

Office of Research

UC Davis

Center for Healthcare Policy & Research

Annual Report

Fiscal Year 2020-21



UCDAVIS

Center for Healthcare
Policy and Research

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Profile & General Information

Name: Center for Healthcare Policy and Research

Year Established: 1994

Social Media: Website: <https://health.ucdavis.edu/chpr/>
facebook: <https://www.facebook.com/ucdchpr/>
Twitter: @UCD_CHPR

Director: Joy Melnikow, MD, MPH, (2010 to June 30, 2021)
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Associate Director: Jeffrey Hoch, MA, PhD (2015 to present)
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Administrative Contact: Michael Webster (effective September 15, 2020)
Chief Administrative Officer
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Space: CHPR staff worked mostly remotely and continued to be very productive. In December 2020, CHPR leadership was notified by UCD Health Facilities Planning that the lease with the Grange was going to end June 30, 2021 and CHPR would be relocating to a university-owned location at 4900 Broadway Sacramento, CA. The assigned space at Broadway is a much smaller footprint than at the Grange, requires supervisors to share offices, and is spread out over three separate suites. Prior to the move, there was much preparation required to get the space ready while coordinating with numerous units at UCD Health, including much updating (ex: new paint and new overhead lighting), significant cleaning, replacement of soiled carpet, and installation of new furniture. CHPR, UCD Health, and the Office of Research all contributed towards the cost of new furniture. The move to Broadway occurred in three phases and concluded in July 2021.

**Significant
Equipment/Instrumentation:**

CHPR continues to use high-performance computers to support statistical analysis on large datasets (e.g., Office of Statewide Health Planning and Development data, Healthcare Cost and Utilization Project databases, Medicare Provider Utilization and Payment Data, etc.). CHPR was assigned six virtual servers from UCD Health IT to aide with running datasets while not using existing computing resources. With the ongoing expansion in dataset size, computing capacity needs have also expanded. We are working to identify the best solution to this challenge.

Mission Statement

The mission of the Center for Healthcare Policy and Research is to facilitate research, promote education, and inform policy about health and healthcare.

The goal of CHPR is to improve the health of the public by contributing new knowledge about access, quality, costs, and outcomes.

The objectives of CHPR are to develop and support Mission-related interdisciplinary and collaborative research projects; to support education and career development for scholars interested in health services and health policy research; and to assist healthcare policy formulation and improve health services delivery through the synthesis, interpretation and dissemination of research findings.

We strive to achieve our goal and objectives through interdisciplinary, collaborative research, teaching and mentoring, research synthesis, and policy analysis.

Research Highlights

Research Highlights of CHPR faculty, fellows and staff

During fiscal year 2020-2021, CHPR implemented funded awards, including grants to support work in substance use research, improve healthcare quality measurement, and inform health-related policy through both new research and rapid and systematic literature reviews. In addition, the five pilot grants on the impacts of COVID-19 on health outcomes, behavioral health and telehealth that CHPR partnered with the UC Davis Behavioral Health Center of Excellence (BHCOE) and Center for Health and Technology (CHT) to award last year were completed during this fiscal year. (Summaries of the results of those five studies can be found in Appendix 10: Impact of COVID-19.) This included Federal funds (and Federal flowthrough funding), including from NIH on opioid research, IMPAQ International for the “Patient Safety Measures” project, AHRQ for a project titled “Patient Safety Network,” and the California Department of Social Services for the Koa Family study.

In 2020-2021, there were 74 CHPR-affiliated grant-supported academic personnel. The following sections briefly describe highlights achieved by CHPR-affiliated researchers in each of **CHPR’s three primary research programs** during fiscal year 2020-2021.

Evidence to Inform Clinical Care and Health Policy

The goal of CHPR’s work in evidence synthesis and policy analysis is to support the alignment of clinical practice, health policy, and healthcare reimbursement with evidence and value. To that end CHPR faculty conduct research and analyses designed to have relevance to clinical practice, specific healthcare policies, and healthcare costs. CHPR teams also conduct rapid evidence reviews as part of the California Health Benefits Review Program (CHBRP), which provides analyses to the California Legislature on the medical effectiveness, cost, utilization and public health impacts of introduced health insurance legislation within a 60-day turn-around time to meet the Legislature’s policy committee calendar; contributions to this program by CHPR have grown steadily over the past 10 years.

Highlights from this CHPR research program during the 2020-2021 fiscal year appear below.

- As part of the California Health Benefits Review Program (CHBRP), a UC-wide collaboration, CHPR faculty and staff, led by Director Melnikow, **provided evidence-based analyses of six bills for the California State Legislature during 2020-2021:** AB 32 Telehealth (Aguiar-Curry); AB 1254 Mobile Stroke Units (Gibson); AB 1520 Prostate Cancer: Screening (Levine); SB 245 Abortion Services: Cost Sharing (Gonzalez); SB 428 Adverse Childhood Experiences Screenings (Hurtado); and SB 523 Contraceptives (Leyva).
- In June 2021 CHPR published a report describing how land-use planning and community design can help to prevent or mitigate many age-related barriers to independent living for older residents, including those who are intellectually or developmentally disabled. **Planning Healthy Aging Communities** was created to inform and inspire developers, planners, home builders and other key stakeholders responsible for creating communities that can support healthy aging. It comprises a review of the community design features known to support improved health outcomes in older adults, 35 examples of already existing and planned healthy aging communities to serve as models, and information about guidelines and toolkits (from AARP, the Urban Land Institute and others) that are available to help planners design the innovative healthy aging

communities of the future. Results of interviews with content experts about how land-use planning and design can foster healthy aging for all, a review of the role digital technology can play in healthy aging, and opportunities for community partnerships to support the planning and development of these communities are also included. The authors summarize their findings and provide specific planning recommendations for developers, planners, and policymakers in the final chapter. Researchers with the UC Berkeley Center for Information Technology Research in the Interest of Society and Corey Owens, M.S., from the UC Davis Center for Health and Technology joined CHPR researchers to author *Planning Healthy Aging Communities*. Bear River Land Holdings LLC funded the project.

- In August 2020 CHPR published two reports that follow up on the Center’s previously published “Integrating Care for People Experiencing Homelessness: A Focus on Sacramento County.” The initial report, published in March 2020, outlined options for innovative, coordinated care programs that could be provided for people experiencing chronic homelessness in Sacramento. It highlighted examples of integrated service models being utilized in the United States that combine healthcare, social services, and housing options for homeless individuals with complex, co-occurring conditions, including mental illness, substance use disorders and/or physical conditions. CHPR’s newly published “Governance Options and Funding Sources for an Integrated Care Organization Serving Sacramento’s Chronically Homeless Population” provides details on how such integrated care organizations could be governed and funded, while “Economic Analysis of Options for Helping People Experiencing Homelessness in Sacramento” examines the costs and outcomes associated with the different options for providing integrated care services. The economic analysis was conducted by CHPR Associate Director and Chief of the UC Davis Division of Health Policy and Management (HPM), Jeffrey Hoch, PhD, and Logan Trenaman, PhD, an HPM Post-Doctoral Scholar. Their results indicate that, under base case assumptions, an integrated care option would incur \$70 million more in building costs and \$77 million more in staffing costs relative to the status quo but would reduce emergency department (ED) costs by \$20 million (25,000 fewer ED visits), inpatient costs by \$45 million (16,000 fewer inpatient days), victimization and criminalization costs by \$17 million, and other costs by \$14 million over five years. Hoch and Trenaman suggest that a key next step in helping Sacramentans experiencing homelessness would be to embark on a collaborative approach to financing an integrated care organization. They cite “Social Determinants as Public Goods: A New Approach to Financing Key Investments in Healthy Communities” (Nichols & Taylor, *Health Affairs*, 2018) in concluding that taking such a collaborative approach could not only finance the provision of integrated care to the chronically homeless, but also enable all stakeholders to enjoy the benefits of their investment in this public good.

Healthcare Quality and Safety Research

Healthcare quality and safety research is critical to improving effective and efficient delivery of healthcare services in the United States. Patrick Romano, MD, MPH, a nationally renowned healthcare quality expert, has led the CHPR effort in quality and safety research for more than 15 years.

Highlights over this reporting period for this CHPR research program follow.

- The CHPR quality team is providing clinical and technical expertise to [AHRQ](#) and [Mathematica, Inc.](#) regarding the intent, implementation and interpretation of AHRQ quality indicators. This work will be used by public

and private payers for contract design, and healthcare organizations for quality improvement.

- Dr. Romano and the CHPR Healthcare Quality and Safety Research team received an award from Cal Hospital Compare/Cal Hospital Compare to take over public reporting on nursing home quality metrics in California, an effort to help drive transparency, accountability, and improvement in long-term care for all Californians.
- The CHPR quality team also works with IMPAQ International and the US Centers for Medicare and Medicaid Services (CMS) to maintain the Patient Safety Indicator (PSI) 90-composite measure. Rigorous reliability and validity testing of the measure is conducted by CHPR faculty member Dr. Dan Tancredi and his team of statisticians in preparation for seeking endorsement from the National Quality Forum (NQF).
- Dr. Romano and Dr. Debra Bakerjian, PhD, APRN, continue to serve as co-editors-in-chief of AHRQ's Patient Safety Network (PSNet), internationally regarded as an authoritative web-based resource for evidence on improving patient safety. Their UC Davis/CHPR editorial team curates 20 to 25 recently published studies, tools, news articles and upcoming events weekly, and provides expert commentary on cases describing medical errors and patient harms from hospitals across the US (WebM&Ms). During fiscal year 2020-2021, the team published 28 WebM&Ms, and 17 Perspectives and seven Primers, on various key patient safety topics.

Mental Health and Substance Use Research

Substance use disorders (SUD) and mental health issues take an enormous toll on our society through premature death, poor health outcomes, increased disparities, and unnecessary costs. CHPR researchers have made a substantial impact in these fields through their work on mental health, tobacco cessation, prescription opioid overuse, and the impacts of prescription opioid tapering on patient health outcomes.

Highlights during this reporting period for this research program are given below.

- Drs. Jerant, Kravitz, Franks, and CHPR staff member Camille Cipri, published on the results of a randomized controlled trial they conducted to promote discussion of recent active suicide thoughts among middle-aged men: "Tailored activation of middle-aged men to promote discussion of recent active suicide thoughts: A randomized controlled trial" (*J Gen Intern Med.* 2020 Jul;35(7):2050-2058). They found that suicide discussion with physicians was more likely among intervention patients (those who used a tailored interactive computer program designed to encourage discussion of suicide with their physician) than those who received standard care. They concluded that their tailored MAPS program activated middle-aged men with active suicide thoughts to engage with their doctors about this customarily taboo topic.
- CHPR continues to partner with the UC Davis Behavioral Health Center of Excellence to evaluate a state-funded program supporting county mental health crisis services for adult/transitional age youth. Drs. Melnikow (PI), Carter (PI) and Niendam, along with CHPR staff, are working with a team at UCSF to conduct the evaluation, funded by the Mental Health Oversight and Accountability Commission (MHSOAC).
- Drs. Niendam and Melnikow collaborated with CHPR staff, funded by the MHSOAC, to evaluate California's early psychosis treatment programs. The survey of early psychosis program representatives yielded substantial variability in services, inclusion criteria, and data recorded. The findings highlight the need to harmonize program data collection methods.

- Based in part on previous work carried out in collaboration with Dr. Melnikow, Dr. Niendam was awarded funding by the National Institutes of Mental Health to create the California Collaborative Network to Promote Data-Driven Care and Improve Outcomes in Early Psychosis (EPI-CAL). This project involves evaluation of outcomes occurring in the recently developed California network of Early Psychosis clinics that are working collectively to improve their care through prospective collection and feedback of client-reported outcomes.
- **Tobacco Cessation:** Elisa Tong, MD, MS, heads up tobacco cessation research associated with CHPR. Her work, carried out with her 6-person team of CHPR staff, has changed Medi-Cal tobacco policy and University of California and California Community College campus smoking policies for hundreds of thousands of students, staff, and faculty. Changes to these policies influence young adult behavior and have significant, positive, life-long health (and cost) effects. Dr. Tong and her team are conducting two large tobacco cessation research projects at CHPR (see descriptions below). The projects complement each other in their focus on multi-sector initiatives that implement and scale the integration of evidence-based treatments for tobacco dependence into safety-net clinics and hospitals to encourage tobacco cessation and mitigate health disparities.
- Dr. Tong continues to serve as Project Director of CA Quits, a partnership of 58 local health departments, 57 safety net hospitals, 23 Medi-Cal plans, and 169 public clinics that seeks to reduce tobacco use through creating tobacco-topic “learning collaboratives” for safety-net clinic systems. Dr. Tong’s team engages clinic personnel in discussions about how they can assess tobacco use and integrate evidence-based tobacco treatment. CHPR faculty members Ulfat Shaikh, Bimla Schwarz, and Patrick Romano are also members of the CA Quits team.
- In partnership with the Los Angeles County Department of Health Care Services, the eConsult Cessation Services Project is a program delivered through the public/private clinic system to improve the reach, effectiveness and efficiencies in tobacco cessation services. Los Angeles County is the most populous county in the US and has the largest population of tobacco users in California. This project seeks to improve patient contact rates, address workflow barriers, and integrate pharmacy services. The long-term goal is to demonstrate a sustainable and scalable model that leverages communication channels for a more integrated, population-based tobacco cessation treatment service. The cumulative impact of this intervention research will extend beyond California.
- “Strategies and lessons learned for smoke and tobacco-free policy change on community colleges with community-based support” was published by Dr. Tong and colleagues this year; the authors concluded that “community-based organizations can facilitate long-term support for smoke and tobacco-free campus policymaking efforts at community colleges.”
- Dr. Tong also published “Engagement and effectiveness of a smoking quitline intervention in a thoracic surgery clinic” in *JAMA Surgery*, a study in which she and her colleagues found that “patients undergoing thoracic surgery were nearly twice as likely to quit smoking as those who did not have an operation, and smoking quitline participation further [improved] abstinence [and that] improved smoking cessation rates, even among nonoperative patients, were associated with appropriate outpatient counseling and intervention.”

- Dr. Melnikow co-authored “Interventions for Tobacco Cessation in Adults, Including Pregnant Persons: Updated Evidence Report and Systematic Review for the US Preventive Services Task Force,” published in *JAMA*.

Opioid Use/Addiction: More than a dozen CHPR faculty and fellows have been producing impactful research related to opioid addiction over the last eight years.

Examples of the research being conducted through CHPR on this important topic are given below.

- A new, multidisciplinary research team headed by Stephen Henry, MD, was awarded a Cultivating Team Science award from the UC Davis School of Medicine (SOM) this year. Dr. Henry is a core faculty member with CHPR and an associate professor in the UC Davis Department of Internal Medicine. Additional members of the team who are associated with CHPR include Joshua Fenton, MD, MPH, and Joy Melnikow, MD, MPH, professors in the Department of Family and Community Medicine, and Aimee Moulin, MD, an associate clinical professor in the Department of Emergency Medicine and a director of CA Bridge. CA Bridge supports a network of certified drug and alcohol counselors based in emergency departments who are trained to identify patients with opioid use disorder (OUD), initiate treatment, provide brief counseling services (e.g. motivational interviewing) and connect patients to longitudinal primary care. The team’s project, titled “Low-barrier, generalist model of care to improve treatment for complex patients with opioid use disorder,” is focused on improving treatment for patients with OUD who also have chronic conditions such as mood disorders or chronic pain. Pilot data from this project is being collected and will be used to strengthen a proposal for a larger “center” grant from NIH and thus increase support for this important effort to stem the current opioid crisis, in California and the rest of the United States.
- Dr. Henry is also developing validated, patient-level risk prediction models for opioid-related overdose by linking statewide prescription, in-patient, and death certificate data in California. He and his team of CHPR staff are partnering with the California Department of Justice and the California Department of Health Care Services and Department of Public Health to produce a clinical risk prediction model for incorporation into California’s Prescription Drug Monitoring Program (PDMP) to inform prescribing decisions at the point of care. Results from this California project will also be generalizable to the 48 other states that have PDMPs. Ultimately, this project advances a PDMP research program aimed at developing and evaluating tools that clinicians can use to make safer opioid prescribing decisions, and that researchers and policymakers can use to design and evaluate interventions.
- CHPR Postdoctoral Fellow Erik Tserogounis published results of three studies with Dr. Henry this year: “Trends in buprenorphine to treat opioid use disorder in California, 2012 to 2018: Medicaid Outpaces the rest of the State,” “Assessing opioid overdose risk: A review of clinical prediction models utilizing patient-level data,” and “Using Prescription Drug Monitoring Program data to assess the likelihood of incident long-term opioid use: A statewide cohort study.”
- Dr. Henry also co-authored “Responding to the opioid epidemic: Education competencies for pain and substance use disorder from the medical schools of the University of California.” CHPR faculty and staff published several additional papers on their research into the safety of opioid tapering this year, including:

“Longitudinal Dose Trajectory Among Patients Tapering Long-Term Opioids,” “Assessing the effectiveness of a narrative-based patient education video for promoting opioid tapering,” “The story vs the storyteller: Factors associated with the effectiveness of brief video-recorded patient stories for promoting opioid tapering,” “Agenda setting and visit openings in primary care visits involving patients taking opioids for chronic pain,” and “Making the most of video recorded clinical encounters: Optimizing impact and productivity through interdisciplinary teamwork.” Each of these studies offers new insight into the complex risks and benefits associated with tapering prescription opioids.

Conclusion

CHPR continues to play a unique role in supporting and fostering interdisciplinary collaboration, among researchers and stakeholders within the University, and in other academic institutions, the community, and other private and public entities, toward solving some of the society’s most significant healthcare- and health policy- related problems. CHPR provides an important nexus for investigators with a broad range of expertise to collaborate on impactful research that informs healthcare delivery, quality, outcomes and costs.

Education Highlights

- In 2020-2021 CHPR participated in the training of multiple postdoctoral fellows as part of a federally funded T32 research training program: QSCERT-PC (Quality, Safety, and Comparative Effectiveness Research Training in Primary Care). (See **Appendix 5 Table 1** for a list of all CHPR-affiliated postdoctoral fellows.) Susan Brown, PhD, and CHPR Associate Director Jeffrey Hoch both currently serve as QSCERT-PC Program Directors. Fellows completing these programs have gone on to fill academic research positions or health policy leadership roles at UC Davis or at other research and policy institutions in the US.
- A range of topics in health services and outcomes research as well as health policy topics were presented during the CHPR Seminar Series (listed as course EPI 291). The seminar series was converted to fully online in 2020 due to COVID-19 requirements, but in the process it has attracted a larger audience and reached more people on the Davis campus. A list of seminar speakers and topics presented during FY 2020-2021 can be found in **Appendix 5, Table 2**, and on the CHPR website.
- CHPR faculty have continued to offer the popular, interdisciplinary course: Principles and Methods of Comparative Effectiveness Research (CLH: 210Y). This traditionally hybrid course converted to fully online in the Spring quarter of 2020. The course introduces students to basic methods used in comparative effectiveness research and engages students in team science for final systematic review projects. In prior years, a number of students have gone on to publish these reviews after completing the course.
- CHPR faculty have continued to mentor undergraduate students, graduate students, medical students, postdoctoral fellows and junior faculty in research on health outcomes, quality, access and costs to inform health policy.
- CHPR staff members Melissa Gosdin, PhD in sociology, and Bethney Bonilla, MS, continued to lead monthly meetings for CHPR faculty and staff on anti-racism matters; they present materials on various issues related to diversity, equity and inclusion and the group discusses them and ways to use what has been learned to inform CHPR hiring and other practices.

Future Vision

Led by Interim Director Anthony Jerant, FY 2021-22 will be a period of transition for CHPR. The Center will continue to adapt to the ongoing COVID-19 pandemic and a competitive search will be conducted to select a new permanent Director to lead the Center for many years to come. CHPR will be working in a hybrid-remote environment this year, while maintaining its high level of production and service, for its members, the University, and for the improvement of healthcare generally.

Key goals and initiatives for CHPR over the next year include:

- **ORU renewal:** CHPR anticipates receiving campus and UC approval to renew the Center's status as an Organized Research Unit (ORU) for another 5 years, so that the Center can build upon its successes of the previous 27 years as an ORU.
- **Foundational planning:** CHPR's leadership team is working with Kapur International, a well-regarded external consulting firm, to carry out foundational work to eventually inform a new five-year strategic plan. A successful approach popularized by Simon Sinek is being employed in this work, focused first on defining CHPR's purpose ("why" statement) and then subsequently creating "how" and "what" statements as the Center prepares for the appointment of a new Director in 2022. The "why," "how," and "what" statements will all reflect the *current state* of CHPR and will be useful to the new permanent Director's eventual strategic planning efforts. To help inform the development of these statements and ensure CHPR staff and members have a voice in this foundational work, Drs. Jerant and Hoch will be conducting semi-structured interviews with approximately two dozen stakeholders.
- **Continue to promote financial sustainability:** CHPR is heavily dependent on extramural funding; therefore, despite consecutive years of financial growth, the Center continues to explore ways to diversify its funding sources.
 - As indirect cost recovery can factor into whether a grant or contract proposal is submitted through a PI's academic home department versus through CHPR, CHPR will consider whether sharing of indirect cost recovery is an appropriate option for encouraging more PIs to use the Center's grant- and research-related services.
 - CHPR will explore ways to utilize available funds from indirect costs to support and expand key initiatives of and services offered by the Center.
 - CHPR will implement a newly awarded 5-year tobacco cessation grant dubbed the Healthy Living Clinic Initiative. CHPR's Associate Director Jeffrey Hoch, Professor and Chief, Department of Public Health Sciences and Division of Health Policy and Management respectively, will serve as PI of the Initiative, supported by Co-PIs Dr. Desiree Backman, Chief of CHPR's Prevention, Policy, and Practice Group (PPPG), and Dr. Neal Kohatsu, Chief Health Strategist, PPPG.
 - CHPR will continue working with Development officers, on both the Davis and Health Sciences campuses, to pursue philanthropic avenues to promote the Center's financial sustainability. For example, CHPR will continue to participate in UC Davis Give Day; donor support from last year's Give Day was substantially greater than the

- previous year and CHPR anticipates this upward trend will continue and hopes to use such funds to create an undergraduate research internship program.
- CHPR will continue to submit grant and contract proposals that focus on health-related research and policy, with special emphasis on those that promote health equity among diverse populations.
 - **Increase visibility of CHPR as an Accelerator of Innovative = Research:**
 - CHPR is working closely with Page Design, while also utilizing the latest TeamSite tools and updates, to explore efficient ways to redesign and improve the user-friendliness of CHPR's website. Page Design has been used by numerous UCD Health departments to make their websites more user-friendly and give them a more up-to-date, "clean" appearance.
 - Additionally, CHPR will expand upon a marketing plan initially implemented in Spring 2020, the goals of which are to improve engagement on its social media channels (Facebook, Twitter, Instagram, and LinkedIn) and with the Center's website.
 - The Center will also put more emphasis on disseminating CHPR research results and call more attention to the highly skilled and efficient teams of researchers—including faculty and staff—affiliated with CHPR.
 - **Further collaborate with the Davis campus:** CHPR will continue to engage with faculty at the main Davis campus (e.g., departments of Sociology, Communication, Psychology and Human Ecology), in addition to those in many departments at the School of Medicine.
 - CHPR will jointly host a research forum with the Center for Poverty and Inequality Research in the Fall, highlighting the work of faculty with overlapping research interests, with the goal of sparking new collaborations.
 - CHPR will also consider additional collaborations with other departments or centers in issuing pilot grant awards. The pilot grants for COVID-19 projects that CHPR co-awarded last year (with the Behavioral Health Center of Excellence and the Center for Health Technology) was very successful.
 - **IAB and EAB meetings:** CHPR will hold meetings with its Internal Advisory Board (IAB) and External Advisory Board (EAB) at least twice during the 2021-2022 fiscal year.

SWOT Analysis

Strengths

- Strong recommendation for continuation by External Reviewers in our 15-year evaluation
- Recruitment of a strong Research Administrator
- Recruitment of experienced senior administrative personnel (e.g., our new CAO)
- New focus on public engagement and community-engaged research via integration of the Institute for Population Health Improvement
- Capacity to submit large multidisciplinary grants and attract diverse research funding
- Faculty with state-of-the-art expertise in research methods in an array of disciplines
- Capacity as a shared research services model to support administrative functions for smaller centers
- National recognition as a resource for systematic evidence reviews, efficient policy analysis and expertise in health economic analysis
- Lead team for California Health Benefits Review Program (CHBRP) for assessing medical effectiveness and public health impacts of proposed health insurance legislation
- Collaborations with the Behavioral Health Center of Excellence, the Clinical Translational Science Center, the Center for Health Technology, the Betty Irene School of Nursing, and the Comprehensive Cancer Center
- Experienced, skilled and committed research staff, from research assistants to PhD researchers, with expertise in an array of research methods including statistical analysis, health economics, health policy analysis, qualitative methods, survey research and simulated patient studies
- Well-regarded research seminar with growing online audience

Weaknesses

- Inadequate visibility and awareness of CHPR and its services to internal and external potential clients
- Large dataset analysis is slow and challenging with existing computing capacity
- CHPR was without a Digital Communications/Marketing Specialist from July to December 2021, thus much attention will be needed to the Center's website and social media channels (e.g. Facebook, Twitter, Instagram, and LinkedIn).

Opportunities

- Recruitment of a new Director with a national reputation
- Having some footprint in Aggie Square in 2023 with enhanced visibility and improved infrastructure
- Becoming an expanded resource for faculty located on the Davis campus, the health system, and other stakeholders and policymakers
- Expanding and diversifying funding sources
- Expanding computing capacity will enhance CHPR members' ability to compete for research support involving analysis of large health datasets
- Opportunity to provide policy analysis and other analytic services to UC Davis Health
- Enhancing communication/marketing to increase CHPR visibility
- Establishing more cross-departmental, multidisciplinary collaborations for research training
- Supporting faculty who are pursuing large (P type) grants that include research infrastructure (e.g. "cores")

Threats

- On-campus ICR rate is now required for new proposals, which can affect the ability of the Center from getting PI's to submit grants and contracts that have a cap on total funding. One way to mitigate this is to consider sharing indirect costs with Divisions and Departments.
- Potential departure of staff due to 100% remote work opportunities elsewhere that come with salary increases and/or promotional opportunities.
- Potential decline in collaboration with SOM Departments and decline in grant submissions due to altered incentives in SOM Funds Flow model
- Potential decline in funding opportunities and increased competition for existing funding opportunities.
- Reduced extramural funding may lead to loss of support for research staff

Technology Transfer

- **Consulting with Industry:** During this reporting period, Bear River Land Holdings LLC funded CHPR's research into how land-use planning and community design can help to prevent or mitigate many age-related barriers to independent living for older residents, including those who are intellectually or developmentally disabled. In June 2021 CHPR published the results of that research project carried out for Bear River in the report **Planning Healthy Aging Communities**. This public/private partnership was undertaken to inform and inspire developers, planners, home builders and other key stakeholders responsible for creating communities that can support healthy aging. The report comprises a review of the community design features known to support improved health outcomes in older adults, 35 examples of already existing and planned healthy aging communities to serve as models, and information about guidelines and toolkits (from AARP, the Urban Land Institute and others) that are available to help planners design the innovative healthy aging communities of the future. Results of interviews with content experts about how land-use planning and design can foster healthy aging for all, a review of the role digital technology can play in healthy aging, and opportunities for community partnerships to support the planning and development of these communities are also included. The authors of **Planning Healthy Aging Communities** (primarily from CHPR but also from the UC Davis Center for Health and Technology and the UC Berkeley Center for Information Technology Research in the Interest of Society) summarize their findings and provide specific planning recommendations for developers, planners, and policymakers in the final chapter.

Personnel

Headcount & FTEs

For the purpose of the annual report OR Human Resources investigated how the terms administrative and clerical are defined. The categories in the table should be defined as listed below. The research unit managers may also wish to consider including additional categories if it would assist with further identifying headcount and FTE.

	Headcount	FTEs
Professional - 99 exempt employees (e.g., Analyst III and up, Sr/Assoc Engineers, Programmer IV-VII, Sr. Editor, Sr. Writer, Prog Rep III)	25	14.43
Administrative - 99 non-exempt employees (e.g., " _" All-Supervisor up to Analyst Grade II, Programmer I-III, Prog Reps I-II)	16	12.8
Clerical* - employees covered by the CX bargaining unit (e.g., " "A I-III, senior coder, survey worker)	1	1
Research - employees covered by the RX bargaining unit. (SRA I-IV, museum scientist, Spectroscopist)	0	0
Service - employees covered by the SX bargaining unit (e.g., custodian, assistant storekeeper, food service worker, cook, security officer, animal tech, lab helper, lab asst, physical plant mechanic)	0	0
Technical - employees covered by the TX bargaining unit (e.g., computer resource specialist, artist, development technician II-V)	0	0
TOTAL Employees	42	38.23

*The Administrative Officer 2 position was accreted into the CX union.

CHPR's headcount increased by three from the prior year due, in part, to receipt of a letter of intent to fund a new award to be issued in August.

Affiliated Count

The following table provides a count of all associated faculty and students involved in CHPR activities.

	Total Affiliated
Faculty	122
Postdoctoral Fellows and Postdocs	8
Graduate Students	6
Undergraduate Students	3
Librarians	1

Academic Personnel

The following table provides a list of faculty members actively engaged in CHPR research or supervision.

Core Faculty Member	Title	Department
Heejung Bang, Ph.D.	Professor	Public Health Sciences-Division of Biostatistics
Janice Bell, Ph.D., M.P.H., M.N.	Professor	Betty Irene Moore School of Nursing
Diana Cassady, M.P.H., Ph.D.	Professor Emeritus Associate Professor	Public Health Sciences Surgery
Joshua Fenton, M.D., M.P.H.	Professor	Family & Community Medicine
Stephen Henry, M.D., M.Sc.	Associate Professor	Internal Medicine
Jeffrey Hoch, Ph.D.	Associate Director Professor and Division Chief	Center for Healthcare Policy and Research Division of Health Policy and Management, Public Health Sciences
James Holmes, M.D., M.P.H.	Professor and Vice Chair for Research	Emergency Medicine
Anthony Jerant, M.D.	Professor and Chair	Family & Community Medicine
Richard Kravitz, M.D., M.S.P.H.	Professor	Internal Medicine
Joy Melnikow, M.D., M.P.H.	Director & Professor	CHPR; Family & Community Medicine
Diana Miglioretti, Ph.D.	Professor and Division Chief of Biostatistics	Public Health Sciences
Lisa Miller, Ph.D.	Professor	Human Development and Family Studies
Patrick Romano, M.D., M.P.H.	Professor	Internal Medicine and Pediatrics
Eleanor Bimla Schwarz, M.D.	Professor	Internal Medicine
Daniel J. Tancredi, Ph.D.	Professor	Pediatrics
Elisa Tong, M.D., M.A.	Associate Professor	Internal Medicine
Garth Utter, M.D., M.Sc.	Associate Professor	Surgery
Elaine Waetjen, M.D.	Professor	Obstetrics and Gynecology
Glen Xiong, M.D.	Health Sciences Associate Clinical Professor	Psychiatry and Behavioral Sciences

Postdoctoral Researchers, Graduate Students, Undergraduate Students

The following table provides a list of the names of undergraduate and graduate students and postdoctoral researchers directly contributing to CHPR who

- a. are on the CHPR payroll, and/or
- b. participate—through assistantships, fellowships, or traineeships, or who are otherwise involved—in CHPR work.

Postdoctoral Fellows	Classification	Home Department
Brittany Chatterton	Post-Doctoral Clinical Fellow	Internal Medicine
Renata Abrahao	Post-Doctoral Fellow	Internal Medicine
Katherine Glaser	Post-Doctoral Clinical Fellow	Department of Obstetrics, Gynecology and Reproductive Sciences
Logan Trenaman	Post-doctoral Fellow	CHPR
Erik Tseregounis	Post-Doctoral Fellow	CHPR
Adrienne Hoyt-Austin	Post-Doctoral Clinical Fellow	Pediatrics
Seonhwa Lee	Post-Doctoral Clinical Fellow	Human Ecology
Anne Elizabeth Clark White	Post-Doctoral Clinical Fellow	Internal Medicine

Graduate Students		Home Department
Rukhshanda Rehman	Graduate Student	UCD Western Center for Agricultural Health & Safety
Kimberly Prado	Graduate Student	UCD Western Center for Agricultural Health & Safety
Tamara Solorzano	Graduate Student	Public Health Sciences
Lynne Presto	Graduate Student	Public Health Sciences
Laura Farnsworth	Graduate Student	Public Health Sciences
Andersen Yang	Graduate Student	Public Health Sciences

Undergraduate Students		Home Department
Angel Anene	Undergraduate	Political Science
Caidon Iwuagwu	Undergraduate	Genome Center
Eryn Morales	Undergraduate	Global Disease Biology

Appendix 1: Strategic Plan

During FY 20-21, CHPR completed the following strategic planning tasks:

- 1) In the Fall, CHPR submitted the 15-year review of the Center highlighting numerous accomplishments, current challenges and solutions, as well as strengths and weaknesses. CHPR leadership, faculty, and researchers met virtually with the ORU review committee to discuss their research and education programs. The Director, Associate Director, and CAO met with UCD Health System leadership (David Lubarsky, Vice Chancellor & CEO) and School of Medicine leadership (Dean Brashear and Associate Dean for Research Dr. Wun). In the end, the Review Committee was very supportive of CHPR continuing as an ORU and provided a number of recommendations, such as planning for space at Aggie Square, recruitment of a strong Director, and for CHPR to increase collaborations with schools and colleges on the main campus.
- 2) Provided support for grants development
 - a. Hired a permanent Chief Administrative Officer
 - b. Hired a permanent Research Administrator III
- 3) CHPR and UCD Health leadership had explored whether the space at the Grange should be brought up to seismic code or whether it more feasible long-term for CHPR to move out of the leased space altogether. While not originally planned to take place during the year, CHPR relocated from the Grange location to the Broadway building after UCD Health advised CHPR leadership of the lease ending at the end of the fiscal year. Conducting the move required much coordination with numerous UCD Health, School of Medicine, and Campus departments, took place during COVID with limited availability of staff resources from these units, and required joint investment from CHPR, the Office of Research, and the School of Medicine Dean's Office for new furniture, new lighting, fresh paint, new carpet, and new computing equipment.
- 4) Successfully recruited Dr. Anthony Jerant, M.D., Professor and Chair, Department of Family and Community Medicine, to lead the Center as the Interim Director effective July 1, 2021. Dr. Jerant takes over for Dr. Joy Melnikow, who retired after 12 years of leading the Center to become an emeritus faculty. Dr. Melnikow was called back to continue to her research with CHPR, teach, and provide clinical duties.
- 5) CHPR continued to brainstorm and seek ways to improve its visibility and branding, in keeping with a recommendation from the review committee of the Center's 15-year ORU review. In the Spring, CHPR's Marketing Specialist created a social media plan aimed to increase visitation and engagement and the number of followers on CHPR's social media channels (i.e. Facebook, Twitter, Instagram, and LinkedIn). Additionally, several ads were ran on Capital Public Radio, typically over a 4-week schedule, to reach the greater Sacramento area. CHPR was able to meet its goal for Give Day to support a student internship program.
- 6) Successfully integrated the Prevention Policy & Practice Group into CHPR in July 2020 as they transferred to CHPR from the Institute for Population Health & Improvement. This partnership eventually led to a new 5-year grant titled "The Healthy Living Clinic Initiative", which was formally awarded in early FY2021-22.

Appendix 2: Publications

CHPR Core Faculty Publications July 2020-June 2021

(Core Faculty in **BOLD**, Post-doctoral Fellows* and Staff**)

1. Abid Z, **Kuppermann N, Tancredi DJ**, Dayan PS. **Risk of Traumatic Brain Injuries in Infants Younger than 3 Months With Minor Blunt Head Trauma.** Ann Emerg Med. 2021 Jun 17:S0196-0644(21)00298-5. doi: 10.1016/j.annemergmed.2021.04.015. Online ahead of print.
2. **Agnoli A, Jerant A, Franks P.** **Prescription Opioids and Patient Sex: A National Cross-Sectional Study.** J Womens Health (Larchmt). 2021 Jan;30(1):29-35. doi: 10.1089/jwh.2019.8234.
3. Alvarez EM, Malogolowkin M, **Hoch JS**, Li Q, Brunson A, Pollock BH, Muffly L, Wun T, **Keegan THM.** **Treatment Complications and Survival Among Children and Young Adults With Acute Lymphoblastic Leukemia.** JCO Oncol Pract. 2020 Oct;16(10):e1120-e1133.
4. Antonoff MB, Mitzman B, Backhus L, Bradbury ST, Chatterjee S, **Cooke DT**, Crestanello J, Goldstone AB, Kim KM, Nguyen TC, Romano JC, Vaporciyan AA, Varghese TK Jr. **The Society of Thoracic Surgeons (STS) Virtual Conference Taskforce: Recommendations for Hosting a Virtual Surgical Meeting.** Ann Thorac Surg. 2021 Jan;111(1):16-23. doi: 10.1016/j.athoracsur.2020.10.008
5. Badon SE, Gabriel KP, Karvonen-Gutierrez C, Sternfeld B, Gold EB, **Waetjen LE**, Lee C, Avalos LA, El Khoudary SR, Hedderson MM. **Dual trajectories of physical activity and blood lipids in midlife women: The Study of Women's Health Across the Nation.** 2021 Apr;146:49-56. doi: 10.1016/j.maturitas.2021.02.002.
6. Barkoski JM, Philippiat C, **Tancredi D**, Schmidt RJ, Ozonoff S, Barr DB, Elms W, Bennett DH, Hertz-Picciotto I. **In utero pyrethroid pesticide exposure in relation to autism spectrum disorder (ASD) and other neurodevelopmental outcomes at 3 years in the MARBLES longitudinal cohort.** Environ Res. 2021 Mar;194:110495. doi: 10.1016/j.envres.2020.110495.
7. Barney A, Rodriguez F, **Schwarz EB**, Reed R, **Tancredi D**, Brindis CD, Dehlendorf C, Tebb KP. **Adapting to Changes in Teen Pregnancy Prevention Research: Social Media as an Expedited Recruitment Strategy.** J Adolesc Health. 2021 Feb 22:S1054-139X(21)00010-0. doi: 10.1016/j.jadohealth.2020.12.140. Online ahead of print.
8. Beaman J, Prifti C, **Schwarz EB**, Sobota M. **Medication to Manage Abortion and Miscarriage.** J Gen Intern Med. 2020 Aug;35(8):2398-2405.
9. Becker JC, Zakaluzny SA, Keller BA, Galante JM, **Utter GH.** **Clamping trials prior to thoracostomy tube removal and the need for subsequent invasive pleural drainage.** Am J Surg. 2020 Aug;220(2):476-481.
10. **Bell JF**, Whitney RL, Keeton V, Young HM. **Caregiver Characteristics and Outcomes Associated With Level of Care Complexity for Older Adults.** Res Gerontol Nurs. 2021 May-Jun;14(3):117-125. doi: 10.3928/19404921-20210427-01.
11. Benzie KM, Aziz K, Shah V, Faris P, Isaranuwatthai W, Scotland J, Larocque J, Mrklas KJ, Naugler C, Stelfox HT, Chari R, Soraisham AS, Akierman AR, Phillipos E, Amin H, **Hoch JS**, Zaroni P, Kurilova J, Lodha A; Alberta FiCare Level II NICU Study Team. **Effectiveness of Alberta Family Integrated Care on infant length of stay in level II neonatal intensive care units: a cluster randomized controlled trial.** BMC Pediatr. 2020 Nov 28;20(1):535.
12. Bissell MCS, Kerlikowske K, Sprague BL, Tice JA, Gard CC, Tossas KY, Rauscher GH, Trentham-Dietz A, Henderson LM, Onega T, Keegan THM, **Miglioretti DL**; Breast Cancer Surveillance Consortium. **Breast Cancer Population Attributable Risk Proportions Associated**

- with Body Mass Index and Breast Density by Race/Ethnicity and Menopausal Status.** *Cancer Epidemiol Biomarkers Prev.* 2020 Oct;29(10):2048-2056.
13. Boraas CM, Sanders JN, **Schwarz EB**, Thompson I, Turok DK. **Risk of Pregnancy With Levonorgestrel-Releasing Intrauterine System Placement 6-14 Days After Unprotected Sexual Intercourse.** *Obstet Gynecol.* 2021 Apr 1;137(4):623-625. doi: 10.1097/AOG.0000000000004118.
 14. Bowles EJA, **Miglioretti DL**, Kwan ML, Bartels U, Furst A, Cheng SY, Lau C, Greenlee RT, Weinmann S, Marlow EC, Rahm AK, Stout NK, Bolch WE, Theis MK, Smith-Bindman R, Pole JD. **Long-term medical imaging use in children with central nervous system tumors.** *PLoS One.* 2021 Apr 21;16(4):e0248643. doi: 10.1371/journal.pone.0248643
 15. Bowman JA, Nuño M, Jurkovich GJ, **Utter GH.** **Association of Hospital-Level Intensive Care Unit Use and Outcomes in Older Patients With Isolated Rib Fractures.** *JAMA Netw Open.* 2020 Nov 2;3(11):e2026500.
 16. **Brown LM**, Gosdin MM, **Cooke DT**, Apesoa-Varano EC, Kratz AL. **Health-Related Quality of Life After Lobectomy for Lung Cancer: Conceptual Framework and Measurement.** *Ann Thorac Surg.* 2020 Dec;110(6):1840-1846.
 17. **Brown LM**, Thibault DP, Kosinski AS, **Cooke DT**, Onaitis MW, Gaissert HA, **Romano PS.** **Readmission After Lobectomy for Lung Cancer: Not All Complications Contribute Equally.** *Ann Surg.* 2021 Jul 1;274(1):e70-e79. doi: 10.1097/SLA.0000000000003561.
 18. Bryan DS, Ferguson MK, Antonoff MB, Backhus LM, Birdas TJ, Blackmon SH, Boffa DJ, Chang AC, Chmielewski GW, **Cooke DT**, Donington JS, Gaissert HA, Hagen JA, Hofstetter WL, Kent MS, Kim KW, Krantz SB, Lin J, Martin LW, Meyerson SL, Mitchell JD, Molena D, Odell DD, Onaitis MW, Puri V, Putnam JB, Seder CW, Shrager JB, Soukiasian HJ, Stiles BM, Tong BC, Veeramachaneni NK. **Consensus for Thoracoscopic Left Upper Lobectomy-Essential Components and Targets for Simulation.** *Ann Thorac Surg.* 2020 Oct 27:S0003-4975(20)31739-2. doi: 10.1016/j.athoracsur.2020.06.152. Online ahead of print.
 19. Callegari LS, Nelson KM, Arterburn DE, Dehlendorf C, Magnusson SL, Benson SK, **Schwarz EB**, Borrero S. **Development and Pilot Testing of a Patient-Centered Web-Based Reproductive Decision Support Tool for Primary Care.** *J Gen Intern Med.* 2021 Feb 4. doi: 10.1007/s11606-020-06506-6. Online ahead of print.
 20. Carvallo Chaigneau FR, Walsh P, Lebedev M, Mutua V, McEligot H, **Bang H**, Gershwin LJ. **A randomized controlled trial comparing non-steroidal anti-inflammatory and fusion protein inhibitors singly and in combination on the histopathology of bovine respiratory syncytial virus infection.** *PLoS One.* 2021 Jun 10;16(6):e0252455. doi: 10.1371/journal.pone.0252455.
 21. Castillo-Carniglia A, González-Santa Cruz A, Cerdá M, Delcher C, Shev AB, Wintemute GJ, **Henry SG.** **Changes in opioid prescribing after implementation of mandatory registration and proactive reports within California's prescription drug monitoring program.** *Drug Alcohol Depend.* 2021 Jan 1;218:108405. doi: 10.1016/j.drugalcdep.2020.108405.
 22. Castillo-Carniglia A, González-Santa Cruz A, Cerdá M, Delcher C, Shev AB, Wintemute GJ, **Henry SG.** **Corrigendum to "Changes in opioid prescribing after implementation of mandatory registration and proactive reports within California's prescription drug monitoring program" [Drug Alcohol Depend. 218 (2021) 108405].** *Drug Alcohol Depend.* 2021 Apr 1;221:108606. doi: 10.1016/j.drugalcdep.2021.108606.
 23. Chin DL, Wilson MH, Trask AS, Johnson VT, Neaves BI, Gojova A, Hogarth MA, **Bang H**, **Romano PS.** **Repurposing Clinical Decision Support System Data to Measure Dosing Errors and Clinician-Level Quality of Care.** *J Med Syst.* 2020 Sep 8;44(10):185.

24. Clark JM, Cooke DT, Brown LM. **Management of Complications After Lung Resection: Prolonged Air Leak and Bronchopleural Fistula.** Thorac Surg Clin. 2020 Aug;30(3):347-358.
25. Conombo B, Guertin JR, Tardif PA, Farhat I, Moore T, Boudierba S, Soltana K, Archambault P, Berthelot S, Lauzier F, Turgeon AF, Stelfox HT, Chasse M, Hoch J, Moore L. **Economic evaluation of intrahospital clinical practices in injury care: protocol for a 10-year systematic review.** BMJ Open. 2020 Jul 14;10(7):e034472. doi: 10.1136/bmjopen-2019-034472.
26. Davis A, Bell JF, Reed SC, Kim KK, Stacey D, Joseph JG. **Nurse-Led Telephonic Symptom Support for Patients Receiving Chemotherapy.** Oncol Nurs Forum. 2020 Nov 1;47(6):E199-E210.
27. DeMellow JM, Kim TY, Romano PS, Drake C, Balas MC. **Factors associated with ABCDE bundle adherence in critically ill adults requiring mechanical ventilation: An observational design.** Intensive Crit Care Nurs. 2020 Oct;60:102873.
28. Dewa CS, Hoch JS, Loong D, Trojanowski L, Bonato S. **Evidence for the Cost-Effectiveness of Return-to-Work Interventions for Mental Illness Related Sickness Absences: A Systematic Literature Review.** J Occup Rehabil. 2021 Mar;31(1):26-40. doi: 10.1007/s10926-020-09904-z.
29. Dharmasukrit C, Chan SYS, Applegate RL 2nd, Tancredi DJ, Harvath TA, Joseph JG. **Frailty, Race/Ethnicity, Functional Status, and Adverse Outcomes After Total Hip/Knee Arthroplasty: A Moderation Analysis.** J Arthroplasty. 2021 Jun;36(6):1895-1903. doi: 10.1016/j.arth.2021.01.033.
30. Dhir A, Bruun DA, Guignet M, Tsai YH, González E, Calsbeek J, Vu J, Saito N, Tancredi DJ, Harvey DJ, Lein PJ, Rogawski MA. **Allopregnanolone and perampanel as adjuncts to midazolam for treating diisopropylfluorophosphate-induced status epilepticus in rats.** Ann N Y Acad Sci. 2020 Nov;1480(1):183-206.
31. Dove MS,* Stewart SL, Tong EK. **Smoking behavior in 18-20 year-olds after tobacco 21 policy implementation in California: A difference-in-differences analysis with other states.** Prev Med. 2021 Jul;148:106553. doi: 10.1016/j.ypmed.2021.106553.
32. Durham DD, Roberts MC, Khan CP, Abraham LA, Smith RA, Kerlikowske K, Miglioretti DL. **Age at initiation of screening mammography by family history of breast cancer in the breast cancer surveillance consortium.** Cancer Causes Control. 2021 Jan;32(1):103-107. doi: 10.1007/s10552-020-01354-5.
33. Elder JW, Wu EF, Chenoweth JA, Holmes JF, Parikh AK, Moulin AK, Trevino TG, Richards JR. **Emergency Department Screening for Unhealthy Alcohol and Drug Use with a Brief Tablet-Based Questionnaire.** Emerg Med Int. 2020 Jul 17;2020:8275386.
34. Erkmen CP, Kane L, Cooke DT. **Bias Mitigation in Cardiothoracic Recruitment.** Ann Thorac Surg. 2021 Jan;111(1):12-15. doi: 10.1016/j.athoracsur.2020.07.005.
35. Erkmen CP, Ortmeyer KA, Cooke DT. **Diversity in Cardiothoracic Surgery: Beyond a "Gender/Color-Blind" Approach.** Ann Thorac Surg. 2021 Jun 5:S0003-4975(21)00991-7. doi: 10.1016/j.athoracsur.2021.05.034. Online ahead of print.
36. Erkmen CP, Ortmeyer KA, Pelletier GJ, Preventza O, Cooke DT; Society of Thoracic Surgeons Workforce on Diversity and Inclusion. **An Approach to Diversity and Inclusion in Cardiothoracic Surgery.** Ann Thorac Surg. 2021 Mar;111(3):747-752. doi: 10.1016/j.athoracsur.2020.10.056.
37. Feng B, Malloch YZ, Kravitz RL, Verba S, Iosif AM, Slavik G, Henry SG. **Assessing the effectiveness of a narrative-based patient education video for promoting opioid tapering.** Patient Educ Couns. 2021 Feb;104(2):329-336. doi: 10.1016/j.pec.2020.08.019.

38. Fenton JJ, Jerant A, Franks P, Gosdin M,** Fridman I, Cipri C,** Weinberg G,** Hudnut A, Tancredi DJ. **Watchful waiting as a strategy to reduce low-value spinal imaging: study protocol for a randomized trial.** 2021 Feb 27;22(1):167. doi: 10.1186/s13063-021-05106-x.
39. Fenton JJ, Magnan EM, Agnoli AL, Henry SG, Xing G,** Tancredi DJ. **Longitudinal Dose Trajectory Among Patients Tapering Long-Term Opioids.** Pain Med. 2021 Mar 19:pnaa470. doi: 10.1093/pm/pnaa470. Online ahead of print.
40. Fenton JJ, Tapp H, Thakur NM, Pfeifle A. **Reliability of Peer Review of Abstracts Submitted to Academic Family Medicine Meetings.** J Am Board Fam Med. Nov-Dec 2020;33(6):986-991.
41. Fields BE, Whitney RL, Bell JF. **Home Oxygen Therapy.** Am J Nurs. 2020 Nov;120(11):51-57.
42. Fields BE, Whitney RL, Bell JF. **Managing Home Infusion Therapy.** Am J Nurs. 2020 Dec;120(12):53-59.
43. Fields BE, Whitney RL, Bell JF. **Using a Mechanical Lift at Home.** Am J Nurs. 2021 Feb 1;121(2):57-62. doi: 10.1097/01.NAJ.0000734140.20556.88.
44. Florin TA, Tancredi DJ, Ambroggio L, Babl FE, Dalziel SR, Eckerle M, Mintegi S, Neuman M, Plint AC, Kuppermann N; Pediatric Emergency Research Networks (PERN) Pneumonia Investigators. **Predicting severe pneumonia in the emergency department: a global study of the Pediatric Emergency Research Networks (PERN)-study protocol.** BMJ Open. 2020 Dec 2;10(12):e041093.
45. Ford JS, Chaco E, Tancredi DJ, Mumma BE. **Impact of high-sensitivity cardiac troponin implementation on emergency department length of stay, testing, admissions, and diagnoses.** Am J Emerg Med. 2021 Feb 19;45:54-60. doi: 10.1016/j.ajem.2021.02.021. Online ahead of print.
46. Ford JS, Holmes JF, Jones RF. **Cardioembolic Stroke in a Patient with Coronavirus Disease of 2019 (COVID-19) Myocarditis: A Case Report.** Clin Pract Cases Emerg Med. 2020 Aug;4(3):332-335. doi: 10.5811/cpcem.2020.6.47856.
47. Ford JS, Parikh A, Sandhu R, Turnipseed S, Morris B, May L, Holmes JF. **Testing Asymptomatic Emergency Department Patients for Coronavirus Disease 2019 (COVID-19) in a Low-prevalence Region.** Acad Emerg Med. 2020 Aug;27(8):771-774.
48. France MT, Ma B, Gajer P, Brown S, Humphrys MS,* Holm JB, Waetjen LE, Brotman RM, Ravel J. **VALENCIA: a nearest centroid classification method for vaginal microbial communities based on composition.** 2020 Nov 23;8(1):166. doi: 10.1186/s40168-020-00934-6.
49. Freed B, Williams B, Situ X, Landsman V, Kim J, Moroz A, Bang H, Park JJ. **Blinding, sham, and treatment effects in randomized controlled trials for back pain in 2000-2019: A review and meta-analytic approach.** Clin Trials. 2021 Jun;18(3):361-370. doi: 10.1177/1740774520984870.
50. Funk AL, Florin TA, Dalziel SR, Mintegi S, Salvadori MI, Tancredi DJ, Neuman MI, Payne DC, Plint AC, Klassen TP, Malley R, Ambroggio L, Kim K, Kuppermann N, Freedman SB. **Prospective cohort study of children with suspected SARS-CoV-2 infection presenting to paediatric emergency departments: a Paediatric Emergency Research Networks (PERN) Study Protocol.** BMJ Open. 2021 Jan 15;11(1):e042121. doi: 10.1136/bmjopen-2020-042121.
51. Glaser N, Chu S, Hung B, Fernandez L, Wulff H, Tancredi D, ODonnell ME. **Acute and chronic neuroinflammation is triggered by diabetic ketoacidosis in a rat model.** BMJ Open Diabetes Res Care. 2020 Dec;8(2):e001793.
52. Goldfarb SB, Turan V, Bedoschi G, Taylan E, Abdo N, Cigler T, Bang H, Patil S, Dickler MN, Oktay KH. **Impact of adjuvant chemotherapy or tamoxifen-alone on the ovarian reserve**

- of young women with breast cancer.** Breast Cancer Res Treat. 2021 Jan;185(1):165-173. doi: 10.1007/s10549-020-05933-7.
53. Golmakani MK, Hubbard RA, **Miglioretti DL.** **Nonhomogeneous Markov chain for estimating the cumulative risk of multiple false positive screening tests.** 2021 May 3. doi: 10.1111/biom.13484. Online ahead of print.
 54. Goodin AJ, Brown JD, Delcher C, Freeman PR, Talbert J, **Henry SG,** Roussos-Ross D. **Perception of prescription drug monitoring programs as a prevention tool in primary medical care.** Res Social Adm Pharm. 2020 Sep;16(9):1306-1308.
 55. Gottschlich A, van Niekerk D, Smith LW, Gondara L, **Melnikow J,** Cook DA, Lee M, Stuart G, Martin RE, Peacock S, Franco EL, Coldman A, Krajden M, Ogilvie G. **Assessing 10-Year Safety of a Single Negative HPV Test for Cervical Cancer Screening: Evidence from FOCAL-DECADE Cohort.** Cancer Epidemiol Biomarkers Prev. 2021 Jan;30(1):22-29. doi: 10.1158/1055-9965.EPI-20-1177.
 56. Gould MK, Altman DE, Creekmur B, Qi L, de Bie E, Golden S, Kaplan CP, Kelly K, **Miglioretti DL,** Mularski RA, Musigdilok VV, Smith-Bindman R, Steltz JP, Wiener RS, Aberle DR, Dyer DS, Vachani A. **Guidelines for the Evaluation of Pulmonary Nodules Detected Incidentally or by Screening: A Survey of Radiologist Awareness, Agreement, and Adherence From the Watch the Spot Trial.** J Am Coll Radiol. 2021 Apr;18(4):545-553. doi: 10.1016/j.jacr.2020.10.003.
 57. Hamra GB, Lesko CR, Buckley JP, Jensen ET, **Tancredi D,** Lau B, Hertz-Picciotto I; program collaborators for Environmental influences on Child Health Outcomes. **Combining Effect Estimates Across Cohorts and Sufficient Adjustment Sets for Collaborative Research: A Simulation Study.** 2021 May 1;32(3):421-424. doi: 10.1097/EDE.0000000000001336.
 58. **Haynes SC,*** Dharmar M, Hill BC, Hoffman KR, Donohue LT, Kuhn-Riordon KM, Rottkamp CA, Vali P, **Tancredi DJ,** **Romano PS,** Steinhorn R, **Marcin JP.** **The Impact of Telemedicine on Transfer Rates of Newborns at Rural Community Hospitals.** Acad Pediatr. 2020 Jul;20(5):636-641.
 59. **Haynes SC,*** Hoffman KR, Patel S, Smith S, **Romano PS,** **Marcin JP.** Telemed J E Health. **The Use of Telemedicine for Stabilization of Neonates Transferred from Rural Community Hospitals.** 2021 Mar 1. doi: 10.1089/tmj.2020.0503. Online ahead of print. PMID: 33691080
 60. **Haynes SC,*** **Marcin JP,** Dayal P, **Tancredi DJ,** Crossen S. **Impact of telemedicine on visit attendance for paediatric patients receiving endocrinology specialty care.** J Telemed Telecare. 2020 Nov 23:1357633X20972911. doi: 10.1177/1357633X20972911. Online ahead of print.
 61. **Haynes SC,*** **Tancredi DJ,** **Tong K,** **Hoch JS,** Ong MK, Ganiats TG, Evangelista LS, Black JT, Auerbach A, **Romano PS;** Better Effectiveness After Transition–Heart Failure (BEAT-HF) Research Group. **Association of Adherence to Weight Telemonitoring With Health Care Use and Death: A Secondary Analysis of a Randomized Clinical Trial.** JAMA Netw Open. 2020 Jul 1;3(7):e2010174.
 62. Hellesen S, Bankston-Lee K, Maytum C, **Tong EK.** **Strategies and lessons learned for smoke and Tobacco-Free policy change on community colleges with community-based support.** J Am Coll Health. 2021 Jan 31:1-10. doi: 10.1080/07448481.2020.1865972. Online ahead of print.
 63. **Henry SG,** **Feng B,** Verba S, **Kravitz RL,** Iosif AM. **The story vs the storyteller: Factors associated with the effectiveness of brief video-recorded patient stories for promoting opioid tapering.** Health Expect. 2021 Apr 9. doi: 10.1111/hex.13243. Online ahead of print.

64. Henry SG, Stewart SL, Murphy E, Tseregounis IE,* Crawford AJ, Shev AB, Gasper JJ, Tancredi DJ, Cerdá M, Marshall BDL, Wintemute GJ. **Using Prescription Drug Monitoring Program Data to Assess Likelihood of Incident Long-Term Opioid Use: a Statewide Cohort Study.** J Gen Intern Med. 2021 Mar 19. doi: 10.1007/s11606-020-06555-x. Online ahead of print.
65. Henry SG, White AEC,* Magnan EM, Hood-Medland EA,* Gosdin M,** Kravitz RL, Torres PJ, Gerwing J. **Making the most of video recorded clinical encounters: Optimizing impact and productivity through interdisciplinary teamwork.** Patient Educ Couns. 2020 Oct;103(10):2178-2184.
66. Hood-Medland EA,* White AEC,* Kravitz RL, Henry SG. **Agenda setting and visit openings in primary care visits involving patients taking opioids for chronic pain.** BMC Fam Pract. 2021 Jan 4;22(1):4. doi: 10.1186/s12875-020-01317-4.
67. Hoyt-Austin A,* Dove MS,* Abrahão R, Kair LR, Schwarz EB. **Awareness That Breastfeeding Reduces Breast Cancer Risk: 2015-2017 National Survey of Family Growth.** Obstet Gynecol. 2020 Dec;136(6):1154-1156.
68. Huo M, Miller LMS, Kim K, Liu S. **Volunteering, Self-Perceptions of Aging, and Mental Health in Later Life.** Gerontologist. 2020 Oct 26:gnaa164. doi: 10.1093/geront/gnaa164. Online ahead of print.
69. Jerant A, Duberstein P, Kravitz RL, Stone DM, Cipri C,** Franks P. **Tailored Activation of Middle-Aged Men to Promote Discussion of Recent Active Suicide Thoughts: a Randomized Controlled Trial.** J Gen Intern Med. 2020 Jul;35(7):2050-2058.
70. Jerant A, Fancher T, Henderson MC, Griffin EJ, Hall TR, Kelly CJ, Peterson EM, Franks P. **Associations of Postbaccalaureate Coursework with Underrepresented Race/Ethnicity, Academic Performance, and Primary Care Training among Matriculants at Five California Medical Schools.** J Health Care Poor Underserved. 2021;32(2):971-986. doi: 10.1353/hpu.2021.0075.
71. Jones KA, Tancredi DJ, Abebe KZ, Paglisotti T, Miller E. **Cases of Sexual Assault Prevented in an Athletic Coach-Delivered Gender Violence Prevention Program.** Prev Sci. 2021 May;22(4):504-508. doi: 10.1007/s11121-021-01210-1.
72. Keeton VF, Trask J, Whitney R, Bell JF. **Overburdened and Underprepared: Medical/Nursing Task Performance Among Informal Caregivers in the United States.** J Gerontol Nurs. 2020 Sep 1;46(9):25-35.
73. Kelz RR, Sellers MM, Niknam BA, Sharpe JE, Rosenbaum PR, Hill AS, Zhou H, Hochman LL, Bilimoria KY, Itani K, Romano PS, Silber JH. **A National Comparison of Operative Outcomes of New and Experienced Surgeons.** Ann Surg. 2021 Feb 1;273(2):280-288. doi: 10.1097/SLA.0000000000003388.
74. Kerlikowske K, Bissell MCS, Sprague BL, Buist DSM, Henderson LM, Lee JM, Miglioretti DL. **Advanced Breast Cancer Definitions by Staging System Examined in the Breast Cancer Surveillance Consortium.** J Natl Cancer Inst. 2020 Nov 10:djaa176. doi: 10.1093/jnci/djaa176. Online ahead of print.
75. Kerlikowske K, Bissell MCS, Sprague BL, Buist DSM, Henderson LM, Lee JM, Miglioretti DL. **Response to Pisano, Gastonis, Sparano, et al.** J Natl Cancer Inst. 2021 Mar 30:djab056. doi: 10.1093/jnci/djab056. Online ahead of print.
76. Khorfan R, Cooke DT, Meguid RA, Backhus L, Varghese TK Jr, Farjah F, Bilimoria KY, Odell DD; ThORN Collaborative. **Institutional factors associated with adherence to quality measures for stage I and II non-small cell lung cancer.** J Thorac Cardiovasc Surg. 2020 Jul 29:S0022-5223(20)32227-3. doi: 10.1016/j.jtcvs.2020.05.123. Online ahead of print.

77. Kim CH, Lieng MK, Rylee TL, Gee KA, **Marcin JP, Melnikow JA. School-Based Telemedicine Interventions for Asthma: A Systematic Review.** Acad Pediatr. 2020 Sep-Oct;20(7):893-901.
78. Kolahi J, Khazaei S, Iranmanesh P, Kim J, **Bang H, Khademi A. Meta-Analysis of Correlations between Altmetric Attention Score and Citations in Health Sciences.** Biomed Res Int. 2021 Apr 7;2021:6680764. doi: 10.1155/2021/6680764.
79. Langer CE, Mitchell DC, Armitage TL, Moyce SC, **Tancredi DJ, Castro J, Vega-Arroyo AJ, Bennett DH, Schenker MB. Are Cal/OSHA Regulations Protecting Farmworkers in California From Heat-Related Illness?** J Occup Environ Med. 2021 Jun 1;63(6):532-539. doi: 10.1097/JOM.0000000000002189.
80. Lee CI, Zhu W, Onega T, Henderson LM, Kerlikowske K, Sprague BL, Rauscher GH, O'Meara ES, Tosteson ANA, Haas JS, diFlorio-Alexander R, Kaplan C, **Miglioretti DL. Comparative Access to and Use of Digital Breast Tomosynthesis Screening by Women's Race/Ethnicity and Socioeconomic Status.** JAMA Netw Open. 2021 Feb 1;4(2):e2037546. doi: 10.1001/jamanetworkopen.2020.37546.
81. Lee JM, Ichikawa LE, Wernli KJ, Bowles E, Specht JM, Kerlikowske K, **Miglioretti DL, Lowry KP, Tosteson ANA, Stout NK, Houssami N, Onega T, Buist DSM. Digital Mammography and Breast Tomosynthesis Performance in Women with a Personal History of Breast Cancer, 2007-2016.** 2021 May 18:204581. doi: 10.1148/radiol.2021204581. Online ahead of print.
82. Lesser RP, Webber WRS, **Miglioretti DL, Mizuno-Matsumoto Y, Muramatsu A, Yamamoto Y. Attention, Not Performance, Correlates With Afterdischarge Termination During Cortical Stimulation.** Front Hum Neurosci. 2021 Jan 22;14:609188. doi: 10.3389/fnhum.2020.609188.
83. Li ST, Schwartz A, Burke AE, Guralnick S, Trimm RF, Guillot A, Mahan JD, Gifford K, **Tancredi DJ. Pediatric Program Director Minimum Milestone Expectations Before Allowing Supervision of Others and Unsupervised Practice.** Acad Pediatr. 2020 Nov-Dec;20(8):1063-1065.
84. Lieng MK, **Marcin JP, Dayal P, Tancredi DJ, Swanson MB, Haynes SC,*Romano PS, Sigal IS, Rosenthal JL. Emergency Department Pediatric Readiness and Potentially Avoidable Transfers.** J Pediatr. 2021 May 14:S0022-3476(21)00444-3. doi: 10.1016/j.jpeds.2021.05.021. Online ahead of print.
85. Lieng MK, **Marcin JP, Sigal IS, Haynes SC,* Dayal P, Tancredi DJ, Gausche-Hill M, Mouzoon JL, Romano PS, Rosenthal JL. Association between emergency department pediatric readiness and transfer of noninjured children in small rural hospitals.** J Rural Health. 2021 Mar 18. doi: 10.1111/jrh.12566. Online ahead of print.
86. Lin JH, Jeon SY, **Romano PS, Humphries MD.* Rates and timing of subsequent amputation after initial minor amputation.** J Vasc Surg. 2020 Jul;72(1):268-275.
87. Lowry KP, Coley RY, **Miglioretti DL, Kerlikowske K, Henderson LM, Onega T, Sprague BL, Lee JM, Herschorn S, Tosteson ANA, Rauscher G, Lee CI. Screening Performance of Digital Breast Tomosynthesis vs Digital Mammography in Community Practice by Patient Age, Screening Round, and Breast Density.** JAMA Netw Open. 2020 Jul 1;3(7):e2011792.
88. Lu L, Jiang Q, Hong J, Jin X, Gao Q, **Bang H, DeRiemer K, Yang C. Catastrophic costs of tuberculosis care in a population with internal migrants in China.** BMC Health Serv Res. 2020 Sep 4;20(1):832.
89. Luc JGY, Archer MA, Arora RC, Bender EM, Blitz A, **Cooke DT, Elde S, Guy TS, Halpern AL, Harrington C, Hlci TN, Kidane B, Olive JK, Ouzounian M, Stamp N, Vervoort D, Varghese TK Jr, Antonoff MB. The Thoracic Surgery Social Media Network Experience During the COVID-19 Pandemic.** Ann Thorac Surg. 2020 Oct;110(4):1103-1107.

90. Luc JGY, Archer MA, Arora RC, Bender EM, Blitz A, **Cooke DT**, Hlci TN, Kidane B, Ouzounian M, Varghese TK Jr, Antonoff MB. **Does Tweeting Improve Citations? One-Year Results from the TSSMN Prospective Randomized Trial.** *Ann Thorac Surg.* 2021 Jan;111(1):296-300. doi: 10.1016/j.athoracsur.2020.04.065.
91. Maier GU, McNabb B, Pereira R, **Bang H**, Aly SS, Rossow HA. **Effect of continued metabolic acidification into the first 3 days of lactation on blood calcium status in postpartum dairy cattle: A randomized controlled trial.** *J Dairy Sci.* 2020 Dec;103(12):11762-11768.
92. Malone C, Tiro JA, Buist DS, Beatty T, Lin J, Kimbel K, Gao H, Thayer C, **Miglioretti DL**, Winer RL. **Reactions of women underscreened for cervical cancer who received unsolicited human papillomavirus self-sampling kits.** *J Med Screen.* 2020 Sep;27(3):146-156.
93. Marco ML, Hill C, Hutkins R, Slavin J, **Tancredi DJ**, Merenstein D, Sanders ME. **Should There Be a Recommended Daily Intake of Microbes?** *J Nutr.* 2020 Dec 10;150(12):3061-3067.
94. Marlow EC, Ducore J, Kwan ML, Cheng SY, Bowles EJA, Greenlee RT, Pole JD, Rahm AK, Stout NK, Weinmann S, Smith-Bindman R, **Miglioretti DL**. **Leukemia Risk in a Cohort of 3.9 Million Children with and without Down Syndrome.** *J Pediatr.* 2021 Mar 6:S0022-3476(21)00212-2. doi: 10.1016/j.jpeds.2021.03.001
95. May L, Nguyen MH, Trajano R, **Tancredi D**, Aliyev ER, Mooso B, Anderson C, Ondak S, Yang N, Cohen S, Wiedeman J, Miller LG. **A multifaceted intervention improves antibiotic stewardship for skin and soft tissues infections.** *Am J Emerg Med.* 2020 Oct 24:S0735-6757(20)30903-7. doi: 10.1016/j.ajem.2020.10.017. Online ahead of print.
96. McCurdy SA, Portillo-Silva C, Sipan CL, **Bang H**, Emery KW. **Risk for Coccidioidomycosis among Hispanic Farm Workers, California, USA, 2018.** *Emerg Infect Dis.* 2020 Jul;26(7):1430-1437.
97. McEntee KM, Crawford KD, Wilson MD, Ponzini MD, Wu BT, Nejad BM, **Waetjen LE**. **Postoperative Opioid Prescribing and Consumption after Hysterectomy: A Prospective Cohort Study.** *J Minim Invasive Gynecol.* 2021 May;28(5):1013-1021. doi: 10.1016/j.jmig.2020.10.023.
98. McFadden NR, Kahn DR, **Utter GH**. **Injuries Sustained During Incarceration Among Prisoners.** *J Surg Res.* 2021 Aug;264:386-393. doi: 10.1016/j.jss.2021.03.008.
99. **Miglioretti DL**, Bissell MCS, Kerlikowske K, Buist DSM, Cummings SR, Henderson LM, Onega T, O'Meara ES, Rauscher GH, Sprague BL, Tosteson ANA, Wernli KJ, Lee JM, Lee CI. **Assessment of a Risk-Based Approach for Triaging Mammography Examinations During Periods of Reduced Capacity.** *JAMA Netw Open.* 2021 Mar 1;4(3):e211974. doi: 10.1001/jamanetworkopen.2021.1974.
100. **Miller LMS**, Gee PM, Katz RA. **The Importance of Understanding COVID-19: The Role of Knowledge in Promoting Adherence to Protective Behaviors.** *Front Public Health.* 2021 Apr 6;9:581497. doi: 10.3389/fpubh.2021.581497.
101. **Miller LMS**, **Tancredi DJ**, Kaiser LL, Tseng JT. **Midlife vulnerability and food insecurity: Findings from low-income adults in the US National Health Interview Survey.** *PLoS One.* 2020 Jul 13;15(7):e0233029.
102. Mu Y, Chin AI, Kshirsagar AV, **Bang H**. **Assessing the Impacts of Misclassified Case-Mix Factors on Health Care Provider Profiling: Performance of Dialysis Facilities.** 2020 Jan-Dec;57:46958020919275. doi: 10.1177/0046958020919275. PMID: 32478600
103. Mumma BE, Casey SD, Dang RK, Polen MK, Kaur JC, Rodrigo J, **Tancredi DJ**, Narverud RA, Amsterdam EA, Tran N. **Diagnostic Reclassification by a High-Sensitivity Cardiac Troponin Assay.** *Ann Emerg Med.* 2020 Nov;76(5):566-579.

104. Murray Horwitz ME, Pace LE, Schwarz EB, Ross-Degnan D. **Use of contraception before and after a diabetes diagnosis: An observational matched cohort study.** Prim Care Diabetes. 2021 Mar 17:S1751-9918(21)00037-1. doi: 10.1016/j.pcd.2021.02.012. Online ahead of print.
105. Mustoe MM, Clark JM, Huynh TT, Tong EK, Wolf TP, Brown LM, Cooke DT. **Engagement and Effectiveness of a Smoking Cessation Quitline Intervention in a Thoracic Surgery Clinic.** JAMA Surg. 2020 Sep 1;155(9):816-822.
106. Muthukumar T, Akat KM, Yang H, Schwartz JE, Li C, Bang H, Ben-Dov IZ, Lee JR, Ikle D, Demetris AJ, Tuschi T, Suthanthiran M. **Serum MicroRNA Transcriptomics and Acute Rejection or Recurrent Hepatitis C Virus in Human Liver Allograft Recipients: A Pilot Study.** 2021 May 11. doi: 10.1097/TP.0000000000003815. Online ahead of print.
107. Nishijima DK, Gosdin M,** Naz H, Tancredi DJ, Hewes HA, Myers SR, Stanley RM, Adelson PD, Burd RS, Finkelstein Y, VanBuren J, Casper TC, Kuppermann N; TIC-TOC Collaborators of the Pediatric Emergency Care Applied Research Network (PECARN). **Assessment of primary outcome measures for a clinical trial of pediatric hemorrhagic injuries.** Am J Emerg Med. 2021 May;43:210-216. doi: 10.1016/j.ajem.2020.03.001.
108. Nystrand C, Sampaio F, Hoch JS, Osman F, Feldman I. **The cost-effectiveness of a culturally tailored parenting program: estimating the value of multiple outcomes.** Cost Eff Resour Alloc. 2021 Apr 23;19(1):23. doi: 10.1186/s12962-021-00278-4.
109. Oh J, Bennett DH, Calafat AM, Tancredi D, Roa DL, Schmidt RJ, Hertz-Picciotto I, Shin HM. **Prenatal exposure to per- and polyfluoroalkyl substances in association with autism spectrum disorder in the MARBLES study.** Environ Int. 2021 Feb;147:106328. doi: 10.1016/j.envint.2020.106328.
110. Oh J, Schmidt RJ, Tancredi D, Calafat AM, Roa DL, Hertz-Picciotto I, Shin HM. **Prenatal exposure to per- and polyfluoroalkyl substances and cognitive development in infancy and toddlerhood.** Environ Res. 2021 May;196:110939. doi: 10.1016/j.envres.2021.110939.
111. Ortmeier KA, Raman V, Tiko-Okoye C, Espinosa J, Cooke DT, Erkmen C. **Women and Minorities Underrepresented in Academic Cardiothoracic Surgery: It's Time for Next Steps.** Ann Thorac Surg. 2020 Nov 5:S0003-4975(20)31851-8.
112. Ortmeier KA, Raman V, Tiko-Okoye CS, Espinosa JA, Cooke DT, Starnes SL, Erkmen CP. **Goals, organizational change, advocacy, diversity literacy, and sustainability: A checklist for diversity in cardiothoracic surgery training programs.** J Thorac Cardiovasc Surg. 2020 Dec 3:S0022-5223(20)33199-8. doi: 10.1016/j.jtcvs.2020.11.112. Online ahead of print.
113. OUD Modeling writing group. **How simulation modeling can support the public health response to the opioid crisis in North America: Setting priorities and assessing value.** Int J Drug Policy. 2021 Feb;88:102726. doi: 10.1016/j.drugpo.2020.102726.
114. Partridge E, McCleery E, Cheema R, Nakra N, Lakshminrusimha S, Tancredi DJ, Blumberg DA. **Evaluation of Seasonal Respiratory Virus Activity Before and After the Statewide COVID-19 Shelter-in-Place Order in Northern California.** JAMA Netw Open. 2021 Jan 4;4(1):e2035281. doi: 10.1001/jamanetworkopen.2020.35281.
115. Patnode CD, Henderson JT, Coppola EL, Melnikow J, Durbin S,** Thomas RG. **Interventions for Tobacco Cessation in Adults, Including Pregnant Persons: Updated Evidence Report and Systematic Review for the US Preventive Services Task Force.** 2021 Jan 19;325(3):280-298. doi: 10.1001/jama.2020.23541.
116. Patnode CD, Henderson JT, Melnikow J, Coppola EL, Durbin S, Thomas R. **Interventions for Tobacco Cessation in Adults, Including Pregnant Women: An**

- Evidence Update for the U.S. Preventive Services Task Force [Internet]**. Rockville (MD): Agency for Healthcare Research and Quality (US); 2021 Jan. Report No.: 20-05264-EF-1.
117. Pear VA, McCort CD, Li Y, Beckett L, **Tancredi D**, Studdert DM, Kass PH, Pierce GL, Braga AA, Wright MA, Laqueur HS, Kravitz-Wirtz N, Wintemute GJ. **Armed and prohibited: characteristics of unlawful owners of legally purchased firearms.** *Inj Prev.* 2021 Apr;27(2):145-149. doi: 10.1136/injuryprev-2019-043479.
 118. Perry LM, Bateni SB, Bold RJ, **Hoch JS**. **Is Improved Survival in Early-Stage Pancreatic Cancer Worth the Extra Cost at High-Volume Centers?** *J Am Coll Surg.* 2021 Mar 22:S1072-7515(21)00165-4. doi: 10.1016/j.jamcollsurg.2021.02.014. Online ahead of print.
 119. Poltavskiy E, Alishahi Tabriz A, **Romano PS**, **Bang H**, Kshirsagar AV. **Predicting COVID-19 at skilled nursing facilities in California: do the stars align?** *BMJ Open Qual.* 2021 Mar;10(1):e001099. doi: 10.1136/bmjoc-2020-001099. PMID: 33658243
 120. Poltavskiy EA, Fenton SH, **Atolagbe O**,** Sadeghi B, **Bang H**, **Romano PS**. **Exploring the implications of the new ICD-10-CM classification system for injury surveillance: analysis of dually coded data from two medical centres.** *Inj Prev.* 2021 Mar;27(S1):i19-i26. doi: 10.1136/injuryprev-2019-043519. PMID: 33674329
 121. Reed SC, **Bell JF**, **Miglioretti DL**, Nekhlyudov L, Fairman N, Joseph JG. **Relationships Between Fear of Cancer Recurrence and Lifestyle Factors Among Cancer Survivors.** *J Cancer Educ.* 2020 Aug;35(4):669-677.
 122. Rosenthal JL, Sauers-Ford HS, Williams J, Ranu J, **Tancredi DJ**, Hoffman KR. **Virtual Family-Centered Rounds in the Neonatal Intensive Care Unit: A Randomized Controlled Pilot Trial.** *Acad Pediatr.* 2021 Mar 18:S1876-2859(21)00148-0. doi: 10.1016/j.acap.2021.03.007. Online ahead of print.
 123. Ryan-Ibarra S, DeLisio A, **Bang H**, Adedokun O, Bhargava V, Franck K, Funderburk K, Lee JS, Parmer S, Sneed C. **The US Supplemental Nutrition Assistance Program - Education improves nutrition-related behaviors.** *J Nutr Sci.* 2020 Sep 30;9:e44.
 124. Salloum RG, D'Angelo H, Theis RP, Rolland B, Hohl S, Pauk D, LeLaurin JH, Asvat Y, Chen LS, Day AT, Goldstein AO, Hitsman B, Hudson D, King AC, Lam CY, Lenhoff K, Levinson AH, Prochaska J, Smieliauskas F, Taylor K, Thomas J, Tindle H, **Tong E**, White JS, Vogel WB, Warren GW, Fiore M. **Mixed-methods economic evaluation of the implementation of tobacco treatment programs in National Cancer Institute-designated cancer centers.** *Implement Sci Commun.* 2021 Apr 9;2(1):41. doi: 10.1186/s43058-021-00144-7.
 125. Sankaran D, Chandrasekharan PK, Gugino SF, Koenigskecht C, Helman J, Nair J, Mathew B, Rawat M, Vali P, Nielsen L, **Tancredi DJ**, Lakshminrusimha S. **Randomised trial of epinephrine dose and flush volume in term newborn lambs.** *Arch Dis Child Fetal Neonatal Ed.* 2021 Mar 9:fetalneonatal-2020-321034. doi: 10.1136/archdischild-2020-321034. Online ahead of print.
 126. Scott JW, Staudenmayer K, Sangji N, Fan Z, Hemmila M, **Utter G**. **Evaluating the association between American Association for the Surgery of Trauma emergency general surgery anatomic severity grades and clinical outcomes using national claims data.** *J Trauma Acute Care Surg.* 2021 Feb 1;90(2):296-304. doi: 10.1097/TA.0000000000003030.
 127. Servis M, Fishman SM, Wallace MS, **Henry SG**, Ziedonis D, Ciccarone D, Knight KR, Shoptaw S, Dowling P, Suchard JR, Shah S, Singh N, Cedarquist LC, Alem N, Copenhaver DJ, Westervelt M, Willis BC. **Responding to the Opioid Epidemic: Educational Competencies for Pain and Substance Use Disorder from the Medical Schools of the University of California.** *Pain Med.* 2021 Feb 4;22(1):60-66. doi: 10.1093/pm/pnaa399.

128. Shin HM, Bennett DH, Calafat AM, **Tancredi D**, Hertz-Picciotto I. **Modeled prenatal exposure to per- and polyfluoroalkyl substances in association with child autism spectrum disorder: A case-control study.** Environ Res. 2020 Jul;186:109514.
129. Siefkes H, Kair L, **Tancredi DJ**, Vasquez B, Garcia L, Bedford-Mu C, Lakshminrusimha S. **Oxygen Saturation and Perfusion Index-Based Enhanced Critical Congenital Heart Disease Screening.** Am J Perinatol. 2020 Jan;37(2):158-165.
130. Sigal I, Dayal P, **Hoch JS**, Mouzoon JL, Morrow E, **Marcin JP**. **Travel, Time, and Cost Savings Associated with a University Medical Center's Video Medical Interpreting Program.** Telemed J E Health. 2020 Oct;26(10):1234-1239.
131. Singh S, Hearps SJC, Borland ML, Dalziel SR, Neutze J, Donath S, Cheek JA, Kochar A, Gilhotra Y, Phillips N, Williams A, Lyttle MD, Bressan S, **Hoch JS**, Oakley E, **Holmes JF**, **Kuppermann N**, Babl FE; Paediatric Research in Emergency Departments International Collaborative (PREDICT). **The Effect of Patient Observation on Cranial Computed Tomography Rates in Children with Minor Head Trauma.** Acad Emerg Med. 2020 Sep;27(9):832-843.
132. Sprague BL, Lowry KP, **Miglioretti DL**, Alsheik N, Bowles EJA, Tosteson ANA, Rauscher G, Herschorn SD, Lee JM, Trentham-Dietz A, Weaver DL, Stout NK, Kerlikowske K. **Changes in Mammography Utilization by Women's Characteristics during the First 5 Months of the COVID-19 Pandemic.** J Natl Cancer Inst. 2021 Mar 29:djab045. doi: 10.1093/jnci/djab045. Online ahead of print.
133. Sprague BL, **Miglioretti DL**, Lee CI, Perry H, Tosteson AAN, Kerlikowske K. **New mammography screening performance metrics based on the entire screening episode.** 2020 Jul 15;126(14):3289-3296.
134. Stocking JC, Drake C, Aldrich JM, Ong MK, Amin A, Marmor RA, Godat L, Cannesson M, Gropper MA, **Romano PS**, **Utter GH**. **Risk Factors Associated With Early Postoperative Respiratory Failure: A Matched Case-Control Study.** J Surg Res. 2021 May;261:310-319. doi: 10.1016/j.jss.2020.12.043.
135. Stocking JC, **Utter GH**, Drake C, Aldrich JM, Ong MK, Amin A, Marmor RA, Godat L, Cannesson M, Gropper MA, **Romano PS**. **Postoperative respiratory failure: An update on the validity of the Agency for Healthcare Research and Quality Patient Safety Indicator 11 in an era of clinical documentation improvement programs.** Am J Surg. 2020 Jul;220(1):222-228.
136. **Tancredi DJ**, Harvey DJ, Smiley-Jewell S, Nguyen DV. **Requiring post-hoc power of 80% amounts to an unstated lowering of the type-1 error rate.** Neurotoxicology. 2021 Jan;82:99. doi: 10.1016/j.neuro.2020.11.004.
137. **Tseregounis IE**,* Gasper JJ, **Henry SG**. **Trends in Buprenorphine to Treat Opioid Use Disorder in California, 2012 to 2018: Medicaid Outpaces the Rest of the State.** J Addict Med. 2020 Nov 12. doi: 10.1097/ADM.0000000000000768. Online ahead of print.
138. **Tseregounis IE**,* **Henry SG**. **Assessing opioid overdose risk: a review of clinical prediction models utilizing patient-level data.** Transl Res. 2021 Aug;234:74-87. doi: 10.1016/j.trsl.2021.03.012.
139. Turan V, Lambertini M, Lee DY, Wang E, Clatot F, Karlan BY, Demeestere I, **Bang H**, Oktay K. **Association of Germline BRCA Pathogenic Variants With Diminished Ovarian Reserve: A Meta-Analysis of Individual Patient-Level Data.** J Clin Oncol. 2021 Jun 20;39(18):2016-2024. doi: 10.1200/JCO.20.02880.
140. **Utter GH**, **Dhillon TS**,* Danielsen BH, Salcedo ES, Shouldice DJ, **Humphries MD**,* White RH. **Use of Statewide Administrative Data to Assess Clinical Outcomes: A**

Retrospective Cohort Study of Therapeutic Anticoagulation for Isolated Calf Vein Thrombosis. Med Care. 2020 Jul;58(7):658-662.

141. van Ravesteyn NT, Schechter CB, Hampton JM, Alagoz O, van den Broek JJ, Kerlikowske K, Mandelblatt JS, **Miglioretti DL**, Sprague BL, Stout NK, de Koning HJ, Trentham-Dietz A, Tosteson ANA; from the Breast Cancer Surveillance Consortium and the Cancer Intervention and Surveillance Modeling Network. **Trade-Offs Between Harms and Benefits of Different Breast Cancer Screening Intervals Among Low-Risk Women.** J Natl Cancer Inst. 2021 Jan 30:djaa218. doi: 10.1093/jnci/djaa218. Online ahead of print.
142. Walsh P, Hankins A, **Bang H**. **Point-of-care Lung Ultrasound Is Useful to Evaluate Emergency Department Patients for COVID-19.** West J Emerg Med. 2020 Sep 28;21(6):24-31.
143. Walsh P, Lebedev M, McEligot H, Mutua V, **Bang H**, Gershwin LJ. **Correction: A randomized controlled trial of a combination of antiviral and nonsteroidal anti-inflammatory treatment in a bovine model of respiratory syncytial virus infection.** PLoS One. 2021 Apr 1;16(4):e0249783. doi: 10.1371/journal.pone.0249783.
144. Wan MA, Clark JM, Nuño M, **Cooke DT**, Brown LM. **Can the Risk Analysis Index for Frailty Predict Morbidity and Mortality in Patients Undergoing High-Risk Surgery?** Ann Surg. 2020 Nov 17. doi: 10.1097/SLA.0000000000004626. Online ahead of print. PMID: 33214473
145. Wang RC, **Miglioretti DL**, Marlow EC, Kwan ML, Theis MK, Bowles EJA, Greenlee RT, Rahm AK, Stout NK, Weinmann S, Smith-Bindman R. **Trends in Imaging for Suspected Pulmonary Embolism Across US Health Care Systems, 2004 to 2016.** JAMA Netw Open. 2020 Nov 2;3(11):e2026930
146. Weber JC, Sohn K, Sauers-Ford HS, Hanhauser A, **Tancredi DJ**, **Marcin JP**, Hoffman KR. **Impact of a Parent Video Viewing Program in the Neonatal Intensive Care Unit.** Telemed J E Health. 2021 Jun;27(6):679-685. doi: 10.1089/tmj.2020.0251.
147. **Xiong GL**, Atkin A, Moquin K, Candido M, Beilenson P, Kasirye O, Wasserman M, Blum P, Hilty D. **COVID-19 Transmission in a Psychiatric Long-Term Care Rehabilitation Facility: An Observational Study.** Prim Care Companion CNS Disord. 2020 Nov 5;22(6):20m02765.
148. **Xiong GL**, Pinkhasov A, Mangal JP, Huang H, Rado J, Gagliardi J, Demoss D, Karol D, Suo S, Lang M, Stern M, Spearman EV, Onate J, Annamalai A, Saliba Z, Heinrich T, Fiedorowicz JG. **QTc monitoring in adults with medical and psychiatric comorbidities: Expert consensus from the Association of Medicine and Psychiatry.** J Psychosom Res. 2020 Aug;135:110138.
149. Yanagawa B, Iannacone EM, Kaneko T, Rubens F, **Cooke DT**. **Cardiothoracic Surgical Residency Programs: A Pandemic Playbook.** Innovations (Phila). 2020 Jul/Aug;15(4):300-305.
150. Yeh JM, Lowry KP, Schechter CB, Diller LR, Alagoz O, Armstrong GT, Hampton JM, Leisenring W, Liu Q, Mandelblatt JS, **Miglioretti DL**, Moskowitz CS, Oeffinger KC, Trentham-Dietz A, Stout NK. **Clinical Benefits, Harms, and Cost-Effectiveness of Breast Cancer Screening for Survivors of Childhood Cancer Treated With Chest Radiation : A Comparative Modeling Study.** Ann Intern Med. 2020 Sep 1;173(5):331-341.
151. Zhang D, Abraham L, Demb J, **Miglioretti DL**, Advani S, Sprague BL, Henderson LM, Onega T, Wernli KJ, Walter LC, Kerlikowske K, Schousboe JT, O'Meara ES, Braithwaite D. **Function-related indicators and outcomes of screening mammography in older women: evidence from the Breast Cancer Surveillance Consortium cohort.** Cancer Epidemiol Biomarkers Prev. 2021 Jun 2:cebp.0152.2021. doi: 10.1158/1055-9965.EPI-21-0152. Online ahead of print.

Appendix 3: Outreach Activities

Notable Outreach Activities

- In partnership with the California Health Benefits Review Program, CHPR staff and Drs. Melnikow, Hoch, and Magnan contributed non-partisan, evidence-based analyses of effectiveness, public health impacts, and cost and utilization of proposed health insurance legislation to inform state lawmaker decisions. Six bills were analyzed in a 60-day time period, meeting the state legislature's policy committee timeline.
- In partnership with UCD Health's Vice Chancellor's office, CHPR has an agreement with Dr. MK Orsulak and the Department of Family & Community Medicine to implement expanded and integrated capacity to care for persistently homeless populations in Sacramento.
- The CHPR Seminar Series (**see Appendix 5 Table 2**) continued to be held virtually and with great success. Presentations were also posted and made available for later viewing.
- Due to COVID-19, no Research Expo (sponsored by the Office of Research or the School of Medicine) was held in 2020-2021. CHPR will again participate in the Research Expo should the event(s) be held in 2021-2022.
- CHPR newsletters are distributed quarterly.
- CHPR's Marketing Specialist created a social media marketing plan and made numerous improvements to the Center's website.
- CHPR ran several 4-weeks-long ads with Capital Public Radio

CHPR Faculty members (highlighted in **bold**) continue to **disseminate their work at national and international meetings**. Examples of presentations given by CHPR-affiliated faculty during FY 2020-2021 are listed below.

* indicates present or previous CHPR post-doctoral fellows; ** indicates CHPR staff.

1. **Agnoli A, Jerant A**, and others. "Risk of overdose and mental health crisis among patients prescribed long-term opioids undergoing dose tapering," North American Primary Care Research Group Annual Meeting, November 20-24, 2020 (virtual).
2. **Backman, Desiree**** Building Partnerships with State Agencies to Advance Health and Well-being in California;" Master of Social Work class, California State University, Sacramento, March 14, 2021 (virtual).
3. **Backman, Desiree**** Fruit and Vegetable Consumption as a National Priority: Honoring the Past, Taking Actions for the Future, Association of State Public Health Nutritionists Conference, June 16, 2021 (virtual).
4. **Backman, Desiree** and Kohatsu, Neal**** Co-presented on "Greening and Health" to the Yolo County Health Council. September 19, 2020.
5. **Backman, Desiree** and Kohatsu, Neal**** Co-presented "Advancing Health in the Medi-Cal Program: Culture, Collaboration, and Commitment;" University of San Francisco MPH class. September 22, 2020.
6. **Backman, Desiree** and Kohatsu, Neal**** Co-presented "Implementing Community Greening to Improve Health and Well-being;" American Public Health Association Conference. October 27, 2020.
7. **Backman, Desiree** and Kohatsu, Neal**** Co-presented "Pivoting During a Pandemic: The Koa Family Experience;" University of San Francisco MPH class. November 17, 2020.
8. **Backman, Desiree** and Kohatsu, Neal**** Co-presented "Growing our Green Infrastructure to Improve Population Health;" Canopy Webinar Series—"Bridging Trees and Health: The Public Health Outcomes of Urban Tree Canopy". March 2021.
9. **Bang H**. "Risk Prediction Models - translational research or mousetrap," International Congress on Obesity and Metabolic Syndrome, Seoul, Korea, September 2020.

10. Godzich M, Marshall S, Henderson S, **Jerant A** (co-author). "Growing as a Community: Advancing Racial and Health Equity," UC Davis Health, Office for Health Equity, Diversity and Inclusion (webinar), August 21, 2020.
11. **Henry S**. "Designing your mixed methods research project: An interactive workshop," faculty presenter, 3-day workshop sponsored by Stanford Surgery Policy Improvement Research and Education Center (C-SPIRE) Palo Alto, CA, August 13-15, 2020.
12. **Henry S**. "Designing your mixed-methods research project: An interactive workshop," faculty presenter, 3-day workshop sponsored by Stanford Surgery Policy Improvement Research and Education Center (C-SPIRE): Palo Alto, CA, March 25-27, 2021.
13. **Hoch J**. "Communicating the value of our professions: Professional and program advocacy," presented as a 1.5 hour plenary as part of the Annual Conference of the Council on Academic Programs in Communication Sciences and Disorders (CAPCSD), April 2021.
14. **Hoch J**. "Financial impacts and policy solutions for trauma in immigrant families," as part of the 3rd panel on Trauma-Informed Care and Services for Immigrant Families sponsored by the California Health Care Foundation and hosted by the UC Center for Reducing Health Disparities, September 2020.
15. **Hoch J**. "How to do a cost-effectiveness analysis," invited guest lecture in "SPH 190: Topics in Public Health," Faculty of Medicine, University of California, Davis, January 2021.
16. **Hoch J**. "Solano Innovations Project Economic Evaluation Plan," as part of the Solano County Behavioral Health Center for Reducing Health Disparities evaluation meeting, November 2020.
17. **Hoch J**. "Using cost-effectiveness analysis to study value: Research, innovation and collaboration," presented as part of the Endowed Lecture Series for Texas Tech University Health Sciences Center, March 2021.
18. **Hoch J**. "Workshop on net benefit regression," presented to the ISPOR Chapter at the Department of Pharmaceutical Outcomes and Policy, University of Florida, April 2021.
19. **Hoch J**. "An Introduction to Cost-Effectiveness and Value," 90-minute invited presentation, Academy of Neurologic Communication Disorders and Sciences (ANCDs) online conference, October 2020.
20. **Hoch J**. "Decision and Cost-Effectiveness Analysis," invited guest lecture in "CLH 202 - Introduction to Clinical Research," Faculty of Medicine, University of California, Davis, September 2020.
21. **Hoch J**. "Health economics for the public's good: My journey to and through public health," invited guest lecture in "SPH 190: Topics in Public Health," Faculty of Medicine, University of California, Davis, October 2020.
22. **Hoch J**. "Introduction to Cost-Effectiveness Analysis," a half day course at the Annual Meeting of the Society for Medical Decision Making (SMDM), Virtual Meeting, October 2020.
23. **Hoch J**. "Negative cost-effectiveness ratios: problems, prevalence, and potential solutions," presented to the Canadian Centre for Health Economics (CCHÉ), Toronto, Ontario Canada, January 2021
24. **Hoch J**. "Preferences about decisions and decisions about preferences: The sacrifices we all must make," invited plenary presentation at The Beatrice Hunter Cancer Research Institute and Terry Fox Research Institute Atlantic Node online conference, Halifax, Nova Scotia, Canada, November 2020.
25. **Hoch J**. "Real World Evidence in Decision Making: From theory to practice," 1st Gulf Oncology Health Economics Summit, April 2021.
26. **Hoch J**. Developed and Taught for the Centers for Disease Control and Prevention (CDC) (online): "Analyzing Person-Level Cost Effectiveness Data," a 3-month online course given as part of the Professional Development Seminar Series for the Centers for Disease Control and Prevention (CDC) Steven M. Teutsch Prevention Effectiveness Fellowship (for government officials, analysts and post-doctoral scholars), September – December 2020.
27. **Hoch J**. Invited expert panel participant in the "Pharmacogenomic Testing in Depression: Evidence and Controversies," symposium at the National Network of Depression Centers 12th Annual Conference: "Advances in Psychiatry: COVID-19 and Beyond," held virtually October 2020.

28. **Holmes JF.** "Clinical Decision Rules: When/What to Use and How to Find Them," Topics in Emergency Medicine, Duck Key, FL, April 26, 2021.
29. **Holmes JF.** "COVID-19 Vaccine Distribution and What it Means for the Emergency Department," featuring Anthony Fauci, MD, SAEM National Grand Rounds, January 28, 2021.
<https://www.youtube.com/watch?v=A1aEvMv2jIU&t=394s>
30. **Holmes JF.** "Dangerous Bites: Spiders, Scorpions, Snakes and Sharks," Topics in Emergency Medicine, Duck Key, FL, April 29, 2021.
31. **Holmes JF.** "Handling Difficult Situations," SAEM Leadership Forum, SAEM Annual Meeting, May 11, 2021.
32. **Holmes JF.** "Infectious Disease Update – COVID-19," Topics in Emergency Medicine, Duck Key, FL, April 27, 2021.
33. **Holmes JF.** "Initial Evaluation of the Minor Trauma Patient," Topics in Emergency Medicine, Duck Key, FL, April 26, 2021.
34. **Holmes JF.** "Initial Trauma Resuscitation: Interventions to decrease morbidity and mortality," Topics in Emergency Medicine, Duck Key, FL, April 26, 2021.
35. **Holmes JF.** "Medical Evaluation of the Psychiatric Patient," Topics in Emergency Medicine, Duck Key, FL, April 28, 2021.
36. **Holmes JF.** "Medical Malpractice: Prevent the Lawsuit," Topics in Emergency Medicine, Duck Key, FL, April 29, 2021.
37. **Holmes JF.** "Pain Management in the ED: Opiates Anyone," Topics in Emergency Medicine, Duck Key, FL, April 27, 2021.
38. **Holmes JF.** "Recent Top Article in Emergency Medicine that Every ED Physician Should Know," Topics in Emergency Medicine, Duck Key, FL, April 27, 2021.
39. **Holmes JF.** "Study Design and Overview," Advanced Research Methodology Evaluation and Design (ARMED), via ZOOM, October 21, 2020.
40. **Holmes JF.** "The Anticoagulated Bleeding Patient: Coagulation Reversal," Topics in Emergency Medicine, Duck Key, FL, April 28, 2021.
41. **Holmes JF.** "The Impact of the COVID-19 Pandemic on Trauma Care in the United States," The Pan-Asian Trauma Outcomes Study (PATOS) 6th Research Workshop, August 25, 2020.
42. **Jerant A, Franks P.** "Associations of Premedical Postbaccalaureate Hours with Medical Student Diversity, Performance, and Primary Care Training," Society of Teachers of Family Medicine Annual Spring Conference, May 1-5, 2021 (virtual meeting; live video presentation).
43. **Jerant A, Franks P.** "Tailored Activation of Middle-Aged Men to Promote Discussion of Recent Active Suicide Thoughts: A Randomized Controlled Trial," Society of Teachers of Family Medicine Annual Spring Conference, August 24-27, 2020 (virtual).
44. **Jerant A, Franks P.** "Tailored Activation of Middle-Aged Men to Reduce Suicide Risk: A Randomized Controlled Trial," North American Primary Care Research Group Annual Meeting, November 20-24, 2020 (virtual).
45. **Liaw W, Khanna N, Zoorob R, Jerant A.** "Funding from the Centers for Disease Control and Prevention: A Key Strategy for Integrating Public Health and Primary Care," North American Primary Care Research Group Annual Meeting, November 20-24, 2020 (virtual).
46. **Kohatsu, Neal**** Led a medical student seminar on tobacco cessation for MDS415C. November 9, 2020.
47. **Kohatsu, Neal**** Facilitated a UC Davis medical student discussion group for MDS415B on the topic, "Public Health Approaches to Tobacco." January 23, 2021.
48. **Magnan EM, Agnoli A, Jerant A, Fenton JJ.** "The impact of long-term opiate therapy tapering on co-morbid chronic conditions," North American Primary Care Research Group Annual Meeting, November 20-24, 2020 (virtual). **Selected as a 2020 NAPCRG Pearl, chosen each year by the Community Clinician Advisory Group (CCAG) as the top research studies presented at the meeting having the greatest impact on clinical practice.**

Appendix 4: Education

Appendix 5 Table 1. Current Postdoctoral Fellows Affiliated with CHPR

Fellow Name (Start Year)	Training Program	Department / Affiliation	Mentor(s)	Project(s)
Katherine Glaser, MD, MPH (2020-present)*	QSCERT-PC	Obstetrics and Gynecology	Dr. Eleanor Bimla-Schwarz	QSCERT-PC fellowship
Adrienne Hoyt-Austin, DO (2019-2021)*	QSCERT-PC	Department of Pediatrics	Dr. Laura Kair Dr. Caroline Chantry	Conducting a randomized evaluation of Hybrid telesimulation with standardized patients for Breastfeeding Education of Pediatric and Family Medicine trainees
Renata Abrahão, MD, MSc, PhD (2019-present)*	QSCERT-PC	Division of Hematology/Oncology	Dr. Theresa Keegan	Developing health policies to enhance cancer outcomes and decrease health disparities, especially among pediatric, adolescent and young adult cancer survivors.
Brittany Chatterton, MD (2020-present)*	QSCERT-PC	Department of Internal Medicine	Dr. Eleanor Bimla-Schwarz	QSCERT-PC Fellowship
Erik Tseregounis, PhD	Post-doctoral fellow	Department of Internal Medicine	Dr. Stephen Henry	Risk-prediction analysis and model development for opioid-related harms
Logan Trenaman	Post-doctoral fellow	CHPR	Dr. Jeffrey Hoch	Health economics research on net benefits of regression and applied use of cost-effectiveness by ICER

Appendix 5 Table 2. CHPR Seminars during FY 2020 – 2021

Presenter	Title/Organization	Presentation	Date
Tancredi, Dan, Ph.D.	Professor, Pediatrics UC Davis	Effects of SARS-CoV-2 Pandemic on other Seasonal Respiratory Virus Activity in the UC Davis Health System: An Interrupted Time Series Analysis of a Natural Experiment	September 30, 2020
Brown, Susan, Ph.D.	Associate Professor, Internal Medicine, UC Davis	Reducing Maternal Health Disparities through Obesity and Diabetes Prevention	October 7, 2020
Grabowski, David, Ph.D.	Professor, Dept of Health Care Policy, Harvard Medical School	Nursing Homes and COVID-19	October 14, 2020
Buggs, Shani, Ph.D.	Assistant Professor in Residence, Violence Prevention Research Program, UC Davis Health	Community Gun Violence and It's Prevention	October 21, 2020
Butte, Atul, M.D., Ph.D.	Professor, Dept of Pediatrics, UCSF	Precisely Practicing Medicine from 700 Trillion Points of Data	October 28, 2020
Hoyt-Austin, Adrienne, D.O.	QSCERT-PC Post-doctoral Fellow, Dept of Pediatrics, UC Davis	The Breastfeeding Experience in NICU Mothers Using Telehealth to Connect with their Hospitalized Infant	November 4, 2020
Rosenthal, Jennifer, M.D. & Hoffman, Kristin, M.D.	Associate Professor & Health Sciences Associate Clinical Professor, Dept of Pediatrics, UC Davis	Virtual Family-Centered Rounds during COVID-19 in the Neonatal Intensive Care Unit	<u>November 18, 2020</u>
Sims, Charles B.	Associate Professor, Dept of Economics, U of Tennessee	<u>Combining Mathematical Epidemiological Models with Economic Models to Determine When and Where to Enact Public Social Distancing Mandates</u>	December 2, 2020
Pereira, Clifford, M.D.	Associate Professor, Dept of Surgery, UC Davis	Hand Therapy App Video-visit Optimized Care (HAVOC) Study: Maintaining Hand Surgery Outcomes Amidst COVID-19 Pandemic	December 9, 2020

Haynes, Sarah, Ph.D., M.P.H.	Post-doctoral Scholar, UC Davis School of Medicine	Adherence to Weight Telemonitoring as a Predictor of Rehospitalization and Death for Heart Failure Patients	December 16, 2020
Zerzan, Judy, M.D., M.P.H.	Chief Medical Officer, Washington State Health Care Authority and Adjunct Associate Professor, Division of General Internal Medicine, U of Washington	Health Technology Assessment in the Real World	January 6, 2021
Abbeduto, Leonard, Ph.D. & Bullard, Lauren, Ph.D.	Principal Investigator & Post-doctoral Scholar, UC Davis MIND Institute	Impacts of COVID-19 on the Neurodevelopmental Community and a Plan for Continued Care	January 13, 2021
Zhang, Jingwen, Ph.D.	Assistant Professor, Dept of Communication, UC Davis	Researching the Effects of Vaccine Misinformation on Vaccination Intentions: What we know and what we don't know (yet)	January 20, 2021
Chambers, David A. D.Phil.	Deputy Director for Implementation Science, Division of Cancer Control and Population Sciences, National Cancer Institute	Advancing Implementation Science: An NCI Perspective	February 3, 2021
Hoyt-Austin, Adrienne, D.O.	QSCERT-PC Post-doctoral Fellow, Dept of Pediatrics, UC Davis	Health Resources & Services Administration (HSRA) Webinar	February 10, 2021
Gosdin, Melissa, Ph.D.	Qualitative Research Analyst, CHPR, UC Davis	Introduction to Qualitative Methods and their Application in Healthcare Research	February 7, 2021
Melnikow, Joy, M.D. M.P.H. & Gosdin, Melissa, Ph.D.	Director, CHPR, Professor, Dept of Family and Community Medicine, UC Davis & Qualitative Research Analyst, CHPR, UC Davis	U.S. Physician Experiences: Barriers and Facilitators to Providing Patient Care during COVID-19	February 24, 2021
Pourat, Nadereh, Ph.D.	Professor-in-Residence, Health Policy and Management, UCLA	How California Counties Responded to COVID-19 under the Whole Person Care Medicaid Pilot Program	March 3, 2021

Gaskin, Darrell, Ph.D.	Professor, Bloomberg School of Public Health, Johns Hopkins University	Reducing Health Disparities: The Importance of Place Based Solutions	March 10, 2021
Tai-seale, Ming, Ph.D.	Professor, Family Medicine and Public Health, UC San Diego	Facilitating Patient and Health Care Team Engagement and Shared Decision Making in 3 Healthcare Delivery Systems	March 17, 2021
Ellis Jr., Charles, Ph.D. CCC-SLP	Professor, Doctoral Studies, Dept of Communication Sciences and Disorders, East Carolina University	Economic Issues in Rehabilitation: The Cost and Cost-Effectiveness of Treating Post-Stroke Aphasia	March 31, 2021
Tserougounis, Iraklis Erik, Ph.D.	Post-doctoral Fellow, Dept of Internal Medicine, UC Davis	A Risk Prediction Model for Long-Term Prescription Opioid Use A Risk Prediction Model for Long-Term Prescription Opioid Use	April 7, 2021
Crossen, Stephanie, M.D., M.P.H.	Assistant Professor, Dept of Pediatrics, UC Davis	The Transformation of Diabetes Care During COVID-19 The Transformation of Diabetes Care During COVID-19	April 14, 2021
Miglioretti, Diana, Ph.D.	Professor and Division Chief of Biostatistics, UC Davis	The Impact of COVID-19 on Breast Cancer Screening and Diagnosis	April 21, 2021
Chan, Kelvin Kar-Wing, M.D., FRCPC, M.Sc., Ph.D.	Medical Oncologist, Associate Scientist Odette Cancer Centre, Sunnybrook Health Sciences Centre	Developing a Framework for the Generation and Use of Real-World Evidence to Inform Cancer Drug Funding Decisions in Canada	April 28, 2021
Leech, Ashley, Ph.D., M.S.	Assistant Professor, Health Policy, Vanderbilt University	Advancing Treatment Outcomes for Pregnant Women with Opioid Use Disorder	May 5, 2021
Peters, Ellen, Ph.D.	Philip H. Knight Chair, Director, Center for Science Communication Research, U of Oregon	Taking Charge with Numeric Ability and Confidence	May 19, 2021
Chatterton, Brittany, M.D.	QSCERT-PC Post-doctoral Fellow, CHPR, UC Davis	The Hospital Discharge Summary: Primary Care Physicians' Perspectives	June 2, 2021

Dale, David J.,M.H.A.	Health Data Solutions Consultant, Center for Improving Value in Health Care	How Researchers Can Access Claims Data for their Research using the Colorado All Payer Claims Database	June 16, 2021
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Appendix 5: Program Members

Currently, CHPR has nearly 150 members, an increase of 31 members since 2012. Members include faculty from the School of Medicine, the School of Nursing, and other UC Davis schools and departments, including Communication, Economics, Sociology, Human Development, and Law. Affiliate members from external organizations recognize the value of CHPR, and include faculty from other academic institutions, such as CSU Sacramento and the University of Toronto, University of the Pacific, Kaiser Permanente, and professional staff from the Department of Health Care Services, the California Public Employees Retirement System (CalPERS), and the Sacramento County Department of Health and Human Services. The current mix of Center membership is 66% from the School of Medicine, 25% from non-School of Medicine appointments, and 9% from external organizations.

Appendix 7 Table 1. Current CHPR Members

Member Name	Title	Department
Agnoli, Alicia, M.D., M.P.H., M.H.S.	Assistant Professor in Residence	Family and Community Medicine
Aguilar-Gaxiola, Sergio, M.D., Ph.D.	Professor of Clinical Internal Medicine	Internal Medicine
Bakerjian, Debra, Ph.D., A.P.R.N., F.A.A.N., F.A.A.N.P., F.G.S.A	Clinical Professor	Betty Irene Moore School of Nursing
Bang, Heejung, Ph.D.	Professor	Public Health Science
Bold, Richard J., M.D.	Professor in Residence	Surgery
Bommer, William, M.D.	Professor Emeritus	Cardiology
Brown, Lisa, M.D., M.A.S.	Associate Professor of Clinical Surgery	Surgery
Brown, Susan Denise, Ph.D.	Associate Professor	Internal Medicine
Buggs, Shani, Ph.D., M.P.H.	Assistant Professor in Residence	Emergency Medicine
Byrd, Robert, M.D., M.P.H.	Professor of Clinical Pediatrics	Pediatrics
Callahan, Edward J., Ph.D.	Professor Emeritus	Family and Community Medicine
Cameron, Colin, Ph.D.	Professor	Economics
Chen, Shuai, Ph.D.	Assistant Professor In Residence	Public Health Sciences
Cooke, David Tom, M.D.	Professor of Clinical Surgery	Surgery
Cress, Rosemary D., Dr.P.H.	Adjunct Professor	Public Health Sciences

Crossen, Stephanie, M.D., M.P.H.	Assistant Professor	Pediatrics
Deeb-Sossa, Natalia, Ph.D.	Professor	Chicano Studies
Drake, Christiana M., Ph.D.	Professor	Statistics
Elder, Josh, M.D., M.P.H., M.H.S.	Assistant Professor of Surgery	Emergency Medicine
Fancher, Tonya, M.D., M.P.H.	Professor of Clinical Internal Medicine	Internal Medicine
Farmer, Diana L., M.D.	Professor, Department Chair	Surgery
Fedyk, Mark, Ph.D.	Associate Professor	Internal Medicine
Feng Bo, Ph.D.	Professor	Communication
Fenton, Joshua, M.D., M.P.H.	Professor	Family and Community Medicine
Fernandez y Garcia, Erik, M.D., M.P.H.	Associate Professor of Clinical Pediatrics	Pediatrics
Fernando, Leonor Pabon, M.D.	Associate Clinical Professor	Pathology and Laboratory Medicine
Franks, Peter, M.D.	Professor	Family and Community Medicine
Garcia, Jorge A., M.D., M.S.	Associate Clinical Professor	Internal Medicine
Garcia, Lorena, M.P.H., Ph.D.	Professor	Public Health Sciences
Halfmann, Drew, Ph.D.	Associate Professor	Sociology
Hansen, Robin L., M.D.	Professor Emeritus	Pediatrics
Hedayati, Nasim, M.D., M.S.	Professor of Clinical Surgery	Surgery
Henry, Stephen G., M.D., M.Sc.	Associate Professor in Residence	Internal Medicine
Hinton, Ladson, M.D.	Professor and Director	Psychiatry & Behavioral Sciences
Hirsch, Calvin H., M.D.	Professor of Clinical Internal Medicine	Internal Medicine
Hoch, Jeffrey, Ph.D.	Associate Director & Professor	Center for Healthcare Policy and Research & Public Health Sciences
Holmes, James, M.D., M.P.H.	Professor and Vice Chair	Emergency Medicine
Humphries, Misty, M.D., M.A.S., R.P.V.I., F.A.C.S.	Associate Professor	Surgery
Jerant, Anthony, M.D.	Professor and Chair	Family and Community Medicine

Joseph, Jill, M.D., Ph.D., M.P.H.	Professor Emeritus	Betty Irene Moore School of Nursing
Jurkovich, Greg, M.D.	Distinguished Professor & Vice Chair	Surgery
Kair, Laura, M.D.	Associate Professor of Clinical Pediatrics	Pediatrics
Karlin, Jennifer, M.D., Ph.D.	Assistant Professor	Family and Community Medicine
Kayingo, Gerald, Ph.D., P.A.-C.	Associate Clinical Professor	Betty Irene Moore School of Nursing
Keegan, Theresa, Ph.D., M.S.	Associate Professor	Hematology and Oncology
Kim, Katherine, M.P.H.	Associate Professor	Betty Irene Moore School of Nursing
Kim, Sunny, Ph.D.	Assistant Professor	Public Health Sciences
Knapp, Penelope K., M.D.	Professor Emeritus	Psychiatry, Pediatrics
Ko, Michelle, Ph.D., M.P.H.	Assistant Professor	Public Health Sciences
Koga, Patrick M., M.D., M.P.H.	Associate Adjunct Professor	Public Health Sciences
Kravitz, Richard L., M.D., M.S.P.H.	Professor	Internal Medicine
Kupperman, Nathan, M.D., M.P.H.	Professor and Chair	Emergency Medicine
Leigh, J. Paul, Ph.D.	Professor	Public Health Sciences
Li, Su-Ting, M.D.	Professor of Clinical Pediatrics	Pediatrics
Lo, Ming-Cheng, Ph.D.	Professor	Sociology
Magnan, Elizabeth, M.D., Ph.D.	Associate Professor in Residence	Family and Community Medicine
Marcin, James P., M.D., M.P.H.	Professor	Pediatrics
Margolis, Helene, Ph.D., M.A.	Associate Adjunct Professor	Internal Medicine
May, Larissa, M.D., M.S.P.H., M.S.H.S.	Associate Professor	Emergency Medicine
McDonald, Craig M., M.D.	Professor and Chair	Physical Medicine & Rehabilitation
Medel-Herrero, Alvaro, Ph.D., M.B.A.	Special Consultant on Epidemiology and Research Design	Migrant Clinicians Network
Melnikow, Joy, M.D., M.P.H.	Professor Emeritus	Family and Community Medicine

Meyers, Frederick J., M.D., M.A.C.P.	Professor	Hematology and Oncology
Miglioretti, Diana, Ph.D.	Professor	Public Health Sciences
Moulin, Aimee. M.D.	Associate Clinical Professor	Emergency Medicine
Mueller, Hans-Georg, M.D., Ph.D.	Distinguished Professor and Chair	Statistics
Murray-Garcia. Jann, M.D., M.P.H.	Associate Clinical Professor	Betty Irene Moore School of Nursing
Nesbitt, Thomas S., M.D., M.P.H.*	Professor	Family and Community Medicine
Nguyen, Hien, M.D., M.A.S.*	Associate Health Sciences Clinical Professor of Medicine	Internal Medicine
Niendam, Tara, Ph.D.	Associate Professor in Residence	Psychiatry & Behavioral Sciences
Nishijima, Daniel, M.D.	Professor	Emergency Medicine
Nuno, Miriam, Ph.D.	Associate Professor	Public Health Science
Nuovo, James, M.D.	Professor Emeritus	Family and Community Medicine
Palmer, Donald A., Ph.D.	Professor	Graduate School of Management
Pan, Richard, M.D., M.P.H.*	Clinical Instructor	Pediatrics
Park, Jeanny K., M.D.	Professor	Pediatrics
Paterniti, Debora A., Ph.D.	Adjunct Professor	Internal Medicine and Sociology
Robbins, John, M.D., M.H.S.	Professor Emeritus	Internal Medicine
Rocke, David M., Ph.D.	Professor	Public Health Sciences
Romano, Patrick S., M.D., M.P.H.	Professor	Internal Medicine
Rosenthal, Jennifer, M.D.	Associate Professor of Clinical Pediatrics	Pediatrics
Roussas, George G., Ph.D.	Professor Emeritus	Statistics
Sandrock, Christian, M.D., M.P.H., F.C.C.P.	Professor	Internal Medicine
Schenker, Marc B., M.D., M.P.H.	Professor Emeritus	Public Health Sciences
Schwarz, Eleanor Bimla, M.D., M.S.	Professor	Internal Medicine
Schweitzer, Julie, M.D.	Professor	Psychiatry and Behavioral Sciences

Shaikh, Ulfat, M.D., M.P.H.	Professor	Pediatrics
Sherman, Jeffrey, Ph.D.	Professor	Psychology
Siegel, Elena O., Ph.D., R.N.	Professor Emeritus	Betty Irene Moore School of Nursing
Singh, Naileshni,, M.D.	Associate Clinical Professor	Anesthesiology and Pain Medicine
Soederberg,Lisa M., Ph.D.	Associate Professor	Human Ecology
Solomon, Marjorie, Ph.D., M.B.A.	Professor	Psychiatry and Behavioral Sciences
Stahmer, Aubyn, Ph.D.	Professor	Psychiatry and Behavioral Sciences
Styne, Dennis M., M.D.	Professor	Pediatrics
Tancredi, Daniel J., Ph.D.	Professor in Residence	Pediatrics
Taylor, Laramie, Ph.D.	Chair and Professor	Communication
Tong, Elisa,, M.D., M.A.	Associate Professor	Internal Medicine
Tseregounis, Erik, Ph.D.	Assistant Project Scientist	Internal Medicine
Tu, Shin Ping, M.D., M.P.H., F.A.C.P.	Chief and Professor	Internal Medicine
Urquiza, Anthony J., Ph.D.	Clinical Professor	Pediatrics
Utter, Garth H., M.D.	Associate Professor	Surgery
Van de Water, Judith, Ph.D.	Professor in Residence	Internal Medicine
Waetjen, L. Elaine, M.D.	Professor of Clinic	Obstetrics and Gynecology
Wang, Jane-Ling, Ph.D.	Professor	Statistics
White, Richard H., M.D.	Professor of Medicine	Internal Medicine
Wiedeman, Jean, M.D., Ph.D.	Associate Professor	Pediatrics
Wilkes, Michael S., M.D., Ph.D.	Professor of Clinic	Internal Medicine
Xiong, Glen, M.D.	Associate Physician Diplomate	Psychiatry and Behavioral Sciences
Young, Heather, Ph.D., R.N., G.N.P., F.A.A.N.	Professor	Betty Irene Moore School of Medicine
Zane, Nolan, Ph.D.	Professor Emeritus	Psychology

Appendix 6: CHPR Advisory Boards

Appendix 8 Table 1. CHPR Internal Advisory Board Members

Board Member	Title
Theodore Wun, MD, FACP	Interim Vice Dean for Research UC Davis School of Medicine Associated Dean for Research Director UC Davis Clinical and Transitional Science Center Chief Division of Hematology and Oncology
Lisa Ikemoto J.D., LL.M.	Martin Luther King Jr. Professor of Law UC Davis School of Law Bioethics Associate UC Davis Health Bioethics Program
James Marcin, MD, MPH	Director UC Davis Center for Health and Technology Vice Chair for Pediatric Clinical Research and Professor UC Davis Health Department of Pediatrics
Shin-Ping Tu, MD, MPH	Chief UC Davis Health Division of General Medicine, Geriatrics, and Bioethics
Richard Applegate, II, MD	Professor and Chair UC Davis Health Department of Anesthesiology and Pain Medicine
Diana Farmer, MD	Chair and Pearl Stamp Stewart Professor UC Davis Health Department of Surgery

Appendix 8 Table 2. CHPR External Advisory Board Members

Board Member	Title
Catrina Kiefe, PhD, MD	Professor Population and Quantitative Health Sciences University of Massachusetts Medical School
Lori Dangberg	Vice President Alliance of Catholic Health Care
Timothy Carey, MD, MPH	Professor Department of Medicine and Social Medicine University of North Carolina
Arden Morris, MD, MPH, FACS	Professor of Surgery Stanford University Medical Center
Ed Yu	Chairman, Vascular Cures Advancing Innovation for a Healthier Future

Appendix 7: Diversity, Equity & Inclusion

CHPR has continued its Center-wide DEI initiative of providing a space dedicated to learning, discussing, and acting upon anti-racism. Led by Melissa Gosdin, PhD, and Bethney Bonilla, MA, the anti-racism group continues to meet monthly and is open to all CHPR staff and affiliated faculty. We have begun acting by expanding our hiring process to include posting new employee recruitments on diverse jobsites and composing diverse hiring committees for all open positions.

Drs. Jeffrey Hoch and Melissa Gosdin continue to mentor junior faculty, graduate and undergraduate students of underrepresented groups. For example, Dr. Gosdin recently worked with Dr. Nikia Mcfadden, a UC Davis medical resident in the Department of surgery, to write a manuscript, “Patient and Clinician Perceptions of the Trauma and Acute Care Surgery Hospitalization Discharge Transition of Care: A Qualitative Study,” for submission to *Trauma Surgery & Acute Care*. Dr. Gosdin also mentored a UC Davis graduate student and a visiting scholar from Lahore College for Women University in Pakistan on their qualitative studies focused on sexual harassment among farmworkers in Mexico, the US and Pakistan.

Drs. Hoch and Gosdin are also assisting the UC Davis Trauma Prevention and Outreach Program with its research focused on social justice. The aim of the research is to better understand structural causes of community violence and its impact on underprivileged communities.

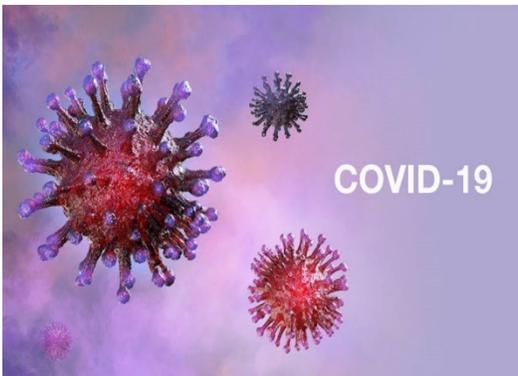
Dr. Melissa Gosdin continues to serve as an instructor of a small group focused on health equity for a course (MDS418 Health Equity) offered to medical and nursing students in the UC Davis Schools of Nursing and Medicine for the purpose of exploring how implicit biases impact patient care through a combination of hands-on learning and discussions.

CHPR Interim Director, Tony Jerant, and colleagues, published “Associations of postbaccalaureate coursework with underrepresented race/ethnicity, academic performance, and primary care training among matriculants at five California medical schools” in the *J Health Care Poor Underserved* (Jerant et al. 2021).

Appendix 8: Impact of COVID-19

CHPR Administrative and Research Response to COVID-19

During fiscal year 2020-2021, CHPR has largely continued the model of staff and research faculty primarily working from home. CHPR staff have adapted well to this model and continued high levels of productivity. Additionally, CHPR and faculty and staff have supported and conducted research on the effects of the pandemic, and synthesized available information on several subjects related to COVID-19 for healthcare professionals and the lay public and posted it on the Agency for Healthcare Research and Quality (AHRQ) PSNet web resource (see details below). Results from the five grants awarded last year, through a collaboration among CHPR, CHT and BHCOE, for pilot studies of effects of the pandemic on health services are also summarized below. Additionally, with support from **CHPR**, UC Davis launched the "Every Aggie Together" Mask Contest in January 2021, a competition to encourage UC Davis students, employees and faculty to produce public campaign messages that will encourage everyone to wear masks correctly and consistently.



Supporting Research on the Effects of the Pandemic

In Spring of 2020, CHPR, the UC Davis Center for Health and Technology (CHT), and the UC Davis Behavioral Health Center of Excellence (BHCOE) announced a joint call for, and made



five grant awards to support, highly meritorious, short-term pilot projects to study the impacts of COVID-19 on health services, access, outcomes and costs, and to generate preliminary data to support applications for future extramural funding. Findings from the five pilot grants jointly awarded by CHPR, CHT and BHCOE are summarized below.

“Sacramento Area Breast Imaging Registry (SABIR): Impact of COVID-19 on Breast Cancer Screening, Surveillance, Diagnosis, and Treatment”

PI Diana Miglioretti indicated that the pilot funds she received were instrumental in allowing her team to collaborate with several Breast Cancer Surveillance Consortium (BCSC) breast imaging registries on the following publications related to the impact of COVID-19:

Miglioretti DL, Bissell MCS, Kerlikowske K, Buist DSM, Cummings SR, Henderson LM, Onega T, O’Meara ES, Rauscher GH, Sprague BL, Tosteson ANA, Wernli KJ, Lee JM, Lee CI. **Assessment of a risk-based approach for triaging mammography examinations during periods of reduced capacity.** *JAMA Open Network*. 2021 Mar 1;4(3):e211974.

Sprague BL, Lowry KP, Miglioretti DL, Alsheik N, Bowles EJA, Tosteson ANA, Rauscher G, Herschorn SD, Lee JM, Trentham-Dietz A, Weaver DL, Stout NK, Kerlikowske K. **Changes in mammography use by**

women’s characteristics during the first 5 months of the COVID-19 pandemic. *J Natl Cancer Inst.* 2021 Sep 4;113(9):1161-1167.

Sprague BL, O’Meara ES, Lee CI, Lee JM, Henderson LM, Buist, DSM, Alsheik N, Macarol T, Perry H, Tosteson ANA, Onega T, Kerlikowske K, Miglioretti DL. **Prioritizing breast imaging services during the COVID pandemic: A survey of breast imaging facilities within the Breast Cancer Surveillance Consortium.** *Prev Med.* 2021 Oct;151:106540.

Schifferdecker KE, Vaclavik D, Wernli KJ, Buist DSM, Kerlikowske K, Sprague, BL, Henderson LM, Johnson D, Budesky J, Jackson-Nefertiti G, Miglioretti DL, Tosteson ANA. **Women’s considerations and experiences for breast cancer screening and surveillance during the COVID-19 Pandemic in the United States: A focus group study.** *Prev Med.* 2021 Oct;151:106542.

Dr. Miglioretti also reported that her team had received an enhancement from PCORI to support this work.

“Virtual Family-Centered Rounds during COVID-19 in the Neonatal Intensive Care Unit”

PIs Jennifer Rosenthal and Kristin Hoffman gave two presentations of their pilot clinical trial results at the Pediatric Academic Societies' 2021 (virtual) Conference: **“Parent and Provider Perspectives on Virtual Family-Centered Rounds in the Neonatal Intensive Care Unit”** (Ranu J, Sauers-Ford H, Williams J, Hoffman K, Rosenthal J) and **“Virtual Family-Centered Rounds in the Neonatal Intensive Care Unit: A Randomized Controlled Pilot Trial”** (Rosenthal J, Sauers-Ford H, Ranu J, Williams J, Tancredi D, Hoffman K). They also presented their results at the following UC Davis events: the COVID-19 Research Town Hall run by Dean Brashear and Vice Chancellor Mohapatra, CHPR’s Seminar Series, and the UC Davis Health Quality Forum.

One manuscript describing results of this project has been published:

Rosenthal JL, Sauers-Ford HS, Williams J, Ranu J, Tancredi DJ, Hoffman KR. **Virtual Family-Centered Rounds in the Neonatal Intensive Care Unit: A Randomized Controlled Pilot Trial.** *Acad Pediatr.* Sep-Oct 2021;21(7):1244-1252. A second manuscript is being readied for submission.

These PIs have applied for two extramural grants and are awaiting final word on whether they will be funded: 1 R03 TR004010-01 – **“Virtual Family-Centered Rounds in the Neonatal Intensive Care Unit for Caregivers with Limited English Proficiency”**; [PA-21-121] - Application for the Small Grant Program for the NCATS Clinical and Translational Science Award (CTSA) Program (R03). **Score: 31** and 1 R21 NR020330-01 – **“Virtual Family-Centered Rounds to Improve Health and Quality of Life Outcomes for Neonates and their Caregivers”**; [PA-20-194] – NIH Exploratory/Developmental Research Grant Program (R21). **Score: 27.** Drs. Rosenthal and Hoffman plan to wait to see what happens with the R03 and will resubmit the R21 (just in case it is not funded).

“Hand Therapy App Video-visit Optimized Care (HAVOC) Study: Maintaining Hand Surgery Outcomes Amidst COVID-19 Pandemic”

Thus far, initial results of this study, conducted by PIs Clifford Pereira, Cheton Irwin and Andrew Li, indicate that there is no statistically significant difference between the in-person post-operative visits/in-person hand therapy group versus the video visit/hand therapy app group. The PIs have increased the incentives for patients to fill out study surveys and participate in clinical exams (to \$50 per survey and \$100 for in-person clinical exams) to increase the number of patients participating in the study and thus its statistical power; but until a larger study is carried out results appear to indicate that patients with simple hand injuries (as opposed to complex reconstructions, especially flexor tendon injuries) can be managed effectively via telemedicine.

Drs. Pereira, Irwin and Li are in the process of writing up the results of this study for publication. Once the manuscript is published, their plan is to apply for funding to support the development of their smart phone app. Dr. Pereira reached out to a software company CHPR Director Melnikow put him in touch with and found out that the cost for developing such software is in the ballpark of \$50,000.

“Parenting during the COVID-19 Pandemic: Implications for Parent and Child Mental Health and Well-being”

PIs Paul Hastings and Camelia Hostinar, and their graduate students, have had hundreds of parents complete multiple surveys (in Spring and a follow-up survey in early Fall) and Dr. Hostinar's doctoral student, LillyBelle Deer, has been conducting an online battery of executive function and self-regulation tasks with the 8-17-year-old offspring of those parents. The youth and their parents have also completed additional survey measures.

This project is being carried out over a longer time period and Drs. Hastings and Hostinar have not yet applied for additional funding; they plan to do so after a reasonable number of the youth in Ms. Deer's part of the study have been tested so that those data can be included in the grant application as pilot data.

Meanwhile, work on the parenting surveys has been presented at conferences. **“Testing the Family Stress Model of Economic Hardships in the Context of the COVID-19 Pandemic”** (M Mashash, L Partington, & P Hastings) was presented at the (online) biennial meeting of the Society for Research in Child Development and another paper (first-authored by Lindsey Partington) was presented at the Association for Psychological Science 2021 (virtual) conference. Versions of these papers are also being prepared for publication in peer-reviewed journals and Lindsey Partington is also leading the writing of a manuscript titled **“Family thriving during COVID-19 and the benefits for children's well-being”** that will be published in a special journal issue dedicated to the topic of families during the pandemic.

And **“We’re all in this together: Focus on community attenuates effects of pandemic-related financial hardship on reactance to COVID-19 public health regulations”** (Knapp M, Partington LC, Hodge RT, Ugarte E, & Hastings PD), which was indirectly supported by the CHPR/CHT/BHCOE pilot grant, is in press at *PLOS ONE*.

“Impacts of COVID-19 on the Neurodevelopmental Community and a Plan for Continued Care”

In their study of how the COVID-19 pandemic impacted clinical services provided to patients of the UC Davis MIND Institute, PI Leonard Abbeduto and graduate student (now post-doctoral fellow) Lauren Bullard tracked the transition to and quality of telehealth appointments conducted with youth with neurodevelopmental disabilities and their parents. Their preliminary data indicate that families continued to be served (1,054 families in 2020 versus 1,195 families during the same months in 2019) although about 15% of clinic appointments were cancelled and never rescheduled. Participating clinicians reported that parents became more involved in their child’s treatment but some also noted that child behaviors could be difficult to manage and there were issues with using telehealth technology and with distractions affecting telehealth visits. However, all responding clinicians expressed some level of interest in continuing with telehealth in the future. Families of patients with autism spectrum disorder, attention deficit and hyperactivity disorder, fragile X syndrome, and Down syndrome indicated that telehealth enabled them to continue accessing services, increased flexibility in scheduling sessions, and saved them from traveling to a clinic; but many also noted decreases in progress made by their child, more caregiver effort was required to keep the child on task, issues using technology, and distractions in the home as negative outcomes of the transition to telehealth. Families also reported increased symptoms of both depression and anxiety (as compared to national statistics for the general population) and 44% of caregiver respondents indicated that the severity of their symptoms had increased since the onset of the pandemic.

The primary manuscript describing details on these and other findings from this study will be submitted for publication early in 2022. Data from this project were also used in mentoring a promising young scientist through the Kennedy Krieger Institute’s Maternal Child Health Careers/Research Initiatives for Student Enhancement’s Undergraduate Program; this student presented the data to colleagues at UC Davis as well as at the CDC’s virtual Undergraduate Public Health Scholar Showcase and the Johns Hopkins Career, Academic, and Research Experiences for Students showcase, including the finding that economic status contributed significantly to the severity of mental health symptoms experienced by parents/caregivers.

Additionally, Dr. Bullard submitted an NIH R21 application in October 2021 (in response to NOT-OD-21-092: Use of Digital Technology and Mobile Health to Improve Diagnosis, Assessments, Interventions,

Management and Outcomes for Individuals with Down Syndrome Across the Lifespan) using preliminary data from this project to support the proposed project: development of self-guided online parent training modules designed to teach parents of adolescents with Down syndrome meaningful language support strategies.

Conducting Research on the Effects of the Pandemic

Robert Bell, emeritus professor of communication and a CHPR faculty member, co-authored a **study** in *Vaccine* that found that nearly 15% of the U.S. residents surveyed in June 2020 said they were unlikely to, and another 23% were unsure as to whether they would, get vaccinated against COVID-19. Their primary basis for hesitation? Concerns about vaccine safety and effectiveness were the primary basis for their hesitation. The paper's first author, Jeanette B. Ruiz, assistant professor of teaching communication, noted that "unfortunately, the seemingly rushed process of the COVID-19 vaccine may have further fueled these doubts." Additional factors—such as lower level of education, lower income, relying primarily on social media or Fox News for information about COVID-19, and identifying with either the Republican or no political party—also contributed to respondents' hesitancy about getting vaccinated.

Eduard Poltavskiy, who when earning his doctoral degree worked under the supervision of Patrick Romano, M.D., M.P.H., a core faculty member with CHPR, is the lead author of "**Predicting COVID-19 at skilled nursing facilities in California: do the stars align?**" a study designed to identify predictors of COVID-19 that could facilitate enhanced surveillance that would help prevent future disease outbreaks in skilled nursing facilities (SNFs). Findings suggest that SNFs with higher Quality Measures star ratings (as posted on the **CMS.gov website**) were more likely to house resident(s) afflicted with COVID-19. Dr. Poltravskiy and his co-authors suggested that this seemingly counterintuitive finding from early in the pandemic (data analyzed were from mid-April through May 31, 2020) "may be the result of hospital practice driving referrals of residents with high comorbidities to facilities with presumably high-quality ratings (≥ 3 stars) and away from facilities with low-quality ratings."

Synthesized and Posted COVID-19-related Information Relevant to Healthcare Professionals on PSNet

Dr. Romano and the CHPR/UC Davis Health PSNet team provided content for PSNet, the online resource for patient safety-related information funded by AHRQ, relevant to the COVID-19 pandemic during this reporting period. COVID-19-related publications included: one WebM&M "A postpartum woman with an erroneous SARS-CoV-2 test;" two Perspectives "AHRQ PSNet Annual Perspective: Impact of the COVID-19 pandemic on patient safety" and "Long-term care and the response to COVID-19;" and four Primers "COVID-19: Team and human

factors to improve safety,” “COVID-19 and diagnostic error,” “COVID-19 and safety of older adults,” and “COVID-19 and dentistry: Challenges and opportunities for providing safe care.”

Appendix 9: Research Highlights for the OR Annual Report

- Successful integration of the Prevention Policy & Practice Group
- A new, multidisciplinary CHPR research team headed by Stephen Henry, MD, being awarded a Cultivating Team Science award from the UC Davis School of Medicine (SOM) for “Low-barrier, generalist model of care to improve treatment for complex patients with opioid use disorder”
- Creation and publication of “Planning Healthy Aging Communities,” outlining the role land-use planning and community design can play in healthy aging
- Patrick Romano, MD, MPH, and the CHPR Healthcare Quality and Safety Research team receiving an award from Cal Hospital Compare to take over public reporting on nursing home quality metrics in California, an effort to help drive transparency, accountability, and improvement in long-term care for all Californians