IQuEST Improving Health and Well-being through Innovations in Health Care Delivery

Appendix 6: Impacts

The following **62 publications** represent the most impactful of the **1,414 peer-reviewed articles authored by IQuESt COIN investigators** from FY20-FY23. These publications were selected because of their impact upon clinical practice, health policy and health services research methodology. Impact was most frequently demonstrated through citation in an official policy, report, or clinical practice guideline; being cited more than 125 times; or publication in a journal with an impact factor greater than 12.

Each article is tied to an impact goal or emerging focus, or another scientific area as indicated by the icons in the right column:

Impact Goal 1 | Impact Goal 2 | Impact Goal 3 | Additional Contribution Area | Emerging Area | Clinical Impact

Figure 1a: Selected Impactful Peer-Reviewed Articles

Citation	How/Why Impactful	Impact Area
Boykin DM, Wray LO, Funderburk JS, Holliday S, Kunik ME, Kauth MR, Fletcher TL, Mignogna J, Roberson RB 3rd, Cully JA. Leveraging the ExpandNet framework and operational partnerships to scale-up brief Cognitive Behavioral Therapy in VA primary care clinics. J Clin Transl Sci. 2022 Jul 20;6(1):e95. doi: 10.1017/cts.2022.430. PMID: 36003211; PMCID: PMC9393574.	The Brief Cognitive Behavioral Therapy (MyBrief CBT) project has led to the creation of a national note template and real-time data dashboard for providers and clinical leaders to track program use and impact. Project publications have documented the program's implementation and scaling successes and sustained impact on Veteran clinical outcomes related to depression. The program has impacted VHA priority goals related to improved patient access to care, improved provider experiences, and improved delivery of best-practices and high-quality care. This demonstration project was designed to train and support providers, facilities, and VISNs to improve delivery of evidence-based psychotherapies (EBP) for common mental health conditions. During phase 1, the project focused on training and supporting VA Primary Care Mental Health Integration (PCMHI) providers to address depression and suicidal ideation using an established MyBrief CBT program. MyBrief CBT launched in early FY21 and is now being used in 10 VISNs and over 90 VA facilities. As of February of 2024,	**Behavioral Health**
Mignogna J, Boykin D, Gonzalez RD, Robinson A, Zeno D, Sansgiry S, Broderick-Mcdaniel J, Roberson RB 3rd, Sorocco K, Cully JA. Expanding access to evidence-based psychotherapy in VA settings: implementation of the brief cognitive behavioral therapy for depression program. Front Health Serv. 2023 Oct 13;3:1210286. doi: 10.3389/frhs.2023.1210286. PMID: 37908557; PMCID: PMC10614153.		

Cully JA, Hundt NE, Fletcher T, Sansgiry S, Zeno D, Kauth MR, Kunik ME, Sorocco K. Brief Cognitive-Behavioral Therapy for Depression in Community Clinics: A Hybrid Effectiveness-Implementation Trial. Psychiatr Serv. 2023 Sep 7:appips20220582. doi: 10.1176/appi.ps.20220582. Epub ahead of print. PMID: 37674395.	over 100 providers have been trained and over 1200 Veterans have received the intervention.	
Ecker AH, Day G, Amspoker AB, Bryan JL, Day SC, Wassef M, Weaver K, Lindsay J. Feasibility of Group-Based Implementation Facilitation for Video Telemental Health. J Technol Behav Sci. 2023 Jan 11;8(4):1-5. doi: 10.1007/s41347-022-00295-x. Epub ahead of print. PMID: 36644310; PMCID: PMC9831874.	Jan Lindsay, PhD, leads the PIVOT - Personalized Implementation of Virtual Treatments team (including Drs. Amspoker, Caloudas, Day, Ecker, Hogan, and Touchett), whose PIVOT-R (PIVOT for rural Veterans) project was designated a VA Office of Rural Health Promising Practice starting in FY23. PIVOT-R uses a flexible implementation approach, adapted from Implementation Facilitation, that integrates training/education, mentoring, and an iterative mixed-methods evaluation approach to expand the availability of VA Video Connect (VVC; video telehealth to home) for mental health with an emphasis on rural Veterans and providers. PIVOT has collaborated with 22 main VA facilities and 150 affiliated community-based outpatient clinics where 27,744 rural Veterans have received mental health care via VVC during 171,894 encounters (64,779 total Veterans and 370,155 total VVC encounters).	**Behavioral Health** 
Guajardo E, Amspoker AB, Stanley MA, Hogan J, Ecker AH, Lindsay JA. Patterns of Telehealth Use for Mental Health Treatment Among Hispanic Veterans. Telemed J E Health. 2023 May;29(5):788-792. doi: 10.1089/tmj.2022.0300. Epub 2022 Oct 25. PMID: 36282802.		
Day SC, Caloudas A, Frosio K, Lindsay J, Shore JH. Culturally Centered Implementation of Video Telehealth for Rural Native Veterans. Telemed J E Health. 2023 Dec;29(12):1870-1877. doi: 10.1089/tmj.2022.0506. Epub 2023 Apr 19. PMID: 37074341.		
Sheinfil AZ, Day G, Walder A, Hogan J, Giordano TP, Lindsay J, Ecker A. Rural Veterans with HIV and Alcohol Use Disorder receive less video telehealth than urban Veterans. J Rural Health. 2023 Sep 27. doi: 10.1111/jrh.12799. Epub ahead of print. PMID: 37759376.		
Day G, Ecker AH, Amspoker AB, Dawson DB, Walder A, Hogan JB, Lindsay JA. Black veteran use of video telehealth for mental health care. Psychol Serv. 2023 Dec 7. doi: 10.1037/ser0000827. Epub ahead of print. PMID: 38059987.		

Lindsay JA, Day SC, Amspoker AB, Fletcher TL, Hogan J, Day G, Helm A, Stanley MA, Martin LA. Personalized Implementation of Video Telehealth. Psychiatr Clin North Am. 2019 Dec;42(4):563-574. doi: 10.1016/j.psc.2019.08.001. Epub 2019 Oct 1. PMID: 31672207.		
Chen PV, Helm A, Fletcher T, Wassef M, Hogan J, Amspoker A, Cloitre M, Lindsay J. Seeing the Value of Video: A Qualitative Study on Patient Preference for Using Video in a Veteran Affairs Telemental Health Program Evaluation. Telemed Rep. 2021 May 31;2(1):156-162. doi: 10.1089/tmr.2021.0005. PMID: 35720740; PMCID: PMC8812285.	In partnership with Office of Rural Health and Office of Mental Health and Suicide Prevention, Dr. Jan Lindsay and the PIVOT Team (including Drs. Day, Ecker, Hogan and Touchett) have received over $1M for five projects focused on increasing mental health services for rural Veterans via video telehealth to home and web-based mental health. One quarter of all Veterans live in rural communities, and mental health services are often not available in rural areas. This work addresses VA Strategy 2.2.4: Increased access for rural Veterans, and VA Strategy 2.2.2: Early intervention and full access to mental health and suicide prevention.	**Behavioral Health** 
Choi DT, Sada YH, Sansgiry S, Kaplan DE, Taddei TH, Aguilar JK, Strayhorn M, Hernaez R, Davila JA. Using Telemedicine to Facilitate Patient Communication and Treatment Decision-Making Following Multidisciplinary Tumor Board Review for Patients with Hepatocellular Carcinoma. J Gastrointest Cancer. 2022 Jun 30:1–9. doi: 10.1007/s12029-022-00844-w. Epub ahead of print. PMID: 35773376; PMCID: PMC9247952.	This mixed-methods study was conducted among patients diagnosed with hepatocellular carcinoma (HCC) who were discussed in multidisciplinary tumor board (MTB) review at one of three VA Medical Centers (VAMC). This report showed that using telemedicine to communicate treatment recommendations following MTB review was found to be feasible and an acceptable alternative to an in-person visit for patient with HCC.	
Singh H, Sittig DF. A Sociotechnical Framework for Safety-Related Electronic Health Record Research Reporting: The SAFER Reporting Framework. Ann Intern Med. 2020 Jun 2;172(11 Suppl):S92-S100. doi: 10.7326/M19-0879. PMID: 32479184.	This article describes a foundational list of research and reporting recommendations to address implementation, effectiveness, and generalizability of electronic health record (EHR)-based interventions needed to effectively reduce preventable patient harm is provided. The SAFER Reporting Framework is not meant to replace previous research reporting guidelines, but rather provides a sociotechnical adjunct that complements their use.	
Powell L, Sittig DF, Chrouser K, Singh H. Assessment of Health Information Technology-Related Outpatient Diagnostic Delays in the US Veterans Affairs Health Care System: A Qualitative Study of Aggregated Root Cause Analysis Data. JAMA Netw Open. 2020 Jun	Diagnostic delay in the outpatient setting is an emerging safety priority that health information technology (HIT) should help address. However, diagnostic delays have persisted, and new safety concerns associated with the use of HIT have emerged. This qualitative study of a national data set of root cause analyses suggests that interventions to reduce outpatient diagnostic delays could aim to improve test result management,	**Safety and Informatics** 

1;3(6):e206752. doi: 10.1001/jamanetworkopen.2020.6752. PMID: 32584406; PMCID: PMC7317596.	interoperability, data visualization, and order entry, as well as to decrease information overload. Press coverage in “Outpatient Diagnostic Delays Linked to EHR Usage, Design Flaws”, Medscape, June 2020.	
Singh H, Upadhyay DK, Torretti D. Developing Health Care Organizations That Pursue Learning and Exploration of Diagnostic Excellence: An Action Plan. Acad Med. 2020 Aug;95(8):1172-1178. doi: 10.1097/ACM.0000000000003062. PMID: 31688035; PMCID: PMC7402609.	The authors propose a 5-point action plan and corresponding policy levers to support development of learning and exploration of diagnostic excellence (LEDE) organizations. The authors also outline specific policy actions to support organizations in implementing these recommendations. They suggest this action plan can stimulate scientific, practice, and policy progress needed for achieving diagnostic excellence and reducing preventable patient harm. This framework is now being used in the recent Leapfrog Group project, Recognizing Excellence in Diagnosis, which is a new national initiative to publicly report and recognize hospitals for preventing patient harm due to diagnostic errors.	
Singh H, Carayon P. A Roadmap to Advance Patient Safety in Ambulatory Care. JAMA. 2020;324(24):2481–2482. doi:10.1001/jama.2020.18551. PMID: 33351052	In this JAMA Viewpoint, Drs. Singh and Carayon look beyond the hospital setting, where most quality improvement efforts have focused to date, to opportunities for improving safety related to ambulatory care and digital health. They propose a roadmap of science, practice, policy and patient/caregiver related milestones needed to accelerate progress in achieving patient safety in ambulatory care.	
Murphy DR, Zimolzak AJ, Upadhyay DK, Wei L, Jolly P, Offner A, Sittig DF, Korukonda S, Rekha RM, Singh H. Developing electronic clinical quality measures to assess the cancer diagnostic process. J Am Med Inform Assoc. 2023 Aug 18;30(9):1526-1531. doi: 10.1093/jamia/ocad089. PMID: 37257883; PMCID: PMC10436145.	Drs. Daniel Murphy, Andrew Zimolzak, Dean Sittig, and Hardeep Singh's work was accepted into the best-of-the-best oral abstract session (top 6 presentations) at the Society to Improve Diagnosis in Medicine (SIDM) 2023 Conference. It was subsequently awarded Best Oral Abstract Presentation at this conference, representing the best item presented at the entire conference. The annual international SIDM conference brings together top researchers and advocates in the field of diagnostic excellence.	**Safety and Informatics**
Makris KI, Clark DL, Buffie AW, Steen EH, Ramsey DJ, Singh H. Missed Opportunities to Promptly Diagnose and Treat Adrenal Tumors. J Surg Res. 2022 Aug;276:174-181. doi: 10.1016/j.jss.2022.02.049. Epub 2022 Mar 30. PMID: 35366423.	This article quantifies delays in the evidence-based workup of adrenal masses in the VA system. These delays in workup are associated with delayed offering of recommended treatment. This work describes the current situation and informs potential initiatives to increase compliance with guidelines, ultimately leading to better and more timely care for Veterans.	
Gandhi TK, Singh H. Reducing the Risk of Diagnostic Error in the COVID-19 Era. J Hosp Med. 2020 Jun;15(6):363-366. doi: 10.12788/jhm.3461. PMID: 32490798; PMCID: PMC7289509.	Based on emerging literature and collaborative discussions across the globe, the authors propose a new typology of diagnostic errors of concern in the COVID-19 era. These errors span the entire continuum of care and have both systems-based and cognitive origins. While some errors arise from	

	previously described clinical reasoning fallacies, others are unique to the pandemic. The authors provide a user-friendly nomenclature while describing eight types of diagnostic errors and highlight mitigation strategies to reduce potential preventable harm caused by those errors.	
Kulkarni PA, Singh H. Artificial Intelligence in Clinical Diagnosis: Opportunities, Challenges, and Hype. JAMA. 2023 Jul 25;330(4):317-318. doi: 10.1001/jama.2023.11440. PMID: 37410477.	This article explores the potential benefits and challenges of incorporating ChatGPT and other artificial intelligence (AI) platforms into health care diagnosis. A foundational aspect of high-quality health care—making a correct and timely diagnosis—remains a challenge in modern medicine despite decades of technological advances. Therefore, any emerging technology with potential to reduce diagnostic errors warrants serious examination.	**Safety and Informatics** 
Kaul B, Lee JS, Glidden DV, Blanc PD, Zhang N, Collard HR, Whooley MA. Agent Orange Exposure and Risk of Idiopathic Pulmonary Fibrosis among U.S. Veterans. Am J Respir Crit Care Med. 2022 Sep 15;206(6):750-757. doi: 10.1164/rccm.202112-2724OC. PMID: 35559726; PMCID: PMC9799114.	This study leveraged the VA electronic health record system to evaluate the association between Agent Orange exposure and Idiopathic Pulmonary Fibrosis (IPF) among Vietnam Era Veterans. Agent Orange exposure was associated with a 14% higher risk of developing IPF in an unadjusted analysis and an 8% higher risk after adjusting for known IPF risk factors. The publication establishes a premise for future work that examines the role of exposures in the development of fibrotic lung diseases, which is of particular importance in light of the PACT Act.	**Military Exposures** 
Duong LM, Nono Djotsa ABS, Vahey J, Steele L, Quaden R, Harrington KM, Ahmed ST, Polimanti R, Streja E, Gaziano JM, Concato J, Zhao H, Radhakrishnan K, Hauser ER, Helmer DA, Aslan M, Gifford EJ. Association of Gulf War Illness with Characteristics in Deployed vs. Non-Deployed Gulf War Era Veterans in the Cooperative Studies Program 2006/Million Veteran Program 029 Cohort: A Cross-Sectional Analysis. Int J Environ Res Public Health. 2022 Dec 24;20(1):258. doi: 10.3390/ijerph20010258. PMID: 36612580; PMCID: PMC9819371.	Dr. Helmer is co-chair of CSP 2006 “Genomics of GWI in Veterans” and leads the large team analyzing data and reporting findings from this project. These publications represent landmark reports of the largest cohort of GWVs ever assembled; the first Million Veteran Program study to recontact participants for additional, targeted self-reported information; and the most detailed characterization of a large cohort of Veterans with GWI.	
Radhakrishnan K, Hauser ER, Polimanti R, Helmer DA, Provenzale D, McNeil RB, Maffucci A, Quaden R, Zhao H, Whitbourne SB, Harrington KM, Vahey J, Gelernter J, Levey DF, Huang GD, Gaziano JM, Concato J, Aslan M. Genomics of Gulf War Illness in U.S. Veterans Who Served		

during the 1990-1991 Persian Gulf War: Methods and Rationale for Veterans Affairs Cooperative Study #2006. Brain Sci. 2021 Jun 25;11(7):845. doi: 10.3390/brainsci11070845. PMID: 34202057; PMCID: PMC8301942.		
Jani N, Christie IC, Wu TD, Guzman DE, Han J, Broderick B, Falvo MJ, Sotolongo A, Osinubi OY, Helmer DA. Factors associated with a diagnosis of sarcoidosis among US veterans of Iraq and Afghanistan. Sci Rep. 2022 Dec 21;12(1):22045. doi: 10.1038/s41598-022-24853-8. PMID: 36543815; PMCID: PMC9772322	This publication is only the second peer-reviewed report linking self-reported Airborne Hazards and Open Burn Pit Registry to VHA electronic health record data to explore associations between self-reported military exposures and health outcomes.	**Military Exposures** 
Wong JJ, SoRelle RP, Yang C, Knox MK, Hysong SJ, Dorsey LE, O'Mahen PN, Petersen LA. Nurse Leader Perceptions of Data in the Veterans Health Administration: A Qualitative Evaluation. Comput Inform Nurs. 2023 Sep 1;41(9):679-686. doi: 10.1097/CIN.0000000000001003. PMID: 36648170; PMCID: PMC10350463.	This article suggests that prioritizing end-user experience and needs is necessary to better govern evidence-based data tools for improving nursing care. Continuous nurse leader involvement in data governance is integral to ensuring high-quality data for end-user nurses to guide their decisions impacting patient care. Understanding how nurses use and perceive available data to support safe staffing can strengthen learning health care systems and support evidence-based practice, particularly given emerging data availability and specific nursing challenges in data usability.	**Nursing Research** 
Knox MK, Mehta PD, Dorsey LE, Yang C, Petersen LA. A Novel Use of Bar Code Medication Administration Data to Assess Nurse Staffing and Workload. Appl Clin Inform. 2023 Jan;14(1):76-90. doi: 10.1055/a-1993-7627. Epub 2022 Dec 6. PMID: 36473498; PMCID: PMC9891851.	The Novel Electronic Health Record-Derived Staffing Measures (NESt) developed at IQuESt are now being used for assessing inpatient registered nurse (RN) staffing enterprise-wide. The measures use nurse activity data in the health record to approximate daily unit-level RN staffing (RN hours per patient day-RNHPPD) and workload (RN patients per staff). Prior to the development of these measures, and as highlighted during the COVID-19 pandemic, VHA ONS did not have the consistent, reliable, enterprise-wide daily unit-level inpatient direct-care nurse staffing data that is are needed to evaluate staffing patterns nationally and to compare data across VAMCs.	
Yang C, Kuebeler MK, Jiang R, Knox MK, Wong JJ, Mehta PD, Dorsey LE, Petersen LA. Beyond Hospital-Level Aggregated Data: A Methodology to Adapt Clinical Data From the Electronic Health Record for Nursing Unit-Level Research. Med Care. 2024 Mar 1;62(3):189-195. doi: 10.1097/MLR.0000000000001972. Epub 2024 Jan 4. PMID: 38180051.		
Hysong SJ, Amspoker AB, Hughes AM, Woodard L, Oswald FL, Petersen LA, Lester HF. Impact of team	This paper outlines the protocol of a study aiming to examine the extent to which primary care clinics in the Veterans Health Administration have	

configuration and team stability on primary care quality. Implement Sci. 2019 Mar 6;14(1):22. doi: 10.1186/s13012-019-0864-8. PMID: 30841926; PMCID: PMC6404317.	implemented team configurations consistent with recommendations based on the Patient-Centered Medical Home model and the extent to which adherence to said recommendations, team stability, and role stability impact health care quality. The paper includes the protocol for a novel application of the Productivity Measurement and Enhancement System (ProMES), to establish the critical domains of primary care and select a succinct yet comprehensive set of indicators of primary care quality.	**Evaluation** 
Al Rifai M, Itchhaporia D, Virani SS. Pragmatic Clinical Trials- Ready for Prime Time? JAMA Netw Open. 2021 Dec 1;4(12):e2140212. PMID: 34962546.	This commentary discusses the benefits and nuances of using data from electronic medical records in the performance of pragmatic clinical trials.	
Arredondo K, Touchett HN, Khan S, Vincenti M, Watts BV. Current Programs and Incentives to Overcome Rural Physician Shortages in the United States: A Narrative Review. J Gen Intern Med. 2023 Jul;38(Suppl 3):916-922. doi: 10.1007/s11606-023-08122-6. Epub 2023 Jun 20. PMID: 37340266; PMCID: PMC10356718.	This article explores the current literature on physician shortages and assesses a variety of programs and incentives which have been implemented to recruit and retain physicians in rural areas.	**Evaluation** 
O'Mahen PN, Petersen LA. Medicaid Expansion's Final Frontier: Breaking State-Level Partisan Opposition. JAMA. 2023 Oct 3;330(13):1227-1228. doi: 10.1001/jama.2023.17700. PMID: 37713181.	The Affordable Care Act's Medicaid expansion has greatly increased access to health insurance and has been linked with improved care and outcomes. However, as of 2023, 10 states have not implemented expansion, leaving 1.5 million Americans without functional access to health insurance. This work reviews historical state uptake of Medicaid programs and discusses how variance in state policymaking institutions and partisanship may predict which of the non-expanding state are most likely to expand in the near future.	
Gloston GF, Day GA, Touchett HN, Marchant-Miros KE, Hogan JB, Chen PV, Amspoker AB, Fletcher TL, Giordano TP, Lindsay JA. Pivoting to Video Telehealth for Delivery of HIV Care During COVID-19: A Brief Report. Telemed Rep. 2021 Aug 6;2(1):205-210. doi: 10.1089/tmr.2021.0010. PMID: 34841420; PMCID: PMC8621621.	In partnership with ORH and OMHSP, Dr. Jan Lindsay and the PIVOT Team (including Drs. Day, Ecker, Hogan and Touchett) have received over $1M for five projects focused on increasing MH services for rural Veterans via video telehealth to home and web-based mental health. One quarter of all Veterans live in rural communities, and MH services are often not available in rural areas. This work addresses VA Strategy 2.2.4: Increased access for rural Veterans, and VA Strategy 2.2.2: Early intervention and full access to mental health and suicide prevention.	
Thomas B, Thadani A, Chen PV, Christie IC, Kern LM, Rajan M, Kadiyala H, Helmer DA. Veterans' ambulatory care experience during COVID-19: veterans' access to and	This publication reports veterans' access to and satisfaction with primary care services at the beginning of the COVID-19 pandemic. It provides suggestions on how existing approaches may be improved to sustain	

satisfaction with primary care early in the pandemic. BMC Prim Care. 2022 Sep 21;23(1):245. doi: 10.1186/s12875-022-01851-3.	veteran perceptions of adequate access to and satisfaction with primary care during times of crisis.	**COVID 19** 
Kohli P, Virani SS. Surfing the Waves of the COVID-19 Pandemic as a Cardiovascular Clinician. Circulation. 2020 Jul 14;142(2):98-100. doi: 10.1161/CIRCULATIONAHA.120.047901. Epub 2020 May 5. PMID: 32369419.	The novel coronavirus collapsed the global economy, changed the landscape of healthcare delivery and left many types of casualties, human and non-human, in its wake. Our only defense was to "flatten the curve" of destruction by practicing social distancing. Paradoxically, however, as we "flattened the curve" of the virus, we may have inadvertently "steepened the curve" of non-guideline-based health care delivery.	
Sittig DF, Singh H. COVID-19 and the Need for a National Health Information Technology Infrastructure. JAMA. 2020 Jun 16;323(23):2373-2374. doi: 10.1001/jama.2020.7239. PMID: 32421178.	This perspective highlighted the need for timely, accurate, and reliable data about the health of the US population at the beginning of the COVID-19 pandemic. Critical questions addressed include the following: (1) how many individuals test positive for severe acute respiratory syndrome coronavirus 2(SARS-CoV-2)and how many are affected by the disease it causes—novel coronavirus disease 2019 (COVID-19) in a given geographic area; (2) what are the age and race of these individuals; (3) how many people sought care at a health care facility; (4) how many were hospitalized; (5) within individual hospitals, how many patients required intensive care, received ventilator support, or died; and (6) what was the length of stay in the hospital and in the intensive care unit for patients who survived and for those who died.	
Jain V, Al Rifai M, Lee MT, Kalra A, Petersen LA, Vaughan EM, Wong ND, Ballantyne CM, Virani SS. Racial and Geographic Disparities in Internet Use in the U.S. Among Patients with Hypertension or Diabetes: Implications for Telehealth in the Era of COVID-19. Diabetes Care. 2021 Jan;44(1):e15-e17. PMID: 33139408.	During the COVID-19 pandemic, the telehealth model offered a valuable solution to the need for physical distancing while maintaining continuity of care. However, potential disparities in internet use, especially among individuals suffering from chronic medical conditions and minority patients, which may affect the implementation of this model. This manuscript assessed disparities in internet access among those with hypertension or diabetes versus those without, disparities in internet access among Blacks and Hispanics compared with Whites, and the extent of such disparities across the U.S. states and found that in general, across all U.S. states, Blacks and Hispanics with hypertension or diabetes had a lower prevalence of internet use compared with Whites. These differences are important from a public health policy standpoint to ensure all patients receive equitable health care. Efforts are needed to mitigate these disparities to ensure equitable care delivery across the U.S.	**COVID 19** 

Cain CM, Kamdar N, Veldman R, Budhwani S, O'Mahen P. Content Analysis of American Network News Coverage of Prevention Strategies During the Initial Wave of the COVID-19 Pandemic. J Gen Intern Med. 2022 Dec 20:1–8. doi: 10.1007/s11606-022-07954-y. Epub head of print. PMID: 36538158; PMCID: PMC9765360.	Broadcast media is a method to communicate health information to the general public and has previously been used in prior public health emergencies. Despite the current ubiquity of social media, traditional news programming retains relatively large audiences, which increased during the COVID-19 pandemic's early days. Viewership of broadcast media networks' evening news skews toward older groups (age 65 and up) which were vulnerable to health complications related to the COVID-19 pandemic.	
ACTIV-3/Therapeutics for Inpatients with COVID-19 (TICO) Study Group. Efficacy and safety of two neutralising monoclonal antibody therapies, sotrovimab and BRII-196 plus BRII-198, for adults hospitalised with COVID-19 (TICO): a randomised controlled trial. Lancet Infect Dis. 2022 May;22(5):622-635. doi: 10.1016/S1473-3099(21)00751-9. Epub 2021 Dec 23. PMID: 34953520; PMCID: PMC8700279.	Barbara Trautner, MD, PhD has undertaken clinical trials of novel therapeutics for COVID-19 infection, serving as the site lead at the Houston VA for EMPACTA and ACTIV3. Under Dr. Trautner's leadership, MEDVAMC became a top-enrolling VA site and one of top 10 enrolling sites worldwide. The EMPACTA trial Dr. Trautner led is the MEVAMC co-lead for Roche Genentech Inc. - sponsored EMPACTA trial (tocilizumab for COVID pneumonia): "A Randomized, Double-Blind, Placebo-controlled, Multicenter Study to Evaluate the Efficacy and Safety of Tocilizumab in Hospitalized Patients with Covid-19". The ACTIV-3 (monoclonal antibodies for COVID) clinical trial was funded by NIAID and NIH titled "Multicenter, Adaptive, Randomized, Blinded Controlled Trial of the Safety and Efficacy of Investigational Therapeutics for Hospitalized Patients with COVID-19".	**COVID 19**
Grigoryan L, Naik AD, Lichtenberger P, Graber CJ, Patel PK, Drekonja DM, Gauthier TP, Shukla B, Sales AE, Krein SL, Van JN, Dillon LM, Hysong SJ, Kramer JR, Walder A, Ramsey D, Trautner BW. Analysis of an Antibiotic Stewardship Program for Asymptomatic Bacteriuria in the Veterans Affairs Health Care System. JAMA Netw Open. 2022 Jul 1;5(7):e2222530. doi: 10.1001/jamanetworkopen.2022.22530. PMID: 35877123; PMCID: PMC9315417.	These publications summarized the results of the "Less is More for Asymptomatic Bacteriuria" project. Less is More took the Kicking CAUTI intervention to four geographically distant VA facilities and supported local implementation through external facilitation. This project met its goals in all three clinical metrics: decreased number of unnecessary urine cultures, decreased days of unnecessary antibiotic use, and decreased length of unnecessary courses of antibiotic therapy. The results were presented nationally with the support of the VA Antimicrobial Stewardship Task Force.	**Infectious Disease**
Amenta E, Grigoryan L, Rajan SS, Ramsey D, Kramer JR, Walder A, Chou A, Van JN, Krein SL, Hysong S, Naik AD, Trautner BW. Quantifying the Implementation and Cost of a Multisite Antibiotic Stewardship Intervention for Asymptomatic Bacteriuria. Antimicrob Steward Healthc Epidemiol. 2023 Jun 30;3(1):e115. doi: 10.1017/ash.2023.198. PMID: 37502251; PMCID: PMC10369447.		

Trautner BW, Kaye KS, Gupta V, Mulgirigama A, Mitrani-Gold FS, Scangarella-Oman NE, Yu K, Ye G, Joshi AV. Risk Factors Associated With Antimicrobial Resistance and Adverse Short-Term Health Outcomes Among Adult and Adolescent Female Outpatients With Uncomplicated Urinary Tract Infection. Open Forum Infect Dis. 2022 Nov 21;9(12):ofac623. doi: 10.1093/ofid/ofac623. PMID: 37065971; PMCID: PMC10101691.		
Mahtta D, Ahmed ST, Shah NR, Ramsey DJ, Akeroyd JM, Nasir K, Hamzeh IR, Elgendy IY, Waldo SW, Al-Mallah MH, Jneid H, Ballantyne CM, Petersen LA, Virani SS. Facility-Level Variation in Cardiac Stress Test Use Among Patients With Diabetes: Findings From the Veterans Affairs National Database. Diabetes Care. 2020 May;43(5):e58-e60. doi: 10.2337/dc19-2160. Epub 2020 Mar 11. PMID: 32161052; PMCID: PMC7171940.	Cardiac stress testing in patients with diabetes mellitus (DM) is a topic of much debate. The clinical heterogeneity and varied interpretation of atypical symptoms in this population may lead to significant variation in cardiac stress testing with downstream implications on healthcare expenditure. The authors evaluated facility-level variation in cardiac stress utilization among patients with DM across the VA Health Care system.	**Cardiology**
Dixon DL, Sharma G, Sandesara PB, Yang E, Braun LT, Mensah GA, Sperling LS, Deedwania PC, Virani SS. Therapeutic Inertia in Cardiovascular Disease Prevention: Time to Move the Bar. J Am Coll Cardiol. 2019 Oct 1;74(13):1728-1731. doi: 10.1016/j.jacc.2019.08.014. PMID: 31558257.	The decline in cardiovascular (CV) mortality over the last 50 years can be largely attributed to advances in preventive care. Despite these improvements, atherosclerotic cardiovascular disease (ASCVD) remains the leading cause of mortality worldwide. Recent advances in pharmacotherapy have led to frequent revisions of clinical practice guidelines that may further reduce CV morbidity and mortality but only if these evidence-based recommendations are widely and consistently implemented.	
Virani SS, Smith SC Jr, Stone NJ, Grundy SM. Secondary Prevention for Atherosclerotic Cardiovascular Disease: Comparing Recent US and European Guidelines on Dyslipidemia. Circulation. 2020 Apr 7;141(14):1121-1123. doi: 10.1161/CIRCULATIONAHA.119.044282. Epub 2020 Apr 6. PMID: 32250694.	This article summarizes the AHA/ACC guideline focused on strictly defined criteria in the clinical trials of statin and non-statin therapy. The guideline uses the concept of LDL-C and non–high-density lipoprotein cholesterol thresholds. By defining a very high-risk patient with ASCVD subset using clinical criteria, this guideline attempts to identify patients with ASCVD who will derive a much larger absolute reduction in recurrent ASCVD risk compared with an average patient with ASCVD.	
Virani SS, Alonso A, Benjamin EJ, Bittencourt MS, Callaway CW, Carson AP, Chamberlain AM, Chang AR, Cheng S, Delling FN, Djousse L, Elkind MSV, Ferguson JF, Fornage M, Khan SS, Kissela BM, Knutson KL, Kwan TW, Lackland DT, Lewis TT, Lichtman JH, Longenecker CT, Loop MS, Lutsey PL, Martin SS, Matsushita K, Moran AE,	The Statistical Update represents a critical resource for the lay public, policy makers, media professionals, clinicians, healthcare administrators, researchers, health advocates, and others seeking the best available data on these factors and conditions. This piece has been cited over 6900 times.	

Mussolino ME, Perak AM, Rosamond WD, Roth GA, Sampson UKA, Satou GM, Schroeder EB, Shah SH, Shay CM, Spartano NL, Stokes A, Tirschwell DL, VanWagner LB, Tsao CW; American Heart Association Council on Epidemiology and Prevention Statistics Committee and Stroke Statistics Subcommittee. Heart Disease and Stroke Statistics-2020 Update: A Report From the American Heart Association. Circulation. 2020 Mar 3;141(9):e139-e596. doi: 10.1161/CIR.0000000000000757. Epub 2020 Jan 29. PMID: 31992061.		
Virani SS, Alonso A, Aparicio HJ, Benjamin EJ, Bittencourt MS, Callaway CW, Carson AP, Chamberlain AM, Cheng S, Delling FN, Elkind MSV, Evenson KR, Ferguson JF, Gupta DK, Khan SS, Kissela BM, Knutson KL, Lee CD, Lewis TT, Liu J, Loop MS, Lutsey PL, Ma J, Mackey J, Martin SS, Matchar DB, Mussolino ME, Navaneethan SD, Perak AM, Roth GA, Samad Z, Satou GM, Schroeder EB, Shah SH, Shay CM, Stokes A, VanWagner LB, Wang NY, Tsao CW; American Heart Association Council on Epidemiology and Prevention Statistics Committee and Stroke Statistics Subcommittee. Heart Disease and Stroke Statistics-2021 Update: A Report From the American Heart Association. Circulation. 2021 Feb 23;143(8):e254-e743. doi: 10.1161/CIR.0000000000000950. Epub 2021 Jan 27. PMID: 33501848.	The Heart Disease and Stroke Statistics 2021 updated is the most comprehensive update on cardiovascular disease statistics for the U.S. available to patients, clinicians, policy makers, and media personnel. This yearlong work is one of the most cited publications in cardiology. Dr. Virani served as the chair of the American Heart Association's Cardiovascular Disease Statistics Committee at the time this report was being prepared.	
Agarwala A, Michos ED, Samad Z, Ballantyne CM, Virani SS. The Use of Sex-Specific Factors in the Assessment of Women's Cardiovascular Risk. Circulation. 2020 Feb 18;141(7):592-599. doi: 10.1161/CIRCULATIONAHA.119.043429. Epub 2020 Feb 17. PMID: 32065772; PMCID: PMC7032610.	Cardiovascular disease (CVD) is the leading cause of death among women in the United States. As compared with men, women are less likely to be diagnosed appropriately, receive preventive care, or be treated aggressively for CVD. Sex differences between men and women have allowed for the identification of CVD risk factors and risk markers that are unique to women. The 2018 American Heart Association/American College of Cardiology Multi-Society cholesterol guideline and 2019 American College of Cardiology/American Heart Association guideline on the primary prevention of CVD introduced the concept of risk-enhancing factors that are specific to women and are associated with an increased risk of incident atherosclerotic CVD in women.	**Cardiology** 

Lee MT, Mahtta D, Ramsey DJ, Liu J, Misra A, Nasir K, Samad Z, Itchhaporia D, Khan SU, Schofied RS, Ballantyne CM, Petersen LA, Virani SS. Sex-related Disparities in Cardiovascular Healthcare Among Patients with Premature Atherosclerotic Cardiovascular Disease. JAMA Cardiol. 2021 Jul 1;6(7):782-790. PMID: 33881448.	This manuscript evaluated sex-based differences in antiplatelet agents, any statin, high-intensity statin (HIS) therapy, and statin adherence in patients with premature and extremely premature atherosclerotic cardiovascular disease (ASCVD). This cross-sectional study revealed that women veterans with premature ASCVD and extremely premature ASCVD receive less optimal secondary prevention cardiovascular care in comparison with men. Women with premature ASCVD, particularly those with ischemic heart disease, were also less statin adherent. Multidisciplinary and patient-centered interventions are needed to improve these disparities in women.	
Jain V, Al Rifai M, Turpin R, Nur Eken H, Agrawal A, Mahtta D, Samad Z, Coulter S, Rodriguez F, Petersen LA, Virani SS. Evaluation of Factors Underlying Sex-Based Disparities in Cardiovascular Care in Adults with Self-Reported Premature Atherosclerotic Cardiovascular Disease. JAMA Cardiol. 2022 Jan 5. PMID: 34985497	This study assessed the association of sex with physical and mental health domains as well as health care access-related factors among adults with self-reported premature ASCVD. Results from this study indicate that women with premature ASCVD were more likely to report worse overall physical and mental health, inability to see a physician due to cost, and cost-related medical nonadherence. Interventions addressing mental health and out-of-pocket costs are needed in adults with premature ASCVD.	**Cardiology** 
Mahtta, D, Ramsey DJ, Lee MT, Chen L, Al Rifai M, Akeroyd JM, Vaughan EM, Matheny ME, do Espirito Santo KR, Navaneethan SD, Lavie CJ, Birnbaum Y, Ballantyne CM, Petersen LA, Virani SS. Utilization Rates of SGLT-2 Inhibitors and GLP-1 Receptor Agonists and Their Facility-Level Variation Among Patients with Atherosclerotic Cardiovascular Disease and Type 2 Diabetes Mellitus: Insights from the Department of Veterans Affairs. Diabetes Care. 2022 Jan 6:dc211815. PMID: 35015080.	There is mounting evidence regarding the cardiovascular benefits of sodium-glucose cotransporter 2 inhibitors (SGLT2i) and glucagon-like peptide 1 receptor agonists (GLP-1 RA) among patients with atherosclerotic cardiovascular disease (ASCVD) and diabetes mellitus (DM). There is a paucity of data assessing real-world practice patterns for these drug classes. This study aimed to assess utilization rates of these drug classes and facility-level variation in their use in the VA healthcare system. The study showed that utilization rates of SGLT2i and GLP-1 RA among eligible patients are low, with significantly higher residual facility-level variation in the use of these drug classes. These results suggest opportunities to optimize their use to prevent future adverse cardiovascular events among these patients.	
Virani SS, Akeroyd JM, Ramsey DJ, Deswal A, Nasir K, Rajan SS, Ballantyne CM, Petersen LA. Health Care Resource Utilization for Outpatient Cardiovascular Disease and Diabetes Care Delivery Among Advanced Practice Providers and Physician Providers in Primary Care. Popul Health Manag. 2018 Jun;21(3):209-216. doi: 10.1089/pop.2017.0090. Epub 2017 Oct 10. PMID: 28994631.	This article published June 2018 was cited in 2020 - Continuity of Care and Outpatient Management for Patients with and at High Risk for Cardiovascular Disease during the COVID-19 Pandemic: A Scientific Statement from the American Society for Preventive Cardiology. American Journal of Preventive Cardiology.	

Virani SS, Akeroyd JM, Ramsey DJ, Chan WJ, Frazier L, Nasir K, S Rajan S, Ballantyne CM, Petersen LA. Comparative effectiveness of outpatient cardiovascular disease and diabetes care delivery between advanced practice providers and physician providers in primary care: Implications for care under the Affordable Care Act. Am Heart J. 2016 Nov;181:74-82. doi: 10.1016/j.ahj.2016.07.020. Epub 2016 Aug 28. PMID: 27823696.	Diabetes and CVD care quality was comparable between physicians and APPs with clinically insignificant differences. Regardless of provider type, there is a need to improve performance on eligible measures in diabetes or CVD patients. This work was cited in Continuity of Care and Outpatient Management for Patients with and at High Risk for Cardiovascular Disease during the COVID-19 Pandemic: A Scientific Statement from the American Society for Preventive Cardiology.	
Minhas AMK, Sagheer S, Ijaz SH, Nazir S, Khan MS, Zaidi SH, Fudim M, Rodriguez F, Johnson HM, Virani SS. Persistent Racial/Ethnic Disparities in Cardiology Trainees in the United States. J Am Coll Cardiol. 2022 Jul 19;80(3):276-279. PMID: 35835499	These nationally representative analyses showed that currently, Hispanic, Non-Hispanic Blacks, and Native American/Alaskan individuals are under-represented in cardiology and cardiology subspecialty training programs. There is therefore a need for more effective systematic changes to ensure equitable training opportunities within medical schools and graduate training programs. A more diverse cardiology workforce will contribute to better health care for the U.S. population.	**Cardiology** 
Singh H, Eckelman M, Berwick DM, Sherman JD. Mandatory Reporting of Emissions to Achieve Net-Zero Health Care. N Engl J Med. 2022 Dec 29;387(26):2469-2476. doi: 10.1056/NEJMsb2210022. Epub 2022 Dec 14. PMID: 36516087.	Climate change is happening faster than expected and the window to take action is quickly closing. The health care sector is responsible for approximately 5% of global emissions and 8.5% of emissions at the national level in the United States. Despite some encouraging developments, voluntary pledges and initiatives will not be adequate to reach net-zero health care goals. The paper provides a framework for implementation of standardized metrics for mandatory reporting health care greenhouse gases to quantify progress, identify best practices, and ensure accountability. Dr. Singh also co-chaired AHRQ's Technical Expert Panel that developed "Reducing Healthcare Carbon Emissions: A Primer on Measures and Actions for Healthcare Organizations to Mitigate Climate Change".	**Climate**
Natarajan Y, Kramer JR, Yu X, Li L, Thrift AP, El-Serag HB, Kanwal F. Risk of Cirrhosis and Hepatocellular Cancer in Patients With NAFLD and Normal Liver Enzymes. Hepatology. 2020 Oct;72(4):1242-1252. doi: 10.1002/hep.31157. PMID: 32022277; PMCID: PMC8318072.	This article concludes that patients with hepatic steatosis with persistently normal ALT are at lower risk for cirrhosis compared to those with steatosis and elevated ALT. They are also not at greater risk compared to a clinical cohort without hepatic steatosis.	
Kanwal F, Hernaez R, Liu Y, Taylor TJ, Rana A, Kramer JR, Naik AD, Smith D, Taddei T, Asch SM. Factors Associated With Access to and Receipt of Liver	Organ scarcity means few individuals with advanced liver disease receive a liver allograft. This study examined if there are other common failures in the transplantation process that further impede access to liver transplantation.	

Transplantation and Transplant Outcomes in Veterans With End-Stage Liver Disease. JAMA Intern Med. 2021 Jul 1;181(7):949-959. PMID: 34028505.	In a national-level cohort study of 34 494 patients with cirrhosis, few were referred for, placed on a waiting list for, or received a liver allograft within 3 years of meeting clinical criteria for transplantation, and most of the deficits occurred at the earlier referral step. Age, comorbidity, and social determinants were associated with low referral, wait-listing, and transplant rates; when documented, medical and psychosocial barriers explained most of the gaps in referral. This study's findings suggest that separate benchmarks for referral and wait-listing and interventions that target potentially modifiable barriers may have an association with improved access to organ transplants.	**Gastroenterology** 
Singal AG, Reddy S, Radadiya Aka Patel H, Villarreal D, Khan A, Liu Y, Cerda V, Rich NE, Murphy CC, Tiro JA, Kramer JR, Hernaez R. Multicenter Randomized Clinical Trial of a Mailed Outreach Strategy for Hepatocellular Carcinoma Surveillance. Clin Gastroenterol Hepatol. 2022 Dec;20(12):2818-2825.e1. doi: 10.1016/j.cgh.2021.12.014. Epub 2021 Dec 10. PMID: 34902568; PMCID: PMC9184300.	In this pragmatic randomized clinical trial, where MEDVAMC was one of the three sites, the effectiveness of mailed hepatocellular (HCC) surveillance outreach to promote HCC surveillance in patients with cirrhosis was evaluated. This study found that mailed outreach significantly increased semiannual HCC surveillance vs usual care in patients with cirrhosis, with a consistent intervention effect across most examined subgroups.	
Kramer JR, Cao Y, Li L, Smith D, Chhatwal J, El-Serag H B, Kanwal F. (2022). Longitudinal Associations of Risk Factors and Hepatocellular Carcinoma in Patients With Cured Hepatitis C Virus Infection. The American Journal of Gastroenterology, 117(11), 1834-1844.	This was a retrospective cohort study of patients with HCV who achieved sustained virological response with direct-acting antivirals from 130 Veterans Administration hospitals during 2014–2018, followed through 2021. Cox proportional hazards models were constructed at three landmark times (baseline and 12 and 24 months after sustained virological response) to examine associations between demographic, clinical, and behavioral factors and HCC risk, stratified by cirrhosis status. These factors can help with risk stratification and HCC surveillance decisions in patients with cured HCV.	**Gastroenterology** 
Kim HS, Sookoian S, Hernaez R. Genome-wide association study of liver-related enzymes suggests putative pleiotropic effects on diverse traits and diseases. Hepatology. 2021 Dec;74(6):3529-3533. PMID: 34564875.	In this editorial, the authors emphasize the importance of properly performing a genome-wide association study in criticism of a study about genetic determinants of liver enzymes. The authors provide guidance to readers of the journal (Hepatology) on what a state-of-the-art genetic epidemiological study would be.	
Mezzano G, Juanola A, Cárdenas A, Mezey E, Hamilton JP, Pose E, Grapera I, Ginès P, Sola E, Hernaez R. Global Burden of Disease: Acute-on-Chronic Liver Failure, A	Acute-on-chronic liver failure, a syndrome characterized by multi-organ failure in patients with decompensated cirrhosis, is a common and usually fatal disease worldwide. In the first analysis of this scope, the authors show the prevalence of this condition affects approximately 35% of the patients	

Systematic Review and Meta-Analysis. Gut. 2022 Jan;71(1):148-155. PMID: 33436495.	admitted with decompensated cirrhosis and results in 58% mortality at 90 days. Significant variation across the world was attributed to access to care.	
Kanwal F, Shubrook JH, Younossi Z, Natarajan Y, Bugianesi E, Rinella ME, Harrison SA, Mantzoros C, Pfotenhauer K, Klein S, Eckel RH, Kruger D, El-Serag H, Cusi K. Preparing for the NASH Epidemic: A Call to Action. Metabolism. 2021 Sep; 122:154822. PMID: 34289945.	Nonalcoholic fatty liver disease (NAFLD) and nonalcoholic steatohepatitis (NASH) are common conditions with a rising burden. Yet there are significant management gaps between clinical guidelines and practice in patients with NAFLD and NASH. Further, there is no single global guiding strategy for the management of NAFLD and NASH. Dr. Kanwal led the initiative for the American Gastroenterological Association, in collaboration with 7 professional associations, to convene an international conference comprising 32 experts in gastroenterology, Hepatology, endocrinology, and primary care providers from the United States, Europe, Asia, and Australia. Conference content was informed by the results of a national NASH Needs Assessment Survey. The participants reviewed and discussed published literature on global burden, screening, risk stratification, diagnosis, and management of individuals with NAFLD, including those with NASH. Participants identified promising approaches for clinical practice and prepared a comprehensive, unified strategy for primary care providers and relevant specialists encompassing the full spectrum of NAFLD/NASH care. They also identified specific high-yield targets for clinical research and called for a unified, international public health response to NAFLD and NASH.	**Gastroenterology** 
El-Serag HB, Ward JW, Asrani SK, Singal AG, Rich N, Thrift AP, Deshpande S, Turner BJ, Kaseb AO, Harrison AC, Fortune BE, Kanwal F. Prevention of Hepatocellular Carcinoma (HCC). White Paper of the Texas Collaborative Center for Hepatocellular Cancer (TeCH) Multi-stakeholder Conference. Clin Gastroenterol Hepatol. 2023 Aug;21(9):2183-2192. doi: 10.1016/j.cgh.2023.03.029. Epub 2023 Apr 20. PMID: 37086825; PMCID: PMC10524305.	This publication summarizes a policy conference and calls for a statewide 1) viral hepatitis elimination program; 2) program to increase nonalcoholic steatohepatitis and obesity awareness; 3) research program to develop health care models that integrate alcohol associated liver disease treatment and treatment for alcohol use disorder; and 4) demonstration projects to evaluate the effectiveness of identifying and linking patients with advanced fibrosis and cirrhosis to clinical care.	
Gregg LP, Richardson PA, Akeroyd J, Matheney ME, Virani SS, Navaneethan SD. Effects of the 2021 CKD-EPI Creatinine eGFR Equation among a National US Veteran Cohort. Clin J Am Soc Nephrol. 2022;17(2):283-285. PubMed PMID: 34799356.	This publication evaluates the impact of the 2021 non-race-based equation for calculating estimated glomerular filtration rate on the prevalence of chronic kidney disease across centers in the VA system. This work demonstrates the unequal impact of this change between different VA locations.	**Nephrology** 

Appendix 1b. Selected Impactful Media Articles

Citation	How/Why Impactful	Impact Area
Cloitre M., Amspoker A., Fletcher T., Hogan J., Jackson C., Jacobs A., Shammet R., Speicher Sz., Wassef M., & Lindsay J. (2022). Comparing the ratio of therapist support to internet sessions in a blended therapy delivered to trauma-exposed veterans: Quasi-experimental comparison study. JMIR Mental Health, 2022 Apr 27;9(4):e33080. doi: 10.2196/33080. PMID: 35475777; PMCID: PMC9096630.	Jan Lindsay, PhD was interviewed for a Houston KPRC Channel 2 news story about the trigger risk of Fourth of July fireworks for veterans with PTSD. Dr. Lindsay discussed how PTSD Coach and PTSD Family apps offer convenience and privacy while drawing upon her research implementing digital health solutions to highlight the importance of coupling apps with therapy and family support.	**Behavioral Health** 
Caloudas AB, Amspoker AB, Stanley M, Boykin D, Arredondo K, Walder A, Hogan J, Lindsay JA. Prevalence of sexual desire and arousal difficulties among women veterans: A retrospective cohort design. Psychol Serv. 2023 Nov;20(4):780-788. doi: 10.1037/ser0000733. Epub 2022 Dec 19. PMID: 36534427; PMCID: PMC10277319.	"Prevalence of sexual desire and arousal difficulties among women veterans: A retrospective cohort design" was selected to appear in the American Psychological Association's Showcase, which highlights recently published articles in the field. The article was promoted via the website Kudos, where authors were invited to share a synopsis of the article and a description of its impact/significance.	**Behavioral Health** 
Giardina TD, Choi DT, Upadhyay DK, Korukonda S, Scott TM, Spitzmueller C, Schuerch C, Torretti D, Singh H. Inviting patients to identify diagnostic concerns through structured evaluation of their online visit notes. J Am Med Inform Assoc. 2022 May 11;29(6):1091-1100. doi: 10.1093/jamia/ocac036. PMID: 35348688; PMCID: PMC9093029.	The work of Dr. Traber Giardina, PhD and team was highlighted in a press release by the Medstar Health Research Institute. The cumulative research efforts of this team illustrate that patients and their families provide valuable information often missing in medical records that can inform safety problems across different care settings; this includes diagnostic safety events. Diagnostic errors are a significant public health concern and the leading cause of harm due to medical care in the U.S. This press release highlights the formation of the Patient-Partnered Diagnostic Center of Excellence. Dr. Giardina and her team will fill these gaps by conducting research that has been identified and prioritized by patients as important to advance diagnostic safety research.	**Safety and Informatics** 
Giardina TD, Korukonda S, Shahid U, Vaghani V, Upadhyay DK, Burke GF, Singh H. Use of patient complaints to identify diagnosis-related safety concerns: a mixed-method evaluation. BMJ Qual Saf. 2021 Dec;30(12):996-1001. doi: 10.1136/bmjqs-2020-011593. Epub 2021 Feb 17. PMID: 33597282; PMCID: PMC8552507.		
Meyer AND, Giardina TD, Khawaja L, Singh H. Patient and clinician experiences of uncertainty in the diagnostic process: Current understanding and future directions. Patient Educ Couns. 2021 Nov;104(11):2606-2615. doi: 10.1016/j.pec.2021.07.028. Epub 2021 Jul 15. PMID: 34312032.		

Singh H, AND Meyer, Thomas EJ. The Frequency of Diagnostic Errors in Outpatient Care: Estimations from Three Large Observational Studies Involving US Adult Populations. BMJ Qual Saf. 2014 Apr 17. doi: 10.1136/bmjqs-2013-002627. PMID: 24742777.	The manuscript detailing the frequency of diagnostic errors was cited in an NBC News article entitled “Medical mistakes are more likely in women and minorities” that was published January 15, 2024. Dr. Hardeep Singh was featured in the NBC News article and quoted as saying: “The vast majority of diagnoses can be made by getting to know the patient’s story really well, asking follow-up questions, examining the patient, and ordering basic tests” and “one of the things we hear over and over is, ‘The doctor didn’t listen to me.’”	
Gandhi TK, Singh H. Reducing the Risk of Diagnostic Error in the COVID-19 Era. J Hosp Med. 2020 Jun;15(6):363-366. doi: 10.12788/jhm.3461. PMID: 32490798; PMCID: PMC7289509.	Dr. Hardeep Singh's article," Reducing the Risk of Diagnostic Error in the COVID-19 Era” received press coverage in May 2020, “8 COVID-19-related diagnostic errors to know", Becker’s Hospital Review.	
Kwan JL, Singh H. Assigning responsibility to close the loop on radiology test results. Diagnosis (Berl). 2017 Sep;4(3):173-177. doi: 10.1515/dx-2017-0019. Epub 2017 Jun 15. PMID: 29119073; PMCID: PMC5673267.	Failure to follow-up on test results represents a serious breakdown point in the diagnostic process which can lead to missed or delayed diagnoses and patient harm. These discussions could help establish reliable closed-loop communication to ensure that every test result is sent, received, acknowledged, and acted upon without failure. Cited in Quick Safety Issue 52: Advancing safety with closed-loop communication of test results. The Joint Commission, December 2019.	
Singh H, Vij MS. Eight recommendations for policies for communicating abnormal test results. Jt Comm J Qual Patient Saf. 2010 May;36(5):226-32. doi: 10.1016/s1553-7250(10)36037-5. PMID: 20480756.	Eight recommendations for effective policies on communication of abnormal diagnostic test results were developed based on policy refinement at the Michael E. DeBakey Veterans Affairs Medical Center (Houston), institutional experience with test result management, and findings from research performed locally and elsewhere. Cited in Quick Safety Issue 52: Advancing safety with closed-loop communication of test results. The Joint Commission. December 2019.	
Gregory ME, Russo E, Singh H. Electronic Health Record Alert-Related Workload as a Predictor of Burnout in Primary Care Providers. Appl Clin Inform. 2017 Jul 5;8(3):686-697. doi: 10.4338/ACI-2017-01-RA-0003. PMID: 28678892; PMCID: PMC6220682.	Burnout associated with alert workload may be in part due to subjective differences at an individual level, and not solely a function of the objective work environment. This suggests the need for both individual and organizational-level interventions to improve alert workload and subsequent burnout. Additional research should confirm these findings in larger, more representative samples. Cited in 10/2019 IOM - Taking Action Against Clinician Burnout: A Systems Approach to Professional Well-Being (2019).	**Safety and Informatics** 
Sittig DF, Ash JS, Singh H. The SAFER guides: empowering organizations to improve the safety and effectiveness of electronic health records. Am J Manag Care. 2014 May;20(5):418-23. PMID: 25181570.	"The SAFER guides: empowering organizations to improve the safety and effectiveness of electronic health records" was cited in 2020 - Office of the National Coordinator for Health Information Technology, "Strategy on Reducing Regulatory and Administrative Burden Relating to the Use of Health IT and EHRs".	

Singh H, Meyer AN, Thomas EJ. The frequency of diagnostic errors in outpatient care: estimations from three large observational studies involving US adult populations. BMJ Qual Saf. 2014 Sep;23(9):727-31. doi: 10.1136/bmjqs-2013-002627. Epub 2014 Apr 17. PMID: 24742777; PMCID: PMC4145460.	"The frequency of diagnostic errors in outpatient care: estimations from three large observational studies involving US adult populations" impacted clinical guidelines – cited in Report to the President: A Transformational Effort on Patient Safety, September 2023.	
Ahmed ST, Li R, Richardson P, Ghosh S, Steele L, White DL, Djotsa AN, Sims K, Gifford E, Hauser ER, Virani SS, Morgan R, Delclos G, Helmer DA. Association of Atherosclerotic Cardiovascular Disease, Hypertension, Diabetes, and Hyperlipidemia With Gulf War Illness Among Gulf War Veterans. J Am Heart Assoc. 2023 Oct 3;12(19):e029575. doi: 10.1161/JAHA.123.029575. Epub 2023 Sep 29. PMID: 37772504; PMCID: PMC10727258.	Drs. Helmer and Ahmed were featured in American Heart Association News on September 29, 2023, in an article that was further reported by five news outlets, including the Houston Chronicle. They discussed their recently published JAHA paper on the association of atherosclerotic cardiovascular disease, hypertension, diabetes, and hyperlipidemia with Gulf War Illness among Gulf War Veterans.	**Military Exposures**
The AIMES Collaboration	Dr. Drew Helmer appeared on Charlie Mike: The Podcast in March of 2023 to discuss burn pit smoke concerns and how the VA addresses those. The episode name is “Serving Those Who Served: A Conversation with Dr. Drew Helmer”.	
Van Doren WW, Iqbal UH, Helmer DA, Litke DR, Simon JE, Wu Q, Zhao D, Yin Z, Ho L, Osinubi O, Pasinetti GM. Changes in polyphenol serum levels and cognitive performance after dietary supplementation with Concord grape juice in veterans with Gulf War Illness. Life Sci. 2021 Jul 5:119797. PMID: 34237311.	In December 2021, Vantage Point: “Grape juice may have the potential to improve cognitive performance in Gulf War Veterans” featured Dr Helmer and his fellow researchers’ work.	
Radhakrishnan K, Hauser ER, Polimanti R, Helmer DA, Provenzale D, McNeil RB, Maffucci A, Quaden R, Zhao H, Whitbourne SB, Harrington KM, Vahey J, Gelernter J, Levey DF, Huang GD, Gaziano JM, Concato J, Aslan M. Genomics of Gulf War Illness in U.S. Veterans Who Served during the 1990-1991 Persian Gulf War: Methods and Rationale for Veterans Affairs Cooperative Study #2006. Brain Sci. 2021 Jun 25;11(7):845. PMID: 34202057.	Dr. Helmer was quoted about the importance of Veteran engagement and research impact related to the Million Veteran Program in the Fall 2020 MVP Insider Newsletter, “MVP Data is Helping Veterans Live Healthier Lives”.	

Kaul B, Petersen LA, Rosas IO, Lee JS, Martinez FJ, Bandi VD, Helmer DA, Wolters PJ, Collard HR, Whooley MA. Interstitial Lung Disease in Veterans: Leveraging Big Data to Bridge Evidence and Practice Gaps. Ann Am Thorac Soc. 2023 Apr;20(4):504-507. PMID: 36623290	A YouTube video published April 2023 by the American Thoracic Society highlights "Interstitial Lung Disease in Veterans: Leveraging Big Data to Bridge Evidence and Practice Gaps", authored by Drs. Bhavika Kaul, Laura Petersen, and Drew Helmer.	
Kamdar N, Hundt NE, Ramsey DJ, Sansgiry S, Utech A, Horning M, Helmer DA. Characteristics Associated with Persistent Versus Transient Food Insecurity Among US Veterans Screened in the Veterans Health Administration. J Acad Nutr Diet. 2023 Jul;123(7):1044-1052.e5. doi: 10.1016/j.jand.2023.03.006. Epub 2023 Mar 8. PMID: 36898479.	Dr. Kamdar received press regarding her article on food scarcity and the About Fresh Produce Prescription Program. Fresh Connect is a 'Food is Medicine' pilot study funded by Rockefeller Foundation.	**Nursing Research** 
Knox MK, Eck CS, Dorsey L, Mehta P, Wong J, Yang C, Petersen LA. Medication Pass Analysis Using BCMA Data Shows Changes in Nurse Staffing and Workload with the COVID-19 Pandemic. Conference Presentation. AcademyHealth 2022 Annual Research Meeting; 4-7 June 2022; Washington, D.C.	"COVID in 20": National VHA podcast, hosted by Dr. Chad Kessler. Dr. Petersen and team shared "Using data and technology to predict staffing: Seeing tomorrow today" on April 20, 2021.	

Figure 1c. Selected Impactful Government or Policy Briefings

Citation	How/Why Impactful	Impact Area
VA Directive 1088 "Communicating Test Results to Providers and Patients"	Dr. Hardeep Singh co-developed national VA policy, VHA Directive 1088, effective July 11, 2023. "It is Veterans Health Administration (VHA) policy that all test results must be communicated by the Department of Veterans Affairs (VA) medical facility diagnostic services provider to the VA medical facility ordering provider or designee within a timeframe that allows for prompt attention and appropriate action to be taken."	**Safety and Informatics** 
Bates DW, Singh H. Two Decades Since To Err Is Human: An Assessment Of Progress And Emerging Priorities In Patient Safety. Health Aff (Millwood). 2018 Nov;37(11):1736-1743. doi: 10.1377/hlthaff.2018.0738. PMID: 30395508.	The President's Council of Advisors on Science and Technology released its findings on patient safety in a report to President Joe Biden entitled "A Transformational Effort on Patient Safety." The report outlines recommendations to advance the nation's commitment to supporting robust safety solutions for patients and the health care workforce. The report was	

Singh H, Meyer AN, Thomas EJ. The frequency of diagnostic errors in outpatient care: estimations from three large observational studies involving US adult populations. BMJ Qual Saf. 2014 Sep;23(9):727-31. doi: 10.1136/bmjqs-2013-002627. Epub 2014 Apr 17. PMID: 24742777; PMCID: PMC4145460.	informed by two publications (PMID 30395508 and PMID 24742777) by Dr. Hardeep Singh, Professor, Health Services Research, and Co-Chief of the Health Policy, Quality and Informatics Program at IQuESt. One of these publications was co-authored by Dr. Ashley Meyer, Assistant Professor, Health Services Research and IQuESt. The report outlines recommendations to advance the nation's commitment to supporting robust safety solutions for patients and the health care workforce, which strengthened the recommendations of VHA Directive 1088 as well as the VHA's commitment to patient safety. Dr. Singh has led a portfolio of multidisciplinary patient safety research related to measurement and reduction of diagnostic errors in health care and improving the use of health information technology for almost two decades at IQuESt.	