robert Turer, Samuel McDonald, Sayon Dutta, Richard Taylor, Christian Rose, Adam Frisch, Kristian Feterik, Craig Norquist, Carrie Baker, Jeffrey Nielson, David Cha, Brian Kwan, Christian Dameff, James Killeen, Richard Medlin, Caryn Boyd, Michael Hall, Robert Doerning, S. Rosenbloom, Casey Distaso, Bryan Steitz</i>	
What Changes Are Needed to Make a Regional Health Information Exchange More Usable to Emergency Medicine Physicians?	1605
<i>Elizabeth Umberfield, Katy Stewart, Titus Schleyer</i>	
GRExit in Biomedical Informatics: One Program's Experience with Moving Away from Use of the GRE in Graduate Admissions.....	1607
<i>Kim Unertl, Cynthia Gadd, Rischelle Jenkins, Bradley Malin, Michael Matheny, Allison McCoy, Leigh Tang, Colin Walsh, Wei-Qi Wei, Jessica Ancker</i>	

Applying Informatics Methods and Systems Thinking to Address the Crisis of Incidental Findings	1609
<i>David Vawdrey, Abdul Tariq, Yatin Mehta</i>	
Prediction of Need for Social Services in an Emergency Department Setting	1611
<i>Joshua Vest, Shaun Grannis, Nir Menachemi, Olena Mazurenko, Christopher Harle, Suranga Kasthuri</i>	
Supervised Machine Learning in Late Preeclampsia Prediction: Unique Risk Factors Predictive as Early as 13 WGA.....	1613
<i>Julie Vignato, Kelvin Encarnacao, Donna Santillan, Heath Davis, Boyd Knosp, Mark Santillan, W. Street</i>	
Weak Supervision Assisted NLP Knowledge Engineering for Cohort Accrual of Breast Cancer Treatment Associated Cardiotoxicity.....	1615
<i>Liwei Wang, Xiaoyang Ruan, Huan He, Andrew Wen, Nan Wang, Heling Jia, Sunyang Fu, Taylor Harrison, Kathryn Ruddy, Suzette Bielinski, Hongfang Liu</i>	
Physiological Phenotype Forecasting in the ICU with Data Assimilation.....	1617
<i>Yanran Wang, J. N. Stroh, George Hripcsak, Cecilia L. Wang, Tellen Bennett, Julia Wrobel, Caroline Nigoghossian, Scott Mueller, Jan Claassen, David Albers</i>	
Fairness Evaluation of Machine Learning Models using Propensity Score Matching: Assessing Racial Bias in Mortality Prediction for Chronic Diseases	1619
<i>Yifei Wang, Liqin Wang, Zhengyang Zhou, John Laurentiev, Lakin Joshua, Li Zhou, Pengyu Hong</i>	
Technical Approach Used in the Consortium for Clinical Characterization of COVID-19 by EHR (4CE)	1621
<i>Griffin Weber</i>	
A Study of Generative Large Language Models and Clinical Text Generation for Building the Next Generation of Intelligent EHR System	1623
<i>Yonghui Wu, Cheng Peng, Aokun Chen, Nima Nejatian, Anthony Costa, Mona Flores, Tanja Magoc, William Hogan, Elizabeth Shenkman, Duane Mitchell, Jiang Bian</i>	
GAT-SIM: A Patient Similarity Network Combined with Graph Attention Network for Home Healthcare Hospitalization or ED Visits Risk Prediction	1625
<i>Zidu Xu, Lauren Evans, Maxim Topaz, Jingjing Shang, Anahita Davoudi</i>	
An Empirical Analysis of Deep Transfer Learning for Infectious Disease Case Detection.....	1627
<i>Ye Ye, Qi Li, Andrew Gu, Ai Ren, Disheng Liu, Yuhe Gao, Junshang Jia, Michael Becich, Per Gesteland, Jeffrey Ferraro, Peter Haug, Runxue Bao, Yuelu Ji, Gregory Cooper</i>	
Specialty-Specific Considerations Impacting Utilization of Clinical Pathways in the Electronic Health Records System.....	1629
<i>Jeniann Yi, Ashley Dafeo, Anunta Virapongse, Sarah Wendel, Brooke Holliman, C. T. Lin, Ethan Cumbler</i>	
Using Machine Learning to Predict the Severity of Cancer Symptoms	1631
<i>Yue Yu, Kathryn Ruddy, Nan Huo, Nansu Zong, Deirdre Pachman, Guohui Xiao, Christopher Chute, Emily Pfaff, Andrea Cheville, Guoqian Jiang</i>	
Clinical Inference of Cancer Trajectory from Radiology Reports using ChatGPT	1633
<i>Travis Zack, Madhumita Sushil, Brenda Miao, Arda Demirci, Corynn Kasap, Atul Butte, Eric Collisson</i>	

Association of Portal Engagement with Body Mass Index Decrease in Post-Bariatric Surgery Patients	1635
<i>Xinmeng Zhang, Kaidi Kang, Chao Yan, Simon Vandekar, Charles Flynn, You Chen</i>	
Explaining Treatment Disparities from a Causal Perspective with EHRs	1637
<i>Linying Zhang, Xinzhuo Jiang, Karthik Natarajan, George Hripcsak</i>	
An Efficient Way to Categorize Patients with Hearing Difficulties and Handicap using Machine Learning	1639
<i>Leming Zhou, Anjnesh Sharma, Leslie Zhen, Sheila Pratt</i>	
Rare Disease Alert System (RDAS)	1641
<i>Qian Zhu, Timothy Sheils, Devon Leadman, Brandon Gong, Annie Hsu, William Kariampuzha, Ewy A. Mathe, Yanji Xu</i>	
Speaker Type Identification in Audio Recorded Patient-Nurse Verbal Communication in Clinical Setting.....	1643
<i>Maryam Zolnoori, Sasha Vergez, Sridevi Sridharan, Ali Zolnour, Sepehr Rafiei, Kathy Bowles, Zoran Kostic, Max Topaz</i>	
Validation of Potential Natural Product Drug Interaction Rules Written in HL7 Clinical Quality Language	1645
<i>Kojo Abanyie, Richard Boyce, Olga Kravchenko</i>	
Deep Learning and Natural Language Processing Methods for Characterizing Pediatric Falls Events	1646
<i>Farzana Adiba, Elise Omaki, Kimia Zandbiglari, Wendy Shields, Andrea Gielen, Masoud Rouhizadeh</i>	
Developing a Web Application to Visualize and Analyze the Protein-Protein Interactions in Cancer	1647
<i>Benjamin Ahn, Caden Chou, Jennifer Chen, Charissa Chou, Alper Uzun, Ece Uzun</i>	
How Do Providers Document Patient Experiences of Racism?	1648
<i>Yasemin Akdas, Laurie Novak</i>	
Implementation of EHR Based Cardio-Oncology Algorithm for Generating Patient Referrals in Community Practice	1649
<i>Sam Al-Droubi, Shakthi Bhaskar, Eiman Jahangir, Kerry Schaffer, Karl Kochendorfer, Marianna Krive, Michal Laufer-Perl, Dan Gilon, Christopher Gans, Joshua Arnold, Tochukwu Okwuosa, Jacob Krive</i>	
DeiDoc: Automatic De-Identification of Notes using LongFormer	1650
<i>Kenan Alkiek, Dalton Simancek, Jiaye Tan, Noah Weissman, Jane Ferraro, V. G. Vinod Vydiswaran</i>	
Who Gets Health Benefits? An (Un)biased Machine Learning Prediction.....	1651
<i>Ghaida Alsadah, Janusz Wojtusiak, Priyanka Anand, Laura Dague, Kathryn Wagner</i>	
Screening for Suicidal Ideation in Patients with Polycystic Ovarian Syndrome: Evidence from India	1652
<i>Amogh Rao, Rema Padman</i>	
Assessing Racial Bias in Clinical Prediction for Urinary Tract Infections.....	1653
<i>Joshua Anderson, Nader Shaikh, Shyam Visweswaran</i>	
Navigating Privacy and Security in Telemedicine for Primary Care.....	1654
<i>Katerina Andreadis, Kimberly Muellers, Jenny Lin, Rahma Mkuu, Carol Horowitz, Rainu Kaushal, Jessica Ancker</i>	

Are Mobile Applications in Speech Pathology Designed for All Patients?	1655
<i>Katerina Andreadis, Eseosa Odigie, Iyra Chandra, Valentina Mocchetti, Hal Rives, Steven Cox, Anais Rameau</i>	
An Analytic Approach to Uncover the Patient Journey to Diagnosis	1656
<i>Danai Aristeridou, Mohammad Ateya, Konstantinos Spyridopoulos, Saira Haque, Anastasia Karatzia</i>	
Extracting Gene Pathways from Figures using Pool-Less Active Learning	1657
<i>Micheal Arowolo, Joshua L. Thompson, Muhammad Azam, Fei He, Mihail Popescu, Dong Xu</i>	
Extracting Smoking Status from Lung Cancer Patients using Natural Language Processing (NLP) in Real World Electronic Health Records (EHR)	1658
<i>Joshua Yeung, Charalampos Gousis, Anthony Shek, Harriet McGrath, Georgios Douganiotis, Eleni Josephides, Alexandros Georgiou, James Teo</i>	
Examining Whole-Person Health for Adults with and Without Thinking (Cognitive) Challenges	1660
<i>Robin Austin, Ratchada Jantraporn, Martin Michalowski, Jenna Marquard</i>	
Following the Money in Healthcare: A Network Analysis Study of the Investment Pattern Changes Pre- to Intra-COVID-19	1661
<i>Marco Mota, Yubo Feng, Michelle Gomez, Kaitlin Williamson, You Chen</i>	
A Preliminary Framework for Business Process Model (BPM+) Metadata	1662
<i>Philip Barrison, Zach Landis-Lewis, Allen Flynn, Rachel Richesson, Charles Friedman</i>	
COVID-Specific Long-Term Sequelae in Comparison to Common Viral Respiratory Infections: An Analysis of 17,487 Infected Adult Patients	1663
<i>William Baskett, Adnan Qureshi, Daniel Shyu, Jane Armer, Chi-Ren Shyu</i>	
Imaging Exam Protocol Tools: Adapting the EHR to the Radiology Workflow	1665
<i>Julie Bauml, Lindsey Johnstone, Kate Frederick-Dyer, Leonard Gorman</i>	
Semantic Mapping Tool Enabling a Streamlined Review Process	1666
<i>Karen Bavuso, Roberto Rocha, Kai Großjohann, Dirk Wenke, Saverio Maviglia</i>	
The Impact of an Electronic Eczema Action Plan on Patient Understanding and Comfort with Disease Management.....	1667
<i>Olivia Beale, Tricia Lee, Swaminathan Kandaswamy, Sofia E. Edwards-Salmon, Shasha Bai</i>	
Using a Blockchain to Immutably Preserve Digital-Only Birth Certificates.....	1668
<i>Edwin Bean, Tsung-Ting Kuo, Michael Hogarth</i>	
Evaluating a Design Challenge Activity for Biomedical Informatics Summer Interns	1669
<i>Robert Becker, Michelle Gomez, Kim Unertl</i>	
Prospective Validation of a Suicide Event Risk Model in Transgender Patients	1670
<i>Robert Becker, Colin Walsh</i>	
Developing a New i2b2 User Interface for Query and Analysis of Clinical Data	1678
<i>Nicholas Benik, Marc Ciriello, Diane Keogh, Jeffrey Klann, Anupama Maram, Mike Mendis, Shawn Murphy, Marc-Danie Nazaire, Griffin Weber</i>	
Improving Sickle Cell Disease Personalized Pain Plan Documentation and Usability via User-Centered Design	1679
<i>Tonya Bennett, Jason Payne, Wayne Liang, Evan Orenstein, Edwin Ray, Beatrice Gee, Swaminathan Kandaswamy</i>	

Evaluation of a 12-Month Virtual Sepsis-Surveillance Pilot Program in a 180-Bed Community Hospital	1680
<i>Jeffrey Bergman, Fareed Beaini, Fiona Winterbottom, Jason Hill</i>	
Identifying Medications for Inflammatory Bowel Disease from Unstructured Data using Knowledge Graphs and UMLS Vocabularies	1681
<i>Joao Bettencourt-Silva, Natasha Mulligan, Alberto Purpura, Tesfaye Yadete, Kingsley Njoku, Uri Kartoun, Vibha Anand, Eileen Koski, Julia Liu, Thaddeus Stappenbeck</i>	
Harnessing Electronic Health Record Data for Causal Inference Through Target Trial Emulation: Lessons from N3C-RECOVER	1682
<i>Abhishek Bhatia, Alexander Preiss, Emily Pfaff</i>	
Investigating the Effectiveness of Mobile Apps for Drug-Drug Interaction (DDI) Management	1683
<i>Ayush Bhattacharya, Prachi Khandare, Rhia Singh, Jose Florez-Arango</i>	
Defining, Characterizing, and Predicting Endometriosis Flare-Ups Through Machine Learning with Patient-Generated Data.....	1684
<i>Jessica Blumberg, Adrienne Pichon, Noemie Elhadad</i>	
Implementation of an eCare Plan for People with Multiple Chronic Conditions	1685
<i>Michelle Bobo, David Dorr, Matt Storer, Laura Marcial, Jacqueline Bagwell, Keegan Barnes</i>	
A Usability Enhancing Privacy-Protecting Approach for EHR Data Sharing	1686
<i>Luca Bonomi, Sepand Gousheh, Liyue Fan</i>	
Vertically Integrated IT Infrastructure for Silent Validation of a Delayed-Cerebral-Ischemia Prediction Model	1687
<i>Jens Boss, Jan Willms, Emanuela Keller</i>	
Machine Learning to Detect Opioid Misuse from Primary Care Notes.....	1688
<i>Allison Bradley, Jessica Merlin, Rayid Ghani, Paula Escott, Shyam Visweswaran, Jonathan Silverstein, Jonathan Arnold</i>	
Assessing the Quality of Uncertainty Calibration	1689
<i>Katherine Brown, Steven Talbert, Douglas Talbert</i>	
Developing and Validating a Multivariable Lung Cancer Risk Prediction Model that Identifies High-Risk Smokers in Electronic Health Records: ECLS and UK Biobank.....	1690
<i>Lamorna Brown, Frank Sullivan, Tom W. Kelsey, Utkarsh Agrawal</i>	
An i2b2 Plugin for Installing Ontologies.....	1691
<i>Kevin Bui, Michele Morris, Shyam Visweswaran</i>	
Sentiment Analysis of Healthcare Interventions.....	1692
<i>Joshua Calvano, Karl Swanson, Jacob Schwell, Paul Kim, Paul Chong</i>	
Developing Motivational Messages for Precision Feedback in Anesthesia Care	1693
<i>Yidan Cao, Anjana Renji, Astrid Fishstrom, Hana Chung, Allen Flynn, Allison Janda, Nirav Shah, Zach Landis-Lewis</i>	
Teaching Histology Through Repetition: A Precision Education Tool for Pathology	1694
<i>Anthony Cardillo</i>	
Implementing Data-Driven User-Interface for Surgical Site Infection Surveillance.....	1695
<i>Ugur Celik, Feifan Liu, Richard Ellison, Kimiyoshi Kobayashi, Qiming Shi, Yurima Guilarte-Walker, Robert Steppacher, Adrian Zai</i>	

Hospital Discharge Summarization Data Provenance	1696
<i>Aaron Chaise, Kunal Patel, Sean Huang, Paul Landes, Barbara Eugenio</i>	
Secondary Use of Data Combined from Health Information Exchange with Electronic Health Record: Code Status Order Trends by Patient Demographics	1697
<i>Eesha Chakravarty, Yunan Zhao, Saul B. Blecker, Simon Jones, Jonathan Austrian</i>	
A Theory-Informed Approach to Studying Social Media About Substance Use.....	1698
<i>Rahul Chaliparambil, Shana Johnny, Sharon Wong, Joseph Glass, Lexie Wang, Mike Conway, Annie Chen</i>	
Automated Mapping of OUD Resources using Hyperlink Network Analysis	1699
<i>David Chen, Kameron Black, Paul Chong, Jonathan Gale, Shuhan He</i>	
Eye-Tracking Methods in Comparing Student and Experienced Nurses' Decision Making During Acute Patient Care Simulations.....	1700
<i>Haozhi Chen, Denny Yu, Nicholas Anton, Guoyang Zhou, Tera Hornbeck</i>	
REDCap Qualitative Data Summarization using Large Language Model AI	1702
<i>Alex Cheng, Kyle McGuffin, Cathy Shyr, Paul Harris</i>	
Where the Rubber Meets the Road: Lessons Learned from Conducting a Co-Design Studio in a Kentucky Community	1703
<i>Ming-Yuan Chih, Joseph Alexander, Kristine Damron, Pamela Hull, Timothy Mullett, Christine Stroebel</i>	
Reducing the Gaps Between Self-Reporting and Nursing Documentation for Inpatient Falls: Proposing of Deep-Learning Approach.....	1704
<i>Insook Cho, EunJoo Lee, Dong-Geon Lee</i>	
Nurses' Adoption and Use of Digital Technologies During the COVID-19 Pandemic: A National Survey.....	1705
<i>Hwayoung Cho, Tamara Macieira, Ragnhildur Bjarnadottir, Jiyoun Song, Oliver Nguyen, Max Topaz, Dawn Dowding</i>	
Utilizing the Dataverse Framework to Configure and Implement a Validated FDA-Compliant Research Archive.....	1706
<i>Amy Cole, John Martin, Abhishek Bhatia</i>	
Usability Testing of a Chatbot for Supporting the Health of Family Caregivers.....	1707
<i>Chelsie Condon, Weichao Yuwen, Andrea Hartzler, Myra Divina</i>	
Auto-Spatial Relationship of Health Inequalities and Multi-Drug Resistant Organisms	1708
<i>Lauren Cooper, John Hanna, Alaina Beauchamp, Tanvi Ingle, Richard Medford, Alexander Radunsky, Trish Perl, Tony Keller, Clark Walker, Marlon Diaz, Chaitanya Katterapalli, Zachary Most, Christoph Lehmann</i>	
Privacy Preserving Record Linkage (PPRL) for Pediatric Research Studies	1709
<i>Valerie Cotton, Elizabeth Clerkin, Rebecca Rosen</i>	
Leveraging EHR-Integrated Tools to Improve Diagnostic Safety in Hospitalized Patients: Early Experience & Preliminary Results	1710
<i>Anuj Dalal, Savanna Plombon, Kaitlyn Konieczny, Daniel Motta-Calderon, Alyssa Lam, Alison Garber, Maria Malik, Marie Leeson, Pamela Garabedian, Ronen Rozenblum, Jacqueline Griffin, Jeffrey Schnipper, Stuart Lipsitz, David Bates</i>	

Data Governance for Sharing and Access to Real-World Data at University of Iowa Healthcare, a Case Study.....	1711
<i>Heath Davis, Diva Perez, Ash Hoberg, Boyd Knosp</i>	
Implementation of a Clinical Decision Support Tool in Support of Medicare Compliant Surgery Scheduling.....	1712
<i>James Davydov, Jonathan S. Austrian, Hardev Randhawa, Omid Barzideh</i>	
Systematically Screening for Race-Ethnicity Disparities Across Near-Countless Clinical Situations in Two Large Health Care Systems	1713
<i>Paul Dexter, Curtis Wright, Randall Grout, Gregory Dexter, David Crabb, Brownsyne Edmonds, Titus Schleyer, Mehda Kulkarni</i>	
Using a Stakeholder Driven-Process to Advance Patient-Centered Clinical Decision Support: Visual Framework for Clinical Decision Support Innovation Collaborative (CDSiC) Efforts.....	1714
<i>Rina Dhopeshwarkar, Dean Sittig, Courtney Zott, Priyanka Desai, Edwin Lomotan, James Swiger, Prashila Dullabh</i>	
Identifying Confounders for Depression and Different Forms of Dementia	1715
<i>Israel Dilan-Pantojas, Scott Malec</i>	
Pediatric Sepsis Subtyping by Vital Sign Trajectory Analysis	1716
<i>Yanyi Ding, Zhidi Luo, Mindy Szeto, Yuan Luo, L. Sanchez-Pinto</i>	
Implementation of a CDS Tool for Facilitating Medication-Assisted Treatment of Opioid Use Disorder.....	1717
<i>Casey Distaso, Dara Mize, Joseph Legrand, Allison McCoy, Sylinda Littlejohn, Nathaniel Miller, Adam Wright</i>	
Successful Transitions to Stable Housing for Veterans Experiencing Homelessness: Does Spending Translate to Better Outcomes?.....	1718
<i>Brian Douthit, Alvin Jeffery, Thomas Reese, Michael Matheny</i>	
Leveraging “Blended Data” to Uncover Disparities in Care: A Case Study of Statin Use.....	1719
<i>Charlotte Drury-Gworek, Shannon Richards, Tyson Barrett, Jillian Rung, Teigan Dwyer, Brent Williams, Indu Poornima</i>	
Differences in Predictors of Cesarean Sections for Foreign-Born Vs US-Born Mexican American Women using a Machine Learning Approach.....	1720
<i>Dominique Dubois, Jonathan Bona, Clare Brown</i>	
Tailored Implementation Support for Successful Adoption of a Clinical Decision Support Tool for Patients with Chronic Pain	1721
<i>Mario Hayek, Cara McDonnell, Brianna Nordelo, Khoa Nguyen, Julie Diulio, Michelle Wang, Francisco J. Martinez-Wittinghan, Lori A. Bilello, Ramzi G. Salloum, Christopher A. Harle</i>	
Understanding Sociodemographic Data Collection Workflows in Emergency Department Settings: A Qualitative Study	1722
<i>Sarah El-Azab, Timberlee Whiteus, Megan Hogikyan, Michelle Macy, Michele Nypaver, Keith Kocher</i>	
Presentation of a Geriatric Oncology Dashboard Displaying the VA - Frailty Index and Recommendations for Use in the Oncology Applications (OncApps) Platform at the Department of Veterans Affairs.	1723
<i>Danne Elbers, Clark Dumontier, Amelia Tarren, Robert Zwolinski, Mayuri Dharne, Linden Huhmann, Sergey Goryachev, Jane Driver, Nathanael Fillmore, Nhan Do</i>	

The MIDAS Catalog and Curated Archive of Global Public Health Data	1724
<i>Jessi Espino, John Levander, Lucie Contamin, Cross Anne, Harry Hochheiser</i>	
EHR-Based Dashboard for Optimization of Surgical Resident Workflows	1725
<i>Parker Evans, Scott Nelson, Chetan Aher, Adam Wright</i>	
Contextual Date Resolution in Clinical Notes	1726
<i>Hannah Eyre, Annie Bowles, Patrick R. Alba, Scott L. DuVall</i>	
Enabling Technologies for Rapid Learning Health Systems with the Molecular Oncology Almanac (MOAlmanac)	1727
<i>Theodore Feldman, Brendan Reardon, Paul Marcantonio, Danne Elbers, Nathanael Fillmore, Eliezer Allen, Michael Kelley, Mary Brophy, Nhan Do</i>	
Identifying a First-Contact Provider for Admitted Patients	1728
<i>Jonah Feldman, David Lin, Christopher Sonne, Erin Fitzgerald, Linnea Drew, Benjamin Silva, Saul Blecker</i>	
Estimating Dynamic Treatment Effects of Dual Antiplatelet Therapy (DAPT) on Bleeding and Ischemic Risk: Real-World Data Analysis.....	1729
<i>Zheng Feng, Fang Li, Jiang Bian, Mattia Prosperi, Inyoung Jun, Yu Huang, Cui Tao</i>	
Data Analytics for Absolute Beginners: A Teaching Evaluation	1731
<i>Susan Fenton, Constance Johnson, Stanley Cron</i>	
Feasibility of Embedding NASA-TLX Within Immersive Virtual Reality.....	1732
<i>Allyson Ferguson, Will Thompson, Denise M. Goldsmith, Patricia F. Brennan</i>	
Primary Care Physician Perceptions and Requirements of Digital Scribes.....	1733
<i>Gic-Owens Fiestan, Emily Balczewski, Erkin Otles</i>	
Development of a Multi-Variate Time Series Data Set for Reportable Cancer Recurrence (MVTs-CanRecur).....	1734
<i>Sarah Fittro, John Osborne, Chris Coffee, Gaurav Goyal</i>	
Correlation of National and State ADI Rankings for 2015 and 2020 Against Chronic and Acute Health Outcomes	1735
<i>Daniel Fort, Abbie Kennedy, Valerie Welch</i>	
Road Map to Building and Implementing a Clinical Decision Support Tool to Meet HIV Prevention National Guidelines	1736
<i>Kruti Gala, Gabriel Cohen, Emma Kaplan-Lewis, Eunice Casey, Zeyu Li</i>	
OMOP-CDM in Asia-Pacific Regions and Lessons for Data Quality Assessment.....	1737
<i>Sujin Gan, Chungsoo Kim, Seongwon Lee, Jing Li, Jiawei Qian, Gyeol Song, Clair Blacketer, Anthony Molinaro, Dinuja Liyanage, Zhang Jingyi, Li Chao, Roger Ward, Mengling Feng, Mui Zandt, Rae Park</i>	
Developing a Machine Learning Model to Predict 30-Day Readmissions in Neurological Intensive Care Unit (NSICU).....	1738
<i>Andy Gao, Danny Wu, Andy Gao, Tzu-Chun Wu, Catherine Xu, Joseph S. Cheng, Brandon Foreman</i>	
Towards Characterizing the Progression to Dementia Onset Through Network Analysis	1739
<i>Muskan Garg, Seyedehsara Hejazi, Sunyang Fu, Maria Vassilaki, Ronald Peterson, Jennifer Sauver, Sunghwan Sohn</i>	

UMLS-Based Data Augmentation for Few-Shot Named Entity Recognition in Medical Texts.....	1740
<i>Yao Ge, Abeed Sarker</i>	
Data Augmentation via UMLS for Few-Shot Named Entity Recognition in Medical Texts.....	1741
<i>Yao Ge, Sudeshna Das, Abeed Sarker</i>	
Privacy Preserving Self-Service DeGAUSS-Based Geomarker Portal	1742
<i>Harpreet Gill, Jared Johnson, Catherine Jackson, Kevin Power, Mark Hoffman</i>	
Mixed Methods Assessment of Front-Line User Empowerment Through a Hospital-Acquired Conditions Visual Analytics Dashboard	1743
<i>Laura Gillard, David Todd, Seton McRae, Evan Orenstein, Swaminathan Kandaswamy</i>	
Exploring Health Disparities: Racial and Ethnic Differences in Hypertension Medication Effectiveness in the All of Us Research Program	1744
<i>Slavina Goleva, Tam Tran, David Schlueter, Jacob Keaton, Thomas Cassini, Huan Mo, Ariel Williams, Tracey Ferrara, Joshua Denny</i>	
The Role of Technology and Informatics Tools in Human Trafficking Interventions Implemented in Healthcare Settings: A Scoping Review	1745
<i>Michelle Gomez, Colin Walsh, Ellen Clayton, Kim Unertl</i>	
A Medication-Wide Association Study to Identify Drug Repurposing Candidates for Alzheimer’s Disease	1746
<i>Monika Grabowska, Wei-Qi Wei</i>	
Optimizing the Delivery of Pneumonia Clinical Decision Support in the Pediatric Emergency Department	1747
<i>Stephen Gradwohl, Adam Wright, Asli Weitkamp, Derek Williams</i>	
Longitudinal Clustering of Life’s Essential 8 Health Metrics: Application of a Novel Unsupervised Learning Method in the CARDIA Study	1748
<i>Peter Graffy, Lindsay Zimmerman, Yuan Luo, Jingzhi Yu, Yuni Choi, Rachel Zmora, Donald Lloyd-Jones, Norrina Allen</i>	
Clustering App Usage and Health Care Engagement Among Veterans	1749
<i>Ashley Griffin, Cindie Slightam, Alison Greene, Charlie Wray, Joe Wielgosz, Eric Kuhn, Daniel Blonigen, Donna Zulman</i>	
A Supervised Text Classification System Detects Fontan Patients in Electronic Records with Higher Accuracy than ICD Codes	1750
<i>Yuting Guo, Mohammed Al-Garadi, Wendy Book, Lindsey Ivey, Fred Rodriguez, Cheryl Raskind-Hood, Chad Robichaux, Abeed Sarker</i>	
Disparities in Test Result Viewership in the Age of Open Results	1751
<i>Kevin Guo, Thomas Reese, S. Rosenbloom, Bryan Steitz</i>	
Prediction of Hand, Foot, and Mouth Disease Incidence using Adaptive Voting-Based Ensemble Models.....	1752
<i>Jianying Guo, Lan Wei, Xiang Li, Tiejian Feng, Guotong Xie, Yongsheng Wu</i>	
Balancing Patient Convenience and Healthcare Costs: A Personalized Recommendation Approach using Reinforcement Learning	1753
<i>Tianjian Guo, Indranil Bardhan, Wen Wen</i>	
Retrieval-Augmented Generation of Lay Language Background Explanations.....	1754
<i>Yue Guo, Trevor Cohen, Gondy Leroy, Sheng Wang, Wei Qiu</i>	

User-Centered Design and Evaluation of a Research Project Management System: A Case Study in a Pediatric Health Institute	1755
<i>Shubhra Gupta, Chen Xin, Aniruddhan Ramesh, Manhar Suharwardy, Hager Hamed, Danny Wu</i>	
Arbitrary Choices Matter: A Case of Cohort Selection in N3C.....	1756
<i>Atefehsadat Haghghathoseini, Sai Vinnakota, Robert J. Thomas, Cara L. Frankenfeld, Timothy F. Leslie, Hua Min, Nirup M. Menon, Janusz Wojtusiak</i>	
Deep Learning and Latent Diffusion Models for Blood Pressure Prediction	1757
<i>Jiarui Hai, Jiancheng Ye, Zidan Wang, Chumei Wei</i>	
Developing Deep Neural Networks for Personalized Matching of Researcher Biosketches to Funder Requests for Proposals	1758
<i>Sifei Han, Russell Richie, Lingyun Shi, Fuchiang Tsui</i>	
Trust in Artificial Intelligence (AI) for Mental Healthcare: A Subgroup Analysis by Pregnancy History	1759
<i>Sarah Harkins, Pooja Desai, Shiveen Kumar, Yiye Zhang, Jyotishman Pathak, Natalie Benda, Meghan Turchioe</i>	
Ten-Year Pathway Figure Mining and Analysis for Non-Small Cell Lung Cancer.....	1760
<i>Fei He, Yibo Chen, Marius Petruc, Dong Xu, Mihail Popescu</i>	
Visual Exploration of the Results and Errors of Information Extraction.....	1761
<i>Huan He, Sunyang Fu, Andrew Wen, Liwei Wang, Sungrim Moon, Kurt Miller, Hongfang Liu</i>	
A Living Interactive Evidence Synthesis Framework and Applications for Creating and Maintaining Living Systematic Reviews and Meta-Analysis.....	1762
<i>Huan He, Irbaz Riaz, Syed A. Naqvi, Rabbia Siddiqi, Noureen Asghar, Mahnoor Islam, M. Murad, Hongfang Liu</i>	
Prompting an EHR Foundation Model for Pancreatic Cancer Risk Prediction	1763
<i>Jianping He, Degui Zhi, Laila Rasmy, Cui Tao</i>	
Assessing the Usability of the SHAREdash—A Health Equity Tool for Rural Public Health	1764
<i>Elizabeth Heitkemper, Scott Hulse, Betty Bekemeier, Anne Turner</i>	
Comparative Analysis of Three Surveys on Primary Care Providers’ Experiences with Interoperability in Electronic Health Records	1765
<i>Nathaniel Hendrix, Natalya Maisel, Jordan Everson, Andrew Bazemore, Lisa Rotenstein, A Holmgren, Alex Krist, Julia Adler-Milstein, Robert Phillips</i>	
Evaluating SARS-CoV-2 Infection Following Immunization: A Pediatric Cohort Study from the RECOVER Initiative	1766
<i>Kathryn Hirabayashi, Hanieh Razzaghi, C. Bailey</i>	
CDC Healthcare Facility Patient Care Location Code (HSLOC) Modernization	1767
<i>Yenling Ho, Sheila Abner, Yasemin Kaynas, Shaun Shakib, Caroline Macumber, Shuai Zheng, Austin Kreisler, Andrea Benin</i>	
Utilizing Relational Database Design for Scalable Phenomics Library Development.....	1768
<i>Yuk-Lam Ho, Michael Murray, Rahul Sangar, John Russo, Jacqueline Honerlaw, Keith Connatser, David Heise, Kelly Cho</i>	

A Needs Assessment on Development of a Contraceptive Decision Aid for Transgender Assigned Female at Birth (AFAB) Persons.....	1769
<i>Vi-Anh Hoang, Jenny Brian, Dongwen Wang</i>	
Nursing Surveillance Risk Scores Preceding Psychological Deterioration.....	1770
<i>Mollie Hobensack, Chris Knaplund, Haomiao Jia, Elise Ruan, Ali Soroush, Sarah Rossetti, Kenrick Cato</i>	
Improving the Readability of Informed Consent Forms using ChatGPT.....	1771
<i>Taylor Horne, Young-Ji Lee, Leming Zhou, Yong Choi, Juleen Rodakowski, Yanshan Wang</i>	
Development of a Vendor-Independent Data Collection System using FHIR-Based Form System for Intractable Diseases and Cancers in Japan.....	1772
<i>Hiroyuki Hoshimoto, Masamichi Ishii, Kengo Miyo</i>	
An Automatic Compliance Analysis: Are Cancer Patients Receiving Appropriate Lifestyle Information During Clinical Visits?.....	1773
<i>Yujia Hou, Javed Mostafa</i>	
The Women in AMIA Leadership Training Program: Applying Lessons Learned to a Team of 50.....	1774
<i>Rachael Howe, Arta Kelmendi-Doko, Dannie Greenlee, Tiffany Harman, Lee Lau</i>	
Streamlining Social Media Information Extraction for Public Health Research with Deep Learning.....	1775
<i>Yining Hua, Shixu Lin, Minghui Li, Yujie Zhang, Peilin Zhou, Li Zhou, Jie Yang</i>	
Navigating the Future of Radiology: Assessing the Usability & Acceptance of AI Diagnostic Imaging Systems.....	1777
<i>David Hua, Neysa Petrina, Noel Young, Jin-Gun Cho, Simon Poon</i>	
Alzheimer's Disease Prediction Through Patients Speech Transcript using Pre-Trained Language Models.....	1778
<i>Xiaoke Huang, Liao Wenxiong, Zhengliang Liu, Haixing Dai, Zihao Wu, Dajiang Zhu, Tianming Liu, Quanzheng Li, Hongmin Cai, Xiang Li</i>	
Educational Topic Discovery Through EHR Data Analysis.....	1779
<i>John Huber, Laura Brown, Christopher Dandoy, Judith Dexheimer</i>	
Towards Building a Recommender System: Ovarian Cancer (OvCa) Patients and Caregivers' Information Needs and Perceived Disease Knowledge Across Different Illness Trajectories.....	1780
<i>Vivian Hui, Yu Chi, Khushboo Thaker, Youjia Wang, Heidi Donovan, Peter Brusilovsky, Daqing He, Young Lee</i>	
Towards Identification of Delirium in Clinical Text.....	1781
<i>Mayeesha Humaira, John Osborne, Mojisola Fasokun, Ahana Chatterjee, Tobias O'Leary, Christina Diblasio, Richard Kennedy</i>	
Development and Validation of Machine Learning Algorithms for Predicting Personalized Red Blood Cell Demand Among Patients with Thoracic Surgery and App Development.....	1782
<i>Sujeong Hur, Junsang Yoo, Ji Y. Min, Yeong J. Jeon, Jong H. Cho, Ji Y. Seo, Duck Cho, Kyunga Kim, Yura Lee, Won C. Cha</i>	
Demonstrating How Data Filtering Methods Affect Outcome Analysis Results.....	1783
<i>Eunyoung Im, Hyeoneui Kim, Jinsun Jung</i>	
Machine Learning and Annotation Tools Reliably Identify Literature Containing New Chemical Substances for Inclusion in the MeSH Vocabulary.....	1784
<i>Rezarta Islamaj, Nicholas Miliaras, Olga Printseva, Zhiyong Lu</i>	

Contextual Data Quality Assessment: Missing Data for Social Determinants of Health at the Healthcare System Level.....	1785
<i>Dena Jaffe, Philip Ruo, Sam Montgomery, Nathan Vavroch</i>	
Improvement of Programmatic Electronic Data Collection and Health Information System Strengthening in Haiti.....	1786
<i>Meredith Jean-Baptiste, Thamar Julmiste, Ellen Ball</i>	
Risk Information Visualization: Nurses' Preference and Performance.....	1787
<i>Alvin Jeffery, Shilo Anders, Janelle Faiman, Russ Beebe, Carrie Reale, Vera Borkowski, Michael Matheny</i>	
Utility of the Fast Healthcare Interoperability Resources (FHIR) Standard as the Arden Syntax V3.0 Data Model for Representation of Non-Query Data Mappings	1788
<i>Robert Jenders</i>	
Detecting Disease Progression in Amyotrophic Lateral Sclerosis with Wearable Sensors in a Free Living Environment.....	1789
<i>Gordon Jewett, Lawrence Korngut, Joon Lee</i>	
Sepsis Phenotype Clustering using EHR Longitudinal Data	1790
<i>Shiyi Jiang, Yuankang Zhao, Xin Gai, William Stead, Miriam Treggiari, Anru Zhang</i>	
Indiana Precision Oncology (IPO) Common Data Model: Design and Development	1791
<i>Nanxin Jin, Netsanet Gebregziabher, Pavani Kavuri, Colin Hoffman, Zuotian Li, Carmel Egan, Baijian Yang, Kun Huang, Jing Su</i>	
Data and Analytic Architecture of a State-Wide Learning Health Collaborative: The Minnesota Electronic Health Record Consortium Experience	1792
<i>Steve Johnson, Peter Bodurtha, R Dudley, Deran McKeen, Sam Patnoe, Nayanjot Rai, Stephen Waring, Tyler Winkelman, Paul Drawz</i>	
Barriers and Facilitators of Genetics Clinical Decision Support: A Systematic Review	1793
<i>Darren Johnson, Marc Williams, Guilherme Fiol, Nathan Sanders</i>	
Empirical Calibration of Antidepressant Safety Risk in Observational Electronic Health Record Data	1794
<i>Barrett Jones, Andrew Spieker, Colin G. Walsh</i>	
Optimization of Sequential Antibiotic Treatment for Invasive MRSA Infections using Real World Data and Causal G-Formula	1795
<i>Inyoung Jun, Scott Cohen, Mattia Proserpi</i>	
Sexual Assault Health Information Technology: A Scoping Review.....	1796
<i>Kassandra Jutis, Rachael Miller, Michelle Gomez, Kim Unertl</i>	
Machine Learning Models to Predict Ductal and Lobular Breast Cancer Recurrence and Identify Potential Biomarkers	1797
<i>Julie Karam, Ece Uzun</i>	
Co-Designing and Piloting a Text-Based Program to Support Clinician Well-Being at a Canadian Mental Health Hospital.....	1798
<i>Iman Kassam, Jessica Kemp, Jori Jones, Rabia Khokhar, Patti Socha, Matthew Tsuda, Gillian Strudwick</i>	

A Standard Operating Procedure for Concept Set Creation in the National COVID Cohort Collaborative	1799
<i>Eileen Keck, Margaret Hall, Adit Anand, Shreya Sinha, Tejas Patel, Dipika Rana, Sigfried Gold, Rachel Wong, Harold Lehmann, Richard Moffitt</i>	
Evaluating the Performance of ChatGPT on Clinical Abbreviation Disambiguation: A Preliminary Study.....	1800
<i>Vipina Keloth, Hua Xu</i>	
FHIR Genomics Sandbox: What it Really Takes to Create a FHIR Application Development and Testing Environment	1801
<i>Aly Khalifa, Xianfeng Chen, Robert Freimuth</i>	
A Natural Language Processing Approach for Detection of Medication Documentation Quality Issues	1802
<i>Julie Kim, Glenn Gobbel, Colleen Lewellyan</i>	
PHAROS, Platform of Harmonizing and Accessing Data in Real-Time Infectious Disease Surveillance Based on OMOP-CDM	1803
<i>Chungsoo Kim, Byungjin Choi, Junhyuk Chang, Rae Park, Soobeen Seol, Seongwon Lee</i>	
Development and Validation of 6-Month Mortality Risk Model to Prompt Serious Illness Interventions.....	1804
<i>Bommae Kim, Katherine Demarco, Cathleen Fitzpatrick, Sage Kealy, Juan Rojas</i>	
Developing a De-Identification Pipeline for Korean Clinical Notes	1805
<i>Jinsol Kim, Hyeoneui Kim</i>	
“Pruning the Tree”: Patient Care Segmentation and Binary Question Modeling Simplifies Decision Tree Logic for Inbound Musculoskeletal Call Center Patient Navigation.....	1807
<i>Dominic King, Dawn Colwell, Elsa D. Jacobson, Lisa Yerian, Jonathan L. Schaffer</i>	
Non-Interruptive Clinical Decision Support Improves Adherence to Lyme Prophylaxis Guidelines.....	1808
<i>Susannah Kisvarday, Emily T. Correa, Louis Vernacchio, Jonathan Hatoun, Heather C. O'Donnell</i>	
Predicting Falls in the Nursing Homes via Machine Learning Methods.....	1809
<i>Olga Kravchenko, Richard Boyce, Richael Saka, Paul Munro</i>	
User-Centered Design Workshop to Develop Clinical Decision Support Tools for Patient Mobility in the ICU	1810
<i>Anna Krupp, Heather Dunn, Nikta Kia, Karen Lopez</i>	
Applying Informatics in the Field of Attention Deficit Hyperactivity Disorder (ADHD): A Scoping Review.....	1811
<i>Elyse Ku, Danny Wu, Gargi Rajput, Chen Xin, Abraham Kim, Mary H. Burlison</i>	
ChatGPT and the Clinical Informatics Board Examination: The End of Knowledge-Based Medical Testing?	1812
<i>Yaa Kumah-Crystal, Scott Mankowitz, Peter Embi, Christoph Lehmann</i>	
Measuring Case Difficulty in Medical Data using Machine Learning	1814
<i>Hyunjin Kwon, Joon Lee</i>	
Prediction and Escalation of Post-Discharge Adverse Events	1815
<i>Marie Leeson, Jorge Rodriguez, Kaitlyn Konieczny, Savanna Plombon, Robert Rudin, Pamela Garabedian, Anuj Dalal</i>	

Enabling Precision Medicine: Considerations When Implementing Pharmacogenomics Clinical Decision Support	1816
<i>Kenneth Leung</i>	
The Safety of Healthcare in the Outpatient Setting: The SafeCare Study	1817
<i>David Levine, Ania Syrowatka, Christine Iannaccone, Michelle Frits, David Bates</i>	
Promoting Interoperability of Psychiatric Electronic Health Records by the OMOP Common Data Model: Lessons Learned.....	1818
<i>Zehan Li, Na Hong, Yujia Zhou, Christopher Mao, Salih Selek, Hua Xu</i>	
Knowledge Graph for Acupuncture: Integrating Domain Knowledge from Multiple Sources	1819
<i>Yiming Li, Xueqing Peng, Suyuan Peng, Jiayan Lu, Yan Hu, Cui Tao, Hua Xu, Na Hong</i>	
Suicide Tendency Prediction from Psychiatric Notes using Transformer Models.....	1820
<i>Zehan Li, Iqra Ameer, Yan Hu, Ahmed Abdelhameed, Salih Selek, Cui Tao, Hua Xu</i>	
TrajVis: A Visual Clinical Decision Support System to Translate AI/ML Trajectory Models in the Precision Management of CKD.....	1821
<i>Zuotian Li, Xiang Liu, Ziyang Tang, Nanxin Jin, Michael Eadon, Qianqian Song, Yingjie Chen, Jing Su</i>	
A Comprehensive VCF File Visualization and Analysis Tool; Variant Graph Craft (VGC).....	1822
<i>Jennifer Li, Alper Uzun, Benedito Carneiro, Ece Uzun, Lauren Massingham, Andy Yang</i>	
Comparing Patient Communication Methods: Patient Portal Versus Traditional SMS Messaging to Recruit Patients to a Research Registry.....	1823
<i>Katherine Liang, Kiron Nair, Eric Kim, Janeen Leon, Yasir Tarabichi, Amanda Ratigan, Wilson Pace, David C. Kaelber</i>	
Implementation and Institutional Impact of a Short-Term, Salary-Supported Physician and Provider Builder Leadership Program.....	1824
<i>Wayne Liang, Evan Orenstein</i>	
An Electronic Medical Decision Support System to Facilitate the Clinical Use of High Sensitivity Troponin-Based Myocardial Infarction Diagnosis Algorithms.....	1825
<i>Matthew Lin, Shih-Hung Liu, Tsung-Chien Lu, Chien-Chang Lee</i>	
Health Equity in Remote Monitoring for COVID-19 in Oncology	1826
<i>Allison Snyderman, Olga Strachna, Zoe Spiegelhoff, Susan Chimonas, Jericho Garcia, Robert Daly, Mark Robson, Gilad Kuperman, Fernanda Polubriaginof</i>	
Telemedicine and Hospital Visits Post-Hospital Discharge in Oncology	1827
<i>Allison Lipitz-Snyderman, Charlie White, Kenneth Seier, Raymond Baser, Zoe Spiegelhoff, Susan Chimonas, Courtney Thompson, Lisa Diamond, Fernanda Polubriaginof, Gilad Kuperman</i>	
Racial Bias in Machine Learning for Predicting Mortality in the Intensive Care Unit: A Retrospective Observational Study	1828
<i>Jialin Liu, Changyu Wang, Siru Liu</i>	
Transforming Retinal Vascular Disease Classification: A Comprehensive Analysis of ChatGPT's Performance and Inference Abilities	1829
<i>Xiaocong Liu, Jiageng Wu, An Shao, Wenyue Shen, Juan Ye, Kai Jin, Jie Yang</i>	

Associations Between Country-Level Policy Intensities and COVID-19 Transmission: Retrospective Analysis of 137 Countries.....	1830
<i>Andrew Liu, Tracy K. Lin, Erin Isaza, Alex Ge, George, Lin, Kevin Donohue, Ariktha Srivathsan, Travis Porco, Seth Blumberg</i>	
Making Clinical Decision Support More Patient Centered and Safe by Expediting Patient and Clinician Engagement	1831
<i>David Lobach, Mary Cooley, Barbara Halpenny, Hayley Yackel, Aziz Boxwala, Catherine Burt, Janet Abrahm</i>	
Federated Data Platform for Rare Congenital Conditions Registry: Supporting the International Arthrogyrosis Multiplex Congenita Consortium	1832
<i>Ishaan Lodha, Shahrzad Nematollahi, Coleman Hilton, Ashley Carpenter, Sriram Chockalingam, Noémi Dahan-Oliel, Tony Pan</i>	
Fostering the Translation of AI to the Clinic by Building a Physiological Data Streaming System.....	1833
<i>Dmytro Lopushansky, Robert W. Greer, Hadrian Balaci, Andrew Goodwin, Anna Goldenberg, Mjaye L. Mazwi</i>	
Physicians as Builders: Development of a Novel Digital Application for Inpatient Pain Management	1834
<i>Stephen Ma, Richard Kim, Joseph Forrester, Srinivasan Boosi, Janice Jiang, Naveed Rabbani, Jennifer Tran, Susan Weber, Oluseyi Fayanju, Christopher Sharp, Ron Li</i>	
Primary Care Physician Perceptions of the Impact of CMS E&M Coding Changes and Associations with Objective Measures of Changes in EHR Time	1835
<i>Natalya Maisel, Robert Thombly, Christine Sinsky, Kathleen Blake, J. Overhage, Kevin Grumbach, Rachel Willard-Grace, Lindsey Carlasare, Julia Adler-Milstein</i>	
Use of Voice-Based Conversational Agents and Artificial Intelligence to Manage Chronic Illness: A Systematic Review	1836
<i>Sabrina Mangal, Elizabeth Frazier, Judy Kwan, Tao Zheng, Jonathan Auld</i>	
A Student-Led Clinical Informatics Interest Group at Harvard Medical School: Strategies, Early Successes, and Future Plans	1837
<i>Eliana Marostica, Zhuo Shi, Kathryn Li, Katherine Young, Sarah Wagner, Ellen Kim</i>	
Causal Inference of Positive Airway Pressure Utilization on Cardiovascular Incidence and Mortality	1838
<i>Diego Mazzotti, Lemuel Waitman, David Gozal, Xing Song</i>	
Enabling Clinical Research and Innovation Through a Clinical Informatics Core: Lessons Learned One Year Later.....	1839
<i>Allison McCoy, Elise Russo, Donald Sengstack, Adam Wright</i>	
Health Information Technology Adoption and Utilization in Behavioral Health Settings	1840
<i>Rebecca McGavin, Michelle Dougherty, Martin Blanco, Meagan R. Pilar, Marc Horvath</i>	
Assessment of a Machine Learning Early Warning Model in Medical and Surgical Inpatients.....	1841
<i>Anne Meehan, Marcia Core, Parvez Rahman, Jared Ross, Hojjat Salehinejad, Bijan Borah, Pedro Caraballo</i>	
Systematically Identifying Opportunities to Avoid Unnecessary Mortality in Heart Failure Patients.....	1842
<i>John Menchaca, Anita Osabutey, Alexis Okoh, Modele Ogunniyi, Martin Campbell, Franck Tonleu</i>	

Informatics for Integrating Biology and the Bedside (i2b2) in 2023: Upcoming Release.....	1843
<i>Michael Mendis, Jeffrey Klann, Griffin Weber, Diane Keogh, Shawn Murphy</i>	
Clinical Text De-Identification with a Free and Open-Source Tool (CliniDeID)	1844
<i>Stéphane Meystre, Gary Underwood, Paul Heider</i>	
Aligning Data Standards with the Learning Health System Virtuous Cycle Model.....	1845
<i>Maria Michaels, Russell Leftwich, Bruce Bray, Ben Hamlin</i>	
Edging Out the Edge Cases: How Informatics Design for the Majority Can Widen Healthcare Gaps – Case Examples from Two Large Genomics Studies	1846
<i>Kathleen Mittendorf, Harris Bland, Stephanie Kraft, Josh F. Peterson, S. Trent Rosenbloom, Lori Orlando, Georgia L. Wiesner</i>	
Shared Decision Aid Navigator System (SEDANS): Health Care Provider User-Centered Design Exploratory Phase.....	1847
<i>Brad Morse, Andrey Soares, Lisa Schilling</i>	
Automatically Identifying Event Reports of Workplace Violence and Psychological Safety using Natural Language Processing	1848
<i>Danielle Mowery, Susan H. Regli, Caitlyn McShane, Caoimhe Duffy, Emily Schriver, Ryan Urbanowicz, Mike Becker, Joshua Atkins, Caryn Douma, John D. McGreevey</i>	
Extending the Use of Time Series Clustering to Detect Emergency Department Shifts from Electronic Health Record Audit Logs to Physicians.....	1849
<i>Amanda Moy, Eugene Kim, Kenrick Cato, Nicholas Tatonetti, Jennifer Withall, Sarah Rossetti</i>	
Theories Integration to Understand Nursing Documentation Prioritization	1850
<i>Rosie Mugoya, Po-Yin Yen, Sarah Rossetti</i>	
Subtyping Patients with Lung Cancer for Improved Immunotherapy Efficacy.....	1851
<i>Sarah Mullin</i>	
Statistical Forecasting Can Inform Staffing Needs and Improve Bed Management in the Emergency Department	1852
<i>Tamanna Munia, Eric Reich, Kyle Marshall, David Vawdrey, Biplab Bhattacharya</i>	
A Domain Analysis of eIRB Applications to Identify Data Extraction Requests for Clinical Research	1853
<i>Shelby-Jade Murdock, Jennifer Lloyd, Natalya Alekhina, Mollie Cummins, Ramkiran Gouripeddi, Julio Facelli</i>	
Personalizing the Empiric Treatment of Gonorrhea using Machine Learning Models.....	1854
<i>Rachel Murray-Watson, Yonatan H. Grad, Reza Yaesoubi</i>	
A Review of Maternal Health Dashboards in the United States	1855
<i>Paige Newman, Jennifer Callaghan-Koru, Clare Brown, Tanvangi Tiwari, Gunes Koru</i>	
External Validation of Computational Barthel Index: Why Accuracy Drops?	1856
<i>Lemba Ngana, Janusz Wojtusiak</i>	
Identifying EHR Tasks and Inactivity using Computer Vision.....	1857
<i>Liem Nguyen, Amrita Sinha, Adam Dziorny, Daniel Tawfik</i>	

Robust and Interpretable Machine Learning Assessment of Variable Importance with Moderate to Small Sample Sizes	1858
<i>Yilin Ning, Siqi Li, Yih Y. Ng, Michael Y. C. Chia, Han N. Gan, Ling Tiah, Desmond R. Mao, Wei M. Ng, Benjamin S. H. Leong, Nausheen Doctor, Marcus H. Ong, Nan Liu</i>	
Predicting Medication Nonadherence in Chronic Diseases and Hospital Readmission Rate	1859
<i>Victor Okoye</i>	
Using Cluster Analyses to Facilitate Security Group Simplification for a Large Enterprise Data Warehouse	1860
<i>Ashley Oliver, Mary Rosman, Elizabeth Senay, Suresh Sampangiraman, David Hodges, Hojjat Salmasian</i>	
Exploring an Imputation Strategy for TQIP ICU Days from Hospital Data.....	1861
<i>Lisa Over, Kuo-Ting Huang, Bryan A. Cotton, Jason L. Sperry</i>	
Improving Early Diagnosis of Primary Immunodeficiencies by Learning Causal Clinical History.....	1862
<i>Georgios Papanastasiou, Vladimir Ivanov, Shelley Moore, Luba Sobolevsky, Sabrina Hsueh, Ji Xiang, Danai Aristeridou, Maria Kritharidou, Vaios Tsarapatsanis, Guang Yang</i>	
Evaluation of Mass General Brigham’s Digital Analytic Patient Reviewer (DAPR).....	1863
<i>Heekyong Park, Taowei Wang, Nich Wattanasin, Victor Castro, Vivian Gainer, Shawn Murphy</i>	
Methodological Quality Checks for OMOP Drug Concept Set Creation	1864
<i>Saaya Patel, Kimon Stathakos, Rachel Wong, Waqas Mahmud, Rishikesan Kamaleswaran, Jake Neumann, Richard Moffitt, Scott Chapman</i>	
Using Large-Language Models to Create Lexicons for Extracting SDoH Data from Electronic Health Record Systems.....	1865
<i>Braja Patra, Praneet Reddy Jagadeesh Kumar, Prakash Adekkanattu, Jyotishman Pathak</i>	
Flexible Data Model for Multi-Language Questionnaires.....	1866
<i>Olga Patterson, Wayne Shea, David Burdick</i>	
User Needs Inquiries for Explainable Clinical Decision Support Interfaces.....	1867
<i>Eddie Claudio, Harry Hochheiser, Shyam Visweswaran</i>	
Using Group-Specific Models to Improve Trust in Machine Learning Models for Trauma Triage	1868
<i>Katherine Phillips, Steven Talbert, Douglas Talbert</i>	
Is There a Teamwork Effect in Patient Survival Outcomes? The Effect of Shared Experience on In-Hospital Mortality for Patients with Heart Failure	1869
<i>Henry Philofsky, Abdul Tariq, Grant Delong, Kyle Marshall, Karen Murphy, David Vawdrey</i>	
Leveraging CTCAE to Develop a Comprehensive Mapping Tool to Study Immune Related Adverse Events in Community Hospitals and Cancer Centers	1870
<i>Richa Phuel, Christina Eldredge, Etienne Pracht, Athanasios Tsalatsanis, Cesar Lam, Millan Shah, Patrice Sarrazin</i>	
A Pre-Deployment Framework for Predictive Models in Clinical Practice.....	1871
<i>Malvika Pillai, Maximilian Schuessler, Dylan Peterson, Doug Blayney, Tina Hernandez-Boussard</i>	
Predicting Breast Cancer Drug Repurposing Candidates for Recurrence-Free Survival with Electronic Medical Records	1872
<i>Malvika Pillai, Di Wu</i>	

A Machine Learning Approach to Evaluate Pharmacokinetic Data as a Predictor of Escitalopram-Related Side Effects	1874
<i>Ethan Poweleit, Samuel Vaughn, Jeffrey Strawn, Laura Ramsey, Judith Dexheimer</i>	
Classification of Fall Types in Parkinson Disease from Self-Report Data using Natural Language Processing.....	1875
<i>Jeanne Powell, Yuting Guo, Abeed Sarker, J. McKay</i>	
Extracting Medication Names and Associated Attributes from Text Messages.....	1876
<i>Kimberly Powell, Philip Amewudah, Mihail Popescu, Gregory Alexander, David Mehr, Suhwon Lee</i>	
Standardizing Patient Information in the EHR using SmartNotes.....	1877
<i>Plamena Powla, Sean Bernstein, Simmer Beniwal, Ronald Alvarado-Dyer, Farima Fakhri, Christos Lazaridis, Fernando Goldenberg, Ali Mansour</i>	
Predicting Mortality at 24 Hours in Moderate to Severe Traumatic Brain Injury Patients: A Comparison of Several Machine Learning Methods	1878
<i>Plamena Powla, Farima Fakhri</i>	
Neurophysiological Patient Signature in Bi-Directional Neural Interfaces: The Need of a Privacy-Based Approach.....	1879
<i>Marco Prenassi, Manuel Ellero, Annamaria Caruso, Sara Marceglia</i>	
Deep Learning to Recommend Proper Diagnostic Follow-Up of ED Patients with Incidental Lung Nodules.....	1880
<i>Leo Qian, Christoph Wald, Ranjith Tellis</i>	
Fusing Structured and Unstructured Data to Reliably Stage Neurocognitive Impairment	1881
<i>Joshua Qualls, Andrea Kalvesmaki, Alec Chapman, Samin Panahi, Jianbin Mao, Gary Globe, Rachel Brenner, Brian Sauer</i>	
The Use of Simulation Modeling for Care Delivery Improvement in Informatics: A Scoping Review.....	1883
<i>Mikie Rachman, Po-Yin Yen</i>	
Developing a Data Lakes Governance Model at a State Public Health Agency.....	1884
<i>Sripriya Rajamani, Steve Gorg, Andrew Will-Holmberg, Derek Lee, Chris Brueske, Sarah Solarz, Aasa Schmit</i>	
Building to Learn: Information Technology Innovations to Enable Rapid Pragmatic Evaluation in a Learning Health System	1885
<i>Geetanjali Rajamani, Deborah Pestka, Maya Peters, Timothy Beebe, April Sell, Christopher Tignanelli, Tanvi Mehta, Nathan Shippee, Joseph Koopmeiners, Genevieve B. Melton, Michael Usher</i>	
Exploring Sleep Patterns of Pre-Med Students and Developing Sleep Data Visualizations.....	1886
<i>Gargi Rajput, Danny Wu, Andy Gao, Tzu-Chun Wu, Ching-Tzu Tsai, Jennifer Molano</i>	
Rapid Assessment of Health Facility Damage Through a Novel Overlay of Geospatial Data: A Case Study of the 2023 Earthquake in Turkey	1887
<i>Anu Ramachandran, Akash Yadav, Shen Yue Jia, Jennifer Chan, Andrew Schroeder</i>	
A Centralized Cloud-Based Infrastructure for External Validation of AI Algorithms for Breast Cancer Screening.....	1888
<i>Ojas Ramwala, Matthew Unrath, Bill Cornell, Suzanne Kolb, Sean D. Mooney, Christoph I. Lee</i>	

Real-Time Machine Learning Framework in Mobile Health Platform with COPD Case Study	1889
<i>Yatharth Ranjan, Heet Sankesara, Malik Althobiani, Pauline Conde, Zulqarnain Rashid, Richard Dobson, John Hurst, Amos Folarin</i>	
Primary Care Clinicians' Use of and Preferences for Electronic Health Record Tools to Support Pediatric Obesity Care	1890
<i>Jessica Ray, Carlin Aloe, Emily Finn, Hollyce Tyrrell, Yunshan Xu, Jeremy Michel, Randall Grout, Charles Wood, Dean Miner, Eliana Perrin, Laura Damschroder, Denise Esserman, Mona Sharifi</i>	
Implementable Prediction for Hospital-Acquired Pressure Injuries	1891
<i>Thomas Reese, Henry Domenico, Antonio Hernandez, Daniel Byrne, Elise Russo, Brian Douthit, Jessica Williams, Sonya Moore, Adam Wright, Allison McCoy</i>	
Comparative Effectiveness of Telemedicine Versus In-Person Buprenorphine Prescribing.....	1892
<i>Thomas Reese, Nana Padi-Adjirackor, Kevin Griffith, Bryan Steitz, Jessica Ancker, Adam Wright</i>	
A Fusion Framework of Domain-Specific and Source-Specific Language Models for Patient Portal Message Triage.....	1893
<i>Yang Ren, Dezhi Wu, Aditya Khurana, Sunyang Fu, J. Fan, Hongfang Liu, Ming Huang</i>	
Development and Validation of Machine Learning and Deep Learning Models for Mpox in a Learning Health System	1894
<i>Harry Nieva, Emma Tucker, Jacob McLean, Claire Delaurentis, Shauna Gunaratne, Noemie Elhadad, Jason Zucker</i>	
Enabling Rapid Application and Management of Knowledge in Learning Health Systems: The Computable Biomedical Knowledge Metadata Model (CBK-MM) Project	1895
<i>Joshua Richardson, Christina Eldredge, Davide Sottara, Rachel Richesson, Jamie McCusker</i>	
Exploring Forensic Nurse Examiner Information Needs for Documenting and Reporting Cases of Interpersonal Violence.....	1896
<i>Joshua Richardson, Stefany Ramos, Jaclyn Houston-Kolnik, Paige Presler-Jur, Julia Brinton, Devin Oxner, Sarah Philbrick</i>	
Let Them See You Learn – Modeling Tenacity in Problem Solving and Exploration for Online Graduate Informatics and Analytics Students.....	1897
<i>David Robbins</i>	
Diagnostic Safety in Telehealth: An Analysis of Process Failures in a High-Risk Cohort	1898
<i>Jorge Rodriguez, Carmen Vesbianu, David Bates, Anuj Dalal</i>	
Scholarly Research Output Tracking at Geisinger Health System: A Scalable and Generalizable Semi-Automated Approach	1899
<i>Katrina Romagnoli, Eric Hall, Tierney Lyons</i>	
NICHD Data and Specimen Hub (DASH): A Central Component of an Interoperable Research Data Sharing Ecosystem.....	1900
<i>Rebecca Rosen, Valerie Cotton, Jianji J. Yang</i>	
But Her Emails: COVID Exacerbated the Gender Disparity in Physician Electronic Health Record Inbox Burden.....	1901
<i>Lisa Rotenstein, A Holmgren</i>	

Association of Primary Care Physicians' Message Volume with Patients' Likelihood to Recommend the Physician.....	1902
<i>Lisa Rotenstein, Edward Melnick, Huan Li, Molly Jeffery, Jianyi Zhang, Richard Gitomer, David Bates</i>	
Deriving a Point Scoring Index for Suicide Attempt Prediction Based on Youth Depression Screenings in a Tertiary Care Children's Hospital.....	1903
<i>Victor Ruiz, Neal Ryan, Nadine Melhem, Jami Young, Molly Davis, David Brent, Fuchiang Tsui</i>	
Comparison of Deep Learning Approaches for Diabetic Retinopathy Staging	1904
<i>Ana Rusconi, Maria Ricci Lara, Tomas Ortiz-Basso, Daniel Luna, Sonia Benítez</i>	
Engaging Clinical Informatics Audiences at an Academic Medical Center	1905
<i>Elise Russo, Allison McCoy, Laura Zahn, Adam Wright</i>	
Evaluation of ChatGPT Answers to Consumer Health Questions	1906
<i>Geoffrey Rutledge</i>	
LOINC Codes that May Contain Personally Identifiable Information	1907
<i>Eugene Sadhu, Malarkodi Samayamuthu, Shyam Visweswaran</i>	
Prediction of Asthma Prognosis in Children After Asthma Onset.....	1908
<i>Elham Sagheb, Chung-Il Wi, Bhavanisingh A. Kshatriya, Euijung Ryu, Young Juhn, Hongfang Liu, Sunghwan Sohn</i>	
Development and Validation of a Natural Language Processing Algorithm for Extracting Preoperative Cannabis Use Status Information from Unstructured Narrative Clinical Notes	1909
<i>Ruba Sajdeya, Chen Bai, Sebastian Jugl, Ronald Ison, Mamoun Mardini, Patrick Tighe, Kimia Zandbiglari, Hanzhi Gao, Almut Winterstein, Thomas Pearson, Robert Cook, Masoud Rouhizadeh</i>	
Preoperative Cannabis Use Status Ascertainment using Natural Language Processing Methods and Coded Data	1910
<i>Ruba Sajdeya, Chen Bai, Mamoun Mardini, Sebastian Jugl, Ronald Ison, Patrick Tighe, Kimia Zandbiglari, Almut Winterstein, Thomas Pearson, Robert Cook, Masoud Rouhizadeh</i>	
Discordances in Head and Neck Cancer Staging Data Capture.....	1911
<i>Vivian Salama, Tianlin Xu, Yomna Khamis, Jaime Chen, Andrea De Leon, Laura Pareja, Kareem A. Wahid, Clifton D. Fuller, Amy C. Moreno</i>	
Social Media Mining for Toxicovigilance of Prescription Medications: End-To-End Pipeline, Challenges and Future Work	1912
<i>Abeed Sarker, Yao Ge, Yuting Guo, Sahithi Lakamana, Mohammed Ali Al-Garadi, Anthony Spadaro, Jeanmarie Perrone</i>	
Bridging the Gap Between Community, Academia, and Industry to Understand the Utility of an AI-Powered Dermatology Tool Among Everyday Users	1913
<i>Rory Sayres, Anna Devon-Sand, Mike Gonzalez, Grace Hong, Naama Hammel, Yuan Liu, Vijaytha Muralidharan, Trinh Nguyen, Rajeev Rikhye, Mike Schaekermann, Dawn H. Siegel, Preeti Singh, Margaret A. Smith, Patricia Strahan, Yun Liu, Justin Ko, Steven Lin</i>	
Using Natural Language Processing to Identify Stigmatizing Language in Labor and Birth Clinical Notes.....	1914
<i>Danielle Scharp, Hans Moen, Anahita Davoudi, Betina Idnay, Kenrick Cato, Max Topaz, Veronica Barcelona</i>	

Probing Machine Learning Models for Clinical Implementation: A Framework for Shift Analysis and Prospective Validation	1915
<i>Maximilian Schuessler, Scott Fleming, Tina Hernandez-Boussard, Shannon Meyer</i>	
Impact of Switching from Interruptive to High-Visibility Decision Support Alerts in an Ambulatory EHR.....	1917
<i>Kelsey Schweiberger, Gary Fischer, Jonathan Arnold</i>	
DAPHNE-An Artificial Intelligence-Based Embodied Conversational Agent to Identify Social Needs and Provide Personalized Resources for Families from At-Risk Neighborhoods	1918
<i>Emre Sezgin, Millie Dolce, Lisa Militello, Micah Skeens, Huan Sun, Jack Stevens, Yungui Huang, Kelly Kelleher</i>	
Factors Associated with Patient-Reported Outcome Completion in a Randomized Controlled Trial of a Telehealth Intervention Among Older Adults with Heart Failure.....	1919
<i>Leah Topaz, Brock Daniels, Jacky Choi, Ruth Creber, Meghan Turchioe</i>	
Modeling Physicians' Antibiotics Use Behavior to Improve Clinical Infectious Risk Models	1920
<i>Devang Sharma, Roshan Tourani, Michael Usher, Christopher Tignanelli, Genevieve Melton-Meaux, Gyorgy Simon</i>	
What Canadians Think: Privacy, Trust, and the Health Data Ecosystem.	1921
<i>Nelson Shen, Iman Kassam, Jessica Kemp, Clement Ma, Sheng Cheng, Abigail Carter-Langford</i>	
A Dashboard for Shared Decision-Making: Putting Patient-Generated Health Data and Clinical Decision Support Together	1922
<i>Edna Shenvi, Courtney Zott, Prashila Dullabh, Edwin Lomotan, Colin Stynes, Desirae Leaphart, Aziz Boxwala, James Swiger, Dean Sittig</i>	
Pediatric PhysioWarehouse: A Data Warehouse for Multi-Modal Machine Learning and Deep Learning with High-Speed Physiological Data, EHR, and Registries.....	1923
<i>Lingyun Shi, Fan Mi, Rich Tsui</i>	
Exploring the Relationship Between Emotions and Medication Errors Among Physicians: A Text Mining Analysis Approach.....	1924
<i>Akiko Shibuya, Rie Ichikawa, Yukihiro Maeda, Yoshiaki Kondo</i>	
Worth the Weight: Improving Insight into Surgical Weight Loss.....	1925
<i>Shannon Shiffer, Lance Heady, Melanie L. Hafford, Mujeeb A. Basit</i>	
Disparities in Hospital Readmissions and Prediction Fairness.....	1926
<i>Huan-Ju Shih, Janusz Wojtusiak</i>	
Digital Scribe and Conversation Summarization Pipeline for Emergency Department Counseling Sessions Among Physicians and Nurses.....	1927
<i>Joseph Sirrianni, Kelly Kranz, Emre Sezgin</i>	
Empowering Justice, Equity, Diversity and Inclusion (JEDI) Through '5' Core Clinical Informatics Electronic Health Record Domains	1928
<i>Amy Sitapati</i>	
Challenges and Opportunities Identified from Workflow Execution Models for Advancing Patient-Centered Clinical Decision Support	1929
<i>Dean Sittig, Aziz Boxwala, Adam Wright, Courtney Zott, James Swiger, Edwin Lomotan, Prashila Dullabh</i>	

Leveraging Clinical Decision Support to Improve Naloxone Co-Prescribing.....	1930
<i>Stuart Sommers, Heather Tolle, Alex Greig, Abraham Wick, Stephanie Eldred, Christine Johnston, Caitlin Dietsche, Jason Hoppe, Katy Trinkley</i>	
Using Polygenic Risk Scores to Evaluate EHR-Derived Codeine Prescription Patterns and Opioid Use Disorder.....	1931
<i>Wenyu Song, Max Lam, Ruize Liu, Kenneth Mukamal, Adam Wright, David Bates</i>	
Pediatric Clinicians' Experience with Telemedicine: A Mixed-Methods Study	1932
<i>Hiral Soni, Hattie Wilkzewski, Julia Ivanova, Dylan Turner, Triton Ong, Janelle Barrera, Brian Bunnell, Brandon Welch</i>	
Evaluating the Variations in Healthcare Utilization Predictions Across Common Computable Phenotypes of Type 2 Diabetes using EHR and Claims	1933
<i>Priyanka Sood, Star Liu, Hadi Kharrazi</i>	
Predicting Drug Regulatory Approval: A Multi-Method Pilot using Text Mining and Sentiment Analysis.....	1934
<i>Dimitrios Soudis, Brett South, Rominder Singh, David Edelen, Ajit Jadhav, Joan Sopczynski, Prakash Naik, Stephen Watt</i>	
Comparing Generic and In-Domain Large Language Model Vocabulary Coverage on Clinical Text.....	1935
<i>Bryan Steitz, Adam Wright</i>	
Evaluating Accuracy of Oxygen Documentation in Electronic Health Records	1936
<i>Bryan Steitz, Nikkie Dutta, Adam Wright, Elise Russo, Daniel Fabbri</i>	
Automated Extraction of Social Determinants of Health (SDoH) from Electronic Health Records	1937
<i>Andrew Stevens, Richard Boyd</i>	
Consistent Perceptions of Infographics Across Heterogeneous Latino Groups.....	1938
<i>Samantha Stonbraker, Stefanie Mayorga, Yazmina Castro, Pamela Caraballo, Gabriella Sanabria, Maureen George, Rebecca Schnall, Suzanne Bakken, Adriana Arcia</i>	
Natural Language Processing-Assisted Incorporation of Diversity, Equity, and Inclusion Principles in Clinical Decision Support Content.....	1939
<i>Stephen Stout</i>	
Real-World Data Collection for Assessing SARS-CoV-2 Intrinsic Severity	1940
<i>Zachary Strasser, Hossein Estiri, Shawn N. Murphy</i>	
Identifying Pressure-Flow Relationships in Neurointensive Monitoring Signals.....	1941
<i>J. N. Stroh, Brandon Foreman, J. N. Stroh, Tellen Bennett, Jennifer Briggs, Soojin Park, David Albers</i>	
The IDEA Study: Identifying and Adapting Interventions to Reduce Documentation Burden and Improve Nurses' Efficiency in using EHRs.....	1942
<i>Gillian Strudwick, Jessica Kemp, Lydia Sequeira, Wei Wang, Alina Lee, Charlotte Pape, Sonia Pagliaroli</i>	
Portfolio Assessment of Research Projects in the <i>All of Us</i> Research Program	1943
<i>Lina Sulieman, Paul Harris, Brandy Mapes, Chris Lunt, Geoffrey Ginsburg, Sheri Schully</i>	
Identifying Cohorts in <i>All of Us</i> Research Program to Perform Comparable Nested and Early Disease Detection Studies	1944
<i>Lina Sulieman, Paul Harris, Geoffrey Ginsburg</i>	

Association of Screening MRI Features with Development of Future Breast Cancer.....	1945
<i>Wesley Surento, Anum Kazerouni, Daniel Hippe, Debosmita Biswas, Michael Hirano, John Gennari, Habib Rahbar, Savannah Partridge</i>	
Large Language Models Are Zero-Shot Oncology Information Extractors	1946
<i>Madhumita Sushil, Brenda Miao, Divneet Mandair, Travis Zack, Atul Butte</i>	
Development of an Electronic Clinical Quality Measure to Report Timely Follow-Up on Abnormal Stool-Based Tests for Colorectal Cancer Screening	1947
<i>Ania Syrowatka, Marlika Marceau, Michael Sainlaire, Angela Rui, Tien Thai, Catherine Yoon, Lipika Samal, Li Zhou, Stuart Lipsitz, David Bates, Patricia Dykes</i>	
Assessment of Clinician Knowledge, Confidence in Decision-Making, and Likelihood of Seeking Additional Support When Using an Electronic Point-of-Care Tool	1948
<i>Ania Syrowatka, Pamela Garabedian, Angela Rui, Zoe Co, Diane Seger, Mary Amato, Marlika Marceau, Aqsa Mugal, Rachel Wasserman, Lynn Volk, Karen Nanji, Ronen Rozenblum, David Bates</i>	
Does Synthetic Data Generation of LLMs Help Clinical Text Mining?	1949
<i>Ruixiang Tang, Xiaotian Han, Xiaoqian Jiang, Xia Hu</i>	
Leveraging Electronic Medical Records and Knowledge Graphs to Predict Onset and Gain Biological Insight into Alzheimer’s Disease Sex Dimorphism	1950
<i>Alice Tang, Katherine Rankin, Gabriel Ceron, Silvia Miramontes, Hunter Mills, Jacquelyn Roger, Billy Zeng, Charlotte Nelson, Karthik Soman, Sarah Woldemariam, Yaqiao Li, Albert Lee, Riley Bove, Maria Glymour, Tomiko Oskotsky, Zachary Miller, Isabel Allen, Stephan Sanders, Sergio Baranzini, Marina Sirota</i>	
Standards for Ophthalmology Trauma and Infection Concept Coverage	1952
<i>Kiana Tavakoli, Michael Hogarth, Sally Baxter, Sonali Bhanvadia, Fritz Kalaw</i>	
A Care Transitions Application to Improve Health Outcomes for Hospitalized Patients with Multiple Chronic Conditions: Defining End-User Needs.....	1953
<i>Christian Tejada, Christian Tejada, Hongyi Wu, Allison McCoy, Lipika Samal, Patricia Dykes</i>	
AsthmaGraph – A Knowledge Graph and Machine Learning Framework for Target Discovery and Prioritization in Asthma.....	1954
<i>Pavel Terentiev, Travis Ahn-Horst, Mario Pandolfi, Hamid Mattoo, Yannis Hara, Emanuele De Rinaldis, Shameer Khader</i>	
Walk a Mile in Their Shoes: Using Personas to Obtain Health Professional Perspectives for an Ovarian Cancer Patient-Focused Recommender System	1955
<i>Khushboo Thaker, Behnam Rahdari, Peter Brusilovsky, Chi Vivian Hui, Zhimeng Luo, Youjia Wang, Daqing He, Heidi Donovan, Young Lee</i>	
Empirically Derived Taxonomy of Distributed Clinical Decision Support Malfunctions	1956
<i>Jeritt Thayer, Amy Franklin, Robert Grundmeier, Deevakar Rogith, Adam Wright</i>	
Challenges in Translating CDS Across Institutions: Use Case with NPO Times	1957
<i>Sarah Thompson, Swaminathan Kandaswamy, Justin Long, Mariah Burch, Allison McCoy, Evan Orenstein</i>	
Nursing Experiences with Medication Administration Technologies Through the Eyes of Safety Science II.....	1958
<i>Iona Thra, Jorie Butler, Teresa Taft, Elizabeth A. Rudd, Sadaf Kazi, Christopher W. Bonk, Zoe M. Pruitt, Deanna-Nicole Busog, Ella Franklin, Aaron Z. Hettinger, Raj M. Ratwani, Charlene R. Weir</i>	

Clinical Decision Support to Improve Emergency Department Prescription Drug Monitoring Program Utilization	1959
<i>Heather Tolle, Sean Michael, Abraham Wick, Alexander Greig, Aaron Barbour, Kennon Heard, Jason Hoppe, Katy Trinkley</i>	
Evaluation of Wrong Patient Errors: A Pilot Study Across Three UK Hospital Trusts.....	1960
<i>Clare Tolley, Yogini Jani, Gladys Habu, Andrew Heed, Jason Adelman, Sarah Slight, Andy Fox</i>	
Defining and Redefining Human Disease at Scale in the UK Biobank: A Framework for Disease Phenotyping Algorithm Development and Evaluation	1961
<i>Ana Torralbo, Cai Ytsma, Natalie Fitzpatrick, Chris Tomlinson, Spiros Denaxas</i>	
Streamlining Referrals and Network Access to Specialty Care using Machine Learning	1962
<i>Jennifer Tran, Amit Kaushal, Susan Weber, Joseph Pallas, Vikrant Singh, Satchi Mouniswamy, Silvia Ramirez, Mandeep Singh, Aimmon Lago, Ron Li</i>	
Using Clinical Decision Support Order Nudges to Encourage Use of Alternatives to Opioid Analgesics	1963
<i>N. Truszczynski, Sean Michael, Aaron Barbour, Kennon Heard, Jason Hoppe, Katy Trinkley</i>	
Passive Clinical Decision Support to Nudge Use of Clinical Guideline Pathways to Optimize Use of Opioid Alternatives	1964
<i>N. Truszczynski, Sean Michael, Aaron Barbour, Kennon Heard, Jason Hoppe, Katy Trinkley</i>	
Developing Modular and Reusable FHIR® Trainings for IDeA State Institutions	1965
<i>Steve Tsang, Max Masnick, Nicole Persing, Snipta Mallick, Belinda Seto</i>	
Methods and Outcomes of an Asynchronous, Online Health Informatics Survey Course for Medical Students	1966
<i>Heidi Twedt, Jason Dambach, Peter Kleinschmidt, David Schneider, Alaa Alsadi</i>	
Using Electronic Health Records to Analyze Adoption of Social Determinants of Health ICD-10 Z-Codes Among Health Systems in New York City	1967
<i>Veer Vekaria, Braja Patra, Prakash Adekkanattu, Jyotishman Pathak</i>	
Custom Phenotyping in a Deidentified Patient Database Accurately Identifies Large Cohorts of Metastatic Renal Cell Carcinoma Patients	1968
<i>Joseph Vento, Cosmin Bejan</i>	
Enabling Exploratory Analysis of Patient Data using an Automatically Generated Jupyter Notebook.....	1969
<i>Fernando Vidorreta, Douglas Bell, Cenan Pirani, David Elashoff, Alex A. T. Bui, Sitaram S. Vangala</i>	
Cost-Benefit Analysis of a Machine Learning Model to Predict 30-Day Unplanned Cancer Readmissions.....	1970
<i>Tripura Vithala, Scott Vennemeyer, Hoang Vu, Danny Wu</i>	
Improving the Understandability and Actionability of Clinical Notes to Support Self-Care in Patients with a Chronic Disease: A Pilot Study	1971
<i>Tripura Vithala, Danny Wu, Somya Pandey, Himaja Chintalapalli, Shwetha Bindhu, Michael Binder, Hillary Liebler, Hexuan Liu</i>	
SleepIE: Natural Language Processing for Enhancing Sleep Research.....	1972
<i>Liwei Wang, Diego Mazzotti, Eilis Boudreau, Hongfang Liu</i>	

ps-KDE: Pixel-Wise Substitution by Kernel Density Estimation, in Semantic Segmentation of Chest X-Ray with a Deep Learning Approach	1973
<i>Yuanchen Wang, Zifan Gu, Yujie Guo, Ziqi Wang, Linzi Yu, Yujie Yan</i>	
Evaluation of the Quality of Online Health Information for Ovarian Cancer	1974
<i>Youjia Wang, Mary Klem, Jeong Kim, Zhimeng Luo, Young Lee, Heidi Donovan</i>	
Mapping Evidence to Standard Social Intervention Codes to Support Clinical Practice	1975
<i>Ruth Wetta, Vera Borkowski, Katie Feldner, Rachel Childs</i>	
PACIO Project Case Study: Leveraging the HL7® FHIR® Accelerator Model for Stakeholders to Engage with Policymakers in Creating Consensus-Based, Sustainable Healthcare Standards	1976
<i>Lorraine Wickiser, Jessica Skopac</i>	
Addressing Current Challenges in Care of Heart Failure with an Integrated Digital Solution: The Role for the Combined Use of Nursing Avatars, Digital Twins, and Biometric Devices	1977
<i>Nilmini Wickramasinghe, Vijay Gehlot, Elliot Sloane, Melissa O'Connor, Suresh Chalasani, James Powell, Ramona Wallace, Carlo Govia, Stefan Gravenstein, Duane Wisk</i>	
Digital Twin for Patient Clinical Workflow: The Musculoskeletal Perspective	1978
<i>Nilmini Wickramasinghe, Nalika Ulapane, Nicolas Piuzzin, Dominic King, Jonathan Schaffer</i>	
Strategies to Develop, Design, Implement and Support Digital Health Equity in Key Underserved Groups: A Systematic Review.	1979
<i>Sarah Wilson, Clare Tolley, Riona McArdle, Lauren Lawson, Emily Beswick, Nehal Hassan, Bob Slight, Sarah Slight</i>	
Research Workspaces: Virtual Environments for Healthcare Data Analytics.....	1980
<i>Steven Wong, Yurima Guilarte-Walker, George Matthew, Paul Langlois, Brian Coleman, Adrian Zai</i>	
Interruptive vs Non-Interruptive Alerts to Increase Statin Prescribing in Primary Care	1981
<i>Aileen Wright, Erin Neal, Jennifer Green, Jill Jones</i>	
The “Idea Drive”: An Initiative to Solicit End-User Input to a Physician Builder Program	1982
<i>Aileen Wright, Sara Horst, Cecelia Theobald</i>	
Development of a Novel Tool for Finding and Comparing Clinical Value Sets.....	1983
<i>Adam Wright, Aileen Wright, David Rubins, Dean Sittig</i>	
Identifying Fontan Procedure in Adults with Congenital Heart Disease (ACHD) using Natural Language Processing of Clinical Notes	1984
<i>Tzu-Chun Wu, Angus L’Herrou Dawson, Xiyu Ding, Angela J. Weingarten, Sunil J. Ghelani, Timothy A. Miller, Danny Wu, Alexander R. Opotowsky</i>	
A Unified Approach for using Manual and Automated Methods to Follow a Retrospective/Prospective Cohort of Persons Cured of Sickle Cell Disease.....	1985
<i>Kristin Wuichet, Michael R. DeBaun</i>	
Use of Natural Language Processing to Identify Symptoms Prior to Pancreatic Ductal Adenocarcinoma Diagnosis from Electronic Health Records	1986
<i>Fagen Xie, Jenny Chang, Tiffany Luong, Bechien Wu, Eva Lustigova, Wansu Chen</i>	
Covlab: A Real-Time Tool for Understanding and Monitoring COVID Trends and Spread Based on Self-Reporting Tweets	1987
<i>Jiacheng Xie, Ziyang Zhang, Joel Hilliard, Guanghui An, Xiaoting Tang, Lei Jiang, Yang Yu, Xiufeng Wan, Dong Xu</i>	

WindowSHAP vs Multihead-Attention: Comparing Model-Agnostic and Model-Dependent Interpretation for Clinical Multivariate Time Series Data	1988
<i>Shashank Yadav, Amin Nayebi, Vignesh Subbian</i>	
Diet Factorization Net: Efficient Model Parameterization for High Dimensional Genomics Data to Predict Brain Imaging Trait of Alzheimer's Disease.....	1989
<i>Shu Yang, Jiahang Sha, Jeffrey Qu, Xinkai Wang, Yanbo Feng, Dokyoon Kim, Christos Davatzikos, Li Shen</i>	
Automated Algorithm to Assess Guideline Concordance of Antibiotic Orders.....	1990
<i>Julia Yarahuan, Adam Yan, Eugene Kim, Susannah Kisvarday, Mari Nakamura, Sarah Jones, Jonathan Hron</i>	
Clustering Algorithm to Identify Cancer Regimens from Administration Data	1992
<i>Ping Ye, Brandon Butler, Puneeth Indurlal, Jason Altieri, Jody Garey</i>	
MTLNFM: Multi-Task Learning to Predict Patient Clinical Outcomes with Neural Factorization Machine.....	1993
<i>Biao Ye, Jiaxin Li, Changyu Yin, Xiangyu Chen, Ashwin Subramaniam, Xiang Zhang, Bian Jiang, Rui Yin</i>	
A Data-Driven Approach for Improving CMS Hospital Star Ratings	1994
<i>Susie Yin, Jim Urick, Eric Reich, Casey Cauthorn, David Vawdrey, Biplab Bhattacharya</i>	
All of Us – Network Ninja & REDCap Engagement Tracking Interface	1995
<i>Amanda Young, Brent Clark, Stephanie Krislov, Amy Siedschlag</i>	
Blockchain-Based Biomedical Training Certificate Management System.....	1996
<i>Yufei Yu, Joseph Edmonston, Czarlyn Camba, Tsung-Ting Kuo</i>	
Telemedicine Utilization Among Oncology Patients During COVID-19.....	1997
<i>Jingzhi Yu, Jean M. Reading, Sam L. Battalio, Benjamin Barrett, Kriti Shah, Donald Hedeker, Siobhan M. Phillips, Bonnie Spring</i>	
MedlinePlus for Increased Information Access of Patients and Caregivers: A Systematic Literature Review.....	1998
<i>Fei Yu, Pengxuan Wang, Jia Liu, Lixin Song</i>	
Iterative Design and Development of the Interactive Prostate Cancer Information, Communication, and Support Program (iPICS) for Patients with Localized Prostate Cancer	1999
<i>Fei Yu, Shamim Ashrafi, Tamjid Ahsan, Shadman Chowdhury, Javed Mostafa, Lixin Song</i>	
Development and Prospective Evaluation of a Canine Disease Prediction Model in 23 Veterinary Clinics.....	2000
<i>Yu Zhang, Alexis Seguin, Maggie Canning, Terry Schutte, David Kincaid, Dwayne Paschall</i>	
Text Classification Models for Creating a Transgender Cohort from Electronic Health Records.....	2001
<i>Qi Zhang, Yuting Guo, Mohammed Al-Garadi, Michael Goodman, Abeed Sarker</i>	
Analysis of User Engagement with a Digital Decision Aid using Eye-Tracking	2002
<i>Lidan Zhang, Doaa Alrefaei, Soussan Djamasbi, Gaayathri Sankar, Carlie Flanagan, Adam Kalayjian, Connie Ge, Shazeb Meraj, Susanne Muehlschlegel, Bengisu Tulu</i>	
Towards Designing Interpretable Artificial Intelligence to Prevent Dispensing Errors: A Focus Group Study	2003
<i>Yifan Zheng, Jin Kim, Qiyuan Chen, Brigid Rowell, X. Yang, Raed Kontar, Corey Lester</i>	

N3C Logic Liaison Templates: Transforming Complex Health Data into Analytics Ready Tables	2004
<i>Andrea Zhou, Johanna Loomba, Evan French, Richard Moffitt</i>	
Creation of a Style Guide for Healthcare Software Applications Development.....	2005
<i>Fangyu Zhou, Jessica Saw, Matthew Berry, Stephen Saliba, Benjamin Elgin, Ramon Gonzalez, Eric Winter, Douglas Vancuyk, Molly Hein, Deanna Feighner, Victoria Guenther, Sarah Sneen, Lisa Gatzke</i>	
Learnings in Knowledge Graph Representation using OMOP CDM: Breast Cancer as an Example	2006
<i>Vivienne Zhu, J. Overhage</i>	
Learnngle: Creation of a Web Application as a Study Resource for the Clinical Informatics Board Exam.....	2007
<i>Noah Abji, Jeffrey Yuan, Shuhan He, Abdel-Badih Ariss</i>	
Translating Machine Learning Research into Implementation: Visual Analytics Tool for Model Evaluation, Threshold Selection, and Explainability.....	2008
<i>Nikolay Braykov, Andrea McCarter, Swaminathan Kandaswamy, Evan Orenstein</i>	
CANDO: A Multiscale Computational Drug Discovery Platform.....	2009
<i>Zackary Falls, William Mangione, Ram Samudrala</i>	
A Robotic Surgery Digital Ecosystem for Lifelong Learning	2010
<i>Elango Guruswamy, Michael Awad, John Robertson, Cameron Gill, Ryan Shaw, Gretchen Jackson</i>	
Centralized Interactive Phenomics Resource (CIPHER): A Platform for Electronic Health Data-Based Phenomics Science	2011
<i>Jacqueline Honerlaw, Yuk-Lam Ho, Laura Davies, Keith Connatser, David Heise, Kelly Cho</i>	
Automating Incremental ETL Processes in Snowflake for Transforming Institutional Clinical Data into the Researchable Common Data Model	2012
<i>M. Zaman Rana, Abu Mosa, M. Islam, Vasanthi Mandhadi, Lemuel Waitman</i>	
Healing with Artificial Intelligence (HEART) Data Pipeline	2013
<i>Kshitij Kayastha, Layla Bouzoubaa, Minh Nguyen, Rezvaneh Rezapour</i>	
System Demonstration of Ethicara: Bias Detection and Mitigation for Responsible AI in Healthcare.....	2014
<i>Maria Kritharidou, Pei-Yun Hsueh, Tasos Ventouris, Georgios Chrysogonidis, Vaios Tsarapastanis, Ahsan Huda</i>	
Using the REDCap Platform to Integrate Risks from Diverse Sources for a Clinical-Grade Genome Informed Risk Assessment.	2015
<i>Jennifer Morse, Jodell E. Linder, Adam Lewis, Travis Wilson, Ellis Thomas, Kyle McGuffin, Sophie Forman, Dawn Moore, Paul Harris, Josh F. Peterson</i>	
Risk Evaluation and Mitigation Strategies (REMS) on FHIR – A Prototype Demonstration	2016
<i>George Neyarapally, Ammu Irvinti, Pat LaRocque</i>	
On-The-Fly Randomization Within Epic for Embedded Randomized Trials.....	2017
<i>Mark Pletcher</i>	
Stepped Care 2.0 in Practice: Leveraging a Mental Health and Substance Use System Transformation Approach to Develop and Implement a Technologically-Enabled Virtual Care Portal	2018
<i>Kait Saxton, Andrea Salas, Melanie Hood, Quynh Pham</i>	

A Novel Software Platform for EHR-Integrated Real-Time Inpatient Applications	2019
<i>Gerald Shaeffer, Naveen Muthu, Fuchiang Tsui, Lingyun Shi, Robert Grundmeier, Jay Jenkins</i>	
A Chatbot for Activities of Daily Living Assessment Standardization.....	2020
<i>Zhecheng Sheng, Sheena Dufresne, Michael Lucke, Aditya Gaydhani, Maria Gini, Serguei Pakhomov, Raymond Finzel</i>	
Virtual Reality Ontology Object Manipulation (VROOM) System	2021
<i>Margarita Vinnikov, James Geller, Danielle Grunwald</i>	
An Operational and Real-Time Natural Language Processing and Deep Learning Clinical Decision Support System in the Electronic Health Record	2022
<i>Graham Wills, Majid Afshar, Dmitriy Dligach, Matthew Churpek, Brian Patterson, Benjamin Schnapp, Michael Chao, Frank Liao</i>	

Author Index