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Aug 30, 2023

CURRICULUM VITAE

Hadi Kharrazi Part I

PERSONAL DATA

Affiliation:	Johns Hopkins School of Public Health
	Department of Health Policy and Management
Address:	624 N Broadway, #606, Baltimore, MD 21205
Phone:	443.287.8264
Fax:	410.955.0470
E-Mail:	kharrazi@jhu.edu
Web:	http://hkharrazi.com
Latest CV:	http://hkharrazi.com/pdf/cv.pdf
Designations:	MHI, MD, PhD, <u>FAMIA</u> , <u>FACMI</u>

EDUCATION AND TRAINING

2010	Interdisciplinary PhD in Health Informatics Dalhousie University, Halifax, Canada
2005	Masters of Health Informatics (MHI) Dalhousie University, Halifax, Canada
2003	Medical Doctorate (MD) Tehran/Iran University (IUMS), Tehran, Iran Medical License: #92174

PROFESSIONAL EXPERIENCE

2019-	Associate Professor
	Department of Health Policy and Management
	Johns Hopkins Bloomberg School of Public Health
2012-	Director
	DrPH Informatics Track
	Department of Health Policy and Management
	Johns Hopkins Bloomberg School of Public Health
2019-	Co-Director
	Center for Population Health Informatics Technology (CPHIT)
	Department of Health Policy and Management
	Johns Hopkins Bloomberg School of Public Health
2020-	Director
	PhD & MSc Research Programs
	General Internal Medicine, Biomedical Informatics and Data Sciences

	Johns Hopkins School of Medicine
2012-	Co-Lead JHU ACG Research and Development Team Johns Hopkins ACG Population Risk Stratification Johns Hopkins Bloomberg School of Public Health
2012-2019	Assistant Professor Department of Health Policy and Management Johns Hopkins Bloomberg School of Public Health
2017-2019	Co-Director PhD Program Division of Health Sciences Informatics Johns Hopkins School of Medicine
2012-	Joint Appointment Division of Health Sciences Informatics Johns Hopkins School of Medicine
2020-	Associate Faculty Hopkins' Economics of Alzheimer's Disease & Services Center <i>Johns Hopkins School of Public Health</i>
2018-	Associate Faculty Armstrong Institute for Patient Safety and Quality Johns Hopkins School of Medicine
2017-	Affiliated Faculty Bloomberg American Health Initiative Johns Hopkins School of Public Health
2012-	Core Faculty Center for Health Services and Outcomes Research (CHSOR) Johns Hopkins School of Public Health
2012-2019	Research Director Center for Population Health Informatics Technology (CPHIT) Johns Hopkins Bloomberg School of Public Health
2008-2012	Assistant Professor School of Informatics & Regenstrief Institute Indiana University Purdue University Indianapolis
2005-2008	Principal Instructor [Lecturer] School of Medicine & Business School Dalhousie University, Halifax, Canada
2005-2008	Teaching & Research Assistant School of Computer Sciences Dalhousie University, Halifax, Canada

PROFESSIONAL ACTIVITIES

Memberships

2012-	Academy Health
2009-	National Institute of Health Informatics (NIHI), Canada
2005-	American Medical Informatics Association (AMIA)
2004-	Canada's Health Informatics Association (COACH), Canada
2016-2017	American Statistical Association (ASA)
Committees	
2023-	Friends of the National Library of Medicine (FNLM) Board of Directors
2022-	Maryland Suicide Fatality Review Committee Office of Suicide Prevention; Maryland Department of Health
2021-	Michigan Center for Contextual Factors in Alzheimer's Disease (MCCFAD) External Advisory Board Member; University of Michigan
2012-	Academy Health Executive Committee: Health Information Technology Interest Group Executive Committee: Population Health Community of Practice Committee: Electronic Data Methods Forum
2005-	American Medical Informatics Association (AMIA) Elected Member: Membership and Outreach Committee (2018-2019) Executive Committee: Public Health Informatics Working Group (2012-) Member: Clinical Decision Support Working Group (2012-) Member: Consumer Health Informatics Working Group (2012-)
2013-	AMIA Presymposium – Population HIT WG (2013, 2014, 2017, 2019) Chair / Co-Chair – Washington DC
2014-	AMIA Presymposium – Visual Analytics in Healthcare (2014, 2017) <i>Co-Chair – Washington DC</i>
2015-2015	DHHS – Office of the National Coordinator (ONC) Exchange and Interoperability Measurement Community of Practice Executive Committee Member
2013-2013	Health Affairs / Project Hope – Planning Committee Special Issue: "Big Data: Potential Impact on Health Care and Research" Invited Member – Washington DC
2013-2013	Wireless Health 2013 Conference (WHC13) Planning Committee / Session Leader

2010-2012 Midwestern Conference on Health Games (MCHG) *Chair – Indianapolis*

EDITORIAL ACTIVITIES

Editorial Contribution

2021-	Medical Care
	Lippincott Williams & Wilkins
	Deputy (Associate) Editor
2021-	Journal of the American Medical Informatics Association (JAMIA) Open
	Oxford University Press
	Associate Editor
2013-2014	Generating Evidence and Methods to Improve Patient Outcomes
	Special Issue: "Lessons from the Field: Health-IT Enabled Community-Based Transformation"
	Academy Health / EDM Forum [eGEMs] / AHRQ
	[Guest] Co-Editor

Editorial Board Membership

2018-2020	Journal of the American Medical Informatics Association (JAMIA) Open
	Oxford University Press
	Editorial Board Member
2017-	Population Health Management Journal
	Mary Ann Libert Inc.
	Editorial Board Member

Peer Review Activities – Journals

Academy Health

+ Gen. Evidence & Methods to Improve Patient Outcomes (eGEMs)

American College of Physicians

+ Annals of Internal Medicine

- * Received the 2020 Annals' Top Reviewer Recognition
- * Received the 2019 Annals' Top Reviewer Recognition
- * Received the 2018 Annals' Top Reviewer Recognition

American Medical Association

+ Journal of the American Medical Association (JAMA)

+ JAMA Open Network

American Medical Information Association + Journal of the American Medical Information Association (JAMIA) + JAMIA Open

* Received the 2019 JAMIA Open's Top Reviewer Recognition

American Public Health Association

+ American Journal of Public Health (AJPH)

BioMed Central

+ BMC Public Health

+ BMC Health Services Research (HSR)

+ BMC Medical Research Methodology (MRM)

+ BMC Medical Informatics and Decision Making (MIDM)

BMJ Publishing Group

+ BMJ Open

Dove Press

+ Clinical Epidemiology

+ Risk Management and Healthcare Policy

Elsevier

+ Artificial Intelligence in Medicine (AIM)

+ Health Care: The Journal of Delivery Science and Innovation (HJDSI)

Lippincott Williams & Wilkins

+ Medical Care + Journal of Patient Safety (JPS)

Mary Ann Libert + Population Health Management (PHM)

Project Hope + Health Affairs

Public Library of Science + *PLoS One*

Springer Verlag + Nature Research * Top 10% of Nature Research reviewers 2020

Society of General Internal Medicine + Journal of General Internal Medicine (JGIM)

Peer Review Profile: <u>https://www.webofscience.com/wos/author/record/110650</u>

Review of Proposals

2022	NIH CDMA (<u>Clinical Data Management and Analysis Study Section</u>) National Institute of Health https://orants.nih.oov/orants/ouide/ta-files/PA-20-185.html
	https://grants.nih.gov/grants/guide/pa-files/PA-20-195.html
	https://grants.nih.gov/grants/guide/pa-files/PAR-21-038.html
	https://grants.nih.gov/grants/guide/pa-files/PAS-21-215.html https://grants.nih.gov/grants/guide/pa-files/PAR-20-179.html
2021	NIMH SERV (<u>Mental Health Services Research Committee</u>) National Institute of Mental Health
	https://grants.nih.gov/grants/guide/pa-files/par-17-264.html
	https://grants.nih.gov/grants/guide/pa-files/par-18-929.html
2019	AHRQ Data Analytics SEP (Special Emphasis Panel: ZHS1-HSR-D02) Agency for Healthcare Research and Quality
	nups://granis.nin.gov/granis/guide/rja-jues/KFA-HS-19-002.nimi
2018	NIH-NIDDK SEP (Special Emphasis Panel: <u>ZDK1 GRB-1 M1</u>) National Institute of Health
	PARs on Pragmatic Research and Natural Experiments
2018	NIDA SBIR Phase II (Special Emphasis Panel: ZDA1 JXB-N32) National Institute of Health
	Small Business Innovation Research (SBIR): Analytical Tools for Biomedical Research
2015	inHealth Funding Opportunity Johns Hopkins University
2012	Sustainable and Collaborative Informatics Projects (SCIP) Indiana University (School of Medicine, Regenstrief Institute)
2011	Multidisciplinary Undergraduate Research Institute (MURI) Indiana University (Center for Research and Learning)

Standing Membership of Federal Review Committees*

2022-2026	NIMH SERV (Mental Health Services Research Committee)
	National Institute of Mental Health
	Eligible for <u>continues submission privileges</u>
	Eligible for <u>late window considerations</u>

* Offers made by programmer officers to join other study panels (e.g., NIH CDMA) as a standing member were declined since NIH policies prohibits serving on more than one committee simultaneously.

HONORS AND AWARDS

Awards

2022-2023	Team Science Award Johns Hopkins Institute for Clinical Translation Research
2019-2020	Technology Transfer Award (#2) Johns Hopkins School of Public Health
2017-2018	Technology Transfer Award (#1) Johns Hopkins School of Public Health
2016	HIMSS Book of the Year Award (Chapter Contribution) Healthcare Information and Management Systems Society
2016	Dr. Robert Lewis Kane Memorial Award (Report) Agency for Healthcare Research and Quality (AHRQ)
2013-2014	Faculty Innovation Fund Award Johns Hopkins School of Public Health
2010-2011	IUPUI Research RTR Award Indiana University Purdue University Indianapolis
2010-2011	IUPUI Curriculum Enhancement Teaching & Conference Awards Indiana University Purdue University Indianapolis
2006-2008	CIHR Doctoral Award Canadian Institute for Health Research
2004-2006	NSHRF Initiative Award Nova Scotia Health Research Foundation

Honors – Scientific Fellowships

2022-	★ Fellow (elected), American College of Medical Informatics (FACMI) ¹
2019-	# Fellow (selected), American Medical Informatics Association (FAMIA) ²

¹ ACMI (American College of Medical Informatics) is a college of elected fellows who have made significant and sustained contributions to the field of biomedical and/or population health informatics both nationally and internationally. Informaticians from all countries are eligible for election to ACMI fellowship. Nomination to ACMI fellowship is invitation-only (no self-nominations) by other fellows. Approximately 10 fellows have been elected annually to the prestigious ACMI since 1984. More information about FACMI can be found at this link.

² Fellows of the American Medical Informatics Association are recognized for their contributions and professional accomplishments who apply informatics skills and knowledge to their practice – be that in a clinical setting, a public or population health capacity, or as a clinical researcher. AMIA fellowship started in 2018 and uses a self-nomination process. Applicants are reviewed by other AMIA fellows. More information about FAMIA can be found at this <u>link</u>.

Honors – Scientific Productivity

2021-2022	Top 2% of highly cited scientists in Health/Medical Informatics Ranked 194 by Scopus among 14,978 health informatics scientists
2020-2021	Top 2% of highly cited scientists in Health/Medical Informatics Ranked 212 by Scopus among 14,904 health informatics scientists
	https://elsevier.digitalcommonsdata.com/datasets/btchxktzvw/5

Honors – Teaching

(309.635.81)
(309.635.81)
(309.635.81)

PUBLICATIONS³

Journal Articles (peer-reviewed)

- 1 Hatef E, Kitchen C, Pandya C, <u>Kharrazi H</u>. Assessing patient and community-level social factors: the synergistic effect of social needs and social determinants of health on healthcare utilization at a multilevel academic healthcare system. J Med Syst. 2023; 47(1): 95. PMID: 37656284 DOI: 10.1007/s10916-023-01990-9
- 2 Zolnour A, Eldredge CE, Faiola A, Yaghoobzadeh Y, Khani M, Foy D, Topaz M, Kharrazi H, Fung KW, Fontelo P, Davoudi A, Tabaie A, Breitinger SA, Oesterle TS, Rouhizadeh M, Zonnor Z, Moen H, Patrick TB, Zolnoori M. A risk identification model for detection of patients at risk of antidepressant discontinuation. *Front Artif Intell.* 2023; 6(1229609). *PMID: 37693012 DOI: 10.3389/frai.2023.1229609*
- 3 Han E*, **Kharrazi H**, Shi L. Identifying predictors of nursing home admission using electronic health records and administrative data: A scoping review. *JMIR Aging*. 2023 [in-press] *PMID: TBA DOI: TBA*
- 4 Susukida R, Nestadt PS, **Kharrazi H**, Wilcox HC. Prevalence and correlates of opioid-involved suicides in Maryland. *Arch of Suicide Res.* 2023 [in-press] *PMID: 37143364 DOI: 10.1080/13811118.2023.2207612*
- Cai CX*, Tran D, Tang T, Liou W, Harrigian K, Scott E, Nagy P, Kharrazi H, Crews DC, Zeger SL. Health disparities in lapses in diabetic retinopathy care. *Ophthalmology Science*. 2023; 3(3): 100295.
 PMID: 37063252 DOI: 10.1016/j.xops.2023.100295
- 6 Lasser E*, Gudzune K, Lehmann H, Kharrazi H, Weiner JP. Trends and patterns of social and behavioral determinants of health data collection within an electronic health record. *Popul Health Manag.* 2022; 26(1): 13-21. *PMID: 36607903 DOI: 10.1089/pop.2022.0209*
- Mannie C*, Strydom S, <u>Kharrazi H</u>. Measuring the geographic disparity of comorbidity in commercially insured individuals compared to the distribution of physicians in South Africa. *BMC Fam Pract.* 2022; 23(1): 286.
 PMID: 36397001 DOI: 10.1186/s12875-022-01899-1
- 8 Liu S*, Ding X, Belouali A, Bai H, Raja K, Kharrazi H. Assessing the racial and socioeconomic disparities in postpartum depression using population-level hospital discharge data: a longitudinal retrospective study. JMIR Pediatr Parent. 2022; 5(4): e38879. PMID: 36103575 DOI: 10.2196/38879

³ Kharrazi: first/senior author; Kharrazi: co-author

^{*:} mentored [student/fellow] publications

- 9 Pandya C, Wu J, Hatef E, Richards TM, Weiner JP, Kharrazi H. Impact of social needs in electronic health records and claims on health care utilization and costs risk-adjustment models within Medicaid population. *Popul Health Manag.* 2022; 25(5): 658-668. *PMID: 35736663 DOI: 10.1089/pop.2022.0069*
- 10 Belouali A*, Bai H, Raja K, Liu S, Ding X, <u>Kharrazi H</u>. Impact of social determinants of health on improving the LACE index for 30-day unplanned readmission prediction. *JAMLA Open.* 2022; 5(2): 00ac046. *PMID: 35702627 DOI: 10.1093/jamiaopen/00ac046*
- 11 Chang HY, Kitchen C, Bishop M, Shermock KM, Gudzune K, Kharrazi H, Weiner JP. Claims-based pharmacy markers for comprehensive medication management program case identification: validation against concurrent and prospective healthcare costs and utilization. *Res Social Adm Pharm.* 2022; S1551-7411(22): 00148-6. *PMID: 35550347 DOI: 10.1016/j.sapharm.2022.04.006*
- 12 Wang HE*, Landers M, Adams R, Subbaswamy A, Kharrazi H, Gaskin DJ, Saria S. Identifying bias in health care predictive models: Development of a modeling bias screening checklist and its pilot application for 30-day hospital readmission models. J Am Med Inform Assoc. 2022; 29(8): ocac065. PMID: 35579328 DOI: 10.1093/jamia/ocac065
- 13 Madlock-Brown C, Wilkens K, Weiskopf N, Cesare N, Bhattacharyya S, Riches NO, Espinose J, Dorr D, Goetz K, Phuong J, Sule A, Kharrazi H, Liu F, Lemon C, Adams WG. Clinical, social, and policy factors in COVID-19 cases and deaths: methodological considerations for feature selection and modeling in county-level analyses. *BMC Public Health.* 2022; 22(1): 747. *PMID: 35421958 DOI: 10.1186/s12889-022-13168-y*
- 14 Kitchen C, Chang HY, Weiner JP, Kharrazi H. Assessing the added value of vital signs extracted from electronic health records in healthcare risk adjustment models. *Risk Manag Healthc Policy*. 2022; 15(eCollection): 1671-1682. *PMID: 36092549 DOI: 10.2147/RMHP.S356080*
- 15 Howson SN, McShea MJ, Ramachandran R, Burkom HS, Chang HY, Weiner JP, Kharrazi H. Improving the prediction of persistent high healthcare utilizers: using an ensemble methodology. *JMIR Med Inform.* 2022; 10(3): e33212. *PMID: 35275063 DOI: 10.2196/33212*
- 16 Ferris LM*, Weiner JP, Saloner B, <u>Kharrazi H</u>. Comparing person-level matching algorithms to identify risk across disparate datasets among patients with a controlled substance prescription: retrospective analysis. *JAMIA Open.* 2022; 5(1): 00ac020. *PMID: 35571361 DOI: 10.1093/jamiaopen/00ac020*
- 17 Yuan CT, Dy SEM, Lai AY, Oberlander T, Hannum SM, Lasser EC, Heughan JA, Dukhanin V, Kharrazi H, Kim JM, Gurses AP, Bittle M, Scholle SH, Marsteller JA. Challenges and strategies for patient safety in primary care: A qualitative study. *Am J Med Qual.* 2022; 37(5):

379-387 PMID: 35404306 DOI: 10.1097/jmq.000000000000054

- Susukida R, Amin-Esmaeili M, Ryan TC, Kharrazi H, Wilson RF, Musci RJ, Zhang A, Wissow L, Robinson KA, Wilcox HC. Ineligibility for and Refusal to Participate in Randomized Controlled Trials That Have Studied Impact on Suicide-Related Outcomes in the United States: A Meta-Analysis. J Clin Psychiatry. 2022; 83(2): 20r13798. PMID: 35172049 DOI: 10.4088/JCP.20r13798
- 19 Hatef E, Nau C, Rouhizadeh M, Xie F, Rouillard C, Padilla A, Lyons LJ, Kharrazi H, Weiner JP, Abu-Nasser M, Roblin D. Assessing the documentation of social needs in electronic health records' unstructured data: A comparison of three integrated healthcare delivery systems. JAMLA Open. 2022; 5(1): 00ac006. PMID: 35224458 DOI: 10.1093/jamiaopen/ooac006
- 20 Kitchen C, Chang HY, Bishop M, Shermock KM, Kharrazi H, Weiner JP. Comparing and validating medication complexity from insurance claims against electronic health records. J Manag Care Spec Pharm. 2022; 28(4): 473-484. PMID: 35332787 DOI: 10.18553/jmcp.2022.28.4.473
- 21 Durojaiye AB*, Fackler JC, McGeorge N, Webster K, Kharrazi H, Gurses AP. Examining diurnal differences in multidisciplinary care teams at a pediatric trauma center using EHR data: Social network analysis. J Med Internet Res. 2022; 24(2): e30351 PMID: 35119372 DOI: 10.2196/30351
- Vest J, Adler-Milstein J, Gottlieb LM, Bian J, Campion T, Cohen G, Donnelly N, Harper J, Heurta T, Kansky J, Kharrazi H, Khurshid A, Kooreman H, McDonnell C, Overhage M, Pantell M, Parisi W, Shenkman E, Tierney B, Wiehe S, Harle CA. Identification and assessment of structured data elements to support social risk factor computable phenotyping: an expert panel. *Am J Manag Care*. 2021; 28(1): e14-e23 *PMID: 35049262 DOI: 10.37765/ajmc.2022.88816*
- 23 Kharrazi H, Chang HY, Weiner JP, Gudzune KA. Assessing the added value of blood pressure information derived from electronic health records in predicting health care cost and utilization. *Popul Health Manag.* 2021; 25(3): 323-334 *PMID: 34847729 DOI: 10.1089/pop.2021.0250*
- 24 Nair SS, Li C, Doijad R, Nagy P, Lehmann H, <u>Kharrazi H</u>. A scoping review of knowledge authoring tools used for developing computerized clinical decision support systems. JAMLA Open. 2021; 4(4): 1-15. PMID: 34927003 DOI: 10.1093/jamiaopen/ooab106
- 25 Ramachandran R, McShea MJ, Howson SN, Burkom HS, Chang H-Y, Weiner JP, Kharrazi H. Assessing the value of unsupervised clustering in detecting key classes of diagnostic and medication codes to improve the prediction of persistent high healthcare utilizers. *JMIR Med Inform.* 2021. 9(11): e31442.

PMID: 34592712 DOI: 10.2196/31442

- 26 Hatef E, Ma X, Shaikh Y, Kharrazi H, Weiner JP, Gaskin DJ. Internet access, social risk factors, and web-based social support seeking behavior: assessing correlates of the "digital divide" across neighborhoods in the state of Maryland. J Med Syst. 2021; 45: 94. PMID: 34537892 DOI: 10.1007/s10916-021-01769-w
- 27 Hatef E, Deol GS, Rouhizadeh M, Lasser E, Tansky L, Li A, Richards T, Bratslaver R, Eibensteiner K, Senese M, Monsen C, <u>Kharrazi H</u>. Measuring the value of a practical textmining approach to identify patients with housing issues in the free-text notes in electronic health record: Findings of a retrospective cohort study. *Front Public Health*. 2021; 9(697501) 1-11 *PMID: 34513783 DOI: 10.3389/fpubb.2021.697501*
- 28 Kitchen C, Hatef E, Chang H-Y, Weiner JP, <u>Kharrazi H</u>. Assessing the association between area deprivation index on COVID-19 prevalence: a contrast between rural and urban U.S. jurisdictions. *AIMS Public Health*. 2021 *PMID: 34395702 DOI: 10.3934/publichealth.2021042*
- 29 Afshar AS, Li Y, Chen Z, Chen J, Lee J, Irani D, Singh D, Kanter M, Faraday N, <u>Kharrazi H</u>. An exploratory data quality analysis of time series physiologic signals using a large-scale intensive care unit database. *JAMLA Open.* 2021; 4(3): 1-6 *PMID: 34350392 DOI: 10.1093/jamiaopen/ooab057*
- 30 Haroz E, Kitchen C, Nestadt PS, Wilcox H, DeVylder JE, <u>Kharrazi H</u>. Comparing the predictive value of screening to the use of electronic health record data for detecting future suicidal thoughts and behavior in an urban pediatric emergency department: a preliminary analysis. *Suicide Life Threat Behav.* 2021; 51(6): 1189-1202 *PMID: 34515351 DOI: 10.1111/stb.12800*
- 31 Chang HY, Tang W, Hatef E, Kitchen C, Weiner JP, Kharrazi H. Differential impact of mitigation policies and socioeconomic status on COVID-19 prevalence and social distancing in the United States. BMC Public Health. 2021; 21: 1140 PMID: 34126964 DOI: 10.1186/s12889-021-11149-1
- 32 Pandya C, Chang HY, **Kharrazi H**. Electronic health record-based risk stratification: A potential key ingredient to achieving value-based care. *Popul Health Manag.* 2021; 24(6): 654-656 *PMID: 34129398 DOI: 10.1089/pop.2021.0131*
- 33 Sharifzadeh N*, Tabesh H, Kharrazi H, Tara F, Kiani F, Jangi M, Rasoulian M, Mirteimoori M, Tara M. PLS (Play and Learn for Surgeons): A Serious Game to Educate Medical Residents in Uterine Artery Ligation Surgery. *Games Health J.* 2021; 10(4): 220-227 *PMID: 34264757 DOI: 10.1089/g4h.2020.0220*
- 34 Karami A, Dahl AA, Shaw G Jr, Valappil SP, Turner-McGrievy G, Kharrazi H, Bozorgi P. Analysis of Social Media Discussions on (#)Diet by Blue, Red, and Swing States in the U.S. *Healthcare (Basel)*. 2021 Apr 29; 9(5): 518. PMID: 33946659 DOI: 10.3390/ healthcare9050518

35 Bishop MA, Chang HY, Kitchen C, Weiner JP, Kharrazi H, Shermock KM. Development of measurable criteria to identify and prioritize patients for inclusion in comprehensive medication management programs within primary care settings. J Manag Care Spec Pharm. 2021; 27(8): 1009-1018

PMID: 34337988 DOI: 10.18553/jmcp.2021.27.8.1009

- Hatef E, Kitchen C, Chang HY, Kharrazi H, Tang W, Weiner JP. Early relaxation of community mitigation policies and risk of COVID-19 resurgence in the United States. *Prev Med.* 2021; 145(106435): 1-5.
 PMID: 33486000 DOI: 10.1016/j.ypmed.2021.106435
- 37 Yuan CT, Lai AY, Benishek LE, Marsteller JA, Mahabare D, Kharrazi H, Dy SEM. A doubleedged sword: The effects of social network ties on job satisfaction in primary care organizations. *Health Care Manage Rev.* 2021; 47(3): 180-187 *PMID: 33965998 DOI: 10.1097/hmr.00000000000314*
- 38 Kharrazi H, Ma X, Chang H-Y, Richards TR, Jung C. Comparing the predictive effects of patient medication adherence indices in EHR and claims-based risk stratification models. *Popul Health Manag.* 2021; 24(5): 601-609 *PMID: 33544044 DOI: 10.1089/pop.2020.0306*
- 39 Ferris LM*, Saloner B, Jackson K, Lyons C, Murthy V, Kharrazi H, Latimore A, Stuart EA, Weiner JP. Performance of a predictive model versus prescription-based thresholds in identifying patients at risk of fatal opioid overdose. *Subst Use Misuse*. 2021; 56(3): 396–403 *PMID: 33446000 DOI: 10.1080/10826084.2020.1868520*
- 40 Lasser EC*, Kim JM, Hatef E, Kharrazi H, Marsteller JA, DeCamp LR. Social and behavioral variables in the electronic health record: a path forward to increase data quality and utility. *Acad Med.* 2021; 96(7): 1050-1056 *PMID: 33735133 DOI: 10.1097/ACM.000000000004071*
- 41 Jackman K*, Kane J, Kharrazi H, Johnson RM, Latkin C. Psychometrics of the Patient Portal Sexual Health Instrument: measuring attitudes toward using patient portals for sexual health behaviors among sexual minority men. JMIR Med Inform. 2021; 23(2): e18750 PMID: 33565987 DOI: 10.2196/18750
- 42 Mannie C*, <u>Kharrazi H</u>. Assessing the geographical distribution of comorbidity among commercially insured individuals in South Africa. *BMC Public Health.* 2020; 20(1): 1709 *PMID: 33198704 DOI: 10.1186/s12889-020-09771-6*
- 43 Jackman K*, Dangerfield DT, Yang C, Trent M, Kharrazi H, Johnson RM, Latkin C. Behavioral intentions to use patient portals to disclose HIV and other sexually transmitted infection testing histories with sexual partners among U.S. sexual minority men. *AIDS and Behav.* 2020; 25(4): 1199-1209 *PMID: 33185776 DOI: 10.1007/s10461-020-03092-w*
- 44 Messino PJ*, **Kharrazi H**, Kim J, Lehmann H. A method for measuring the effect of certified

electronic health record technology (CEHRT) on childhood immunization status scores among Medicaid managed care network providers. *J Biomed Inform.* 2020; 110(103567): 1-12 *PMID: 32927058 DOI: 10.1016/j.jbi.2020.103567*

- 45 Chang HY, Hatef E, Ma X, Weiner JP, Kharrazi H. Impact of Area Deprivation Index on the performance of claims-based risk adjustment models in predicting healthcare costs and utilization. *Popul Health Manag.* 2020; 24(3):403-411 *PMID: 33434448 DOI: 10.1089/pop.2020.0135*
- 46 Hatef E, Chang H-Y, Kitchen C, Weiner JP, <u>Kharrazi H</u>. Assessing the impact of neighborhood socioeconomic characteristics on COVID-19 prevalence across seven states in the United States. *Front Public Health.* 2020; 8(571808) 1-7 *PMID: 33072710 DOI: 10.3389/fpubh.2020.571808*
- Bery A*, Anzaldi LJ, Boyd CM, Leff B, <u>Kharrazi H</u>. Potential value of electronic health records in capturing data on geriatric frailty for population health. *Arch Gerontol Geriatr.* 2020; 91:104224
 PMID: 32829083 DOI: 10.1016/j.archger.2020.104224
- 48 Tan M, Hatef E, Taghipoor E, Vyas K, Kharrazi H, Gottlieb L, Weiner JP. Including social and behavioral determinants in predictive models: trends, challenges, and opportunities. *JMIR Med Inform.* 2020; 8(9) e18084 *PMID: 32897240 DOI: 10.2196/18084*
- 49 Chang H-Y, Kan HJ, Shermock KM, Alexander CG, Weiner JP, <u>Kharrazi H</u>. Integrating eprescribing and pharmacy-claim data for predictive modeling: comparing costs and utilization of health plan members who fill their initial medications with those who do not. J Manag Care Spec Pharm. 2020; 26(10) 1282-1290 PMID: 32996394 DOI: 10.18553/jmcp.2020.26.10.1282
- 50 Hatef E, Ma X, Rouhizadeh M, Singh G, Weiner JP, Kharrazi H. Assessing the impact of social needs and social determinants of health on healthcare utilization: using patient and community level data. *Popul Health Manag.* 2020; 24(2): 222-230 *PMID: 32598228 DOI: 10.1089/pop.2020.0043*
- 51 Lai AY, Yuan CT, Marsteller JA, Hannum SM, Lasser E, Heughan JA, Oberlander T, Berger ZD, Gurses AP, Kharrazi H, Pitts SI, Sholle SH, Dy SEM. Patient safety in primary care: conceptual meanings to patients and the health care team. J Am Board Fam Med. 2020; 33(5): 754-764 PMID: 32989070 DOI: 10.3122/jabfm.2020.05.200042
- 52 Dy SM, Acton RM, Yuan CT, Hsu Y-J, Lai AY, Marsteller J, Ye FC, McGee N, Kharrazi H, Mahabare D, Kim J, Gurses AP, Bittle M, Scholle SH. Association of implementation and social network factors with patient safety culture in medical homes: a coincidence analysis. J Patient Saf. 2020; 18(1): e249-e256 PMID: 32740134 DOI: 10.1097/pts.00000000000752

- 53 Ma X*, Jung C, Chang H-Y, Richards TR, <u>Kharrazi H</u>. Assessing the population-level correlation of medication regimen complexity and adherence indices using electronic health records and insurance claims. *J Manag Care Spec Pharm.* 2020; 26(7): 860-871 *PMID: 32584680 DOI: 10.18553/jmcp.2020.26.7.860*
- 54 Shafiq M*, Ma X, Taghizadeh N, Kharrazi H, Feller-Kopman D, Tremblay A, Yarmus L. Healthcare costs and utilization among patients hospitalized for malignant pleural effusion. *Respiration*. 2020; 99(3): 257-263 *PMID: 32155630 DOI: 10.1159/000506210*
- Anzaldi L*, Perkins JA, Byrd A, Kharrazi H, Okoye GA. Characterizing inpatient hospitalizations for hidradenitis suppurativa in the United States. J Am Acad Dermatol. 2020; 80(2): 510-513 PMID: 31541745 DOI: 10.1016/j.jaad.2019.09.019
- 56 Sharifzadeh N*, Kharrazi H, Nazari E, Tabesh H, Edalati M, Heidari S, Tara M. Health education serious games: a scoping review. *JMIR Serious Games*. 2020; 8(1): e13459 *PMID: 32134391 DOI: 10.2196/13459*
- 57 Hatef E, Kharrazi H, Searle KM, Lasser EC, Predmore Z, Nelson K, Sylling P, Batten AJ, Curtis I, Fihn S, Weiner JP. The association between neighborhood socioeconomic and housing characteristics with hospitalization: results of a national study of veterans. J Am Board Fam Med. 2019; 32(6): 890-903 PMID: 31704758 DOI: 10.3122/jabfm.2019.06.190138
- 58 Hatef E, Predmore Z, Lasser EC, Kharrazi H, Nelson K, Sylling P, Curtis I, Fihn S, Weiner JP. Integrating social and behavioral determinants of health into patient care and population health at VHA: a conceptual framework and an assessment of available individual and population level data sources and evidence-based measurements. *AIMS Public Health*. 2019; 6(3): 209-224 *PMID: 31637271 DOI: 10.3934/publichealth.2019.3.209*
- 59 Knapp EA, Bennett WL, Wilson RF, Zhang A, Tseng E, Cheskin LJ, Bass EB, Kharrazi H, Stuart EA. Methods and risks of bias in natural experiments in obesity: opportunities for the future informed by a systematic review. Obesity. 2019; 27(12): 1950-1957 PMID: 31693802 DOI: 10.1002/oby.22645
- Liu D*, Mia Y, Duncan JD, Fondairo A, Kharrazi H, Nestadt PS. Discovering the unclassified suicide cases among undetermined drug overdose deaths using machine learning techniques. Suicide Life Threat Behav. 2019; 50(2): 333-344
 * first author is a high school mentee! PMID: 31536175 DOI: 10.1111/sltb.12591 Posts: Baltimore Sun Newspaper
- 61 Hatef E, Rouhizadeh M, Tia I, Lasser E, Hill-Briggs F, Marsteller JA, <u>Kharrazi H</u>. Assessing the availability of social and behavioral determinants data in structured and unstructured electronic health records: a retrospective analysis of a multi-level healthcare system. *JMIR Med*

Inform. 2019; 7(3): e13802 *PMID: 31376277 DOI: 10.2196/13802*

- 62 Chen T*, Dredze M, Weiner JP, Kharrazi H. Identifying vulnerable older adult populations by contextualizing geriatric syndrome information in clinical notes of electronic health records. J Am Med Inform Assoc. 2019; 26(8-9): 787–795 PMID: 31265063 DOI: 10.1093/jamia/ocz093
- 63 Kanakubo T*, Kharrazi H. Comparing the trends of electronic health record adoption in the United States and Japan. J Med Syst. 2019; 43(7):224 PMID: 31187293 DOI: 10.1007/s10916-019-1361-y
- 64 Chen T*, Dredze M, Weiner JP, Hernandez L, Kimura J, <u>Kharrazi H</u>. Extraction of geriatric syndromes from electronic health record clinical notes: assessment of statistical natural language processing methods. *JMIR Med Inform.* 2019; 7(1): e13039 *PMID: 30862607 DOI: 10.2196/13039*
- 65 Hatef E, Weiner JP, Kharrazi H. A public health perspective on using electronic health records to address social determinants of health: The potential for a national system of local community health records in the United States. *Int J Med Inform.* 2019; 124: 86-89 *PMID: 30784431 DOI: 10.1016/j.ijmedinf.2019.01.012*
- 66 Zolnoori M*, Fung KW, Patrick TB, Fontelo P, Kharrazi H, Faiola A, Wu YSS, Eldredge CE, Luo J, Conway M, Zhu J, Park SK, Xu K, Moayyed H. The PsyTAR dataset: from patients generated narratives to a corpus of adverse drug events and effectiveness of psychiatric medications. *Data Brief.* 2019; 90(103091) 1-14 *PMID: 31065579 DOI: 10.1016/j.dib.2019.103838*
- 67 Hatef E, Searle KM, Predmore Z, Lasser EC, Kharrazi H, Nelson K, Sylling P, Curtis I, Fihn S, Weiner JP. The impact of social determinants of health on hospitalization in the Veterans Health Administration. *Am J Prev Med.* 2019; 56(6): 811-818 *PMID: 31003812 DOI: 10.1016/j.amepre.2018.12.012*
- Husain A*, Sridharma S, Baker MD, <u>Kharrazi H</u>. Incidence and geographic distribution of injuries due to falls among pediatric communities of Maryland. *Pediatr Emerg Care*. 2019; 37(11): e736-e745 *PMID: 31268961 DOI: 10.1097/PEC.00000000001852*
- 69 Zolnoori M*, Fung KW, Patrick TB, Fontelo P, Kharrazi H, Faiola A, Wu YSS, Luo J. A systematic approach for developing a corpus of patient reported adverse drug events: a case study for SSRI and SNRI medications. J Biomed Inform. 2019; 90: 103091 PMID: 30611893 DOI: 10.1016/j.jbi.2018.12.005
- Durojaiye AB*, Levin S, Toerper M, Kharrazi H, Lehmann HP, Gurses AP. Evaluation of multidisciplinary collaboration in pediatric trauma care using EHR data. J Am Med Inform Assoc. 2019; 26(6): 506-515
 PMID: 30889243 DOI: 10.1093/jamia/ocy184

- 71 Kan HJ, Kharrazi H, Chang HY, Bodycombe D, Lemke K, Weiner JP. Exploring the use of machine learning for risk adjustment: a comparison of standard and penalized linear regression models in predicting health care costs in older adults. *PLoS One.* 2019; 14(3): e0213258 *PMID: 30840682 DOI: 10.1371/journal.pone.0213258*
- 72 Zolnoori M*, Fung KW, Fontelo P, Kharrazi H, Faiola A, Wu YSS, Stoffel V, Patrick TB. Identifying the underlying factors associated with patients' attitudes toward antidepressants: qualitative and quantitative analysis of patient drug reviews. *J Med Intern Res Ment Health.* 2018; 5(4): e10726 *PMID: 30287417 DOI: 10.2196/10726*
- 73 Kharrazi H, Chang HY, Heins S, Weiner JP, Gudzune K. Enhancing the prediction of healthcare costs and utilization by including outpatient BMI values to diagnosis-based risk models. *Med Care.* 2018; 56 (12): 1042-1050 *PMID: 30339574 DOI: 10.1097/MLR.000000000001001 Posts: News*
- Durojaiye AB*, Puett LL, Levin S, Toerper M, McGeorge N, Webster K, Deol GS, Kharrazi H, Lehmann HP, Gurses AP. Linking electronic health record data to trauma registry data: assessing the value of probabilistic linkage. *Methods Inf Med.* 2018. 57(5-6): 261-269
 PMID: 30453337 & 30875705 DOI: 10.1055/s-0039-1681087
- 75 Tseng E, Zhang A, Shogbesan O, Gudzune K, Wilson R, Kharrazi H, Cheskin L, Bass EB, Bennett W. Effectiveness of policies and programs to combat adult obesity: a systematic review. J Gen Intern Med. 2018; 33(11) 1990–2001 PMID: 30206789 DOI: 10.1007/s11606-018-4619-3
- 76 Gamache R, Kharrazi H, Weiner JP. Public health and population health informatics: the bridging of big data to benefit communities. *Yearb Med Inform.* 2018; 27(1): 199-206 *PMID: 30157524 DOI: 10.1055/s-0038-1667081*
- 77 Musci RJ, Kharrazi H, Wilson RF, Susukida R, Gharghabi F, Zhang A, Wissow L, Robinson KA, Wilcox HC. The study of effect moderation in youth suicide prevention studies. Soc Psychiatry Psychiatr Epidemiol. 2018; 53(12): 1303-1310 PMID: 30088027 DOI: 10.1007/s00127-018-1574-2
- 78 Kharrazi H, Gonzalez CP, Lowe KB, Huerta TR, Ford EW. Forecasting the maturation of electronic health record functions among U.S. hospitals: retrospective analysis and predictive model. J Med Internet Res. 2018; 20(8): e10458 PMID: 30087090 DOI: 10.2196/10458 Posts: News
- 79 Lemke K, Gudzune KA, Kharrazi H, Weiner JP. Assessing markers from ambulatory laboratory tests for predicting high-risk patients. *Am J Manag Care.* 2018; 24(6): e190-e195 *PMID: 29939509*
- 80 Chang HY, Kharrazi H, Bodycombe D, Weiner JP, Alexander GC. Healthcare costs and utilization associated with high-risk prescription opioid use: a retrospective cohort study. BMC Med. 2018; 16(1): 69

PMID: 29764482 DOI: 10.1186/s12916-018-1058-y Posts: Blog

- 81 Bennett WL, Wilson RF, Zhang A, Tseng E, Knapp EA, Kharrazi H, Stuart EA, Shogbesan O, Bass EB, Cheskin LJ. Methods for evaluating natural experiments in obesity: a systematic review. *Ann Intern Med.* 2018; 168(11): 791-800 PMID: 29710087 DOI: 10.7326/M18-0309
- 82 Kan H, Dyagilev K, Schulam P, Saria S, Kharrazi H, Bodycombe D, Molta CT, Curtis JR. Factors associated with physicians' prescriptions for rheumatoid arthritis drugs not filled by patients. *Arthritis Res Ther.* 2018; 20(1): 79-92 *PMID: 29720237 DOI: 10.1186/s13075-018-1580-5*
- 83 Kharrazi H, Anzaldi L, Hernandez L, Davison A, Boyd CM, Leff B, Kimura J, Weiner JP. Measuring the value of electronic health record's free text in identification of geriatric syndromes. J Am Geriatr Soc. 2018; 66(1) 1499-1507 PMID: 29972595 DOI: 10.1111/jgs.15411
- Kan H, Kharrazi H, Leff B, Boyd C, Davison A, Chang H-Y, Kimura J, Wu S, Anzaldi LJ, Richards T, Lasser E, Weiner JP. Defining and assessing geriatric risk and associated health care utilization among elderly patients using claims and electronic health records. *Med Care*. 2018; 56(3): 233-239
 PMID: 29438193 DOI: 10.1097/MLR.00000000000865 Posts: Blog
- 85 Sheehan OC, Kharrazi H, Carl KJ, Leff B, Wolff JL, Roth DL, Gabbard J, Boyd CM. Helping Older adults improve their Medication Experience (HOME) by addressing medication regimen complexity in skilled home health care. *Home Healthc Now*. 2018; 36(1): 10-19 *PMID: 29298192 DOI: 10.1097/NHH.00000000000632*
- 86 Hatef E, Kharrazi H, VanBaak E, Falcone M, Ferris L, Mertz K, Perman C, Bauman A, Lasser EC, Weiner JP. A state-wide health IT infrastructure for population health: building a community-wide electronic platform for Maryland's all-payer global budget. Online J Public Health Inform. 2017; 9(3): e195 PMID: 29403574 DOI: 10.5210/ojphi.v9i3.8129
- Lu AS, Kharrazi H. A state-of-the-art systematic content analysis of games for health. Games Health J. 2018; 7(1): 1-15
 PMID: 29293368 DOI: 10.1089/g4b.2017.0095
- Anzaldi LJ*, Davison A, Boyd C, Leff B, Kharrazi H. Comparing clinician descriptions of frailty and geriatric syndromes using electronic health records: a retrospective cohort study. BMC Geriatr. 2017; 17 (247): 1-7 PMID: 29070036 DOI: 10.1186/s12877-017-0645-7
- 89 Bae J, Ford EW, Kharrazi H, Huerta TR. Electronic medical record reminders and smoking cessation activities in primary care. *Addict Behav.* 2017; 16 (77): 203-209 *PMID: 29065376 DOI: 10.1016/j.addbeh.2017.10.009*

- 90 Hatef E, Lasser EC, Kharrazi H, Perman C, Montgomery R, Weiner JP. A population health measurement framework: evidence-based metrics for assessing community-level population health in the global budget context. *Popul Health Manag.* 2017; 21(4): 261-270 *PMID: 29035630 DOI: 10.1089/pop.2017.0112*
- 91 Chang HY*, Richards TM, Shermock KM, Elder-Dalpoas S, Kan H, Alexander CG, Weiner JP, Kharrazi H. Evaluating the impact of prescription fill rates on risk stratification model performance. *Med Care.* 2017; 55 (12): 1052-1060 *PMID: 29036011 DOI: 10.1097/MLR.0000000000825*
- 92 Karami A*, Dahl AA, Turner-McGrievy G, Kharrazi H, Shaw JG. Characterizing diabetes, diet, exercise, and obesity comments on Twitter. Int J Inf Manage. 2017; 38: 1-6 DOI: 10.1016/j.ijinfomgt.2017.08.002
- 93 Kharrazi H, Chi W, Chang HY, Richards TM, Gallagher JM, Knudson SM, Weiner JP. Comparing population-based risk-stratification model performance using data extracted from electronic health records versus administrative claims. *Med Care*. 2017; 55 (8): 789-796 *PMID: 28598890 DOI: 10.1097/MLR.00000000000754 Posts: Blog1 & Blog2*
- 94 Karami A*, Gangopadhyay A, Zhou B, Kharrazi H. Fuzzy approach topic modeling for health and medical corpora. Int J Fuzzy Sys. 2017; 1-12 DOI: 10.1007/s40815-017-0327-9
- 95 Kharrazi H, Lasser E, Yasnoff WA, Loonsk J, Advani A, Lehmann H, Chin D, Weiner JP. A proposed national research and development agenda for population health informatics: summary recommendations from a national expert workshop. J Am Med Inform Assoc. 2017; 24 (1):2-12 PMID: 27018264 DOI: 10.1093/jamia/ocv210
- 96 Chan KS, Kharrazi H, Parikh M, Ford EW. Assessing electronic health record implementation challenges using item response theory. *Am J Manag Care.* 2016; 22 (12): e409-e415 *PMID: 27982669*
- 97 Wilcox HC, Kharrazi H, Wilson RF, Musci RJ, Susukida R, Gharghabi F, Zhang A, Wissow L, Robinson KA. Data linkage strategies to advance youth suicide prevention: a systematic review for a national institute of health pathways to prevention workshop. *Ann Intern Med.* 2016; 165 (11): 779-785 *PMID: 27699389 DOI: 10.7326/M16-1281*
- Lasser E, Pfo E, Chang HY, Chan KS, Baily J, Kharrazi H, Weiner JP, Dy S. Has Choosing Wisely affected use of dual-energy X-ray absorptiometry (DXA) rates? Osteoporos Int. 2016; 27 (7): 2311-2316 PMID: 26860499 DOI: 10.1007/s00198-016-3511-0
- 99 Swain MJ*, Kharrazi H. Feasibility of 30-day hospital-readmission prediction modeling based on health information exchange data. Int J Med Inform. 2015; 84 (12):1048-1056 PMID: 26412010 DOI: 10.1016/j.ijmedinf.2015.09.003

- Dixon B, Pina J, Kharrazi H, Gharghabi F, Richards J. What's past is prologue: a scoping review of recent public and global health informatics literature. Online J Public Health Inform. 2015; 7 (2) e1-31
 PMID: 26392846 DOI: 10.5210/ojphi.v7i2.5931
- 101 Dixon B, Kharrazi H, Lehman H. Public health and epidemiology informatics: recent research and events. Yearb Med Inform. 2015; 10 (1): 199-206 PMID: 26293869 DOI: 10.15265/IY-2015-012
- 102 Kharrazi H, Weiner JP. IT-enabled community health interventions: challenges, opportunities, and future directions. *Generating Evidence & Methods to Improve Patient Outcomes (eGEMs)*. 2014; 2 (3): 1-9
 PMID: 25848627 DOI: 10.13063/2327-9214.1117
- 103 Devaraj S*, Sharma S, Fausto D, Viernes S, <u>Kharrazi H</u>. Barriers and facilitators to clinical decision support systems adoption: a systematic review. *Journal of Business Administration Research* (JBAR). 2014; 3 (2): 36-53 DOI: 10.5430/jbar.v3n2p36
- 104 Kharrazi H, Wang C, Scharfstein D. Prospective EHR-based clinical trials: the challenge of missing data. J Gen Intern Med. 2014; 29 (7): 976-978 PMID: 24839057 DOI: 10.1007/s11606-014-2883-0
- 105 Wu A, Kharrazi H, Boulware LE, Snyder CF. Measure once, cut twice adding patient reported outcome measures to the electronic health record for comparative effectiveness research. J Clin Epidemiol. 2013; 66 (8): S12-20 PMID: 23849145 DOI: 10.1016/j.jclinepi.2013.04.005
- 106 Lu AS, Kharrazi H, Gharghabi F, Thompson D. A systematic review of health videogames on childhood obesity prevention and intervention. *Games Health J.* 2013; 2 (3): 131-141 *PMID: 24353906 DOI: 10.1089/g4h.2013.0025*
- 107 Kharrazi H, Chisholm R, VanNasdale D, Thompson B. Mobile personal health records: an evaluation of features and functionality. *Int J Med Inform.* 2012; 81 (9): 579-593 *PMID: 22809779 DOI: 10.1016/j.ijmedinf.2012.04.007*
- 108 Kharrazi H, Lu AS, Gharghabi F, Coleman W. A scoping review of health game research: past, present, and future. *Games Health J.* 2012; 1 (2): 153-164 PMID: 24416638 DOI: 10.1089/g4b.2012.0011
- 109 Gadde P, Kharrazi H, Patel H, MacDorman K. Toward monitoring and increasing exercise adherence in older adults by robotic intervention: a proof-of-concept study. *Journal of Robotics* (JRob). 2011; 1-11 DOI: 10.1155/2011/438514
- 110 BenMessaoud C, **Kharrazi H**, MacDorman K. Facilitators and barriers to adopting roboticassisted surgery: contextualizing the unified theory of acceptance and use of technology. *PLoS*

One. 2011; 6 (1): e16395 PMID: 21283719 DOI: 10.1371/journal.pone.0016395

111 **Kharrazi H**, Watters C, Oore S. Improving behavioral stages in children by adaptive applications. *Journal of Information Technology in Healthcare (JITH)*. 2008; 6 (1), 83-95. *PMID: 101173280*

Conference Articles (full-length & peer-reviewed)⁴

- Karami A, Money V, Turner-McGrievy B, <u>Kharrazi H</u>. Seasonal characterization of diet discussions on Reddit. *Proceedings of Association for Information Science and Technology Annual Meeting*. 2020; 57(1): e320. Virtual: ASIS&T. DOI: 10.1002/pra2.320
- 113 Bian X*, Kharrazi H, Caban J, He G, Chen J. Literature driven task taxonomy for medical data visualization based on Andrienko framework. 2018 IEEE International Conference on Progress in Informatics and Computing (PIC). 2018. 281-286; Suzhou, China: IEEE. DOI: 10.1109/PIC.2018.8706292
- 114 Gold S*, Batch A, McClure R, Jiang G, Kharrazi H, Saripalle R, Huser V, Weng C, Roderer N, Szarfman A, Elmqvist N, Gotz D. Infrastructures and interfaces to encourage value set reuse for health data analytics. *Proceedings of the American Medical Informatics Association (AMIA) Annual Symposium.* 2018; 480-489. San Francisco, CA. *PMID: 30815088*
- 115 Karami A*, Gangopadhyay A, Zhou B, <u>Kharrazi H</u>. FLATM: A fuzzy logic approach topic model for medical documents. *Proceedings of the North American Fuzzy Information Processing Society Annual Conference (NAFIPS)*. 2015. 1-6; Redmond, WA: IEEE DOI: 10.1109/NAFIPS-WConSC.2015.7284190
- 116 Knowles R*, Dredze M, Evans K, Lasser E, Richards T, Weiner JP, Kharrazi H. High risk pregnancy prediction from clinical text. Proceedings of the 27th Neural Information Processing Systems (NIPS): Workshop on Machine Learning for Clinical Data Analysis. 2014. Montreal, Canada URL: sematicscholar.pdf
- 117 Mehrabi S*, Mohammadi I, Kunjan K, <u>Kharrazi H</u>. Effects of data transformation methods on classification of patients diagnosed with myocardial infarction. *Proceedings of the 11th World Congress of Medical and Health Informatics (MedInfo 2013)*. 2013; 192: 1203. Copenhagen, Denmark: Studies in Health Technology and Informatics, IOS Press. *PMID: 23920977 DOI: 10.3233/978-1-61499-289-9-1203*
- 118 Kharrazi H, Vincz L. Increasing physical activity by implementing a behavioral change

⁴ Full papers published in conference proceedings are considered an influential route of knowledge dissemination in informatics. Papers listed in this section are <u>full-length manuscripts that are peer reviewed</u> by scientific committees. See "Presentations \rightarrow Conference Proceedings" [end of the CV] for the list of peer-reviewed abstracts and short-papers.

intervention using pervasive personal health record system: an exploratory study. In S. Constantine (Eds.), Universal Access in Human Computer Interaction Applications and Services: *Proceedings of the SMART Interfaces for Consumer Health Applications*. 2011; 366-375. Orlando, FL: Springer *DOI: 10.1007/978-3-642-21657-2*

- 119 **Kharrazi H**, Faiola A, Bolchini D. Framework-driven health game design: a formative approach for treatment adherence in children with chronic diseases. *Proceedings of Games for Health Sixth Annual Conference*. 2010. Boston, MA.
- 120 Kharrazi H. Improving healthy behaviors in type 1 diabetic patients by interactive frameworks. Proceedings of the American Medical Informatics Association (AMIA) Annual Symposium. 2009; 322-326. San Francisco, CA PMID: 20351873
- 121 Kharrazi H, Faiola A, Defazio J. Healthcare game design: behavioral modeling of serious gaming design for children with chronic diseases. *Proceedings of the 13th International Conference on Human-Computer Interaction (HCI-International)*. Part IV: Interacting in Various Application Domains. 2009; 335-344. San Diego, CA: Springer DOI: 10.1007/978-3-642-02583-9_37
- 122 Duke J*, Faiola A, <u>Kharrazi H</u>. A novel visualization tool for evaluating medication sideeffects in multi-drug regimens. *Proceedings of the 13th International Conference on Human-Computer Interaction (HCI-International).* Part IV: Interacting in Various Application Domains. 2009; 478-487. San Diego, CA: Springer DOI: 10.1007/978-3-642-02583-9_52
- 123 Abidi SR, Elvidge K, Kharrazi H, Shepherd M, Watters C, Duffy J. Reformulation of consumer health queries with standard medical vocabulary. *Proceedings of the 11th International Symposium on Health Information Management Research (iSHIMR).* 2006; 146-153. Halifax, NS URL: iSHIMR.pdf
- 124 Watters C, Oore S, Shepherd M, Abouzied A, Cox A, Kellar M, Kharrazi H, Liu F, Otley A. Extending the use of games in health care. *Proceedings of the 39th Annual Hawaii International Conference on System Sciences (HICSS)*. 2006; 88b. Kauia, HI: IEEE DOI: 10.1109/HICSS.2006.179
- 125 Kharrazi H, Paterson G, Thieu T, Wang Z. Transforming bone marrow transplantation data into a case-based reasoning system for decision support. Proceedings of the 5th Annual Symposium on Medical/Health Professions Education and Inter-Professional Learning. 2004; Halifax, NS: Dalhousie Press URL: 10.1.1.91.5895

Book Chapters

1 **Kharrazi H**, Horroks D, Weiner JP. Use of Health Information Exchanges for value-based care delivery and population health management: a case study of Maryland's Health

Information Exchange. In Dixon BE (Ed.) *Health Information Exchange; 2nd edition.* 2023; 523-542. Cambridge, MA: Academic Press. ISBN 978-0-323-90802-3. *DOI: 10.1016/B978-0-323-90802-3.00011-3*

- Allen KS, Gilliam NJ, Kharrazi H, McPheeters M, Dixon BE. Health information exchange: incorporating social and environmental determinants of health into health information exchange. In Dixon BE (Ed.) *Health Information Exchange; 2nd edition.* 2023; 423-433. Cambridge, MA: Academic Press. ISBN 978-0-323-90802-3. DOI: 10.1016/B978-0-323-90802-3.00023-X
- 3 Horrocks D, Ferris L, <u>Kharrazi H</u>. Health Information Exchange. Forthcoming in Weaver CA, Ball MJ, Kim GR, and Diel JM (Eds.) *Health Information Management Systems; 5th edition*. 2021; London UK: Springer-Verlag. ISBN 978-3-319-20764-3 URL: https://link.springer.com/book/10.1007/978-3-030-41215-9
- 4 Kharrazi H, Gamache R, Weiner JP. Role of Informatics in Bridging Public and Population Health. In Magnuson JA & Dixon BE (Eds.) *Public Health Informatics and Information Systems; 3rd edition.* 2020; 59-79. London UK: Springer-Verlag. ISBN 978-3-030-41215-9 URL: *https://link.springer.com/book/10.1007/978-3-030-41215-9*
- 5 Dixon BE, Kharrazi H, Papagari SR. Public Health Decision Support Systems. In Magnuson JA & Dixon BE (Eds.) Public Health Informatics and Information Systems; 3rd edition. 2020; 349-365. London UK: Springer-Verlag. ISBN 978-3-030-41215-9 URL: https://link.springer.com/book/10.1007/978-3-030-41215-9
- 6 Kharrazi H, Ehrenstein V, Lehmann H, Overby-Taylor, C. Obtaining Data from Electronic Health Records. In Gliklich RE, Leavy MB, Dreyer NA (Eds.) Tools and Technologies for Registry Interoperability, Registries for Evaluating Patient Outcomes: A User's Guide, 3rd Edition, Addendum 2. Rockville MD: AHRQ. 2019 URL: https://www.ncbi.nlm.nih.gov/books/NBK551878/ PMID: 31891455
- 7 Kharrazi H, Lehmann HP. Role of population health informatics in understanding data, information and knowledge. In Joshi A, Thorpe L, & Waldron L (Eds.) *Population Health Informatics: Driving Evidence-Based Solutions into Practice*. 2017; 65-89. Burlington, MA: Jones and Bartlett Learning. ISBN: 978-1-28-410396-0 URL 1: http://www.jblearning.com/catalog/9781284103960/ URL 2: https://www.amazon.com/Population-Health-Informatics-Evidence-Based-Solutions/dp/128410396X
- 8 Kharrazi H, Horrocks D, Weiner JP. Use of HIEs for value-based care delivery: a case study of Maryland's HIE. In Dixon B (Ed.) *Health Information Exchange: Navigating and Managing a Network of Health Information Systems*. 2016; 313-332. Cambridge, MA: Academic Press Elsevier. ISBN: 978-0-12-803135-3 URL 1: https://www.elsevier.com/books/health-information-exchange/dixon/978-0-12-803135-3 URL 2: www.amazon.com/Health-Information-Exchange-Navigating-Managing/dp/0128031352

* Received the 2016 "HIMSS Book of the Year Award": http://www.himss.org/awards/book-of-the-year

- 9 Lu AS, Kharrazi H, Baranowski T. Digital games for nutrition and healthy eating: a systematic review. In Dadaczynski K, Schiemann S & Paulus P (Eds.), *Health promotion through gaming? Potentials and challenges of digital games for health promotion and prevention* (in German). 2016; 261-281. Basel, Germany: Beltz Juventa. ISBN: 978-3-7799-3342-7 URL: https://www.beltz.de/fachmedien/erziehungs_und_sozialwissenschaften/buecher/produkt_produktdetails/30471gesundheit_spielend_foerdern.html
- 10 Faiola A, Kharrazi H. Diabetes education and serious gaming: teaching adolescents to cope with diabetes. In Hayes B & Aspray W (Eds.), *Health Informatics: A Patient-Centered Approach to Diabetes.* 2010; 151-177. Cambridge, MA: MIT Press. ISBN: 978-0-262-01432-8 URL: http://mitpress.mit.edu/books/health-informatics
- 11 Watters C, Oore S, Kharrazi H. Games for children with long-term problems. In Kaufman D & Sauvé L (Eds.), Educational Gameplay and Simulation Environments. 2010; 286-302. Hershey, NY: Information Science Reference. ISBN: 978-1-616-92242-9 URL: http://www.igi-global.com/book/educational-gameplay-simulation-environments/37262

Reports

- Stewart M, Rosen M, Kharrazi H, Vass M, Zhang A, Sharma R, Bass E. Patient Safety Practices to Address Harms Resulting from Patient-Clinician Real-Time Clinical Encounters using Video-based Telehealth: A Rapid Evidence Review. *Agency for Healthcare Research and Quality (AHRQ).* 2023 [in-press]
- 2 Hatef E, Wilson RF, Hannum SM, Zhang A, Kharrazi H, Weiner JP, Davis SA, Robinson KA. Use of Telehealth During the COVID-19 Era. Systematic Review. *Agency for Healthcare Research and Quality (AHRQ)*. Jan 2023. Contract No. 75Q80120D00003. AHRQ Publication No. 23-EHC005. DOI: 10.23970/ahrqepcsrcovidtelebealth
- 3 **Kharrazi H**, Roblin DW, Weiner JP. Developing and Assessing the Validity of Claims-based Indicators of Frailty & Functional Disabilities and Testing their Use in Other Data. *Agency for Healthcare Research and Quality (AHRQ)*. Nov 2022. Contract No. 75Q80120D00015. AHRQ Publication No. 22-0058. URL: https://www.ahrq.gov/sites/default/files/wysiwyg/learning-health-systems/frailty-ehr.pdf

4 Kharrazi H, Hatef E, Lasser E, Woods B, Rouhizadeh M, Kim J, DeCamp L. A Guide to Using Data from Johns Hopkins Electronic Health Record: Identifying Research Needs and Assessing the Availability of Behavioral and Social Variables. Sep 2018. Johns Hopkins School of Medicine ICTR National Center for Advancing Translational Sciences (NCATS). Sep 2018. UL1 TR001079

URL: https://ictr.johnshopkins.edu/wp-content/uploads/Phase2.Epic_.Social.Guide_2018.06.30_final.pdf

5 Ford E, Kim J, **Kharrazi H**, Gleason K, Gumas D, DeCamp L. A Guide to Using Data from EPIC, MyChart, and Cogito for Behavioral, Social and Systems Science Research. *Johns Hopkins*

School of Medicine ICTR National Center for Advancing Translational Sciences (NCATS). Apr 2018. UL1 TR001079 URL: https://ictr.johnshopkins.edu/wp-content/uploads/Phase1.Epic_Social.Guide_2018.04.30_final.pdf

- 6 Bennett W, Cheskin LJ, Wilson RF, Zhang A, Tseng E, Shogbesan O, Knapp EA, Stuart E, Bass EB, Kharrazi H. Methods for Evaluating Natural Experiments in Obesity: A Systematic Evidence Review. Agency for Healthcare Research and Quality (AHRQ). Dec 2017. Contract No. 290-2012-00007-I. AHRQ Publication No. 18-EHC006-EF URL 1: https://effectivebealthcare.ahrq.gov/sites/default/files/pdf/cer-204-obesity-prepublication.pdf URL 2: https://unwn.ncbi.nlm.nih.gov/books/NBK493804 PMID: 29708675 DOI: 10.23970/AHRQEPCCER204
- 7 Wilcox H, Wissow L, Kharrazi H, Wilson RF, Musci RF, Zhang A, Robinson KA. Data Linkage Strategies to Advance Youth Suicide Prevention. *Agency for Healthcare Research and Quality (AHRQ)*. Oct 2016. Contract No. 290-2012-00007-I. AHRQ Publication No. 16(17)-E001-EF

URL1: https://www.ncbi.nlm.nih.gov/pubmed/30307734 URL2: https://www.ncbi.nlm.nih.gov/books/NBK390956/ DOI: 10.23970/AHRQEPCERTA222

* Received AHRQ's "Dr. Robert Lewis Kane Memorial Award"

- 8 Sorace J, Patel V, Kharrazi H, Boone E, Kemper N, Rafiqi F, Yencha R, Samarth A. Measurement of Interoperable Electronic Health Care Records Utilization. Office of the Assistant Secretary for Planning and Evaluation (ASPE). Aug 2016. Contract No. HHSP233201500099I_HHSP23337001. ASPE Publication No. 255526 URL: https://aspe.hhs.gov/sites/default/files/pdf/255526/EHRUtilizationReport.pdf
- 9 Kharrazi H. Evaluation of Stage 3 Meaningful Use Objectives: Maryland and Arkansas. Agency for Healthcare Research and Quality (AHRQ). Apr 2015. Contract No. HHSA 290-2010-00027-I. AHRQ Publication No. 15-0032-EF URL: https://bealthit.ahrq.gov/sites/default/files/docs/citation/evaluation-stage-3-meaningful-use-md-ar-final-report.pdf

Other Publications (invited editorials, letters, and consortia authorships)

- Bennett TD, et al. [Kharrazi H part of the N3C Consortium group authors]. Clinical Characterization and Prediction of Clinical Severity of SARS-CoV-2 Infection Among U.S. Adults Using Data from the U.S. National COVID Cohort Collaborative. JAMA Netw Open. 2021 Jul 1; 4(7): e2116901 PMID: 34255046 DOI: 10.1001/jamanetworkopen.2021.16901
- 2 Staes CJ, Jellison J, Kurilo MB, Keller R, <u>Kharrazi H</u>. Response to authors of 'Barriers to Hospital Electronic Public Health Reporting and Implications for the COVID-19 Pandemic'. J Am Med Inform Assoc. 2020; 27(11): 1821-1822 PMID: 33001156 DOI: 10.1093/jamia/ocaa191
- 3 Haendel M, et al. [Kharrazi H part of the N3C Consortium group authors]. The National

COVID Cohort Collaborative (N3C): rationale, design, infrastructure, and deployment. J Am Med Inform Assoc. 2020; 28(3): 427-443 PMID: 32805036 DOI: 10.1093/jamia/ocaa196

- 4 Kharrazi H, Gudzune K, Weiner JP. A population health segmentation framework for balancing medical need and COVID-19 risk during and after the pandemic. Health Affairs (HAff). 2020 URL: link
- 5 Chang H-Y, **Kharrazi H**, Weiner JP. JHU CPHIT team details costs, predictors of opioid abuse. *Predictive Modeling News*. 2018; 11 (6): 1, 6-7. URL: http://www.predictivemodelingnews.com
- 6 Kan HJ, **Kharrazi H**, Weiner JP. Hopkins researchers validate using senior risk factors to predict utilization. *Predictive Modeling News.* 2018; 11 (4); 1, 4-6. URL: *http://www.predictivemodelingnews.com*
- 7 **Kharrazi H**, Weiner JP. A practical comparison between the predictive power of populationbased risk stratification models using data from EHRs versus administrative claims: setting a baseline for future EHR-derived risk stratification models. *Med Care*, 2017; 56(2), 202-203 *PMID: 29200132 DOI: 10.1097/MLR.00000000000849*
- 8 **Kharrazi H**, Chang H-Y, Weiner JP. Hopkins team sees risk stratification value in Rx fill data. *Predictive Modeling News.* 2017; 10 (11); 1, 4-5. URL: http://www.predictivemodelingnews.com
- 9 Kharrazi H. The role of health IT in value-based care. Management Rounds. Johns Hopkins Master of Health Administration Program, 2015; 1 (10): 1-2 URL: MR_single_pages_August_28_2015.pdf

PRACTICE ACTIVITIES

Presentation to Policymakers

2014-2014	Population Health Informatics Agenda Institute of Medicine, DC
2014-2014	HIE-Centric Population Health Analytic Framework Department of Health and Mental Hygiene, Baltimore MD

Software Development

2015-2016	Free-text HIPAA Scrubber (completed)
2015-2016	Medication Complexity HOME Tool (completed)
2012-	eACGs (EHR-based ACGs; long-term development)

Media

- 1 Kharrazi H. (interview) in DST Health. Can populations be risk stratified using only EHR data? Apr 2018. https://www.dstsystems.com/insights/hc-population-risk-stratified-ehr-data
- 2 **Kharrazi H**. (interview) in David R. Improving efficiency, quality through population health. Managed Healthcare Executive. Sep 2015. http://managedhealthcareexecutive.modernmedicine.com/managed-healthcare-executive/news/improving-efficiency-qualitythrough-population-health
- 3 **Kharrazi H**. (interview). Games Studies Insight. Digital Games Research Center. Aug 2015. http://direc.com/Uploads/GameStudiesInsightsNo4.pdf
- 4 Kharrazi H. (interview) in Haber G & Kessler B. Electronic medical records (EMRs) have security advantages, but systems aren't perfect. York Daily Records. Jun 2014. http://www.ydr.com/local/ci_26004767/electronic-medical-records-have-security-advantages-but-systems
- 5 Kharrazi H. (interview) in Levin-Epstein M. Mobile health: Real game-changer. Managed Care. Oct 2013. http://www.managedcaremag.com/archives/2013/10/mobile-health-real-game-changer
- 6 **Kharrazi H**. (interview) in 'Heart + Mind Strategies'. Innovations to improve the quality of healthcare in the United States. 2013.
- 7 Kharrazi H. (interview) in AHC Media. Games people play could be good for their health, sense of empowerment. Dec 2009. https://www.ahcmedia.com/articles/115167-games-people-play-could-be-good-for-their-health-sense-of-empowerment

CURRICULUM VITAE Hadi Kharrazi PART II

TEACHING

Advisees

Masters	Thesis Mentor or Capstor	ne Supervisor	(33 master students)
2022-	Haibin Bai TBD	MSc advisor and thesis supervis	Sor
2022-	Kanimozhi Raja TBD	MSc advisor and thesis supervis	Sor
2021-	John Harry Munroe TBD	MPH advisor and capstone sup	ervisor
2020-	Anjali Srivastava TBD	MPH advisor and capstone sup	ervisor
2020-	Zachary Goldberg TBD	MPH advisor and capstone sup	ervisor
2020-	Shidin Balakrishnan TBD	MPH advisor and capstone sup	ervisor
2020-	Yuko Takiyoshi "What is the important factor for s	MPH capstone supervisor troke upper limb paralysis recovery? A pilot study	for developing model"
2017-	Masatoshi Ishikawa TBD	MPH advisor and capstone sup	ervisor
2017-	Amyna Husain "Using novel sources of data to deta	MPH advisor and capstone sup ermine the prevalence and factors associated with per	ervisor liatric falls in Maryland"
2019-2021	Mukesh Hamal "Utilization of social determinants department patients in Maryland,	DHSI MSc advisor and capstor of health-related ICD-10-CM codes among hospite United States, 2016–2018"	ne supervisor alized and emergency
2019-2020	Carin Hitchens "The impact of social determinants	MPH advisor and capstone sup of health on emergency department utilization: a sys	ervisor stematic review"
2019-2020	Hana Schwartz "Assessing the risk of bias among s scoping review"	MPH capstone supervisor and predictive model developments of emergency dep	practicum receptor bartment utilization: a
2019-2020	Wei Chen "Predicting falls among older adult.	Epi MSc thesis supervisor s of Maryland using hospital discharges and geo-der	ived social data"
2017-2019	Joseph Mercado "Prevalence of Chronic Kidney Dis	DHSI MSc advisor and capstor ease in the Maryland Area using HCUP data"	ne supervisor

2016-2019	Gahyun BahnMPH advisor and capstone supervisor"Postpartum infection as a predictor of utilization and cost: a retrospective study of Maryland hospital discharges"
2016-2019	Cristina Mannie MPH advisor and capstone supervisor "A geographical distribution of the health status and associated financial risk of commercially insured lives in 2016 and 2017 in South Africa: bridging the gap between population health management and public health"
2017-2018	Xiaomeng MaDHSI MSc advisor and capstone supervisor"Geographical distribution of disease comorbidity among Maryland residents admitted to hospitals, 2013-2014"
2017-2018	Ariel CaldwellMPH Epi/Biostat capstone supervisor"Using B'FRIEND data and platform to develop and test predictive risk models for falls in elder adults"
2016-2018	Kristen HarveyMPH advisor and capstone supervisor"Electronic health records, primary care providers and burnout"
2016-2017	Takako KanakuboMPH-MBA advisor and capstone supervisor"The requirement for Meaningful Use and cost-effectiveness of EHR in Japanese universal healthcare system"
2016-2017	Jimmy SmallMPH advisor and capstone supervisor"Evaluation of priority case management member identification by a predictive model of patients at high-risk for future facility utilization for a Medicare advantage health plan in three counties of upstate New York"
2016-2017	Afifah HandayaniMPH capstone supervisor and practicum receptor"A systematic review of readmission prediction models: An informatics perspective"
2015-2018	Kathryn EsperMPH advisor and capstone supervisor"Utilize population health data to propose a strategy for value-based care delivery models following industry research"
2014-2016	Virna SalesMPH advisor and capstone supervisor"Meaningful use of health information technology in cardiac surgery: developing real-time clinical registries"
2014-2015	Janani Veluchamy MPH advisor and capstone supervisor "Evaluating the AECS data systems and proposing a data flow to monitor patients through the continuum of care of diabetic retinopathy"
2015-2016	Sarah YounMPH advisor and capstone supervisor"Measuring population health metrics based on existing population-wide data in Maryland: Challenges and opportunities"
2014-2016	Brett Cropp DHSI MSc thesis supervisor "Exploring the impact of HIE-based geo-data on 30-day hospital readmission"
2014-2015	Jeffrey BalsewiczMPH advisor and capstone supervisor"An analysis of potentially preventable emergency department visits in Illinois"
2013-2015	Matthew SwainMPH advisor and capstone supervisor"Assessing the utility of electronic health information exchange transaction data to predict 30-day hospitals readmissions"
2013-2014	Stella UkaomaMPH advisor and capstone supervisor"Smartphone apps for breast cancer awareness and treatment: Health consumer needs and current apps available"
2013-2014	Oscar Minosco y de Cal MPH advisor and capstone supervisor "The HITECH act: Emerging issue for the healthcare professional"

2013-2014	Shmuel Goldberg "Leveraging the SHIN-NY (HIE) to	MPH advisor and capstone su advance the consumer m-health market"	pervisor
2013-2014	Senyo Norgbey "Exploring the readiness for 'meaningfu combined AHA annual survey and CN	DHSI MSc capstone supervise I use' of EHRs among eligible hospitals: A AS attestation datasets"	D r feasibility study within a
Masters	Advisor, Practicum Preceptor	, or Committee Member	(12 master students)
2018-2019	Ritu Doijad	DHSI MSc	
2018-2019	Gan Shi	DHSI MSc	
2017-2019	Colleen Line	MPH	
2017-2019	Susan Whitfield	DHSI MSc	
2017-2019	Allen Cassandra	DHSI MSc	
2016-2018	Angela Chen	DHSI MSc	
2016-2018	James Graziano	MPH	
2014-2015	Mayank Patel	DHSI MSc	
2014-2016	Adler Archer	DHSI MSc	
2014-2015	Allyson Helmer	MPH	
2013-2014	Damilola Onasanya	MPH	
2013-2014	Yash Deo	MPH	
Doctoral	Advisor or Thesis Mentor/Su	pervisor	(17 doctoral students)
2022-	Lingwei Xiang TBD	DrPH advisor	
2022-	Claudia Pulgarin <i>TBD</i>	DrPH co-advisor	
2022-	Jefferson McMillan-Wilhoit TBD	DrPH advisor	
2022-	Anas Belouali <i>TBD</i>	PhD advisor and thesis mento	or
2021-	Ying Zhang TBD	DrPH co-advisor and thesis m	nentor
2021-	Monisola Malomo <i>TBD</i>	DrPH co-advisor and thesis m	nentor
2021-	Sile Yu <i>TBD</i>	DrPH co-advisor (deferred ma	atriculation to 2022)
2020-	Eric [Weiqi] Liu "The application of artificial intelligence	DrPH thesis mentor (Tsinghu in radiology management" (tentative)	a Cohort)
2019-	Victor Bagwell TBD	DrPH advisor and thesis men	tor
2018-	Keane Tzong	DrPH advisor and thesis men	tor

	"The clinical value of unstructured electron dementia"	ic health record data in the diagnosis of Alzheimer's disease and related
2018-	Paulina Sosa "Conceptualizing and assessing health equi immediate public-health decision-making" Received the 2022 Charles Flagle	DrPH advisor and thesis mentor ity representation in COVID-19 dashboards and their effect on (tentative) e Award from JHU
2018-	Prince Baawuah "Individual and community-level factors as beneficiaries during the COVID-19 pand ★ Received the 2022 Pearl and Jere	DrPH co-advisor and thesis co-mentor sociated with telehealth utilization among vulnerable Medicare demic" emiah German Scholarship
2017-	Haoying (Echo) Wang "Bias in health services risk prediction models" day hospital readmission risk models" (the Received the 2022 Charles Flagh	DrPH advisor and thesis mentor dels: conceptualizing and measuring bias in the context of all-cause 30- esis defense scheduled for Dec 2022) de Award from JHU
2017-	Jennifer Chase TBD	DrPH advisor and thesis mentor
2016-	Priyanka Dua Sood "Assessing the effect of data quality in pre- type 2 diabetes population using electronic	DrPH advisor and thesis mentor dicting healthcare utilization and potential disparities in outcomes of health records and insurance claims"
2019-2020	Rebecca Hyde	HPM PhD advisor (medical leave)
2016-2018	Stella Liang	DrPH advisor (transferred to Drexel)

Doctoral	Thesis Committee Member	(20+ doctoral students)
2020-	Xiyu Ding TBD	PhD thesis committee
2020-	Elizabeth (Bess) Nieto TBD	DrPH thesis committee
2020-	Ting (Helen) He TBD	DHSI PhD thesis committee
2019-	Eunkyung (Eileen) Han "Integration of acute care and long-ten Korea"	DrPH thesis committee rm care for older adults with incontinence: A nationwide study in South
2019-	Ahmed Elsayed "Exploring the effect of density and p Maryland"	DrPH thesis committee proximity to healthcare services on high-utilizer status of residents of
2019-	Shanshan Song * R <i>ecipient of AMLA's 2022 I</i>	DHSI PhD thesis committee
2018-	Ebele Okoli "Assessing telemedicine care patterns	DrPH thesis committee and patient experiences in vulnerable populations in a large healthcare

	delivery system during the COVID-19) pandemic"	
2016-	Matt Castner "Social determinants of health, access to	DrPH thesis committee o care and suicide prediction models"	
2017-2021	Ben Hamlin "A consensus-based data quality decisi measurement programs"	DrPH thesis committee ion model for patient reported outcome information in digi	tal quality
2016-2021	Elyse Lasser "Assessing social and behavioral data"	DrPH thesis committee in electronic health records: availability, accuracy, and ap	plicability"
2014-2020	Bowen Li "A deep learning based data-quality se	DHSI PhD thesis committee (incomp ervices framework for secondary uses of clinical data"	lete)
2016-2020	Supharerk (Pai) Thawillarp "Assessment of Thailand HIV data q	DrPH thesis committee quality and its impact to UNAIDS 90-90-90"	
2016-2020	Harlan Pittell "Primary non-adherence to medication:	PhD thesis committee new evidence from electronic health records"	
2017-2019	Sarah Green Gensheimer "Association of housing insecurity india	PhD thesis committee (topic changed) cators in electronic health records with utilization and hea	lth outcomes"
2015-2019	Lindsey Ferris "Using Predictive Models and Linked ★ Received the 2019 Extraordina	DrPH thesis committee Datasets to Understand Risk of Fatal Opioid Overdose rry Women in Health IT Leadership Award	'n
2014-2018	Paul Messino "The effect of achieving meaningful use childhood immunization status scores"	DrPH thesis committee among Maryland Medicaid managed care network provid	ders on HEDIS
2013-2018	Ashimiyu Durojaiye "A novel approach for the investigation electronic health record data"	DHSI PhD thesis committee a of multidisciplinary collaboration using social network a	nalysis on
2015-2017	Roza Vazin "Evaluation and description of the CR notification service"	PhD thesis committee (topic changed) USP [Maryland's Statewide Health Information Exchanged]	nge] encounter
2014-2016	Joy Lee "Patient-reported satisfaction and prov	PhD thesis committee ider use of novel communication technologies"	
2013-2015	Olatunde Animashaun	DrPH thesis committee (unfinished)	
2014-2015	Remle Newton-Dame "Obesity surveillance in the age of Big.	DrPH thesis committee (unfinished) Data"	
PostDoc	Mentor		(4 post doctorates)
2018-	Kevon Jackman "Worldwide electronic sexual health in	PostDoc co-mentor formation notification and education (weSHINE)"	
2016-2018	Kelly Searle "Identifying the geospatial distribution	PostDoc co-mentor of obesity among the VA patients"	

2016-2017	Claudia Nau	PostDoc co-mentor	
	''Prevalence of obesity among V	HA patients: A national demographic analysis"	
2015-2016	Kirill Dyagilev	PostDoc co-mentor	
	"Predicting the trajectory of healthcare utilization among patients with type 2 diabetes"		

Others	Medical Students, Fellows,	and Undergraduates	(12 fellows)
2021-	Steph Nothelle, MD	Gerontology; K-grant committee	
2021-	Paul Nestadt, MD	Psychiatry; K-grant committee	
2021-	Jacob Balin	MD research rotation	
2020-	Cindy Cai, MD	Ophthalmology; K-grant committee	
2019-	Aly Straus, MD	Gastroenterology; K-grant committe	ee
2018-2020	Majid Shafiq, MD "Sub-phenotyping unexplained pleur	Interventional Pulmonologist ral effusion using cluster analysis"	
2019-2020	Daniel Shenker	Math BSc	
2018-2019	Ashley Li "Data quality issues of demographic	BME BSc s data in HCUP data"	
2017-2018	Christopher Britt "Vestibular-Related Falls in Maryu	Fellowship: ENT Surgeon <i>land: 2013-2015"</i>	
2015-2017	Anand BeryMD research rotation"A systematic review of the feasibility of implementing frailty measures in EHRs: Meaningful use implications"		
2015-2017	Laura AnzaldiMD research fellowship"Predicting fall among Baltimore elderly residents"; "Developing 30-day hospital readmission prediction models"& "Extracting frailty concepts from medical records using natural language processing tools" & "Developing aPHI-scrubbing automated tool: Challenges and opportunities"		
2015-2016	Morgan Opie Informatics Training In Place Progr	Maryland Department of Health - C am (i-TIPP)	DC PHI
2017-2019	Kathryn Foti "Improving hypertension control amo	Epi PhD ong U.S. adults nearing Medicare eligibility: future healt.	h implications"
2017-2019	Sonia Sarkar	DrPH	

Departmental Oral Participation (Departmental Proposal Defense)

2021	Paulina Sosa	DrPH
2021	Ebele Okoli	DrPH (alternate)
2021	Prince Baawuha	DrPH
2020	Haoying (Echo) Wang	DrPH
2020	Ben Hamlin	DrPH
2020	Matt Castner	DrPH
2019	Ahmed Elsayed	DrPH

2019	Supharerk (Pai) Thawillarp	DrPH
2019	Harlan Pittell	HPM PhD
2019	Sarah Green Gensheimer	HPM PhD
2017	Lindsey Ferris	DrPH
2016	Roza Vazin	HPM PhD
2014	Paul Messino	DrPH
2014	Joy Lee	HPM PhD

Preliminary Oral Participation (School Proposal Defense)

2021	Paulina Sosa	DrPH
2021	Prince Baawuha	DrPH
2021	Matt Castner	DrPH
2021	Haoying (Echo) Wang	DrPH
2020	Eunkyung (Eileen) Han	DrPH (alternate)
2020	Ahmed Elsayed	DrPH
2020	Ben Hamlin	DrPH
2018	Elyse Lasser	DrPH (alternate)
2019	Supharerk (Pai) Thawillarp	DrPH
2019	Harlan Pittell	HPM PhD
2019	Sarah Green Gensheimer	HPM PhD
2018	Ashimiyu Durojaiye	DHSI PhD
2017	Lindsey Ferris	DrPH
2016	Roza Vazin	HPM PhD
2015	Paul Messino	DrPH
2014	Joy Lee	HPM PhD

Final Oral Participation (Thesis Defense)

2021	Ben Hamlin	DrPH
2021	Elyse Lasser	DrPH
2020	Supharerk (Pai) Thawillarp	DrPH
2019	Lindsey Ferris	DrPH
2018	Paul Messino	DrPH
2014	Brad Smith	DrPH (alternate)
2014	Edrees Hanan	DrPH (alternate)

Non-JHU Academic Advisees

2019-2022 Bijan Farhoudi PhD thesis committee @ U Calgary "Using advanced deep-learning methods to analyze MRI data for epilepsy" Academic Career: TBD

2021-2022	Jiwan Ghoseiri "Measuring quality of demographi * Received the High School Scho	High School Scholar @ Maryland ic data captured in hospital discharge reports" olar Competition @ AMIA 2022
2018-2019	Daphnie Liu "Discovering the unclassified suicie Academic Career: BSc CS @ Sta * Received the High School Scho	High School Scholar @ Utah de cases among undetermined drug overdose deaths using ML techniques" anford olar Competition @ AMIA 2019
2015-2018	Suheila Sawesi "Reducing non-adherence aromata Academic Career: Assistant Scien	PhD thesis committee @ IU se inhibitors and Tamoxifen regimens among breast cancer patients" atist @ Tufts University
2015-2018	Maryam Zolnoori "Seeking support on Facebook: A Academic Career: Assistant Scien	PhD thesis committee @ UWM content analysis of depression groups" atist @ Mayo Clinic & Columbia University
2012-2016	Amir Karami "Fuzzy Approach Topic Models J Academic Career: Assistant Profe	PhD thesis committee @ UMBC for Medical Corpus" essor @ University of South Carolina
2012-2013	Tamara Locke [Blue] "Unlocking the potential use of via Deficiency/Hyperactivity Disorder	MSc thesis mentor @ IU deo games in behavioral therapy in of young children with Attention r (ADHD)"
2012-2013	Sung Park "Exploring the patient identificati Indiana network for patient care (MSc thesis committee @ IU ion process between Indianapolis emergency medical service (I-EMS) and INPC)"
2011-2012	Stu Morton "An improved utility driven appro	PhD thesis committee @ IU pach towards k-anonymity using data constraint rules"
2011-2012	Wilfred Portillo "Mobile technology to improve add	MSc thesis mentor @ IU perence in patients with diabetes: A systematic review"
2010-2012	Lynn Vincz "Increasing physical activity by im	MSc thesis mentor @ IU plementing a behavioral change intervention using information technology"
2010-2012	Uche Unogu "Building a social network-oriente	MSc thesis mentor @ IU d web based personal health record to increase physical activity"
2009-2011	Nick Adam Stepp "The personal health record: Help consumer perceptions"	MSc thesis committee @ IU ing to create an attitude for use by comparing and contrasting provider and
2009-2011	Fardad Gharghabi	MSc thesis committee @ IU
2009-2011	Wei Kong "Exploring health website users b	MSc thesis committee @ IU y web mining"
2011-2013	Kislaya Kunjan	PhD advisor @ IU
2011-2012	Joe Clark	BSc mentor @ IU
2010-2012	Abdul Jabour	PhD advisor @ IU

2009-2011	Ziad Khader	PhD advisor @ IU
2009-2011	Douglas Rammel	PhD advisor @ IU
2009-2011	Saeed Mehrabi	PhD advisor @ IU
2009-2010	Prathik Gadde "Developing a robotic test bed for monitorin	MSc thesis committee @ IU ng and increasing exercise adherence in older adults"
2009-2010	Heather Coates "Exploring the exchange of social support is with an autism spectrum disorder"	MSc thesis committee @ IU within the social networks of maternal caregivers for children diagnosed
2008-2010	Christine BenMessaoud "Uncovering the causes of the slow adoption	MSc thesis committee @ IU a of robotic surgery"

Classroom Instruction

2020-	Population Health: Analytic Methods and Visualization Techniques		
	Johns Hopkins	School of Public Health	
	Role:	Principal Instructor	
	Type:	Graduate course	
	Tasks:	Developed the curriculum	
		Developed educational content	
2020-	Health Info	rmatics Research Methods & Mentored Research	
	Johns Hopkins	School of Medicine	
	Role:	Principal Instructor	
	Type:	Graduate course	
	Tasks:	Developed the curriculum	
		Developed educational content	
2017-	Population	and Consumer Health Informatics (OPAL)	
	Johns Hopkins	School of Public Health	
	Role:	Principal Instructor	
	Type:	Graduate course for MAS PHM	
	Tasks:	Developed the curriculum	
		Developed educational content	
2012-	Population	Health Informatics	
	Johns Hopkins	School of Public Health	
	Role:	Principal Instructor	
	Type:	Graduate course for MPH & PhD	
	Tasks:	Redesigned the curriculum	
		Developed and recorded most of the lectures	
		Conducted the live sessions	
2015-	DrPH and	PhD Doctoral Seminars (HPM & Mental Health)	
	Johns Hopkins	School of Public Health	
	Role:	Guest Lecturer	
	Type:	Graduate course for DrPH and PhD	
	Tasks:	Developed various sessions on HIT	
2015-2018	Principles of	of HIT for HPM (Summer Institute)	
	Johns Hopkins	School of Public Health	
	Role:	Principal Instructor	
	Type:	Graduate course for MPH	
	Tasks:	Redesigned and developed the curriculum	
		Developed educational content	
2015-2017	Advances in	n HIT and Preventative Medicine Applications	
	Johns Hopkins	School of Public Health	
	Role:	Principal Instructor	
	Type:	Graduate course for Preventative Medicine Residents	
	Tasks:	Redesigned and developed the curriculum	
		Developed educational content	
2015-2018	Research ar	nd Evaluation Methods for Health Policy	
	Johns Hopkins	School of Public Health	
	<i>J I</i>	J	

	Role:	Guest Lecturer
	Type:	Graduate course for MPH and PhDs
	Tasks:	Developed a session on Big Data and HPM
2015-2018	Fundamen	tals of Health Policy and Management
	Johns Hopkin	s School of Public Health
	Role:	Guest Lecturer
	Type:	Undergraduate course
	Tasks:	Developed a session on Health Information Exchanges
2015-2018	Digital Hea	alth for Medical Students
	Johns Hopkin	s School of Medicine
	Role:	Guest Lecturer
	Type:	Graduate course for MD students
	Tasks:	Developed a session on HIT policies in clinical care
2015-2016	Web Analy	rtics for Public Health (Fall Institute – Barcelona)
	Johns Hopkin	s School of Public Health & UPF
	Role:	Principal Instructor
	Type:	Graduate course for MPH and others
	Tasks:	Developed the curriculum
		Developed educational content
2012-2014	Health Infe	ormation Systems: Design to Development
	Johns Hopkin	s School of Public Health
	Role:	Guest Lecturer
	Type:	Graduate course for MPH & PhD
	Tasks:	Conducted two live sessions on HIEs
2012-2013	Concepts,	Theories and Current Trends in Health Informatics
	Johns Hopkin	s School of Public Health / Summer Institute
	Role:	Guest Lecturer
	Type:	Graduate course
Other Significant	Teaching (before)	ioinine IHU)
2009 2012	Clinical De	original Support Systems
2007-2012	Indiana Univ	meito Dundua Universito Indianatolio
	Tuta	Finite Oniversity Indunupous Elective and unterseation HI MSs of DbD
	Type. Tasks:	Principal instructor; Curriculum developer
2009-2012	Fundamen	tals of Clinical Care in Health Informatics
2007 2012	Indiana Unive	eris of Similar Sale in Heatin mistination
	Tupe	Core oraduate course for HI MSc d' PhD
	Tasks:	Principal instructor; Curriculum developer
2009-2012	Health Infe	ormation Exchange
	Indiana Unive	ersity Purdue University Indianapolis
	Type:	Elective graduate course for HI MSc & PhD
	Tasks:	Principal instructor; Curriculum developer
2008-2012	Foundation	n of Health Informatics
	Indiana Unive	rsity Purdue University Indianapolis
	Type:	Core graduate course for HI MSc & PhD

	Tasks:	Principal instructor; Curriculum developer
2008-2012	Web-Databa Indiana Univers Type: Tasks:	ase Concepts in Health Informatics sity Purdue University Indianapolis Core graduate prerequisite course for HI MSc & PhD Principal instructor; Curriculum developer
2008-2012	Independen Indiana Univers Type: Tasks:	t Study / Rotations / Thesis in HI sity Purdue University Indianapolis Core graduate research course/thesis for HI MSc & PhD Principal mentor; Thesis supervisor; Chair
2008-2010	Clinical Info Indiana Univers Type: Tasks:	ormation Systems sity Purdue University Indianapolis Core graduate course for HI MSc ざ PhD Principal instructor; Curriculum developer
2006-2008	Electronic I Dalbousie Univ Type: Tasks:	nformation Management ersity, Canada Core undergraduate course Principal instructor; Curriculum developer
2006-2008	Clinical Dec Dalhousie Univ Type: Tasks:	ersity, Canada Elective graduate course for HI MSc & PhD Principal instructor; Curriculum developer
2006-2008	Clinical Proo Dalhousie Univ Type: Tasks:	cesses and Decision Making II versity, Canada Core graduate course for HI MSc Principal instructor; Curriculum developer
2006-2008	Health Info: Dalhousie Univ Type: Tasks:	rmation Flow and Use versity, Canada Core graduate course for HI MSc ざ PhD Teaching assistant, Lab lecturer
2006-2008	IT Project N Dalhousie Univ Type: Tasks:	Management versity, Canada Core graduate course for HI MSc ざ PhD Teaching assistant
2011-2012	Serious Gan Indiana Univers Type:	ning sity Purdue University Indianapolis Elective undergraduate course
2005-2008	Networking Dalhousie Univ Type: Tasks:	g and Databases for Healthcare eersity, Canada Core graduate course for HI MSc ざ PhD Teaching assistant, Lab lecturer
2005-2008	Computer S Dalhousie Univ Type: Tasks:	cciences for Health Professionals persity, Canada Core undergraduate course for health professionals Teaching assistant, Lab lecturer

RESEARCH GRANT PARTICIPATION

Awarded - Ongoing

ID	(#1) JHU Kaiser Permanente
Title	"Development of a Pulmonary Embolism Research Database from EHR Data"
Funding	Internal (JHU ICTR & KP Mid-Atlantic)
Period	04/2023 - 04/2024
Role	Co-Investigator; PIs: Ellenbogen M & Roblin DW
Total	\$75,000
Topic	The objectives of this project are to: (1) develop detailed measurement specifications that identify patients at risk for PE and capture patient, provider, and healthcare system factors that might affect PE testing and diagnosis; (2) identify EHR sources of data and write, implement, and test computer code to extract EHR data and operationalize study measures; and (3) create and document the PE analytic dataset for future epidemiologic and health services analyses and research proposals.
ID	(#2) 1R01MH128518
Title	"NATIVE RISE-Risk Identification for Suicide and Enhanced care for Native Americans"
Funding	National Institute of Mental Health (NIMH)
Period	06/2023 - 06/2027
Role	Co-Investigator; PI: Haroz E
Total	\$3,993,303
Topic	NATIVE-RISE a systems level strategy to suicide prevention that combines service-ready tools based on predictive analytics with risk- stratified evidence-based care for Native American adults. They will use a Hybrid Type-III stepped wedge cluster randomized trial and mixed methods, to improve the reach of Brief Contact Interventions, evidence- based suicide prevention approaches shown to reduce suicide attempts and deaths. Implementing predictive analytics and risk-stratified care to help extend the reach of evidence-based suicide prevention programs to communities with the highest needs, is paramount to reducing related health disparities.
ID	(#3) JHU Kaiser Permanente
Title	"EHR-Based Detection of Frailty Risk to Improve Care Management Among Older Adults"
Funding	Internal (JHU ICTR & KP Mid-Atlantic)
Period	04/2022 - 04/2023
Role	Principal Investigator: Co-PI: Roblin DW
Total	\$75,000
Topic	The objectives of this project are to: (1) develop an NLP algorithm to collect valid measures of social risks and needs from the Johns Hopkins Medical Institute (JHMI) and Kaiser Permanente (KP) EHR Epic-based platforms; (2) validate the NLP algorithm through expert review and quantitative tests of precision and recall; and (3) elicit the opinions of JHU and KP stakeholders as to the value and generalizability of the NLP algorithm for improving patient care and outcomes, and mitigating socioeconomic disparities across individuals and communities.
ID	(#4) OT2HL161847 (subcontract from NYU)
Title	"The RECOVER Post-Acute Sequelae of SARS-CoV-2 (PASC) Electronic Health Record (EHR)
	Cohort Study"
Funding	NIH
-	

Period	10/2021 - 05/2022
Role	Co-Investigator; PIs: Katz, Horwitz & Troxel
Total	\$11,427,461
Topic	Major goals include the development and dissemination of generalizable, data-driven tools for (1) PASC cohort discovery (e.g., PASC computable phenotypes, trial eligibility "sniffers"); (2) PASC risk models; (3) deployable, EHR-based clinical decision support (CDS) tools.
ID	(#5) 1T15LM013979-01 (Training Grant)
Title	"Johns Hopkins Training Program in Biomedical Informatics and Data Science"
Funding	National Library of Medicine (NLM)
Period	07/2022 - 07/2027
Role Total	<u>Co-Principal Investigator;</u> MPI: Chute C ~\$3,606,506
Topic	Johns Hopkins University is committed to leveraging the full spectrum of faculty and data in a multidisciplinary training program for Biomedical Informatics and Data Science (BIDS). The BIDS program is structured around four tracks: Translational Bioinformatics, Clinical Research Informatics, Healthcare/Clinical Informatics, and Public Health Informatics. Opportunities for learning and application through well-funded research enrich this training experience.
ID	(#6) Evidence-based Practice Center AHRQ-RFTO9
Title	"Creating a digital healthcare equity framework with an accompanying guide for its use"
Funding	HHS – Agency for Healthcare Research and Quality (AHRQ)
Period	09/2021 - 03/2023
Role	Co-Investigator; PIs: Austin M & Hatef E
Total	\$292,314
Topic	The overarching purpose of this task order is to create a digital healthcare equity framework, which will specify the aspects that need to be considered when creating and planning for equitable healthcare solutions that involve digital technologies. The framework will be accompanied by a guide for its use that contains best practice examples and relevant resources. The framework and guide will be applicable to both patient-facing and clinician-facing digital healthcare solutions. The framework and guide are intended to inform the planning phase for design and implementation of digital healthcare technology.
ID	(#7) 1R01MD015844
Title	"Development, piloting and dissemination of an integrated clinical and social multi-level decision support platform to address social determinants of health among minority populations in Baltimore city"
Funding	National Institute on Minority Health and Health Disparities (NIMHD)
Period	08/2021 - 08/2025
Role	Co-Investigator; PIs: Weiner JP & Hatef E
Total	\$2,746,061
Topic	With the intent of improving care for minority and disadvantaged populations with chronic diseases, this project will develop methods and tools to better integrate available digital information regarding social determinants of health (SDOH) into providers' electronic health records (EHRs). The study will develop, pilot, evaluate, and widely disseminate a multi-level EHR-integrated clinical decision support system to help identify, manage, and refer patients with high chronic disease burden who also have high levels of modifiable SDOH challenges.

ID	(#8) AFSP YIG-R-002-19
Title	"Sociodemographic factors, clinical profiles and social determinants of suicides involving opioids"
Funding	American Foundation for Suicide Prevention (AFSP)
Period	04/2021 - 04/2023
Role	Co-Investigator; PI: Susukida R
Total	~\$90,000
Topic	The goal of this study is to examine the patterns of sociodemographic attributes, clinical encounters, and social and geographical factors that characterize suicides involving opioids as well as polysubstance opioid suicides in order to enhance targeted efforts for suicide prevention. This study leverages data linkage, predictive modeling, and spatial clustering techniques to identify individual-level factors as well as aggregate-level social and geographical factors linked with opioid-related suicides.
ID	(#9) Addressing Suicide Research Gaps: Understanding Mortality Outcomes / R01MH124724
Title	"Advancing Maryland's Statewide Suicide Data Warehouse to Improve Individual and Population-level Mortality Prediction and Prevention"
Funding	NIMH
Period	9/2020 - 9/2024
Role	Principal Investigator
Total	~\$3,260,000
Topic	The aim of developing Maryland Suicide Data Warehouse (MSDW) is to link a diverse set of data sources and use various layers of risk factors to predict suicide death on a generalizable population. Currently, MSDW includes data on \sim 5+ million Maryland residents spanning from 2012 to 2017. MSDW contains hospital and emergency discharges, health information exchange (HIE) data, commercial insurance claims, medical examiner data, electronic health record (EHR) data from 5 select health systems, and place-based social determinants of health data covering various domains such as housing, employment, education, income, and crime. This study will leverage the unique data types linked by MSDW to improve suicide death predictions among generalizable patient populations.
ID	(#10) FDA CERSI Award / 5U01FD005942-05
Title	"Assessing Disparities in Occurrence and Outcomes of Type 2 Diabetes ADEs Using Claims and EHRs"
Funding	FDA CERSI
Period	9/2020 – 9/2022 (no cost extension until 9/2023)
Role	Principal Investigator; Co-PI: Weiner JP
Total	~\$741,000
Topic	This project aims to improve the identification of SHG events in ambulatory EHRs and claims. We will compare SHG events across races/ethnicities and various SDH factors; and, then identify key disparity factors associated with increased likelihood of SHG among African American patients (after adjusting for clinical comorbidities). Finally, we will discover contextual patterns (using EHR's free-text) associated with higher rates of SHG among different minority and special-need populations.
ID	(#11) Centers on the Demo. and Economics of Alzheimer's Disease and Alzheimer's Related Dementias
Title	"Hopkins' Economics of Alzheimer's Disease and Services (HEADS) Center"
Funding	NIH/NIA P30AG066587

Period	08/2020 - 06/2025
Kole Total	$\frac{P10CP1}{(CO-P1S: POISKY & WOIII}$
Topic	The HEADS Center advances science that addresses the relationship between ADRD and goals of accessible, affordable, and appropriate quality care delivery. To achieve this goal, HEADS will undertake activities to stimulate and support research on two overarching signature themes: (1) To identify and quantify ADRD care needs and variation in needs, including racial and ethnic minority subgroups, and how ADRD care needs affects economic consequences for persons with ADRD, their families and other unpaid caregivers and (2) To examine how health system organization and financing affect ADRD-related health outcomes.
ID	(#12) T32 NRSA Institutional Research Training Grant / T32-AG066576
Title	"Program in Health Services and Outcomes Research for Aging Populations"
Funding	NIA
Period	09/2020 - 09/2024
Role	Co-Investigator/Mentor; PIs: Wolff J & Boyd C
Total	-
Topic	The goal of this program is to produce the next generation of researchers with rigorous training in person and family-centered health services and outcomes research, all applied to geriatrics and gerontology. This program is conducted jointly by health services researchers, gerontologic nursing researchers, and geriatricians with a strong commitment to bringing together students and fellows in all these disciplines to develop expertise in the content areas and methodologies that are essential to advancement of the field and an understanding of how health services, care delivery and financing systems might optimally be designed to serve the needs of older adults.
ID	(#13) T32 Predoctoral Training in Advanced Data Analytics for Behavioral and Social
Tide	Sciences Research (BSSR) - Institutional Research Training Program / 132-MH12255/
Funding	NILL OBSSP
Period	09/2020 - 09/2024
Role	Co-Investigator/Mentor: PI: Stuart I
Total	-
Topic	The goal of this training program is to train scholars to become leaders in the use of advanced computational methods and designs to estimate causal effects in behavioral health. To accomplish this goal, we will provide rigorous training and high-quality mentorship.
ID	(#14) eACG – Internal
Title	Developing Next Generation EHR-Supported Predictive Modeling: Developing the Johns Hopkins e-
	ACG System"
Funding	Internal (ACG)
Period	09/2012 - NA
Role	<u>Co - Principal Investigator;</u> PI: Weiner JP
Total	~\$2,000,000 (~8 FTEs * 3 yrs.)
1 opic	In collaboration with Health Partners in Minnesota, this research seeks to incorporate EHR elements into the advanced models of the ACG System. The goal is to identify EHR and other HIT elements amenable to incorporation with traditional claims based ACG measures and test how to best integrate a combination of elements with the ACG System to enhance our predictive modeling ability.

Awarded - Completed

ID	(#15) AHRQ ACTION-IV RFTO#2 / 2020.K72AS19.25505
Title	"Developing and Assessing the Validity of Claims-based Indicators of Frailty & Functional Disabilities and Testing their Use in Other Data (EHRs and linked EHR-claims)"
Funding	AHRQ
Period	9/2020 - 9/2022
Total	~\$498.000
Topic	The purpose of this task order is to validate a claims-based algorithm of frailty and functional disabilities using EHR data. We will validate and refine claims-based indicators of frailty and functional disability in linked EHR-claims data to confirm diagnoses of potentially disabling conditions or frailty for case identification. We will also test and refine draft EHR-modified algorithms. The focus is on validating the claims algorithm to evaluate frailty in Medicare populations, and to refine the EHR-modified algorithm for potential use across all-payers in adult patient populations.
ID Title	(#16) Evidence-based Practice Center AHRQ-RFTO19 "Virtual Health During COVID19"
Funding Period	HHS – Agency for Healthcare Research and Quality (AHRQ) 03/2021 – 09/2021
Role Total	Co-Investigator; PI: Robinson K ~\$150.000
Topic	This task order is a distributed under the EPC (Evidence-based Practice Center) IDIQ. The main aims of the task order are 'topic refinement' and 'systematic review' [optional] of the use and effectiveness of telehealth services during the COVID-19 pandemic.
ID Title	(#17) Evidence-based Practice Center AHRQ-RFTO20
Funding	HHS – Agency for Healthcare Research and Quality (AHRQ) 03/2021 – 12/2021
Role Total	Co-Investigator/Consultant; PI: Robinson K ~\$215,000
Topic	This task order is a distributed under the EPC (Evidence-based Practice Center) IDIQ. The main aim of the task order is to prepare a 'technical brief' on the development of a framework for assessing mental health applications (mobile health apps).
ID	(#18) 3R34MH121639-01S1
Funding	Adaptation and Puot Lest of a Universal School-Based Suicide Prevention Program – Supplement
Period	01/2021 - 12/2021
Role	Co-Investigator; PI: Wilcox H
Total	~\$275,000
Topic	This study attempts to enhance our understanding of risk and protective processes on suicide death among African American and Latinx children and adolescents.

ID	(#19) NIMH 1R56-MH117560-01
Title	"Addressing Suicide Research Gaps: Understanding Mortality Outcomes in the Mid-Atlantic Region"
Funding	National Institute of Mental Health (NIHM)
Period	09/2018 - 09/2021
Role	Principal Investigator; Co-PI: Wilcox H
Total	~\$492,000 (R56 mechanism – FY1 of 1R01-MH117560-01)
Topic	This study will conduct data linkage and informatics approaches to utilize existing resources to improve suicide risk identification and prevention. The project will also offer essential measures for providers and payers to reduce suicide events in their systems. The methods will be assessed against and shared as a resource with other states/regions to establish a similar analytics framework to advance suicide prevention.
ID	(#20) IHSoM ICTR BSSS Nexus Award IPhase IIII – Internal
Title	"Behavioral Social and Systems Science: Extracting Social Science Data from Etvic Electronic Health
The	Record System"
Funding	Internal (IHU ICTR)
Period	04/2020 - 04/2021
Role	Principal Investigator
Total	\$95,000
Topic	This phase of the project will complete the extraction of social and behavioral determinants of health
1	from Epic's EHR as well as integrate place-based social determinants of health into JHMI's research platforms.
ID	(#21) TDAF 2019
Title	"Novel Predictive Model for Risk stratification of Congestive Heart Failure Patients at Discharge"
Funding	IHSPH– Technology Development Accelerator Fund (TDAF)
Period	09/2019 - 09/2021
Role	Principal Investigator
Total	\$50,000
Topic	This project plans to commercialize the cloud-based CDS tool integrated with EHRs, to assist Case Managers with clinical triage and discharge planning of higher risk CHF patients who are candidates for 30-day hospital readmissions.
ID	(#22) IHU Kaiser Permanente
Title	"Applying Unstructured EHR Notes and Structured Clinical and Community Data to Identify Patient
	Social Needs and Determinants"
Funding	Internal (IHU ICTR & KP Mid-Atlantic)
Period	04/2020 - 04/2021
Role	Co-Investigator; PIs: Hatef E & Nau C
Total	\$75,000
Topic	The overarching goal of this project is to develop and apply new practical tools and approaches for measuring Social Determinants of Health using unstructured (e.g., clinician notes) and structured EHR data and information derived from neighborhood databases.
ID	(#23) ACG-GSAP Integration
Title	"Integrating the Geo-Social Predictive Model Platform in ACGs"

Funding	Johns Hopkins Health Care (JHHC) Solutions
Period	10/2018 - 10/2020
Role	Principal Investigator
Total	~\$400,000 (contract)
Topic	This study will develop novel patient-level geo-derived risk scores that can used to enhance existing risk scores such as ACGs, and ultimately become integrated into traditional care management workflows.
ID	(#24) JHU APL IRAD
Title	"Improving Population Health Risk Stratification with Machine Learning & Advanced Statistical Techniques"
Funding Period	Internal (JHU APL) 09/2018 – 09/2019
Role	<u>Co - Principal Investigator;</u> PI: McShea M \$175,000
Topic	This project is a collaboration between APL and Bloomberg CPHIT teams to develop higher performing algorithms using ML techniques, and both EMR and claims data. EMR data will include SDoH data where available. The primary objective is to show increased efficacy of this approach to predicting cost and ability to identify at risk subpopulations.
ID	(#25) JHU IDIES
Title	"Using Epidemiological and Simulation Data to Inform the Testing of Autonomous Vehicles"
Funding	Johns Hopkins Institute for Data-Intensive Engineering and Science
Period	03/2018 - 03/2019
Role	Co-Investigator; PI: Ehsani J
Total	\$25,000
Topic	Using epidemiologic and simulated models of crash risk, we propose the development of a tool to assist AV engineers and federal regulators to inform AV testing. This tool will assess safety as a function of the road types, neighborhoods and traffic patterns along a specific route, and the elements of the AV algorithms that govern speed, lane changing and other driving behaviors.
ID	(#26) JHU Kaiser Permanente
Title	"Adherence to Chronic Disease Medication Regimens in the KP/JHHS Enrolled Populations: A Cross-
E . E.	Organization Assessment of the Impact of Socio-Economic Factors in the Baltimore Region"
Funding	00/2018 = 00/2010
Role	$\frac{09}{2018} = \frac{09}{2019}$
Total	\$75.000
Topic	The study focuses on medication adherence and its association with a variety of determinants including
ropie	socioeconomic factors either at individual and geographic levels.
ID	(#27) JHU IDIES
Title	"Harnessing Big Data for Population Health: Advancing Natural Language Processing Techniques to Extract Social-Behavioral Risk Factors from Free Text within Large Electronic Health Record Systems"
Funding	Johns Hopkins Institute for Data-Intensive Engineering and Science
Period	03/2018 - 03/2019
Role	Co-Investigator; PI: Weiner JP

Total	\$25,000
Topic	We propose to build on the machine learning tools developed using a mix of pattern matching techniques for note categorization and deep learning methods (i.e., long short-term memory recursive neural networks). Our goal in this pilot is to establish the viability of these methods for social determinants of health (SDH) data and to extract a first-pass corpus of SDH factors.
ID	(#28) VHA Phase-IV
Title	"Analytical Framework to Project BMI Trajectory for VHA Veterans at the Population Level"
Funding	Veteran Health Affairs – Office of Analytics and Business Intelligence
Period	09/2017 - 11/2018
Role Total	Principal Investigator; Co-PI: Weiner JP ~\$255,000 (IPA mechanism)
Topic	This project will utilize high priority data sources including the VHA's CDW to develop a series of predictive models to forecast obesity trajectory in a given population denominator. Underlying GIS information and other sources of social determinants of health will be used to improve the prediction of obesity trajectory geographically.
ID	(#29) DST Health Solutions – GSAP
Title "Geo-So	cial [Risk Prediction and Visualization] Analytic Platform (GSAP)"
Funding	DST Health Solutions
Period	09/2017 - 09/2019
Role Total	Principal Investigator \$325,000
Topic	We are proposing the development of the Johns Hopkins Geo-Social Analytic Platform (GSAP) that will incorporate geo-social factors for risk prediction on both aggregated and patient levels. GSAP data will be used to improve risk stratification of various sub-populations (e.g., health plan members, employees).
ID	(#30) TDAF C14627 – 2017
Title "Helping	g Older adults improve their Medication Experience (HOME)"
Funding Period	JHSPH– Technology Development Accelerator Fund (TDAF) 07/2017 – 07/2019
Role	Principal Investigator
Total	\$25,000
Topic	A pilot study of 20 patients demonstrated that the tool is useful for communication between nurses and primary care physicians (PCP) and is easily integrated into clinical workflow. The HOME tool automated the medication complexity reduction process and improved medication management among older adults.
ID	(#31) VHA PACT Evaluation
Title	"Developing and Testing an Approach for the Integration of Population and Patient Level Information in Support of Patient Centered Primary Care at the VHA"
Funding Period	Veteran Health Affairs – Office of Analytics and Business Intelligence 10/2016 – 10/2018
Role Total	<u>Co - Principal Investigator</u> ; PI: Weiner JP ~\$175.000 (contract)
Topic	PACT is part of the national "Patient Centered Medical Home" (PCMH) movement, where accountable

	primary care delivery teams, equipped with comprehensive information support systems, provide coordinated care attuned to the patient's individual needs.
ID	(#32) CMS CPC+ AIR PRO
Title	"Patient Reported Outcome-based Performance Measure (PRO-PM) and Patient Experience of Care Surveys for Primary Care Practices Participating in the Centers for Medicare & Medicaid Services / Center for Medicare and Medicaid Innovation Comprehensive Primary Care (CPC+)"
Funding Period	CMS – Subcontract to AIR (American Institute for Research) 09/2017 – 09/2023
Role Total	Co-Investigator; PI of JHU Subcontract: Wu A ~\$6,500,000 (JHU Subcontract); \$55,000,000 (AIR CMS)
Topic	This project focuses on recommending CMS one or more PROM(s) that is feasible and appropriate in a primary care patient population with clinical emphasis on patients with multiple chronic conditions. EHRs will be used to collect PROs and then applied to improve the risk stratification of comorbid older adult populations using predictive modeling.
ID	(#33) B'FRIEND – Multiple Funding Streams
Title	"Baltimore Falls Reduction Initiative Engaging Neighborhoods and Data (B'FRIEND)"
Funding	(a) Johns Hopkins inHealth Initiative
	(b) Robert Wood Johnson Foundation (RWJF) DASH Program
~	(c) Center for Government Excellence at the 21 st Century Cities Initiative
Period	01/2016 - 12/2018
Role	<u>Principal Investigator</u> ; Co-PI: Sharfstein J Co-Investigator; PI: Wen L
	Co-Investigator; PI: Sharfstein J
Total	(a) ~\$75,000
	(b) ~\$200,000 (c) ~\$25,000
Topic	Baltimore Falls Reduction Initiative Engaging Neighborhoods and Data (B'FRIEND) is a citywide effort to reduce such falls by one-third in three years. Hospital discharge summary as well as health information exchange (HIE) data will be used to develop a risk prediction model for severe falls among older adults. B'FRIEND will involve standing up a real-time data and trajectory surveillance capacity for all falls requiring hospital care in a major city.
ID	(#34) JHSoM ICTR BSSS Nexus Award [Phase II] – Internal
Title	"Behavioral, Social and Systems Science: Extracting Social Science Data from Epic Electronic Health Record System"
Funding	Internal (JHU ICTR)
Period	12/2017 - 09/2018
Role	Principal Investigator
Total	\$65,000
Topic	This phase of the project will document the social determinant measure available, provide a guide to researchers wishing to integrate them into studies and make recommendations on how to integrate new measures going forward.
ID	(#35) PDMP BJA-2015-4189

Title	"Prescription Drug Monitoring Program's Risk Modeling Project"
Funding	U.S. Department of Justice
Period	09/2015 - 12/2018
Role	Co-Investigator; PIs: Weiner JP & Saloner B
Total	~\$530,000 (subcontract to DHMH)
Τορις	This research will increase understanding about the risk factors for prescription drug overdose and inform interventions to help curb the prescription drug abuse and overdose epidemic in Maryland, and hopefully generalizable to other states.
ID	(#36) Patient Safety in Ambulatory Care
Title	"What is Patient Safety in the Medical Home?"
Funding	AHRQ R01HS24859-01
Period	09/2016 - 09/2019
Role	Co-Investigator; PI: Dy S
Total	~\$1,499,998
Topic	No previous research has explicitly evaluated safety in the PCMH. This partnership between Johns Hopkins and the National Committee on Quality Assurance (NCQA) is a unique opportunity to evaluate how the PCMH can best address safety.
ID	(#37) Frailty – Atrius Health
Title	"The Development and Testing of the Frailty Component of a Novel EHR-based "Geriatric e-risk" Measure for Predictive Modelino"
Funding	Atrius Health Foundation – Harvard Vanguard Medical Associates
Period	06/2015 - 06/2018
Role	<u>Co - Principal Investigator;</u> PI: Weiner JP
Total	~\$25,000
Topic	Develop advanced predictive modeling tools for high-risk case detection and management for a geriatric population. Using the ACG frailty constructs as a baseline we are exploring how new elements found in the EHR as structured or unstructured information (using advanced NLP techniques) may improve the current model.
ID	(#38) IHSoM ICTR BSSS Nexus Award [Phase I] – Internal
Title	"Behavioral, Social and Systems Science: Extracting Social Science Data from Epic Electronic Health Record System"
Funding	Internal (IHU ICTR)
Period	02/2017 - 12/2017
Role	Co-Investigator; PI: Ford E
Total	\$65,000
Topic	The aims of this project are: First, describing the existing frameworks for assessing social determinants of health in patient populations. Second, interviewing key informants to assess the current SDH routinely collected at JHMI. Third, produce a plan for assessing the current social determinants that are available for research.
ID	(#39) ONC WF-WF-15-300
Title	"Workforce Development Programs: Population Health IT"
Funding	HHS - Office of the National Coordinator (ONC) for Health IT

Period	07/2015 - 07/2017
Role	<u>Co - Principal Investigator;</u> PI: Lehmann H
Total	~\$969,000
Topic	We will update training materials from the original Workforce Curriculum Development program funded under HITECH. In addition to updating training materials, the goal of this program is to train 6,000 incumbent health care workers to use new health information technologies in a variety of settings. The updates will focus on the four key topic areas of Population Health, Care Coordination, New Care Delivery and Payments Models, and Value Based & Patient Centered Care
ID	(#40) Evidence-based Practice Center AHRQ-RFTO22
Title	"Advancing Research Methods for Evaluation of Natural Experiments in Obesity Prevention and Control"
Funding Period	HHS – Agency for Healthcare Research and Quality (AHRQ) 02/2016 – 12/2017
Role	Co-Investigator; PI: Bennett W
Tonia	~\$400,000
Topic	the task order is a distributed under the EPC (Evidence-based Practice Center) IDIQ. The main aim of the task order is to systematically identify & assess population-level data sources, and approaches for evaluation of policies for obesity prevention and control.
ID	(#41) VHA Phase-III
Title	"Analytical Framework to Project BMI Trajectory for VHA Veterans at the Population Level"
Funding Period	Veteran Health Affairs – Office of Analytics and Business Intelligence $09/2015 - 09/2016$
Role Total	Principal Investigator; Co-PI: Weiner JP ~\$240,000 (IPA mechanism)
Topic	The aim of this phase of the VHA project is to develop a series of predictive models to forecast obesity trajectory in a given population denominator (which could be eventually tailored as feedback to clinicians, policy makers and others).
ID	(#42) DHMH SIM
Title	"Care Coordination and Expanded Analytics Infrastructure of the All-Payer Demonstration Project" Marriand Department of Haelth and Montal Husiana (DHMH)
Period	12/2015 - 09/2016
Role	<u>Co - Principal Investigator;</u> PI: Weiner JP
Total	~\$200,000 (subcontract to DHMH/CRISP)
Topic	We will develop a comprehensive framework of population health measures that can be derived from electronic data to assess the state of health of target populations/communities. We will also assist Maryland public health, social welfare and medical care providers and community organizations plan for population health targeted interventions.
ID	(#43) Discovery Fund Synergy Award
Title	"Addressing medication regimen complexity in skilled home health care"
Funding	Johns Hopkins School of Medicine
Period	9/2014 - 12/2015

Role Total	Co-Investigator; PI: Boyd C ~\$100,000
Topic	This project develops and tests the feasibility of an innovative, largely automated informatics solution (the HOME tool) to efficiently and clearly communicate information about medication regimens and insights gained by the home health nurse in the process of evaluating the patient at home.
ID	(#44) ASPE 15-233-SOL-00303
Title	"Measurement of Interoperable Electronic Healthcare Records Utilization"
Funding	HHS – Assistant Secretary for Planning and Evaluation (ASPE) & ONC
Period	09/2015 - 09/2016
Total	~\$245,000
Topic	This project will develop methods for measuring interoperability between users of certified health information technology (IT) systems and information partners not covered by the Medicare and Medicaid EHR Incentive program, or who are not providers in long-term/post-acute care settings.
ID	(#45) Evidence-based Practice Center AHRQ-RFTO42
Title	"Data Sources and Methods to Analyze Suicide Prevention Interventions among Youth"
Funding	HHS – Agency for Healthcare Research and Quality (AHRQ)
Role	Co-Investigator: PI: Robinson K
Total	~\$400,000
Topic	This task order is a distributed under the EPC (Evidence-based Practice Center) IDIQ. The main aims of the task order are 'topic refinement' and 'systematic review' of existing and effective interventions to prevent suicide among the younger population. Using HIT and various data sources is of special emphasis in this project.
ID	(#46) RFA-AG-14-009
Title	"Clinical Trial of a Multifactorial Fall Injury Prevention Strategy in Older Persons (U01)"
Funding	NIH U01 / PCORI Special Call
Period	4/2014 - 5/2017
Role Total	Co-Investigator [in-kind; FY1 only]; PI: multiple institutions ~\$29,000,000
Topic	The investigators, patients and stakeholders will collaboratively refine and pilot a strategy for identifying persons at risk for falling and optimize the study design and intervention. The trial will incorporate an adaptive design and a pre-specified mid-term analysis.
ID	(#47) VHA Phase-II
Title:	"Developing an Obesity Trajectory Population-based Risk Prediction Model (OT-PRPM)"
Funding:	Veteran Health Affairs
Period:	10/2014 - 10/2015
Role:	Principal Investigator; Co-PI: Weiner JP
Total:	~\$150,000 (IPA mechanism)
1 opic:	VHA has awarded CPH11 to develop a national population-health measurement framework and assist in

	the implementation of a population health platform. To pilot this framework and platform we are linking EHR and GIS data to understand population health facets of obesity.
ID Title Funding Period Role Total Topic	(#48) VHA Phase-I <i>"Framework for a VHA Population Health Program"</i> Veteran Health Affairs 06/2014 – 10/2014 Principal Investigator; Co-PI: Weiner JP Subcontract ~\$70,000 (IPA mechanism) We collaborated with the VAH to more clearly define population health and population health informatics as well as develop ways to integrate new population-based data sources into an electronic health repository in a meaningful way. The collaboration will conclude with the development and evaluation of a high impact population HIT solutions.
ID Title Funding Period Role Total Topic	(#49) 1-R13-LM011955 <i>"Symposium on Population Health Informatics"</i> National Library of Medicine (NLM) R13 04/2014 – 05/2014 Co-Investigator; PI: Weiner JP \$12,500 This R13 application seeks federal support for a one-day meeting on population health informatics. The proposal wants to bring experts together in this emerging field.
ID Title Funding Period Role Total Topic	 (#50) R21-HS022578 <i>"Community-wide HIE- based Hospital Readmission Risk Prediction and Notification System"</i> AHRQ R21 09/2013 – 12/2015 Principal Investigator ~\$300,000 This research facilitates care coordination between inpatient and outpatient settings. This project will derive and validate a hospital readmission risk-prediction model based on Maryland's Health Information Exchange. If adopted by primary care providers, the model can significantly reduce readmissions.
ID Title Funding Period Role Total Topic	(#51) ACTION-II RFTO32 "Evaluation of Stage 3 Meaningful Use Objectives among Eligible Hospitals" AHRQ RFTO 09/2013 – 09/2014 Principal Investigator ~\$632,000 The aim of this (contract) project is to evaluate the readiness of 10 hospitals in MD and AR to roll out two of the meaningful use stage 3 measures. The project includes three phases of a conceptual framework development, implementation and evaluation of measures, and dissemination of the findings.
ID	(#52) FIF 2013
Title	"Utilizing Maryland's Health Information Exchange Infrastructure to Develop and Evaluate a Real-time Inter-Provider Hospital Readmission Risk Detection and Notification System: A Population Health IT

	Feasibility Study"
Funding	JHSPH
Period	03/2013 - 03/2014
Role	Principal Investigator
Total	~\$35,000
Topic	This research explores the derivation and evaluation of a hospital readmission risk-prediction model based on Maryland's Health Information Exchange. If adopted by primary care providers, the model can significantly reduce readmissions.
ID	(#53) PCORI – MSSDT2014
Title	"Methodology Standards Academic Curriculum: Comparative Effectiveness Research"
Funding	PCORI (PCO-MSSDT2014)
Period	09/2013-09/2014
Role	Co-Investigator; PI: Segal J
Total	~\$335,000
Topic	The CIHR Team Grant in Access to Children's Mental Health Services is organized around 5 projects. Each project has a unique focus that will provide us with the knowledge we need to create our unique system to minimize waiting list times.
ID	(#54) HHSM-500-TO-003
Title	"PHEMUR Project"
Funding	Mathematica
Period	09/2013-09/2014
Role	Co-Investigator; PI: Dy S
Total	~\$100,000 (subcontract)
Topic	ARRA HITECH Eligible Professional (EP) Clinical Quality Measures (PHEMUR) contributes to the
	development of testing plan for new measures and ensuring requirements defined by CMS and NQF are addressed.
ID	(#55) 5-R01-LM009897
Title	"Clinical Knowledge Hub - Conceptual Integration of Rules, Data Sets, and Queries"
Funding	National Library of Medicine (NLM) R01
Period	05/2010 - 04/2012
Role	Principal Investigator; Co-PI: Schadow G
Total	~\$495,000
Topic	To create a standards-based clinical decision support (CDS) knowledge library which integrates, harmonizes, and disseminates a diverse set of major sources of clinically relevant biomedical knowledge which each in their own right have been proven effective at their original institution but that could not be shared in the past due to technical and conceptual barriers.

ACADEMIC SERVICE

Department (HPM)

2017-	HSR&P Committee Committee member
2015-	DrPH Program Admission Committee Director – Informatics Track
2012-	Center for Population Health IT (CPHIT) Research Director Co-Director (since 2019)
2012-	Center for Health Services and Outcomes Research (CHSOR) Data Infrastructure Committee

School (JHSPH)

2020-	JHSPH Data Trust/Governance Committee Committee Member
2020-	Faculty Technology Transfer Committee Committee Member (pending)
2019-2020	JHSPH Data Governance Ad-hoc Committee Committee Member
2016-	Bloomberg American Health Initiative (BAHI) Evidence Workgroup – Committee Member & Liaison Obesity Workgroup – Committee Member
2013-	ACG Technical Advisory Board Committee Member
2012-	Global mHealth Initiative (GmI) Steering Committee Member

University (JHU)

2020-	JHSOM Biomedical Informatics and Data Sciences (BIDS) Executive Committee Committee Member
2019-	inHealth/PMAP Data Science Core Team Committee Member
2015-	Center on Aging and Health Committee Member
2014-	Behavioral, Social and Systems Science (BSSS) Advisory Board ICTR Translational Research Communities

	Committee Member
2013-	JHSOM Data Trust Council – Research and Informatics Sub-council <i>Committee Member</i>
2013-2020	JHSOM Div. of Health Science Informatics (DHSI) Executive Committee Committee Member
2013-2015	Clinical Informatics Fellowship Executive Committee Committee Member
2013-2014	Bloomberg Distinguished Professor (BDP) Search Committee for HIT Committee Member

Professional Societies

2018-2019	AMIA Annual Symposiums
	American Medical Information Association (AMIA)
	Scientific Program Committee (SPC)

State and National Agencies/Committees

2022-	Maryland Suicide Fatality Review Committee Office of Suicide Prevention; Maryland Department of Health
2022-	Maryland HSCRC Population Health Workgroup Health Service Cost Review Commission (HSCRC) Subject Matter Expert
2020-	NCQA Social Determinants of Health & Health Equity Expert Work Group National Committee for Quality Assurance (NCQA) Subject Matter Expert

PRESENTATIONS AT SCIENTIFIC MEETINGS⁵

Conference Proceedings (peer-reviewed abstracts & short-papers) ^{6,7}

- Ghoseiri J*, Kharrazi H. Measuring quality of demographic data captured in hospital discharge reports. Proceedings of American Medical Informatics Association Annual Symposium. 2022; [in-press]. Washington DC: AMIA.
 * first author is a high school mentee!
- 2 Ding X*, Nishimuar A, Zeger S, Kharrazi H. Assessing the impact of social determinants of healthcare on patients with type II diabetes. *Proceedings of American Medical Informatics Association Annual Symposium*. 2022; [in-press]. Washington DC: AMIA.
- 3 Hatef E, **Kharrazi H**, Weiner JP. Development of an integrated clinical and social multi-level risk score to identify social needs among minority populations in Baltimore city. *Proceedings of American Medical Informatics Association Annual Symposium*. 2022; [in-press]. Washington DC: AMIA.
- 4 Belouali A, Bai Haibin, Raja K, Kharrazi H. Impact of social determinants of health on improving the LACE index for 30-day unplanned readmission prediction. *Proceedings of American Medical Informatics Association Annual Symposium*. 2022; [in-press]. Washington DC: AMIA.
- 5 Pandya CJ, Hatef E, Wu JB, Richards T, Weiner JP, Kharrazi H. Association of documented social needs in claims and electronic health records of Medicaid population with healthcare utilization and costs. *Proceedings of American Medical Informatics Association Annual Symposium*. 2022; [in-press]. Washington DC: AMIA.
- 6 Lasser EC*, Gudzune K, **Kharrazi H**, Lehmann H, Weiner JP. A comparison of sociobehavioral determinants of health information captured in the electronic health record versus insurance claims for a population seen in an ambulatory care setting. *Proceedings of American Medical Informatics Association Annual Symposium*. 2022; [in-press]. Washington DC: AMIA.
- 7 Wang H*, Kharrazi H. An evaluation of racial disparity in 30-day hospital readmission models. Proceedings of American Medical Informatics Association Annual Symposium. 2021; 1544-1545. San Diego: AMIA.
- 8 **Kharrazi H**, Chang H-Y, Hatef E, Ma X, Weiner JP. Improving the prediction of healthcare costs and utilization using the Area Deprivation Index and statewide insurance data. *Proceedings* of *American Medical Informatics Association Annual Symposium*. 2021; 1425-1426. San Diego: AMIA.
- 9 Hatef E, Rouhizadeh M, Nau C, Xie F, Padilla A, Lyons LJ, Rouillard C, Abu-Nasser M,

⁵ Kharrazi: first/corresponding presenter; Kharrazi: co-presenter; *: mentored presentations

⁶ Short-papers and abstracts published in conference proceedings are considered an influential route of knowledge dissemination in informatics. All publications are peer-reviewed.

⁷ See <u>http://hkharrazi.com?section=pub</u> for links and full text of the abstracts and short papers.

Kharrazi H, Weiner JP, Roblin D. Assessing the documentation of social needs in electronic health records' unstructured data: a collaboration of Johns Hopkins Health System and Kaiser Permanente. *Proceedings of American Medical Informatics Association Annual Symposium*. 2021; 1384-1385. San Diego: AMIA.

- 10 Haroz E, Kitchen C, Nestadt PS, Wilcox H, DeVylder JE, Kharrazi H. Comparing the predictive value of universal screening to electronic health records for suicide risk in the pediatric emergency department. *Proceeding of American Association of Suicidology Annual Conference*. 2020. Virtual/Orlando: AAS.
- 11 Hatef E, Chang H-Y, Kitchen C, Weiner JP, Kharrazi H. Addressing health equity in the healthcare system: assessing the impact of neighborhood characteristics on healthcare utilization in Baltimore City. *Proceedings of American Medical Informatics Association Annual Symposium.* 2020; 1533-1534. Virtual: AMIA.
- 12 Ma X, Hatef E, Shaikh Y, **Kharrazi H**, Weiner JP, Gaskin DJ. Internet access, social risk factors, and web-based social support seeking behavior: assessing correlates of the "digital divide" across neighborhoods in the state of Maryland. *Proceedings of American Medical Informatics Association Annual Symposium.* 2020; 1573-1574. Virtual: AMIA.
- 13 Kharrazi H, Chang H-Y, Hatef E, Weiner JP. Comparison of the impact of placed-based social determinants of health on claims-based risk adjustment models across different geographic levels. *Proceedings of American Medical Informatics Association Annual Symposium*. 2020; 1543-1544. Virtual: AMIA.
- 14 Samson LW, Kim D, Deutsch A, Kharrazi H, Jackson C. A tale of two approaches for using standardized data and predictive analytics to inform care solutions. *Proceedings of Academy Health Annual Research Meeting.* 2020; Virtual: Academy Health.
- 15 Chang H-Y, Shermock KM, Kitchen C, **Kharrazi H**, Weiner JP, Bishop M. Construction and validation of claims-based medication regimen complexity index. *Proceedings of Academy Health Annual Research Meeting*. 2020; Virtual: Academy Health.
- 16 Li A*, Kharrazi H. Measuring the quality of demographic data captured in maryland's hospital and emergency department discharges. Proceedings of American Medical Informatics Association Annual Symposium. 2019; 1389-1390. Washington DC: AMIA
- Bery A*, Kharrazi H. The potential value of electronic health records in capturing geriatric frailty variables. *Proceedings of American Medical Informatics Association Annual Symposium*. 2019; 1306-1307. Washington DC: AMIA
- 18 Ma X*, Jung C, <u>Kharrazi H</u>. Comparing the distribution and predictive power of medication adherence indexes derived from EHRs and claims in forecasting healthcare utilization. *Proceedings of American Medical Informatics Association Annual Symposium*. 2019; 1399-1400. Washington DC: AMIA

- 19 Dixon BE, Lourens SG, Kharrazi H, Lehmann H, Fenton SH. Integrating data science into public health informatics training programs. *Proceedings of AMLA Informatics Educators Forum*. 2019. St. Louis, MO: AMIA
- 20 Yuan C, Marsteller J, Lai A, Oberlander T, Hannum S, Lasser E, Kharrazi H, Dy S. What is patient safety in the medical home? *Proceedings of Academy Health Annual Research Meeting*. 2019; Washington DC: Academy Health
- 21 Messino P*, Kim J, **Kharrazi H**, Lehmann H. Impact of certified electronic health record technology on childhood immunizations among Maryland Medicaid managed care providers. *Proceedings of Academy Health Annual Research Meeting*. 2019; Washington DC: Academy Health
- 22 Shafiq M*, Ma X, Taghizadeh N, **Kharrazi H**, Feller-Kopman D-J, Tremblay A, Yarmus LB. Longitudinal trends in healthcare utilization among hospitalized patients with malignant pleural effusion. *American Thoracic Society International Conference*. 2019; Dallas, TX: ATS
- 23 Chang H-Y, **Kharrazi H**, Bodycombe D, Weiner JP, Alexander GC. Health care costs and utilization associated with high risk prescription opioid use. *International Society for Pharmacoeconomics and Outcomes Research*. 2018; Baltimore, MD: ISPOR.
- 24 Rouhizadeh M*, Hatef E, Dredze M, Chute C, Kharrazi H. Identifying social determinants of health from clinical notes: a rule-based approach. *American Medical Informatics Association Annual Symposium*. 2018; San Francisco, CA: AMIA.
- 25 Zolnoori M, Fung KW, Fontelo P, Kharrazi H, Faiola A, Wu YSS, Stoffel V, Patrick TB. Utilizing consumer health posts to identify underlying factors associated with patients' attitudes towards antidepressants. *Proceedings of American Medical Informatics Association Annual Symposium*. 2018; 1878-1879. San Francisco, CA: AMIA.
- 26 Hatef E, Searle KM, Predmore Z, Lasser E, Kharrazi H, Sylling P, Nelson K, Fihn S, Weiner JP. A conceptual framework and approach for integration of population and patient-level electronic data to address social determinants of health within Veterans Health Administration's patient centered medical home. *Proceedings of American Medical Informatics Association Annual Symposium.* 2018; 1718-1719. San Francisco, CA: AMIA.
- 27 Kharrazi H, Ma X, Lasser E, Richards T, Weiner JP. Population-level comparison of diagnostic data collected in EHRs versus insurance claims [using OptumLabs data]. Proceedings of American Medical Informatics Association Annual Symposium. 2018; 1736-1737. San Francisco, CA: AMIA.
- 28 Cantor MN, Gold R, Gottlieb L, Kharrazi H, Cullen T. Lessons learned from using informatics to address the social determinants of health. *Proceedings of American Medical Informatics Association Annual Symposium.* 2018; 38-40. San Francisco, CA: AMIA.
- 29 Dixon BE, Lourens SG, Fenton SH, **Kharrazi H**. Integrating data science into public health informatics training programs. *Proceedings of Center for Disease Control and Prevention's Public Health*

Informatics Conference. 2018. Atlanta, GA: CDC.

- 30 **Kharrazi H**, Wilcox HC, Nestadt P. The role of population health IT in the future of mental health services. *Proceedings of National Institute of Mental Health's Mental Health Services Research* (MHSR) Conference. 2018; Bethesda, MD: NIMH
- 31 Kharrazi H, Bennett W, Wilson R, Zhang A, Tseng E, Knapp E, Stuart E, Shogbesan O, Bass E, Cheskin L. A systematic review of data sources and data linkage methods in natural experiment studies of obesity. *Proceedings of Academy Health Annual Research Meeting (HIT Interest Group)*. 2018; Seattle, WA: Academy Health
- 32 **Kharrazi H**, Stephan C. Current and emerging issues for population health informatics in healthcare and public health [2017]. *Proceedings of American Medical Informatics Association Annual Symposium Workshop*. 2017; Washington DC: AMIA
- 33 Caban J, Dowding D, Wu D, Kharrazi H, West V. Current state of visualization of EHR data: What's needed? What's next? *Proceedings of American Medical Informatics Association Annual Symposium*. 2017; 359-360. Washington DC: AMIA
- 34 Gharghabi F*, Anzaldi L, Richards T, Weiner JP, <u>Kharrazi H</u>. Measuring the value of EHR's free-text in identifying geriatric risk factors. *Proceedings of American Medical Informatics Association Annual Symposium*. 2017; 71-72. Washington DC: AMIA
- 35 Ford E, Kharrazi H. Forecasting the maturation of EHR functions among U.S. hospitals. Proceedings of American Medical Informatics Association Annual Symposium. 2017; 65-66. Washington DC: AMIA
- 36 **Kharrazi H**, Box T, Fihn S, Weiner JP. Analyzing prevalence of obesity among VHA patients using clinical, temporal, and geographical data extracted from a nationwide EHR. *Proceedings of American Medical Informatics Association Annual Symposium*. 2017; 105-106. Washington DC: AMIA
- 37 Kan H, Kharrazi H, Chang H-Y, Weiner JP. A comparison of using full and partial information from administrative claims data to predict future health care costs. *Proceedings of American Medical Informatics Association Annual Symposium*. 2017; 101-102. Washington DC: AMIA
- 38 Anzaldi L*, Lasser E, Sharfstein J, <u>Kharrazi H</u>. Identifying and predicting falls among elderly residents of Baltimore city using hospital discharge summaries and health information exchange data. *Proceedings of American Medical Informatics Association Annual Symposium*. 2017; 17-18. Washington DC: AMIA
- 39 Kharrazi H, Lee J, Padula W, Kan H, Burkom H, Saria S. Statistical methodologies for identifying, modeling, and managing subpopulations at risk. *Proceedings of Joint Statistical Meeting*. 2017; Baltimore, MD: American Statistical Association [Discussant]
- 40 **Kharrazi H**, Anzaldi L, Gharghabi F, Richards T, Weiner JP. Measuring the value of EHRs in identifying geriatric risk factors. *Proceedings of Academy Health Annual Research Meeting*. 2017; New

Orleans, LA: Academy Health

- 41 **Kharrazi H**, Chi W, Chang H-Y, Richards TM, Gallagher JM, Knudson SM, Weiner JP. Comparing the value of diagnostic and medication data extracted from EHR versus claims in risk stratification. *Proceedings of Academy Health Annual Research Meeting*. 2017; New Orleans, LA: Academy Health
- 42 **Kharrazi H**, Box T, Fihn S, Weiner JP. Using EHR records to analyze the trajectory of obesity among VHA patients from 2000 to 2015. *Proceedings of Academy Health Annual Research Meeting*. 2017; New Orleans, LA: Academy Health
- 43 Sheehan OC, Gabbard J, Carl KJ, Wolff JL, Kharrazi H, Leff BA, Boyd C. Patient and family perspectives on medication management for older adults receiving home health care: strengthening informal support resources for older adult patients. *Proceedings of International Association of Gerontology and Geriatrics*. 2017; San Francisco, CA: IAGG PMCID: <u>PMC6183367</u>
- 44 Nassery N, Mane K, Liu F, Sangha NX, Sharp AL, Shamim EA, Rubenstein KB, Kharrazi H, Nagy P, Kanter MH, Horberg M, Ford D, Pronovost PJ, Newman-Toker DE. Measuring missed strokes using administrative and claims data: towards a diagnostic performance dashboard to monitor diagnostic errors. *Proceedings of Diagnostic Error in Medicine*. 2016; Los Angeles, CA: DeGruyter
- 45 Karami A*, Gangopadhyay A, Zhou B, <u>Kharrazi H</u>. A fuzzy approach model for uncovering hidden latent semantic structure in medical text collections. *Proceedings of iConference*. 2015; e1-5: iSchools
- 46 Dixon B, Pina J, Richards J, Kharrazi H, Turner A. Public and global health informatics year in review [2015]. Proceedings of American Medical Informatics Association Annual Symposium. 2015; Washington DC: AMIA
- 47 **Kharrazi H**. Evaluation of stage-3 care coordination Meaningful Use objectives among eligible hospitals [Maryland and Arkansas]. *Proceedings of Academy Health Annual Research Meeting*. 2014; San Diego, CA: Academy Health
- 48 **Kharrazi H**, Joshi A, Loonsk J. Current and emerging issues for population health informatics in healthcare and public health [2013]. *Proceedings of American Medical Informatics Association Annual Symposium.* 2013; Washington DC: AMIA
- 49 Dixon B, Pina J, Richards J, Kharrazi H, Turner A. Public and global health informatics year in review [2014]. Proceedings of American Medical Informatics Association Annual Symposium. 2014; 166-168. Washington DC: AMIA
- 50 **Kharrazi H**. Evaluation of stage 3 meaningful use objectives among hospitals. *Proceedings of American Medical Informatics Association Annual Symposium.* 2014; 57-58. Washington DC: AMIA

- 51 Loonsk J, Kharrazi H. A hybrid electronic surveillance design pattern for public and population health. *Proceedings of American Medical Informatics Association Annual Symposium*. 2014; 71-72. Washington DC: AMIA
- 52 Gudzune K, Lemke K, **Kharrazi H**, Weiner JP. Refining a patient risk assessment using Adjusted Clinical Groups (ACG) with outpatient lab results. *Proceedings of American Medical Informatics Association Annual Symposium.* 2014; 42-43. Washington DC: AMIA
- 53 Kharrazi H. 'Clinical Knowledge Hub' conceptual integration of rules, data sets, and queries: A proof of concept pilot. *Proceedings of Academy Health Annual Research Meeting*. 2013; Baltimore, MD: Academy Health
- 54 **Kharrazi H**, Joshi A, Loonsk J. Current and emerging issues for population health informatics in healthcare and public health [2013]. *Proceedings of American Medical Informatics Association Annual Symposium Workshop*. 2013; Washington DC: AMIA
- 55 Dixon B, Turner A, Pina J, Richards J, Kharrazi H. Public and global health informatics year in review [2013]. Proceedings of American Medical Informatics Association Annual Symposium. 2013; 326-328. Washington DC: AMIA
- 56 Kharrazi H, Lu AS, Gharghabi F, Coleman W. The effectiveness of health games in improving health outcomes: a systematic review. *Proceedings of Midwestern Conference on Health Games*. 2011. Indianapolis, IN: IUPUI
- 57 Mokashi A, Kharrazi H, Otley A. Can a video game improve adherence to treatment in children with type 1 diabetes? *Proceedings of the American Diabetes Association 71st Scientific Sessions*. 2011; San Diego, CA: American Diabetes Association
- 58 **Kharrazi H**, Mehrabi S. Meaningful use of personal health records. *Proceedings of Individualized Healthcare Conference*. 2011. Washington DC: AMA-IEEE Medical Technology
- 59 Kharrazi H, Vincz L. Using health information technology and behavior change model to increase exercise adherence in obesity. *Proceedings of Individualized Healthcare Conference*. 2011. Washington DC: AMA-IEEE Medical Technology
- 60 **Kharrazi H**, Rand K, Ross T, Militello L. Behavioral change health games: From theory to practice. *Proceedings of Midwestern Conference on Health Games*. 2010; Indianapolis, IN: IUPUI
- 61 Vincz L*, <u>Kharrazi H</u>. Interactive health information technology and obesity. *Proceedings of Midwestern Conference on Health Games.* 2010; Indianapolis, IN: IUPUI
- 62 Locke T*, <u>Kharrazi H</u>. Health games and attention deficit hyperactivity disorder: opportunities and challenges. *Proceedings of Midwestern Conference on Health Games*. 2010; Indianapolis, IN: IUPUI
- 63 **Kharrazi H**. A behavior change game for people with type 1 diabetes. *Proceedings of Games for Health Fifth Annual Conference*. 2009; Boston, MA: Robert Wood Johnson Foundation

- 64 Paterson G, **Kharrazi H**, Taylor B, Abidi S, Mensink N, Cheng C. Caregiver, researcher and educator responses to the training requirement for applied clinical informatics subspecialty. *Proceedings of the 9th Annual Symposium on Medical Professions Education*. 2009; Halifax, NS: Dalhousie Press
- 65 **Kharrazi H**, Watters C, Oore S, Liu F. Improving behavioral stages in children by adaptive applications. *Proceedings of Information Technology and Communications in Health.* 2007; Victoria, BC: ITCH
- 66 **Kharrazi H**, Lichodzijewski P. Efficient evolution of rule-based classifiers: Findings of the application in breast cancer diagnosis. *Proceedings of Dalhousie Computer Science In-House Conference*. 2007; Halifax, NS: Dalhousie Press
- 67 Lichodzijewski P, **Kharrazi H**. Efficient evolution of rule-based classifiers: An application in medical diagnosis. *Proceedings of the 11th International Symposium on Health Information Management* Research. 2006; 122-124. Halifax, NS: iSHIMR
- 68 **Kharrazi H**. An automated telephony natural speech interface as a 'virtual coach' for child healthcare. *Proceedings of the 3rd Annual Crossroads Conference*. 2005; Halifax, NS: Dalhousie Press
- 69 Watters C, Liu F, **Kharrazi H**, Oore S, Kellar M, Shepherd M. Building classes of entertaining games for health education. *Proceeding of Digital Games Research Association: Changing Views - Worlds in Play.* 2005; Vancouver, BC: DiGRA

Conference Posters (peer reviewed)8

- 1 Kalari VK, Kharrazi H, Wilcox HC. Now screening suicidality and ASD: can the emergency department paly a leading role? The Scientific Proceedings of the 69th Annual Meeting of the American Academy of Child & Adolescent Psychiatry. 2022; Toronto, Canada: AACAP/CACAP. Published in the Journal of the American Academy of Child & Adolescent Psychiatry. 2022; 61(10): S237–S238. URL: Link DOI: 10.1016/j.jaac.2022.09.310
- 2 Sood PD*, Liu S, Chang HY, <u>Kharrazi H</u>. Measuring the effect of EHR data quality in identifying type 2 diabetes population across common phenotype definitions of diabetes. *Proceedings of American Medical Informatics Association Annual Symposium*. 2022; [in-press] Washington DC: AMIA
- 3 Chang HY, Kitchen C, Weiner JP, **Kharrazi H**. Identification and prediction of severe hypoglycemia using structured and unstructured EHR data among type-2 diabetes patients. *Academy Health Annual Research Meeting*. 2022; Washington DC: Academy Health
- 4 Pandya CJ, Hatef E, Wu J, Richards T, Weiner JP, <u>Kharrazi H</u>. Using claims and electronic health records data to assess the impact of social needs on healthcare utilization and costs

⁸ See <u>http://hkharrazi.com?section=pub</u> for links and full text of the posters.

within Medicaid population. *Academy Health Annual Research Meeting*. 2022; Washington DC: Academy Health

- 5 Kitchen C, Chang HY, Weiner JP, <u>Kharrazi H</u>. Assessing added value of vital signs (BMI & BP) extracted from EHRs in the performance of healthcare risk adjustment models. *Proceedings of American Medical Informatics Association Annual Symposium*. 2021; 1708. San Diego, CA: AMIA
- 6 Afshar AS*, Li Y, Chen Z, Chen Y, Lee JH, Irani D, Crank A, Singh D, Kanter M, Faraday N, Kharrazi H. Assessing data quality of higher frequency time series vital signs captured in intensive care units. *Proceedings of American Medical Informatics Association Annual Symposium*. 2021; 1578. San Diego, CA: AMIA
- 7 Kitchen C, Chang HY, Weiner JP, **Kharrazi H**. Assessing added value of vital signs extracted from electronic health records in the performance of healthcare risk adjustment models. *Proceedings of Academy Health Annual Research Meeting.* 2021; Virtual: Academy Health.
- 8 Chang HY, Hatef E, Ma X, Weiner JP, <u>Kharrazi H</u>. Comparison of the impact of Area Deprivation Index on the performance of claims-based risk adjustment models across three geographic levels. *Proceedings of Academy Health Annual Research Meeting*. 2020; Virtual: Academy Health.
- 9 Hatef E, Ma X, Rouhizadeh M, Singh G, Weiner JP, Kharrazi H. Assessing the impact of social needs and social determinants of health on healthcare utilization: using patient and community level data of a multi-level healthcare system. *Proceedings of Academy Health Annual Research Meeting.* 2020; Virtual: Academy Health.
- 10 He G, Bian X, Garbarino A, Kharrazi H, Caban JJ, Zhang P, Chen J. Necklace: a guided interaction and comparison metaphorical interface for medical claim analysis. VIS 2019; Vancouver, Canada: IEEE
- 11 Karami A, Dahl AA, Shaw G, Valappil PS, Turner-McGrievy G, Bozorgi P, <u>Kharrazi H</u>. Does diet-related tweets disclose political preferences? *Proceedings of American Medical Informatics Association Annual Symposium*. 2019; 1623. Washington DC: AMIA
- 12 Kan HJ, **Kharrazi H**, Chang H-Y, Lemke K, Weiner JP. Patterns of longitudinal disease development and association with future medical care costs. *Academy Health Annual Research Meeting.* 2019; Washington DC: Academy Health
- 13 Hatef E, Rouhizadeh M, Tia I, Lasser E, Hill-Briggs F, Marsteller J, Kharrazi H. Assessing the availability of social and behavioral determinants data in structured and unstructured electronic health records: a retrospective analysis of a multi-level healthcare system. Academy Health Annual Research Meeting. 2019; Washington DC: Academy Health
- 14 Hatef E, **Kharrazi H**, Nelson K, Sylling P, Lasser E, Searle K, Predmore Z, Batten A, Curtis I, Fihn S, Weiner JP. The association between neighborhood socioeconomic and housing characteristics with hospitalization: results of a national study of veterans. *Academy Health*

Annual Research Meeting. 2019; Washington DC: Academy Health

- 15 Li A* & <u>Kharrazi H</u>. Measuring HCUP's quality of demographic data: a case-study of Maryland's hospital discharge data. *Academy Health Annual Research Meeting*. 2019; Washington DC: Academy Health
- 16 Pittell H*, Lasser E, Kan H, Weiner JP, <u>Kharrazi H</u>. Measuring the overlap of diagnostic codes extracted from administrative claims versus electronic health records using a large multiprovider data warehouse. *Academy Health Annual Research Meeting*. 2019; Washington DC: Academy Health
- 17 Chang H-Y, Kan H, Shermock K, Alexander CG, Weiner JP, <u>Kharrazi H</u>. Savings in healthcare costs and utilization associate with medication full initial fillers. *Academy Health Annual Research Meeting*. 2019; Washington DC: Academy Health
- 18 Kharrazi H, Chang H-Y, Weiner JP, Gudzune K. Using EHR-based blood pressure to improve claims-based prediction models of cost and utilization. *Academy Health Annual Research Meeting.* 2019; Washington DC: Academy Health
- 19 Kharrazi H, Anzaldi L. Using hospital discharge summaries to measure the incident and predict geriatric falls in Maryland. *Academy Health Annual Research Meeting*. 2018; Seattle, WA: Academy Health
- 20 **Kharrazi H**, Lasser E, Richards T, Ma X, Weiner JP. Comparison of diagnostic data collected in EHRs versus insurance claims [using HealthPartners data]. *Academy Health Annual Research Meeting.* 2018; Seattle, WA: Academy Health
- 21 Husain A*, Sridharma S, <u>Kharrazi H</u>. Prevalence of pediatric fall injuries: a statewide study. *Academy Health Annual Research Meeting*. 2018; Seattle, WA: Academy Health
- 22 **Kharrazi H**, Ford E. An update on forecasting the maturation of EHR functions among U.S. hospitals. *Academy Health Annual Research Meeting*. 2018; Seattle, WA: Academy Health
- 23 Kan HJ, Chang H-Y, Kharrazi H, Weiner JP. A comparison of risk adjustment models based on traditional statistical and machine learning techniques in predicting health care costs in older adults. *Academy Health Annual Research Meeting*. 2018; Seattle, WA: Academy Health
- 24 Kharrazi H, Searle K, Box T, Fihn S, Weiner JP. Spatial distribution of obesity among the U.S. veteran health administration's male population in 2015. *Academy Health Annual Research Meeting*. 2017; New Orleans, LA: Academy Health
- 25 Kan HJ, Kharrazi H, Leff B, Boyd C, Davison A, Chang H-Y, Kimura J, Lasser E, Weiner JP. Geriatric risk factors and their association with health care use in the elderly population. *Academy Health Annual Research Meeting.* 2017; New Orleans, LA: Academy Health
- 26 Kharrazi H, Anzaldi L, Lasser E, Sharfstein J. Baltimore falls reduction initiative engaging

neighborhoods & data (B'FRIEND). Academy Health Annual Research Meeting. 2017; New Orleans, LA: Academy Health

- 27 Kharrazi H, Lasser EC, Yasnoff WA, Loonsk J, Advani A, Lehmann HP, Chin DC, Weiner JP. A proposed national research and development agenda for population health informatics. *Academy Health Annual Research Meeting.* 2017; New Orleans, LA: Academy Health
- 28 Chang H-Y, Richards TM, Weiner JP, Kharrazi H. Using medication adherence extracted from EHR prescriptions and pharmacy claims fills to improve risk stratification. *Academy Health Annual Research Meeting.* 2017; New Orleans, LA: Academy Health
- 29 Chan KS, Kharrazi H, Parikh MA, Ford EW. Assessing EHR implementation challenges using item response theory. *Academy Health Annual Research Meeting*. 2017; New Orleans, LA: Academy Health
- 30 Kharrazi H, Wilcox H, Wissow L, Wilson R, Musci R, Zhang A, Robinson K. Data Linkage Strategies to Advance Suicide Prevention. *Academy Health Annual Research Meeting*. 2016; Boston, MA: Academy Health
- 31 Lu AS & **Kharrazi H**. A comprehensive content analysis of games for health. *International Society of Behavioral Nutrition and Physical Activity Convention*. 2015, Edinburgh, Scotland: ISBNPA
- 32 **Kharrazi H**. Development of a community-wide HIE-based hospital readmission risk prediction and notification system: A feasibility and evaluation study. *Academy Health Annual Research Meeting.* 2014; San Diego, CA: Academy Health
- 33 Kharrazi H. The role of 'Big Data' in community-wide population healthcare delivery and research: Case study and matching conceptual framework. Academy Health Annual Research Meeting. 2014; San Diego, CA: Academy Health
- 34 Kharrazi H. The role of big data in community-wide population healthcare delivery and research. American Medical Informatics Association Annual Symposium. 2014; 1458. Washington DC: AMIA
- 35 Kharrazi H. 'Clinical Knowledge Hub' technical integration of rules, data sets, and queries: a pilot study. American Medical Informatics Association Annual Symposium. 2012; 1812. Chicago, IL: AMIA
- 36 Vincz L*, Kharrazi H. Increasing physical activity by implementing a behavioral change intervention using information technology. *Midwestern Conference on Health Games*. 2011. Indianapolis, IN: IUPUI
- 37 Blue T*, Kharrazi H. Unlocking the potential use of video games in behavioral therapy of young children with attention deficiency/hyperactivity disorder. *Midwestern Conference on Health Games*. 2011. Indianapolis, IN: IUPUI

38 Kharrazi H, Watters C. Changing behavioral stages in diabetic children by adaptive interactive applications: theoretical considerations. 11th World Congress on Internet in Medicine. 2006; Toronto, ON: MedNet

Keynotes and Invited Panels (not peer-reviewed)

- 1 **Kharrazi H**. Population Health Informatics: what, how, and why? *Brown University's Learning Health Systems Rehabilitation Research Network (LeaRRn).* 2023; Providence, RI (virtual).
- 2 **Kharrazi H**. Informatics and population health: challenges and opportunities. *American College* of Medical Informatics (ACMI) Conference. 2023; San Juan, PR.
- 3 Clark C, Kharrazi H, Davis S, Nelson G, Everson J [moderator]. Responsible Stewardship of Machine Learning and Algorithmic Bias. DHHS ONC (Office of National Coordinator) Annual Meeting. 2022; Washington DC (virtual). https://www.healthit.gov/news/events/2022-onc-virtual-annual-meeting
- 4 Pickering C, Vest JR, Tanzman B, Abujarad F, **Kharrazi H** [moderator]. Electronic referrals for connected & integrated service delivery for vulnerable older adult populations. *Proceedings of AMIA Annual Symposium*. 2018; San Francisco, CA.
- 5 Kharrazi H. Methods for Evaluating Natural Experiments in Obesity: A Systematic Evidence Review (KQ1). Presented at: NIH Methods for Evaluating Natural Experiments in Obesity; Dec 2017; Bethesda MD. https://prevention.nih.gov/p2p-workshop/2017/methods-evaluating-natural-experiments-obesity/agenda/day-1
- 6 **Kharrazi H**. Population Health Informatics: Past, Present, and Future. Presented at: *Health Policy Seminar – George Mason University, Department of Health Administration and Policy*. Oct 2017; Fairfax, VA.
- 7 Kharrazi H. Population Health Informatics and Visualization [Keynote Address]. Presented at: IEEE VIS – VAHC 2017. Oct 2017; Phoenix, AZ. http://www.visualanalyticshealthcare.org/speakers.html
- 8 **Kharrazi H**. Population Health Informatics: Challenges, Opportunities, and Case Studies. Presented at: *Population Health Forum – Thomas Jefferson University, Jefferson College of Population Health.* Sep 2017; Philadelphia, PA. *http://jdc.jefferson.edu/hpforum/113/ http://events.r20.constantcontact.com/register/event?oeidk=a07eed31tcx346a4e9ferstr=lrj4tqkab*
- 9 Kharrazi H, Fihn S, Advani A, Kachur S, Sutariya B, Yasnoff W. A Proposed National Research and Development Agenda for Population Health Informatics: Case Studies and Future Directions. Presented at: *iHealth 2017 Clinical Informatics Conference (AMIA)*; May 2017; Philadelphia, PA. https://www.amia.org/ibealth2017/panels
- 10 Kharrazi H, Wilcox H. Data Linkage Strategies and Methods to Advance Youth Suicide

Prevention. Presented at: NIH Pathways to Prevention Workshop: Advancing Research to Prevent Youth Suicide; Mar 2016; Bethesda MD. https://prevention.nib.gov/programs-events/pathways-to-prevention/workshops/binders/2016/suicide-prevention/day-1

- 11 **Kharrazi H**, Yasnoff W. Learnings from the 'Population Health Informatics' conference. Presented at: *Institute of Medicine – Population Health Board*; May 2014; Washington DC.
- 12 **Kharrazi H**. What is 'Health Informatics', and how it can be leveraged to propel healthcare in emerging markets? Presented at: *IAAPDC Academics and Professionals*; 2014; Bethesda, MD. *http://www.iaapdc.org/2014/04/*
- 13 Kharrazi H. Using 'Meaningful Use' to provide population 'Decision Support Systems' for 'Accountable Care Organizations': Challenges and opportunities. Presented at: Medical Informatics World Conference; Apr 2014; Boston, MA. http://www.medicalinformaticsworld.com/hit_content.aspx?id=139519&libID=139490
- 14 Kharrazi H. 'Health Information Exchanges' and 'Big Data': Challenges and opportunities. Presented at: Big Data and Analytics in Healthcare: Reduce Costs and Increase Performance; Apr 2013; Philadelphia, PA.
- 15 Weiner JP, **Kharrazi H**, Sylvia M. Harnessing the power of data for population health. Presented at: *World Health Care Congress*; Apr 2013; Washington DC.
- 16 Kharrazi H. Contextualizing clinical decision support systems in tethered EHRs/PHRs: A new approach to population-based quality measures. Presented at: *Indiana Health Information Management Association (IHIMA)*; Apr 2012; Indianapolis, IN.

Other Presentations (not peer-reviewed)

- 1 **Kharrazi H**. Using CRISP data for population health research: the geriatric falls and suicide prevention projects. Presented at: *Johns Hopkins Institute for Clinical and Translational Research Symposium, 2019*; Baltimore, MD.
- 2 Kharrazi H, Weiner JP, Sharfstein J, Anzaldi L. Baltimore Falls Reduction Initiative Engaging Neighborhoods and Data (B'FRIEND). Presented at: *Baltimore City Health Department, 2016*; Baltimore, MD.
- 3 **Kharrazi H**. Hospital Health IT in the U.S.: Lessons Learned Hospital IT System Design and Implementation. Presented at: *Chinese Hospital Delegation, 2014, 2015 and 2016*; Baltimore, MD.
- 4 Loonsk JW, Weiner JP, **Kharrazi H**. A hybrid digital design pattern for public and population health surveillance. Presented at: *CDC PHI Conference*; Feb 2014; Atlanta, GA.
- 5 Kharrazi H. Public health informatics or population health informatics: Setting the debate context. Presented at: *Population Health Informatics Presymposium Workshop at AMLA Symposium*. Nov 2013; Washington DC.

ADDITIONAL INFORMATION

Keywords

Primary: Population Health Informatics; Population Health Management; Risk Stratification; Predictive Analytics; Utilization Modeling; and Data Quality

Secondary: Meaningful Use; EHR Adoption; Public Health Informatics; Clinical Informatics; Clinical Decision Support Systems; and Consumer Health Informatics

Bibliometric:	http://hkharrazi.com/?section=ext
PubMed.	https://pubmed.pcbi.plm.pib.gov/?term=(kharrazi%20hadi)&sort=date
Google Scholar:	https://scholar.google.com/citations?user=O687ewkAAAAI
0008-00-00-00-00-00-00-00-00-00-00-00-00	2023-06-06 citations: 4629 h-index: 40 i10-index: 86